

POSTERS

(in numeric order)

BREAST

28

Breast cancer during pregnancy

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Introduction. As women in western countries delay childbearing, it has been hypothesized that the incidence of breast cancer diagnosed during pregnancy will increase. Breast carcinoma during pregnancy put the health of the mother in conflict with the one of the foetus. The aim is to give optimal treatment to the mother to maximize the chances of survival, whilst minimizing the risk of harm on the foetus. Few breast surgeons or oncologists have developed expertise in this area showing the rarity of the association.

We report the epidemiology, pathology, clinical picture, therapeutic management and fetal outcome of pregnant women with breast cancer treated at our institution.

Methods. Twenty-two pregnant breast cancer patients were treated at our hospital from January 1995 to October 2006. The patients were surveyed by mail or telephone regarding the outcome of children exposed to chemotherapy in uterus.

Results. Of the twenty-two women, seventeen were alive and disease-free, one had recurrent breast cancer and four died from breast cancer. The twenty-two women ranged in age from 26 to 40 years old (mean age 34). The gestational age at the moment of the initial presentation ranged from 6 to 36 weeks (mean gestational age 20). Twenty patients self-discovered the tumors as palpable masses, and one patient presented diffuse erythema (inflammatory carcinoma). Abnormalities were observed on mammography for eleven of fourteen patients on whom it was performed and breast ultrasonography confirmed tumor masses in all nineteen women on whom it was performed.

Discussion. The goal for treatment on the pregnant woman with breast cancer is the same than on the non-pregnant breast carcinoma patient. In our experience, breast cancer can be treated with FAC chemotherapy during the second and third trimester without significant complications for the children exposed to chemotherapy in uterus. We report three cases treated with taxanes after the first trimester.

50

Lobular Carcinoma in Situ of the breast within a fibroadenoma – a case report

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Introduction: Fibroadenoma is a common benign breast tumor prevalent among young women. The development of a carcinoma within a fibroadenoma is a rare clinical entity, it is an incidental pathological finding after the excision of a palpable fibroadenoma with a prevalence of 0.02%. The most common histological type of carcinomas within fibroadenomas is lobular carcinoma in situ (LCIS) – 66.9%, followed by ductal carcinoma in situ – 12.4%. The behavior of LCIS arising within fibroadenomas is not well established, but it resembles that of pure LCIS. The mean age of patients is 44 years, higher than that with simple fibroadenomas. There is a possibility of other synchronous masses in the ipsilateral or contralateral breast, reflecting the bilateral and multicentric character of LCIS *per si*.

Case: A healthy 36-year-old woman, nullipara, with no family history of breast or ovarian carcinoma was referred to our unit because of a palpable mass in the upper outer quadrant (UOQ) of the right breast. The mass was elastic, mobile, measuring 15mm diameter, slightly painful. Clinical examination was negative for other masses and for axillary lymphadenopathy. Ultrasonography showed a well delimited, hypoechoic area compatible with fibroadenoma. She was observed at our hospital in regular intervals (6 months) for one year. She reappeared three years later because of mass enlargement. Mammography and ultrasonography revealed two hypoechoic nodules, one in the UOQ (29x10mm) and another in the upper transition quadrants of right breast (11mm). Excisional biopsy was performed. During the procedure we found another smaller lump that was also excised. Histopathological examination showed three fibroadenomas, the smaller one with LCIS. Follow up with magnetic resonance imaging was decided.

Conclusion: This rare entity should be treated using the established criteria for the histological type of carcinoma found within the fibroadenoma. Close surveillance should always be maintained

117

Metaplastic breast carcinoma and von Recklinghausen's Disease

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Background: von Recklinghausen's disease or neurofibromatosis 1 (NF1) is an autosomal dominant disorder that affects 1 in 4000 individuals. The defective gene is localized at the long arm of chromosome 17. Malignancy risk in NF1 patients is elevated but prevalence of malignancies occurring outside of the nervous system has not been clearly defined. There are few reports on breast tumor development and incidence in patients with NF1. Metaplastic carcinomas of the breast are uncommon lesions and account for less than 5% of all breast malignancies.

Case: A 62-year-old woman, tetraplegic after an accident 23 years before, has NF1 diagnosis since a long time. Her family noticed a breast erythema and induration one year before the first visit to the clinic. At that time the lump measured 10 x 7 cm, had inflammatory signs and was fixed to the deep tissues. Biopsies revealed metaplastic breast carcinoma (with histologic features of epithelial cells nests – poor differentiated carcinoma in a malignant mesenchymatous stroma with smooth muscle cell differentiation). The patient is now receiving chemotherapy and is doing well. Nine months have passed since the first visit to the clinic.

Conclusion: To our knowledge, based in a PubMed search, this is the second report of a metaplastic breast carcinoma associated with NF1. The clinical manifestation is unspecific and the pathologic diagnosis is difficult. Chemotherapy is the first line treatment.

148

Breast cancer in pregnancy – a case report

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Breast cancer is the most common cancer in pregnant women, according to the majority of authors, while it follows cervical cancer, according to others. Owing to the rarity of the situation (0,03% of pregnancies and 3% of breast cancers), there is lack of controlled data concerning this issue. These rates are expected to rise with the concomitant increase of childbearing age. Management of women with breast cancer during pregnancy is challenging. Diagnosis may be delayed because of physiologic changes within the breast. Available reports suggest that diagnosis and surgical

treatment may be carried out as for non-pregnant patient, while there are some limitations concerning staging investigations and medical treatment (chemotherapy and radiotherapy). The aim is to give optimal treatment to the mother to maximize the chances of survival while minimizing the risk of harm to the fetus.

The authors make summary of these aspects, based on a review of current data and present a clinical case.

A 30-years-old woman, with irrelevant personal and familiar medical history, presented at our Breast Pathology Unit with a 3 cm, painless, mammary lump, first noted about 1 year ago and that suddenly grew up in size. FNAc was inconclusive and microbiopsy yielded the diagnosis of DCIS. The patient was then pregnant, at first trimester.

159

A primary breast cancer of the vulva

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Introduction: The frequency of ectopic mammary tissue in females is 1-6%, and decreases progressively from the axilla to the vulva. This ectopic tissue may develop physiologic and pathologic changes similar to those found in the normal breast. The occurrence of adenocarcinoma is extremely rare (20 cases described in the English language literature). We report a case of a primary breast carcinoma of the vulva.

Methods and Results: An 82-year-old, G5P2, white female presented with a 7 months history of a 2cm firm nodule of the left labia minor. A wide local excision of the tumour was performed. The histological examination revealed the presence of adenocarcinoma of mammary origin, positive for common breast markers (Epithelial Membrane Antigen and Carcinoembryonic Antigen) and for estrogens and progesterone receptors, with an elevated proliferative index, and with vascular invasion. The study for orthotopic breast carcinoma was negative, as well as the study for metastatic disease (bone scintigraphy, abdominal-pelvic magnetic resonance, pelvic ultrasound and chest radiograph). The diagnosis of primary breast carcinoma was established.

Discussion: Due to the rarity of this condition, guidelines for therapy are unavailable. The management suggested in the literature is that of primary orthotopic breast neoplasm of a similar stage. Our patient is now being submitted to pelvic and inguinal radiotherapy as well as aromatase inhibitors (letrozole) and she is completely asymptomatic.

265

Mondor Disease and breast cancer

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Introduction: Mondor disease or superficial veins thrombophlebitis of the breast is an uncommon condition, usually self-limited and is characterized by the presence of a palpable linear cord-like swelling in the affected breast resulting from vein thrombosis and its posterior sclerosis. Some factors may be associated, like trauma or breast surgery. It is rarely associated with breast cancer.

Case Report: A 25 year old patient, taking oral contraceptives, without any important gynecological or other medical disease in the past and with no family history of breast cancer complained of acute pain in the right breast. No previous trauma or breast surgery. The right breast was enlarged and a red venous tract was visible in the skin of the transition of the superior quadrants; a tense cord was palpable in the same tract. It was also palpable a painful node, in the transition of external quadrants, 3cm wide, with irregular limits and hard consistency. An ultrasound was performed and revealed, in the same breast, a solid, heterogeneous and irregular mass in the inferior external quadrant, with 29.5x18.7mm. A fine needle aspiration and a needle biopsy of the node were performed and they revealed an invasive ductal carcinoma.

Conclusion: Mondor disease is usually a self-limited benign disease and literature says that its association with cancer is rare. Nevertheless, our case shows that when we have a patient with this diagnosis the possibility of breast malignancy must be excluded.

294

Langerhans Cell Histiocytosis and breast – a case report

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Introduction: Langerhans cell histiocytosis (LCH) is a systemic disorder characterized by abnormal proliferation of histiocytes. The clinical manifestations depend on the location of the lesions, the number of organs involved, and the extent to which organ function is compromised. It usually involves lungs, bones, liver, spleen and lymph nodes.

Case: A 32-year-old woman came to the clinic with an asymptomatic palpable breast mass. An ultrasound examination revealed a left intramammary lesion measuring 50mm in diameter. Clinical and mammo-

graphic findings were consistent with the diagnosis of fibroadenoma, but carcinoma could not be excluded. She underwent excisional biopsy. Immunohistochemical and pathology analyses revealed sheets of S-100 protein-positive histiocytes, scattered in a polymorphous background of lymphocytes and plasma cells - Langerhans cell histiocytosis. No multisystem involvement was found. Treatment consisted in surgical excision.

Conclusion: LCH is a rare entity with several subtypes that have different clinical manifestations and prognosis. To our knowledge, this is the first report of LCH confined to the breast. Because pathogenesis of LCH remains uncertain, treatment has been highly individualized and can include surgery, irradiation, corticosteroids, chemotherapy, and combinations of these treatments. In presence of a well circumscribed tumoral lesion and having found no multisystem involvement, we consider our therapeutic option adequate.

322

Evaluation of hysteroscopic findings in patients under Tamoxifen therapy

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Introduction: Tamoxifen has been implicated in an increased rate of endometrial hyperplasia, polyps and perhaps carcinoma. Although tamoxifen has known antiestrogenic effects on many organs, there is a stimulatory effect on endometrium. There are no consensus about the follow-up of these patients and how often (if ever) patients receiving tamoxifen therapy should undergo endometrial sampling. The purpose of this work is to evaluate the hysteroscopic findings in patients under tamoxifen therapy in our department.

Methods: A retrospective study of 38 women under tamoxifen therapy (20 mg/day) submitted to office hysteroscopy during 20 consecutive months. We evaluated for age, indications, hysteroscopic findings, procedure duration, associated pain, complications and histological diagnosis.

Results: Mean age was 64 years old (46-85). 95% of women were post-menopausal. The indications for the procedure were: asymptomatic endometrial thickening (≥ 4 mm) in 60,5% (23/38), asymptomatic polyp in 31,6% (12/38), symptomatic endometrial thickening in 5,3% (2/38) and symptomatic polyp in 2,6% (1/38). The most frequent hysteroscopic appearance was endometrial polyp (68,4%), followed by normal cavity (18%), synechiae (7,9%), myoma (2,6%) and endometrial hyperplasia (2,6%). Endometrial sampling was done in 29 women, and of these the histological findings were: polyps in 86,2% (25/29), myoma in 6,9% (2/29), normal endometrium in 3,45% (1/29) and carcinoma in 3,45% (1/29). Mean procedure duration was

36,4 minutes (10-70). Pain was subjectively assessed in a numerical scale from 0-10 and mean value was 4. There were no complications reported.

Discussion: Only 18% of patients had normal uterine cavity appearance on hysteroscopy. The pathological diagnoses confirm the literature data, with a high rate of endometrial polyps and carcinoma in 3,45%. We consider regular assessment of the endometrium by transvaginal ultrasound a good practice among patients under tamoxifen, however, it is known that ultrasound is not as accurate as hysteroscopy for detecting polyps, hyperplasia and carcinoma. Office hysteroscopy is a safe, simple and almost painless procedure, with the possibility to do direct biopsies and have the correct diagnosis. It should be performed to all patients with abnormal ultrasound under tamoxifen therapy.

361

A needle in the breast – a case report

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Foreign bodies in the breast are relatively rare. Most of them are an incidental finding during a routine mammogram. They can be divided into two major groups: iatrogenic and noniatrogenic. The iatrogenic group refers mainly to wires, draining catheters or surgical sponges accidentally left in the breast during operative procedures. The noniatrogenic group includes cases in which, by some way, a foreign body penetrated through the breast's skin (accidentally, voluntarily or by aggression).

The authors present a case of noniatrogenic foreign body in the breast.

Case report: A 71-year-old, former seamstress, presented herself in our Breast Pathology Unit with a mammography performed the month before showing a metallic image in her left breast. Despite asymptomatic at first approach, after intensive questioning she revealed stitching pain in the left breast with a long term duration that never concerned her.

An ultrasound and mammography were performed, both revealing a linear image, with high density suggesting a needle in the external quadrants of the left breast.

Surgical removal of this foreign body was the therapeutic decision.

422

Adenomyoepithelioma of the breast: a rare neoplasm – a case report

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Background: Adenomyoepithelioma is a rare neoplasm characterised by a biphasic proliferation of two cell populations: epithelial (inner) and myoepithelial (outer) cells of the breast, composing a well-circumscribed nodular lesion. Although most are benign tumours or have low-grade malignancy potential characterized by propensity for local recurrence, some of these lesions can appear as or progress to a malignant form, giving rise to metastases. Establishing the diagnosis, choosing the optimal treatment and predicting the outcome is a challenge to the clinical and the pathologist.

Case Report: We report a case of a 58 years old patient who was found to have a nodule in the lower-inner quadrant of the right breast in a screening mammography. Physical examination was negative, without masses, nipple discharge or axillary lymph nodes. Ultrasound showed a hypoechoic lesion with 9mm, suspect of malignancy. An ultrasound guided fine-needle aspiration (FNA) biopsy was performed and smears of the aspirate showed epithelial cells with atypia. The material was insufficient for immunohistochemical staining, hence the patient was submitted to an excisional biopsy. The histological diagnosis was biphasic adenomyoepithelioma, based on the presence of a proliferation of an epithelial (ductal) component and a myoepithelial component. Immunohistochemistry confirmed the dual nature of the neoplastic tissue: positive for ck 5/6, P63, small muscle actin (SMA), Cam 5.2 and ki-67. The tumour was surrounded by a pseudocapsule. The lesion was completely excised and had benign characteristics (small lesion, well circumscribed, without local invasion or cellular necrosis and ki-67 expression less than 10%) and the patient remains in clinical follow-up.

439

Mammographic appearance of nonpalpable breast cancer as predictor of histologic type

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Background: Screening mammography has markedly increased the number of nonpalpable and often non-invasive breast cancers. Consequently, there has been a decline on what concerns size and stage of breast cancers at presentation, resulting in improved survival and increased breast conservative surgery.

Nonpalpable breast cancers may present on mammography as masses, calcifications, architectural distortions or combined findings.

Objective: To investigate the association between mammography appearance and pathologic characteristics of nonpalpable breast cancers.

Materials and methods: Mammographic appearance and pathologic characteristics of 100 consecutive nonpalpable breast cancers diagnosed in the Gynaecology Department were reviewed.

Mammographic presentations were divided in four groups: masses (group 1), calcifications (group 2), architectural distortions (group 3) and combined findings (group 4).

Results: The 100 patients ranged in age from 33 to 78 years (mean 57, 6). Masses without calcifications (group 1, n = 49) and isolated calcifications (group 2, n = 32) accounted 81% of total cases, while architectural distortions (group 3, n=10) and combined findings (group 4, n=9) accounted for 19%.

Group 1 was strongly associated with invasive cancers (OR = 29) [3.71-228.19]; no ductal carcinoma in situ was observed in this group. Group 2 was strongly associated with ductal carcinoma in situ (DCIS) (OR = 37,4) [7.79-179.55].

No significant associations were found in groups 3 and 4.

Invasive carcinoma was the predominant histologic diagnosis (81%). Axillary lymph node metastases were found in 15 invasive cancers (0,19%). Sixty six cases were treated with breast-conserving surgery.

Conclusion: Masses and isolated calcifications in nonpalpable breast cancer can be strongly predictive of histologic type.

440

Breast conserving surgery with sentinel lymph node biopsy

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Background: The sentinel lymph node (SLN) hypothesis states that tumor cells migrating from a primary tumor colonize one or a few lymph nodes (LN) before involving further LNs. SLN biopsy has replaced routine axillary dissection as the new standard of care in early breast cancer.

Objective: To describe the results of the SLN biopsies done in a gynecology/oncology centre.

Methods: Retrospective one year (2006/2007) case series of all SLN biopsies, from our centre. We collected to data regarding the criteria for case selection, preoperative clinical, imaging and therapeutical work up, surgical techniques, pathological findings and follow-up.

Results: We report on the first 26 SLN biopsies. The mean (\pm SD) age of the patients was 58.3 (\pm 10.8) years. All cases selected had no previous history of ipsilateral breast surgery. Non had multifocal or multicentric known disease, and there were no palpable axillary nodes. All cases had clinical stage T1-2N0 invasive breast cancers. Intradermal injection of vital blue dye and radiolabeled colloid identified all SLN, except in a single case which preoperative lymphoscintigraphy was not performed. Metastases were found in 6 cases (2 micrometastases) and in all cases conventional axillary LN dissection was performed. No metastases were identified in the 2 cases with micrometastases.

Conclusions: The status of the axillary LN is one of the most important prognostic factor in women with breast cancer. SLN biopsies offer minimal morbidity and are a reliable method of axillary staging. These preliminary results, of a small and selected series highlight the need for adequated case selecting for SLN biopsies.

Further long-term results of randomized controlled trials are still pending for evidence of long-term efficacy.

454

Prognostic significance of number of metastatic axillary lymph nodes in T1 breast cancer: a retrospective study

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Objective: Axillary lymph node involvement is considered to be the most important prognostic factor in breast cancer, being the number of metastatic lymph nodes directly related to clinical outcome. This study aims to determine what is the impact on survival rates of the number of metastatic axillary lymph nodes in T1 breast cancer.

Methods: Retrospective review of clinical records from breast cancer patients, diagnosed from January 1995 to December 2005, whose treatment and follow-up were performed at the Department of Gynaecology. To be eligible, patients were required to have a 2 cm or smaller tumour, clinically negative axilla and no distant disease at time of diagnosis. We considered for analysis two groups: group 1, with metastasis in one to three lymph nodes (115 patients) and group 2, with metastasis in four or more lymph nodes (27 patients). Pathologic features were analyzed and compared for these two groups, as well as overall survival and progression-free survival, which were calculated using the Kaplan-Meier method.

Results: Mean histologic size was 0.22 cm larger in group 2 (1.85 versus 1.63 cm), but with no statistical significance. Also, no statistical significant differences were found on what concerns to histologic grade, Her-2/neu and estrogen receptors. Mean number of lymph nodes removed in group 1 was 14 (range 5 – 31), while in group 2 was 17 (range 10 – 27), being this difference statistical significant ($p=0.025$). Mean follow-up was 134.5 months for group 1 and 79.2 months for group 2. Overall survival was 90.4% in group 1 and 65.1% in group 2 ($p=0.003$). On what concerns to progression-free survival, it was 90.3% in group 1 and 63.7% in group 2 ($p=0.01$).

Discussion: This study supports the knowledge that axillary lymph node status is a powerful prognostic indicator. Concerning T1 tumours, patients with four or more involved nodes at initial diagnosis had a significantly worse outcome than one to three node positive cases, despite an adequate treatment. Also, we can say that a higher number of lymph nodes involved constitute not only a marker of diagnosis at a later point in the natural history of breast cancer but also a marker of a more aggressive biologic behaviour.

468

Secretory breast carcinoma – a case report

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Background: Secretory breast carcinoma is a rare neoplasia originally described in children but also occurring in the adult population. It is an histologically distinct variant of invasive ductal carcinoma that tends to have an indolent clinical course with a favourable prognosis.

Case Report: We report a case of a 21-year-old woman who presented a palpable right breast mass with an evolution of 2 years. On physical examination a firm regular mass was palpable beneath the right nipple areolar complex. Ultrasound showed a 2 cm wide ovular hypoechoic formation with regular margins. Fine needle aspiration and biopsy were performed revealing a secretory carcinoma of the breast. After a multidisciplinary discussion, skin sparing mastectomy and biopsy of sentinel lymph node was proposed. Histopathology analysis showed a 2,7 cm diameter secretory carcinoma and a metastatic sentinel lymph node. Total axillary dissection was therefore performed during a subsequent intervention, 11 lymph nodes were isolated and one contained metastases and showing capsular disruption. Patient received adjuvant chemotherapy followed by radiotherapy.

Conclusions: The current case evidences a rare type of breast carcinoma. A large lesion with lymph node involvement was crucial in our decision to perform adjuvant treatment despite the indolence of the tumour.

489

Primary breast carcinoma of the vulva – a case report

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Introduction: Ectopic breast tissue may be found along the primitive embryonic milk lines, which extend from the axilla to the groin. The occurrence of ectopic breast tissue within the vulva is uncommon and the development of breast carcinoma within vulvar ectopic breast tissue is very rare.

Methods: The authors report a case of primary breast carcinoma of the vulva in a 86 year old woman. The patient presented with an endophytic vulvar mass with approximately 6 cm in the superior third of left labia majora. There were no palpable groin lymph nodes or other suspicious signs in gynaecologic exam. Breast exam was normal. We performed a vulvar biopsy. Several imaging tests were performed in order to stage the tumor.

Results: Histopathologic examination revealed a ductal adenocarcinoma involving the overlying skin. Tumor cells contained estrogen (75% of cells) and progesterone (50%) receptors. Abdominopelvic CT didn't show any expansive lesions or lymph node involvement within the pelvis. Mammography and chest radiogram were normal. Primary surgery consisted of simple vulvectomy which confirmed biopsy results. The absence of primitive adenocarcinoma in other location, namely in breast, states for diagnosis primary breast carcinoma of the vulva, with origin in vulvar ectopic breast tissue.

One month after surgery was detected groin lymph nodes involvement. Adjuvant therapy consisted on inguinal radiation therapy. Patient initiated hormone therapy with tamoxifen after radiation therapy. One year after treatment patient reported a painful cervical mass – cytology of cervical lymph node revealed atypical cells with positive estrogen and progesterone receptors, consistent with metastasis of initial tumor. Excision of cervical lymph node confirmed progression of the disease and patient died two years after the diagnosis.

Discussion: This case states the importance of histopathologic study of suspected tumors, which determines the management the disease. Primary breast carcinoma of the vulva should be treated as primary carcinoma of the orthotopic breast. Tamoxifen should be prescribed for patients whose tumors contain hormone receptors.

508

Advanced microsurgical breast reconstruction – clinical cases

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Introduction: The most modern techniques for breast reconstruction, reside on the free or pedicled perforator flaps. The various flaps available rely on perforators of the dorsum, abdomen, and gluteus vessels.

The authors present 2 clinical cases of women, reconstructed electively, after having received radiotherapy. It was performed a DIEP – deep inferior epigastric perforator and a TDAP - toracodorsal artery perforator flaps. They are characterized by the raising of fascio-adipo-cutaneous tissue, vascularized by a single pedicle, composed of one artery and two veins. The authors

pretend to demonstrate the advantages of this new kind of Breast Reconstruction

Methods: The technique used, was decided upon patient choice, the amount of abdominal or dorsal tissue and from previous surgeries, whether from reconstructions or other kind of surgery.

Results: The patients presented a good symmetry, had no complications and maintain normal function of the Rectus Abdominis muscle and from the Latissimus muscle respectively. The aesthetics results was considered very good by a series of documentation and inquires.

Discussion: These type of reconstruction, provides above average aesthetic results, less morbidity, with no harvest of muscles, comparatively with the classical reconstructions, and diminishes the rate of flap necrosis because of the better vascularization provided by these vessels.

These reconstructions may also be performed at the same operating time with the Breast Oncology Surgeon, allowing an immediate breast reconstruction.

PELVIC TUMOURS AND GYNAECOLOGIC CANCER

29

A β cg negative placental site trophoblastic tumour

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Background: Placental site trophoblastic tumour (PSTT) is a very rare and unique form of gestacional trophoblastic disease.

Case report: 38 years old patient, gravida 2 para 1. The first pregnancy in 1998, without complications, ended in a vaginal delivery. In 1999, a routine US scan identified an area of hipervascularization (35x25mm) in the posterior uterine wall. β HCG was then 24IU/L. Due to intense dilatation of pelvic vessels the patient had two uterine embolisations in London during 2001. Afterwards, several US scans showed a moderately increased uterus and a persistence of the hipervascularized area, albeit of reduced dimensions.

Because of infertility one cycle was eventually completed in February 2004. The post treatment β HCG was 314IU/L but the pregnancy did not progress.

In 2006 the patient returned complaining of extreme hypomenorrhea. An US scan showed a much enlarged uterus (159x130x112mm), whose body was occupied by a huge mass suggestive of fibroid. MRI showed no suspect lymphatic nodes. The thoraco-abdominal CAT scan was normal and all tumour markers for gynaecological malignancies were negative, including β HCG.

She had a total hysterectomy in October 2006. The diagnosis of placental site trophoblastic tumour was done and adjuvant chemotherapy was performed.

Four months after surgery, the MRI raised the possibility of a small iliac node. The patient moved to London where pelvic/para-aortic lymph node sampling and removal the remaining adnexa were performed. No tumour was found. A second look laparoscopy three months later showed no residual disease and all biopsies were reassuring.

Conclusions: β HCG negative PSTT is a challenging variant. This atypical presentation supports the previous literature about the variable characteristics of placental site trophoblastic tumour.

39

Evaluation of malignancy in hysteroscopic polypectomy in pre and post-menopausal women with abnormal uterine bleeding

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Aim: To evaluate the eventual risk of malignant or premalignant pathology in endometrial polyps after hysteroscopy and biopsy.

Methods: 80 women between 45 and 65 years of age were involved in our study. They all underwent hysteroscopic resection the endometrial polyps and all polypectomy specimens were submitted to biopsy. Presence or absence of symptoms, as well as use of hormonal medication and eventually menopausal status, were documented.

Results: 32 women (40%) were asymptomatic. 6,2% of them showed malignancy or atypical neoplasia after biopsy.

48 women were symptomatic and 12,5% showed malignancy or atypical neoplasia after biopsy. Postmenopausal bleeding and age were associated. Older women with postmenopausal bleeding had a greater prevalence of malignancy and atypical hyperplasia.

Conclusion: There was a prevalence of malignancy and atypical hyperplasia in older women with postmenopausal bleeding. Symptomatic as well as asymptomatic polyps seem to be involved in malignant and premalignant pathology, thus endometrial polyps should be removed.

55

Cervical cancer during pregnancy - a case report

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Introduction: Cervical cancer, even if rare, is the most common solid tumor diagnosed during pregnancy. Many patients are completely asymptomatic and their disease is usually detected on cervical screening. Some cases may present vaginal bleeding and discharge. Colposcopy with directed cervical biopsy is recommended for initial evaluation of abnormal or suspicious cytology. Cervical cancer is always clinically staged; 83% of the cases diagnosed during pregnancy are stage I. Caesareans are often performed to avoid bleeding, potential seeding of the episiotomy site, obstructed labour and dissemination of disease into lymphovascular spaces.

Clinical case: Woman, 41, with an abnormal Pap-smear's at 16 weeks of gestational age. A colposcopy with directed biopsy was performed 6 weeks later; a biopsy-proven diagnosis of invasive cancer was made; the patient was clinically staged IB1. She decided along with her family to delay pregnancy termination until 30 weeks of gestational age to enhance fetal maturation; a caesarean was performed at this time. Type III radical hysterectomy was accomplished 6 weeks later. After 3 years of follow-up, mother and child are well.

Conclusion: Since most of women with cervical cancer are in the reproductive age group, pregnancy becomes a suitable time for cervical screening. Due to its rarity, guidelines are not clearly defined. Although delay of therapy may allow for maturation of the fetus, current data are insufficient to recommend a prolonged delay. Decisions depend upon the stage of disease, gestational age and the will of the patient and family, who should be aware of all the options.

79

Serous endometrial intraepithelial carcinoma – a case report

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Objective: To report a case of serous endometrial intraepithelial carcinoma incidentally found in a 60-year-old female with uterine prolapse.

Patient(s): A 60-year-old woman who had breast cancer history after menopause and presented no other symptoms than those related to uterine prolapse.

Intervention(s): Vaginal hysterectomy was performed for the treatment of uterine prolapse. The histopathological findings of hysterectomy specimen demonstrated intraepithelial serous carcinoma adjacent to an endometrial polyp with simple hyperplasia without atypia. A full surgical staging was performed in retrospect, with bilateral salpingo-oophorectomy, omentectomy, bilateral pelvic lymphadenectomies, para-aortic lymph node exploration, multiple peritoneal biopsies, and peritoneal cytology obtained upon entry into to abdominal cavity.

Result(s): There was no evidence of nodal involvement or extrauterine spread of disease in the histological findings of the surgical staging. The patient was free of disease 9 months after the surgical treatment. The serum tumor marker CA-125 level remained within normal limits.

Conclusion(s): Although serous endometrial intraepithelial carcinoma represents the noninvasive intraepithelial stage of uterine serous carcinoma, recent literature suggests that it may be associated with extrauterine disease in a high proportion of cases. Therefore, it is prudent that a complete staging laparotomy is performed, as an important measure to predict the prognosis.

85

Report of an atypical case of sacrococcygeal teratoma

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Introduction: Sacrococcygeal teratoma is the most common congenital neoplasm, occurring in 1 in 40,000 infants. Derived from a pluripotential cell line, the tumor contains components of all three germ layers. The increasing usage of ultrasound has been disclosing antenatal diagnosis more frequently and at an earlier gestational age. The development of hydrops, due to high-output cardiac failure, is considered to be the most relevant predictor of poor outcome, associated with high perinatal mortality rate.

Case report: We present a case of a 21 year old pregnant lady referred to us because of a sacral tumor diagnosed at 24th week of gestation. Sonographic evaluation at our centre revealed a female fetus, carrying a sacro-coccygeal solid cystic mass, measuring 6,6 x 6,1 x 6,0 cm and also an increased amniotic fluid index. No other abnormalities neither signs of hydrops were observed. Expectant management with close surveillance has been adopted. In the 31th week of gestation, patient was admitted on advanced preterm labour. A cesarean section was performed, liveborn weighted 2110g, apgar score 5/7. After clinical stabilization in the nursery, a radical resection of the tumor was performed (measuring 22 x 12 cm). Opening of the specimen at surgery room revealed highly differentiated tissues which formed a clearly leg and foot. Child is now 1 year old and has so far an adequate weight gain and neuropsychal development.

Discussion: Ultrasound finding of sacral solid-cystic mass arises the suspicion of sacrococcygeal teratoma, although myelomeningocele and haemangioma should also be considered as differential diagnoses. Chromosomal abnormality and coexisting anomalies are rarely associated, what makes fetal karyotyping controversial. Antenatal management includes serial ultrasound examination in order to monitor tumor growth and the presence of adverse signs such as polyhydramnios and hydrops besides cesarean delivery at a centre where there is immediate access to experienced neonatal and pediatric surgical. Postnatal resection of the tumor is recommended soon after birth, after cardiovascular stabilization, since delay is associated with an increased risk of malignant transformation. In the follow-up of these children, recurrence might occur and long-term deficits in anorectal and urinary functions are common.

for better operative view and conduct ultrasound to measure rest urine and urodynamics.

Materials and Methods: 34 patients with stage 1B to 2A CC were submitted to “nerve-sparing” RH. Assessment include and urodynamic investigation with single channel cystometry (*Gynecare – Moni Torr*) before operation and 2 weeks after. We identified nerve supply to bladder and were dissected off the genital tract before parametria, cervico-vesical and uterosacral ligaments were divided during surgery. Bladder was draining for 3 days and post operative bladder function was assessed by 2 parameters: with ultrasound post voiding residual urine volume and with urodynamics sensation of bladder storage.

Results: all patients there found no significant difference at the moment of storage desire to void between before and 2 weeks after operation, no residual urine volume at third days with removing the catheter and were recovered their ability to void spontaneously. 12 months after surgery, showed normal lower urinary function and no cancer recurrence.

Conclusion: in this prospective study, all 34 patients with CC who were included underwent the uniform management, namely “nerve-sparing” RH. The study proves that nerve preservation surgery hasn’t negative influence on function of the bladder, rectum and vagina. The evaluation urinary dysfunction in the postoperative period using urodynamic test would not in case be conclusive, because postoperative radiotherapy, which performed, would have constituted a confusing covariate. Post voiding residual urine in the early postoperative period could be seen by ultrasound, indirect method of routinely evaluating the bladder emptying difficulties which, in turn, are one of the most frequent bladder dysfunction after RH. This “nerve-sparing” technique could be a useful method for reducing treatment-related morbidity, without compromising radicality.

90

“Nerve sparing” radical hysterectomy and bladder function

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Introduction: radical hysterectomy (RH) is the recommended treatment for patients with early stage cervical carcinoma (CC). The loss of bladder sensation, incomplete emptying and voiding difficulties are common after operation. We attempted to preserve the autonomic nerve supply to the bladder during RH without to compromising the oncologic outcome, We attempted to preserve the autonomic nerve supply to the bladder during radical hysterectomy without to compromising the oncologic outcome, use Liga-Sure vessels sealing system and Ultracision scissors to reduce blood loss

92

Borderline ovarian tumor and pelvic echinococcosis in differential diagnosis - a case report

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Introduction: Borderline ovarian tumours form a separate entity within the group of ovarian tumours and are characterized by a degree of cellular proliferation and nuclear atypia in the absence of infiltrative destructive growth or obvious stromal invasion. The diagnosis is not easy because they are usually asymptomatic indeed, no blood markers are useful and with ultrasounds is difficult the differentiations within functional diseases.

Human Echinococcosis is a parasitic disease that remains a complex problem because affects several organs and requires mostly surgical management.

The infection is caused by Echinococcus larvae. Echinococcosis is endemic in Mediterranean, South America and Eastern Europe but it can be found almost anywhere due to migration and increased travelling. Pelvic echinococcosis is rare with an incidence between 0.2-0.9%. The diagnosis is usually difficult: the symptoms are not specific and may involve abdominal pain, swelling, menstrual irregularities and infertility. Pelvic echinococcosis may simulate malignancies and mimic a multicystic ovary.

Case report: We describe a case of a 47-year-old woman, gravida 2, para 1, who was admitted at our hospital with chronic pelvic and abdominal pain. Her medical history was negative. With ultrasounds we found irregular cysts of both right and left ovary. We gave a dosage of CA-125, CA-15-3, CA-19-9 and all was negative. We performed an explorative laparotomy and we found an abundant abdominal liquid and numerous peritoneal and omental cysts. We discovered a mass in the right ovary and in the liver too. We carried out a hysterectomy with bilateral ovariectomy, omentectomy and we removed also a vermiform appendix. The pathology report was secondary peritoneal echinococcosis and borderline left ovarian tumour. The primitive localization was the liver and these lesions were treated in a second time by alcoholization. We also administered oral albendazol.

Conclusions: The diagnosis of pelvic echinococcosis is difficult but it must always therefore be considered in the differential diagnosis of ovarian cysts. Moreover, the presence of ovarian cancer could be hidden by echinococcosis.

99

Gene expression pattern in patients with epithelial ovarian cancer.

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Ovarian carcinoma is one of the leading causes of death among gynecologic malignancies with a 5-year survival rate of about 30%. Over 75% of cases are diagnosed with widespread intra-abdominal disease or distant metastases. Large epidemiological studies agree that the risk of epithelial cancer of ovaries increases with advancing age, family history of breast and ovarian cancer and frequency of ovulation. Still we don't know

any simple tests diagnosing early stages of ovarian carcinomas, so it is very important to use the appropriate drugs in chemotherapy, which might give better chances for recovery and longer remission. However molecular and genetic events, associated with early ovarian cancer development still remain enigmatic.

In this study, gene expression in 30 serous ovarian carcinoma was estimated using Atlas Human Cancer 1.2 Array (Clontech Laboratories, Inc.). This technique allows determining over 1100 genes in one experiment. Normal ovarian tissue was used as a control. Differences in gene expression were quantified as the fold change in gene expression between the ovarian carcinoma and normal ovarian tissue.

Genes were identified that were over-expressed in the invasive ovarian carcinoma samples compared with the normal ovarian tissue.

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108

Paget's disease of the vulva - a case report

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Introduction: Paget's disease of the vulva is a nonsquamous intraepithelial neoplasia, which accounts for less than 1% of vulvar malignancies. The pathogenesis remains controversial, and it is believed it can be originated by abnormal differentiation of epidermal apocrine gland stem cells or be associated with underlying invasive adenocarcinoma in 20% of cases. It tends to be a slowly growing neoplasm and may or may not be invasive.

Case Report: 48-year-old white female, presented with whitish pruritic lesion on vulva. Clinical examination confirmed a well defined whitish scaling lesion on the left labium majus. A lesion biopsy was performed. Histological study revealed large vacuolated cells with polymorphic nuclei, isolated and in clusters, compatible with melanoma / Paget's disease. Immunohistochemical study was cytokeratin-7 positive and S100-protein negative, establishing Paget's disease diagnosis. No malignancy signs were detected in cervical cytology, abdomen and pelvis CT scan, colonoscopy, cystoscopy, and mammography. A wide local excision was performed; histologic examination of the operative specimen detected two positive margins. Re-excision was

performed, revealing isolated cells in margins limits, with no invasive component. The patient was proposed for follow-up surveillance, each 3 months for 2 years, and then annually.

Discussion: Extramammary Paget's disease is primarily found in postmenopausal caucasian women in the sixth and seventh decades. Grossly, the lesions can appear well defined, white to red, eczematous, scaling or macerated. Pruritus in the affected area is the only complaint in most patients. Differential diagnosis includes melanoma and immunohistochemical staining is often helpful in distinguishing between them. To establish a correct diagnosis, medical history, clinical examination, biopsy with pathologic and immunohistochemical examination of the involved skin, and search for an underlying adnexal or visceral malignancy, are essential. Wide surgical excision is the treatment of choice, because microscopic spread of the disease may extend beyond the macroscopically involved area of the skin. Prognosis varies, depending on the success of surgery in obtaining clear margins and whether an underlying malignancy is present. Therefore, long-term follow-up is required to exclude recurrence of the disease and development of an associated cancer.

116

Ovarian fibroma: an unusual presentation

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Introduction: Meigs' syndrome is defined as a benign ovarian neoplasm with ascites and pleural effusion with clinical resolution after tumor resection. It is a rare clinical condition in women under 30 years of age and even more rare when associated with an elevated tumor marker CA-125. The authors present a clinical case of ovarian fibroma with Meigs' syndrome features and elevated CA-125.

Case Report: A 13-year old portuguese girl presented with a 4-month history of amenorrhea, abdominal enlargement and mild dyspnea. Physical examination revealed a large, solid, non-tender mass in the central lower abdomen, associated with a medium-large ascites. The ultrasound showed a large, heterogeneous, solid, nodular formation with a maximum diameter of 14 cm occupying the pelvis and lower abdomen. Further clinical evaluation revealed large ascites, bilateral pleural effusion and, analytically, elevated serum CA-125 level (15times higher the upper normal limit reference value). At surgery, a 19x15x11,5 cm mass, with smooth, lobulated borders, adherent to the epiploon, was disclosed from the left ovary. 3L of straw colored ascitic fluid were sent to analysis. The remaining abdomino-

pelvic cavity was macroscopically normal, including uterus and right adnexa. It was performed a unilateral salpingo-oophorectomy and infracolic omentectomy. The final citohistologic exam concluded that it was an ovarian fibroma with mitotic activity and no significant nuclear atypia and excluded malignancy in ascitic fluid or omentum. A toraco-abdomino-pelvic CT scan, performed 3 months later, showed complete resolution of pleural effusion and ascites.

Conclusions: Fibroma accounts for only 4% of ovarian neoplasms and is even more rare in young women. Only 1% of fibromas present with clinical features of Meigs' syndrome. The clinical relevance of this rare syndrome is related to the fact that it is a significant differential diagnosis for epithelial ovarian cancer, which is a more frequent cause of ascites, pleural effusion and elevated CA-125. In a young patient presenting with an ovarian mass, ascites, pleural effusion and elevated tumor markers, one must always keep in mind fibroma as a differential diagnosis. This influences upon the surgical approach, which should initially always be conservative.

118

Premalignant changes of cervix

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Objective: Estimation on frequency of premalignant changes of cervix.

Method of work: Retrospective analysis of history of women who were subjected to *conisatio* due to premalignant changes of cervix. Analyzed period 1995 – 2004.

Results: In the analyzed period in the Clinical Center of Montenegro 179 *conisatio*s of cervix were carried out due to premalignant changes (HgSIL: 135 and LgSIL: 44). Comparison of those figures with women population (99513 women) resulted with calculation of rates for 100000 women. Rate for HgSIL is 13.5/100000, and for LgSIL 4.4/100000. Average incidence rates for cervix carcinoma in Montenegro were 15.8/100000 (for the period 1995 – 1999) and 19.5/100000 (for the period 2000 – 2004). Distribution of perimalignant changes in relation with age of women is described in the following sentences. LgSIL is represented in 15.9% of women aged 20 – 29, 27.3% of women aged 30 – 39 and 47.7% of women aged 40 – 49. HgSIL is represented in 6.6% of women aged 20 – 29, 36.3% of women aged 30 – 39 and 43% of women aged 40 – 49.

Conclusion: HgSIL incidence rate (13.5/100000) is lower than *Ca cervicis uteri* incidence rate (15.8/100000 – 19.5/100000). Obtained incidence rate of perimalignant cervix changes is far from real one (it may be even lower than the half of the real one?).

119

Correlation of histopathologic diagnoses of adnexal masses with ultrasonographic findings previous to surgery

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Background: Adnexal masses are a frequent finding in clinical practice. Ultrasound evaluation is the main screening method of this pathology and may be useful in distinguishing benign and malignant lesions.

Objective: To evaluate the correlation between ultrasonographic and histopathologic findings of adnexal masses in our department.

Methods: Retrospective study of 84 women who had surgery for treatment of adnexal masses, during a period of two years (from January 2005 to December 2006). The evaluated parameters were age, parity, ultrasonographic characteristics of adnexal masses and histological classification of the specimens.

Results: Mean age was 48,8 years (14-82) and the majority of women (73,4%) were multiparous. The histopathologic findings included benign tumours in 71 cases (84,5%) and malign tumours in 12 cases (14,3%). The pathologic diagnose was not available in 1 case. We described the ultrasonographic findings of all women previous to surgery. In 11 of the 12 cases of malignancy there were ultrasonographic signs of high suspicion; only 1 had pathologic doppler. In the 71 cases of benign tumours, 62 had positive correlation with ultrasonographic findings. We found that only 43 cases had doppler evaluation witch was positive in 10 cases, 2 of them with resistance index inferior to 0,5.

Discussion: In our experience, ultrasound is a very useful instrument in planning treatment of patients with adnexal masses. Unfortunately, the use of doppler was not performed in all patients. Our results show good sensitivity (91%) and specificity (87%) of the exam to exclude malignancy, correlating ultrasonographic findings with definitive / histological diagnose.

137

Malignant mixed mullerian tumor of the ovary – a case report

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Introduction: Malignant Mixed Mullerian Tumors (MMMTs) are defined by the presence of malignant epithelial and stromal elements and are rare neoplasms of the

female genital tract. The ovary and endometrium are the most common primary sites of origin, but it can also arise from the cervix, fallopian tube and pelvic peritoneum. MMMTs occur generally in elderly/postmenopausal women and presents at an advanced stage in the majority of cases. The MMMT of the ovary represents less than 1% of all ovarian malignancies and has a dismal prognosis, with highly malignant behavior. The most effective therapy is unknown. We report a case of a 68 year-old-woman with ovarian MMMT.

Methods and Results: M.M.F.V., 68 years old, multiparous, postmenopausal, hypertensive, presented with pelvic pain with 3 months of evolution, without other complains. She had a good general state, no palpable adenopatias. In the gynecological exam there was a palpable elastic, painful mass with 8cm in the left anexial region. The pelvic ultrasound confirmed a solid mass with 11cmx9cmx6cm in the left anexial area. The CA 125 was 33.3. U/mL. An exploratory laparotomy was decided and we performed a total hysterectomy with bilateral anexectomy, bilateral pelvic linfadenectomy, apendicectomy, epiplonectomy, parcial removal of the ileon and several biopsies. There was no residual disease. The anatomo-pathological exam revealed a malignant mixed mullerian tumor of the left ovary, G3, predominantly serous, infiltrating the bladder biopsies and ileon. The lymph nodes were negative. The uterus, right ovary, epiplon and apendix were normal. As it was a rare tumor, stage III, chemotherapy with carbaplatina and paclitaxel was decided (6 cycles). Despite this, 9 months after surgery, there was a pelvic tumor, with obstruction of the colon and bilateral obstruction of the ureter, that leded to the patient's death.

Discussion: Few women with ovarian MMMT have survived longer than a few years and aggressive surgical cytoreduction followed by combination chemotherapy has been used increasingly to control this malignancy. However, a major improvement in prognosis for this rare malignancy has not yet been achieved. The optimal postoperative therapy for ovarian MMMT is also debatable, partly because the histogenesis is controversial. Control of this unusual tumor may require novel aproches.

139

Fallopian tube transitional cell carcinoma – a case report

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Background: Carcinoma of the fallopian tube accounts for 0.3% of all cancers of the female genital tract and preoperatively it is often misdiagnosed as an ovarian carcinoma. Histologically most of the carcinomas of the fallopian tube are adenocarcinomas. Primary transitional cell carcinomas are extremely rare in the fallopian tube.

Case: A 61-year-old postmenopausal woman with watery, intermittent vaginal discharge, was found to have a right adnexal mass on pelvic ultrasound. The mass was predominantly solid with some fluid areas and measured 5.5 x 2.8 x 4.5 cm. MRI confirmed those characteristics and showed neither pelvic invasion nor ganglionic metastasis. CA 125 was 59.3 U/mL. The patient refused surgery. Ultrasound follow-up showed the same dimensions and characteristics of the mass, but CA 125 increased.

Two years later the patient agreed to be submitted to an exploratory laparotomy. At that time CA 125 was 192.2 U/mL. The surgery revealed a dilated right fallopian tube with 6 x 3 cm. Extemporaneous exam showed histologic features of transitional cell carcinoma without serosal invasion. She underwent total abdominal hysterectomy, bilateral salpingo-oophorectomy and infracolic omentectomy. The tumor was confined to the right fallopian tube but a metastasis was found in the omentum - FIGO Stage IIIa.

The patient received 6 courses of systemic chemotherapy (carboplatin and paclitaxel).

Five years after the initial diagnosis of the disease, she is doing well with no evidence of recurrence.

Conclusion: We report the case of a rare histologic type of a rare disease (fallopian tube carcinoma). The spread followed the usual pattern of the epithelial ovarian malignancies, i.e. mainly by transcoelomic exfoliation. The treatment was successful using the same strategy as for epithelial ovarian cancers.

144

Surgical management of 299 benign ovarian tumors

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Introduction: The aim of this study is to assess the surgical approach and the clinical outcome of benign ovarian tumours.

Methods: Retrospective study of 299 patients treated surgically for a benign ovarian tumour at our Institution from January 2000 to December 2006.

Results: The median of age was 32,5 years (10-77 years) and 92,3% of the patients were in reproductive age. In 10,4% of women, we found history of infertility. Clinical presentation was pain in 38,3% of cases whilst 75,7% were diagnosed incidentally during routine ultrasonography. The mean tumour size was 6,2 (1-20 cm). 79,9% patients had pre-operative CA-125 values within the normal range. The surgical approach was laparoscopic in 80% of cases and the rate of laparoconversion was 5,7%. The mean operative time and hospital stay were 69 (24-274 min) and 2,7 (1-10 days).

The surgical procedures performed were: unilateral (80,9%) or bilateral (13,2%) cystectomy and unilateral

anexectomy (3,9%). Histological examination of the ovarian lesion revealed endometriomas (27,1%), mature cystic teratomas (20,4%), serous cystadenomas (18,4%) and serous cysts (9,4%). Recurrence rate was inferior to 2%.

Discussion: Our results are in agreement with similar to the case series published in the literature. Laparoscopic approach is among us the surgical procedure of choice.

162

Recurrent leiomyomatosis peritonealis disseminata

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Introduction: *Leiomyomatosis peritonealis disseminata* (LPD) is a rare disorder (about 100 documented cases were found in the English language literature) characterized by the development of multiple smooth muscle nodules throughout the peritoneal cavity, mimicking peritoneal carcinomatosis. LPD patients are mainly females of reproductive age. Most LPD cases are clinically benign, and the lesions may partially or completely regress. Alternatively LPD may recur, progress or, rarely, undergo malignant transformation. We report a case of LPD recurrence.

Methods and Results: In 1998 a 31-year-old white female presented with a 19 weeks pregnancy, abdominal tumour and ascitis. She was then submitted to exploratory laparotomy with a corporal cesarean section and feto-placenta removal, omentectomy and tubal ligation. The pathological diagnosis was LPD. She was completely asymptomatic and without any hormonal treatment until 2006 when she developed pelvic pain, dysmenorrhea and abdominal volume increase. The pelvic ultrasound revealed the presence of two adnexa tumors (34x23mm and 18x9mm) with increased vascularization suggesting neovessels. In the exploratory laparotomy multiple peritoneal nodules were observed. She was submitted to a hysterectomy with adnexa removal and multiple biopsies of the abdominal-pelvic nodules. The histological examination confirmed a recurrence of LPD.

Discussion: LPD recurrence without exposure to high levels of endogenous or exogenous female gonadal steroids is very rare. LPD recurrence seems to be a risk factor for malignant transformation, and these patients need to be strictly followed. The case we report is distinctive in that LPD recurrence occurred without exposure to high levels of estrogens and progesterone. Our patient remains asymptomatic, without evidence of a further recurrence after months.

173

Cystic uterine leiomyoma mimicking an ovarian tumour – a case report

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Introduction: Leiomyomas are the most common gynaecological tumour. Typical appearances are easily recognised on imaging, however leiomyomas can undergo various kinds of asymptomatic degeneration that drastically alters their appearance and can cause confusion in the process of diagnosis.

Case-report: We report a case of a 56 years-old postmenopausal woman presented with dyspareunia and progressive abdominal enlargement. A large abdominopelvic mass was found in ultrasound and CT examination, with 214 mm, predominantly cystic, with thick internal septations and a solid component, which appeared to be an adnexal mass, although a peritoneal origin could not be excluded. Preoperative diagnosis was neoplasm of uncertain behaviour of the ovary.

An exploratory laparotomy was performed. The large mass was found to arise from the uterine fundus but with adhesions to the greater omentum. Both ovaries were of normal appearance. The mass was resected, followed by a total hysterectomy and bilateral salpingo-oophorectomy. Histopathological study of the tumour showed a leiomyoma with extensive cystic degeneration.

Discussion: This is an unusual case of a large cystic uterine leiomyoma mimicking a primary ovarian tumour on imaging. Atypical appearances of uterine leiomyoma are a challenge to diagnosis, and it is important to be familiar with the variety imaging appearances (US, CT and MR) of uterine leiomyomas to distinguish them from other significant diseases.

178

Three-dimensional sonography in differential diagnosis of ovarium tumors.

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To present day highly specific ultrasound diagnostic criteria of ovarian cancer are absent. Ultrasound picture of uterine appendages disorders is extremely diverse. That is why it is very difficult to determine the type of tumor and to differentiate it from non-tumorous changes. Thereupon it is very actual to look for reliable ultrasound signs, typical for malignant neoplasms. Evidence criteria

are based on improved technology of ultrasound visualization and on their correlation with clinical and morphological peculiarities of different tumors.

The sample included 119 patients 17-74 years old (36,4±2,8) with ovarian formations. Ultrasound examination was made with "VOLUSON-730 expert" using transvaginal (5-9 MHz) and transabdominal (3,5-5 MHz) sensors. In 2D and 3D regimens the structure of formation and intratumorous blood flow were evaluated. Diagnosis was confirmed by operation with following morphological analysis.

3D power-Doppler imaging evenly improves evaluation of spatial location and disturbance of treelike ramification of vessels inside the tumor. Sensitivity and specificity of method in prognosis of malignant neoplasms is 98,6% and 88,7%, respectively. In 94% of cases in which we used combination of 2D and 3D ultrasound with color Doppler mode echographic conclusion coincided with morphologically confirmed diagnoses. Tumorous formations were revealed in 53% (63), benign tumors in 34% (41), malignant tumors – 9% (11), metastatic tumors - 3% (3), in one case – rectosigmoid carcinoma. Only in two patients (with abundant vascularisation and endometrioma of highly heterogeneous structure and tuberous inner surface) malignant nature was misdiagnosed.

Three-dimensional technologies significantly diminish the rate of diagnostic mistakes by pre-operational examination of patients with ovarian tumors. Diagnostic accuracy determines timely choice of appropriate extent of surgical operation and as the result, effectiveness of treatment.

189

Wertheim-Meigs Procedure. Jan-1996 To Set-2007 Analysis

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Introduction: Wertheim-Meigs procedure continues to be the election procedure for invasive cervical cancer treatment in initial stadiums. Since first operation until the current moment technique has had a great reduction in morbimortality, due to the advances in anaesthetics care and with the development of specialized surgical teams. We evaluate early and late surgery morbidity of Wertheim-Meigs and the quality of surgical specimens.

Methods: Retrospective study including 70 patients submitted to this surgical intervention by the Oncology Gynaecology Group of Guimarães's Hospital, during the period January 1996 to September 2007.

Parameters analyzed: age, FIGO's stage, intra-operative complications, early and late post-operative complications and histopathology.

Results: The patients mean age was 49 years (range 29-79). We found 63 cervical cancers (49 epidermoid and 14 adenocarcinoma) and 7 endometrial carcinoma propagated to cervix.

In all cases Piver III radical hysterectomy was performed. Pelvic lymphadenectomy was performed in 82% of patients and para-aortic nodes were also excised in the other 18%.

We had 6% intra-operative complications, 20% early post-operative complications and 10% late post operative ones. The mean surgery duration and hospitalization was 160 +/- 58 minutes and 9 +/- 5 days. In relation to histopathology were evaluated: surgical edges (free of lesions in all cases), parametrium invasion (6%), lymphovascular invasion (28%), the vaginal sleeve length (mean 3,5cm), TNM and FIGO stage, nodes excised (mean 25). The mean follow-up time was 43 months.

Conclusions: Well trained team can assure a good quality of surgical specimens and low morbidity indexes.

200

Successful spontaneous pregnancy following conservative management of a borderline ovarian tumor – a case report

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Introduction: Borderline ovarian tumors (BOT) comprise approximately 15% of all epithelial ovarian tumors. They are staged according to the FIGO (International Federation of Gynecology and Obstetrics) classification of ovarian cancer. Since approximately 80% of these tumors are diagnosed at stage I or II and the malignancy potency is low, the prognosis is better than other ovarian malignancies. We report a case of a young woman with a BOT that wished to maintain fertility.

Methods/Results: A.T.V.L., 33 years old, GIVPI, who was submitted to a cystectomy of the right ovary (02/01) because of a cystic complex mass adjacent to the right ovary identified in the transvaginal ultrasonography. Serum CA125 was 37,0 U/mL. The anatomo-pathological exam revealed mucinous borderline tumor of the ovary. She was transferred to our Institution where we found a normal gynecologic exam with no palpable adenopathies. A complete surgical staging procedure was performed (exploratory laparotomy with right salpingo-ooforectomy + wedge biopsy of the contralateral ovary + peritoneal biopsies + omentectomy + apendicectomy + peritoneal cytologic examination + pelvic bilateral linfadenectomy) which revealed neither residual tumor nor metastasis. At 1-year follow-up all the routine exams were normal and she was informed that she could try to get pregnant. She had a term eutocic delivery in the following year (18/03), without neonatal complications. In 19/05 she

was diagnosed a 6-week spontaneous abortion. There was no evidence of the disease during the follow-up period of 6.4 years.

Discussion: Although BOT are rare they still pose problems to both pathologists and gynecologists because they are a disease of younger and fertile females. Because they are seen in the reproductive period, preservation of fertility is an important issue in the management of these tumors. According to most authors, the prognosis is good at any stage and there is a 10-year survival rate of approximately 95% for stage I lesions in these borderline neoplasms. The authors reported a successful case of spontaneous pregnancy after conservative treatment of a stage IA unilateral mucinous borderline ovarian tumor that went to term, without significant maternal or neonatal morbidity.

201

Borderline ovarian cancer - considerations at a five-year follow-up

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Introduction: There is a special category of epithelial ovarian cancers (EOC) called borderline or cancers of low malignant potential based on the microscopic appearance of the cancer, that comprises approximately 15% of all EOC. They are expected to be very slow growing. Signs of recurrence may not develop for fifteen or twenty years and most will never recur.

Objective: The present study was undertaken to establish the role of surgical procedures, histotype, and stage of the tumor on the survival rate of patients with borderline ovarian tumors at a 5 year follow-up.

Material and Methods: It is a retrospective study that analyses histological grade, stage of the disease, treatment and follow-up up to 5 years of all new cases of borderline ovarian tumors that occurred in the years of 2000, 2001 and 2002 in our Institution.

Results: During these 3 years, 61 new cases of ovarian cancers were diagnosed of which 91.67% were EOC (55/61). The borderline ovarian cancers (BOC) correspond to 12,73% (7/55) of all EOC - 42.86% (3/7) were serous, 42.86% (3/7) were mucinous and 14.28% (1/7) was serous and mucinous. The mean age of patients at diagnosis was 46.2 years (range: 33-59 years). The survival rate after 5 years was 100%.

Discussion: The mean age of occurrence of BOC is approximately 10 years younger than that of women with frankly malignant ovarian cancer. As with other ovarian masses, staging is performed surgically. Most are stage I, but can be stage III when diagnosed.

The 2 major histologic tumor subtypes are serous and mucinous.

215

The effect of cervical cone excision on future pregnancy outcome

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Objective: To estimate whether cervical cone excision is associated with an adverse outcome of subsequent pregnancies

Method: Retrospective case control study, which included a cohort of women who had a pregnancy after treatment for cervical intra epithelial neoplasia in our department between January 1st 1999 and June 30st 2006.

Each case was matched with two women who delivered without prior treatment of their cervix. Outcome measures were length of gestation, birth weight, preterm premature rupture of membranes (PPROM) and mode of delivery.

Results: of a total of 185 women of reproductive age who had cervical cone excision performed during the study period, 32 had a pregnancy after the procedure. 8 women were excluded (7 spontaneous abortion and 1 voluntary termination of pregnancy). Delivery prior to 37 weeks was found in 20.8% of the conization group and in 2.1% of the controls ($p=0.008$). PPROM was found in 16.6% of the conization group and in 2.1% of the control group ($p=0.04$).

There was no significant difference in duration of labour between the women who had undergone conization and the controls. Cesarean section was performed in 29.1% in the conization group vs 11.6% in the control group ($p<0.05$). Dystocia (failure to progress cervical dilatation) was the c-section indication in 85.7% vs 33.3% in the control group. Birth weight less than 2500g was found in 4.2% of the conization group. Mean birth weight had no significant difference between the two groups. No association was found between the characteristics of the cone, including depth and the rate of neonatal or maternal outcomes.

Conclusion: Despite the small number of cases, cervical cone excision procedure is associated with an increased risk of overall preterm delivery, preterm delivery after PROM and C-section.

216

Relationship between the VEGF level and dendritic cells in women with ovarian carcinoma

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Background: To detect the VEGF level and to evaluate correlation between VEGF and dendritic cells (DCs)

subsets in peripheral blood (PB) and peritoneal fluid (PF) of patients with epithelial ovarian carcinoma – EOC ($n=50$) and benign ovarian tumors ($n=31$).

Methods: Mononuclear cells were isolated from PF and PB, stained with monoclonal antibodies (mAbs) against DC antigens (anti- BDCA-1 for myeloid, anti- BDCA-2 for lymphoid) and estimated using flow cytometry. The plasma and peritoneal fluid VEGF level was measured by ELISA kit.

Results: The percentage of PF myeloid DC in mononuclears was significantly lower in patients with ovarian cancer in comparison to the group of non-malignant ovarian tumors (0.69% and 11.7 %). The percentage of PF lymphoid DCs was higher in patients with ovarian cancer than in the reference group (0.63% and 0.12%). The percentage of PB myeloid and lymphoid DCs did not differ significantly between studied groups. In women suffering from ovarian cancer the percentage of both myeloid and lymphoid DCs was higher in the PF than in the PB. In the reference group the percentage of myeloid DCs was higher but of lymphoid DCs lower in the PF than in the PB.

The peritoneal fluid VEGF levels (943.61 pg/ml) in patients with EOC were significantly higher than those in plasma (44.47 pg/ml). There were no difference between PF (63.41 pg/ml) and plasma (46.87 pg/ml) VEGF levels in women with benign ovarian tumors.

PF levels of VEGF in ovarian cancer patients were significantly higher compared with controls ($p=0.000001$). Plasma levels of VEGF did not differ significantly ($p=0.58$) between studied groups of patients.

There were no correlation between the PF and plasma VEGF levels and dendritic cells subsets in women with malignant and non-malignant ovarian tumors.

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217

Human Pappilomavirus infection associated lesions in HIV-infected women

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Introduction: There is still limited data on the outcome of Human papillomavirus (HPV) and Human immunodeficiency virus (HIV) coinfection. It is known that HIV-infected women are at increased risk of cervical, vulvar and anal intraepithelial neoplasia, as well as lower genital tract condyloma acuminata. There seems to be also an increased risk for invasive cancer, but this is not yet established as well as the impact of antiretroviral therapy in the incidence of these disorders. The aim of our study was to characterize HPV infection associated

lesions among HIV-infected women followed at our institution.

Methods: We analysed retrospectively data from HIV-infected women followed at the Gynecology Department of our hospital from 1998 to 2007.

Results: Eighty-nine women were enrolled. Sixty-three (71%) were on antiretroviral therapy. Cervical smear was performed to all women and cervical disease was assessed by colposcopy and cervical biopsy when necessary. Abnormal cervical cytology was found in 39 women (43,8%): 5 ASCUS (6%), 24 LSIL (27%) and 10 HSIL (9%). There were 24 women (26,9%) with cervical disease: 10 cervical intraepithelial neoplasia (CIN) 1 (11,2%), 12 CIN 2/3 (13,4%) and 2 invasive cervical cancer (2,2%). Vulvar disease was diagnosed in 16 women (18%): 13 condylomas (14,6%) and 3 vulvar intraepithelial neoplasia (3,3%). Vaginal intraepithelial neoplasia was diagnosed in 2 women (2,2%). Anal cytology was performed in 33 women, revealing 6 cases of LSIL (18%).

Discussion: There was a high prevalence of cervical and anal cytological anomalies, cervical, vulvar and vaginal intraepithelial neoplasia, condyloma acuminata and cervical cancer. The high prevalence of anogenital lesions and their multifocality underscores the importance of a multidisciplinary approach in HIV-infected women.

236

Colpocytology screening in HIV women

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We have studied 96 women HIV seropositive in routine evaluation regarding cervical cancer screening - endocervix and exocervix.

Epidemiological data from this sample of population are the following: (average \pm sd) - age 38,3 \pm 9,31 years and menarche 13,3 \pm 2,03 years; 32 cases (33%) are younger than 35 years; 61 cases (63%) are above 35 years and no registration was noted in 3 cases. Regarding parity, 76 are multiparous (79%), 11 are nuliparous (11%), 4 never been pregnant (4%) and no data in 4 cases. We had founded 10 cases (10%) in post-menopausal (41,7 \pm 12,13 years).

Results from the screening - Cytological anomalies were detected in 25 women (26%) and were distributed in: superficial low grade lesion - 9 (36%), superficial low grade lesion with HPV - 8 (32%), ASCUS - 3 (12%), ASCUS with HPV - 1 (4%), high grade lesion - 2 (8%), ASC-H - 1 (4%) and CIN II - 1 (4%).

Negative results for cervical dysplasia were founded in 71 cases (74%); in this subgroup, genital infection were founded (parasites, "candida albicans" fungus and bacterial vaginosis) at the same time in 36 cases (50,7%)

and 35 cases (49%) without infection. Inflammation was founded in 4 cases (4%) with negative pap smear.

Comments: In general, cervical cancer and cervical dysplasia screening in women without HIV, will found positive results in 5%. In this study, cytological anomalies frequency in HIV women is substancially higher than general population - 26%. HPV infection was detected in 9 cases with cytological anomalies. The actually HIV patient long life span and those results, reinforce the recommendations for regullary cervical cytology evaluation in HIV women.

247

Surgical treatment fof cervical cancer

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Objectives: The aim of the study was to estimate age, parity, distribution by stage of disease and comparison between clinical and postoperative stage of the disease in patiens with invasive cervical cancer.

Materials and Methods: 654 surgically treated patients with hystologically verified invasive cervical cancer were included in the study. Results were presented in absolute and relative numbers.

Results: Most of the cases - 258 (39.4%) were aged between 41-50. More then half of our patients (55%) had 2 deliveries. Most our cases - 413 (63.1%) was in I b stage of the disease, 46 (7%) had II a stage and 98 of patients (15%) was in II b stage of cervical cancer. We found microinvasive disease in 59 (9.1%) cases but 34 of surgically treated (5.2%) had no invasive disease. Surgically removed lymph-nodes were positive in 20.1% cases in I b stage of the disease, 39.1% were positive in stage II a and in even 96% patients with II b stage of cervical cancer. Lymph-vascular invasion was present in 56.4% of all cases. In patients with negative lymph-nodes we found 200 patients (44%) with lymph-vascular invasion which is bad prognostic factor and was the reason for radiotherapy. The highest percentage of positive lymph-nodes had patients with adenosquamous histological type of cervical cancer 46.3% , while in case of squamocellular and adenocarcinoma that percentage was significantly lower - 24.9 % and 13.5%. Most of our patients had grade 2 (moderately differentiated cancer - 74.9 % then grade 3 (undifferentiated - 19% and grade 1 (well differentiated) - only 6.1%.

Conclusions: The analysis of patients age shows the trend of increased incidence rate of invasive cervical cancer in younger females. Most surgically treated cases was in I b stage of the disease, but in 9.1% of total number of cases we found microinvasive cancer. Clinical stage higher then surgical was found in 13.1%, while in 22.4% it was lower.

252

Squamous cell carcinoma - a curious case

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Cervical carcinoma was once the most frequent form of cancer in women around the world.

Squamous cell carcinoma is the most common type of cervical cancer, accounting for 85% to 90% of all cases. It develops from the cells that line the inner part of the cervix (squamous cells) and usually begins where the ectocervix meets the endocervix – the squamocolumnar junction (in “transformation zone”).

Fortunately the widespread use of Papanicolaou (cytologic) screening of women, has dramatically lowered the incidence of invasive tumors, making cervical cancer now eighth in the roster of cancer-killers. This simple, highly effective screening procedure can detect precancerous conditions of the cervix and more than 90% of all cervical cancers.

We present a case of a 57-year-old woman with a history of invasive ductal carcinoma of the breast submitted in February 2006 to a modified radical mastectomy with neoadjuvant chemotherapy. She was posteriorly submitted to radiotherapy and adjuvant chemotherapy and later medicated with goserelin and tamoxifen. Her routine examination and tests were normal until November of 2006. At this time she had a routine gynaecologic ultrasound (US) that revealed a homogeneous vascularised mass with 37x32mm, localised in the anterior wall of the uterus and cervix. The last PAP test performed (October 2006) revealed ASC-US. A colposcopy and a endocervical curettage was then performed. The colposcopic exam didn't reveal areas at risk and the pathologic exam of the endocervical curettage made the diagnosis: **Invasive squamous cell carcinoma moderately differentiated and keratinized**. Radiotherapy was the therapeutic decision at the Oncologic Portuguese Institute.

A cutaneous metastasis of the breast carcinoma was diagnosed in January 2007, for which she underwent chemotherapy. At the present the routine examination has been satisfactory and the current medication is capecitabine 500mg/day.

It's important to emphasize in this case the atypical behavior of the tumor, and the influence of the US result in the complementary study with endocervical curettage. With this case the authors want to draw attention for the importance of the routine exams that are usually available, and particularly their interpretation and complementarity.

278

Bilateral Krukenberg tumours complicated by pregnancy

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Introduction: Krukenberg tumour is an uncommon metastatic tumour of the ovary, accounting for 1-2% of all ovarian tumours. This entity is characterized by the presence of mucin-filled, signet-ring cells within the cellular stroma of the ovary.

More than half of this tumours are from stomach, and the next most common sites of origin are the intestine and breast.

Krukenberg tumor is sometimes complicated by pregnancy and, generally, the outcome of such patients is poor.

Case report: The authors recently observed a case of Krukenberg tumour associated with pregnancy in a caucasian women.

A 36-year-old woman was pregnant with 30-week gestation, and presented to MBB from Leiria Hospital with a clinical-radiological suspicion of breast cancer, and the presence of ascites and metastatic implants of the peritoneum. Abnormal findings included asthenia, abdominal pain, dyspnoea and stony mass on the left breast (± 10 cm). The fetus was alive.

An abdominal ultrasound examination revealed marked ascites and metastatic implants of the peritoneum. The breast ultrasound showed voluminous swelling on the left breast with 6x5cm. The thoracic radiography proved right hydrothorax, and it was performed toracocentesis that revealed malignant cells.

The patient underwent elective caesarean section at 30 week with delivery of vital male newborn weighing 1390 g, with Apgar score 8/10/10 and the baby went to the intensive care unit. Surgical exploration confirmed ascites, metastatic implants of the peritoneum, and revealed stony shape of stomach and irregular, solid ovaries. It was performed right oophorectomy, left anexectomy and epiploic biopsy. Microscopic features revealed adenocarcinoma with low differentiation (G3) and signet ring cells, bilateral of the ovaries, and epiploic metastases. In pos-operative period, the patient developed a hypovolemic shock, and exploratory laparotomy was made and showed hemoperitoneum due irreversible uterine atony, and then, total hysterectomy was performed.

Two weeks later, the mother died because of multi-organ failure.

283

Abnormal cervical cytology in pregnancy - Case review

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Objective: The objective of this study was to evaluate the clinical outcome and discuss the management of women presenting abnormal cytology during pregnancy.

Methods: We reviewed patients with abnormal cytology during pregnancy between January of 2005 and December of 2006.

During this period of two years was performed cervical screening in 6018 pregnant women. Sixty three (1%) had abnormal cytology findings. Only fifty five were included in the study.

Results: Cytological results included 15 ASC-US (27%), 1 AGC (2%), 29 LSIL (53%) and 10 HSIL (18%).

All cases underwent colposcopy and in 48 cases (87%) punch biopsies were performed. Fourteen colposcopies suspected of high grade lesions, which corresponded to 2 CIN2, 5 CIN3, 1 CIS and 1 microinvasive carcinoma.

In post-partum period, 18 showed regression, 9 showed persistent lesions, 10 had a progressive course and 19 patients missed follow-up visits.

Seventeen were treated – 4 with laser vaporization and 13 with conization (10 with laser). Histological exams found 5 CIS and confirmed the microinvasive carcinoma.

Conclusion: In our institution 1% of all pregnant women had abnormal cytological findings and 9 had CIN 2 lesions or higher.

We conclude that opportunistic screening performed in pregnant women seems to be very important.

The high prevalence of CIN lesions lead us to perform colposcopically directed biopsies during pregnancy and ensure appropriate treatment in post-partum period.

In our institution we face the problem of having a high rate of patients missing follow-up visits.

296

HPV Infection: what does the public know?

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Introduction: Genital Human Papilloma Virus infection is one of the most common sexual transmission diseases worldwide. Knowing that high-risk HPV types are a necessary cause for cervical cancer is of extreme importance when trying to motivate patients to HPV screening and HPV vaccination. The objective of this study was to determine the patients level of awareness of this prevalent infection and its consequences.

Methods: The authors elaborated a questionnaire, based on common questions about this subject, such as type of infection, risk factors, signs and symptoms, relation of HPV infection with abnormal smears and cervical cancer and vaccination. The questionnaires were distributed to 200 women attending Gynecology Consultations in a tertiary hospital, during a 3 months period, in 2007.

Results: Preliminary results revealed an overall ignorance about HPV infection in this population. The knowledge level on HPV health implications and association with abnormal smears and cervical cancer was also very low.

Discussion: The sexually transmissible nature of this infection is of major concern and represents a barrier when seeking information. Such as reported by other studies we verified that general awareness about HPV infection and, more important, its relation with cervical cancer is low. This became a very important issue in the present era of HPV vaccination, since its success is conditioned on a high uptake within the population, which in turn depends on women or parental decision. Knowing the public lack of awareness about HPV, educational initiatives on this matter are necessary in order to prevent infection and to increase the acceptance of HPV testing and cervical cancer screening. Physicians will certainly have an important role on this process.

305

Completeness of excision and follow up cytology in patients treated with loop excision biopsy (LLETZ)

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Introduction: Screening programs have made a huge impact on decreasing the morbidity of Cervical Cancer. Women with high grade lesions are generally treated either by excision (LLETZ/Cone) or LASER treatment. Follow up is by a combination of cytological & Colposcopic assessment. There is variation in method of follow up, especially if the completeness of excision cannot be commented on during histological analysis.

Methods: Retrospective Audit of patients attending the Colposcopy clinic at Ipswich Hospital, Ipswich, UK. All patients undergoing LLETZ in 2006 were assessed. Data was obtained from the Infoflex system, pathology laboratory data and patient notes and analyzed statistically.

Results and discussion: The highest number of patients in 21- 40 age group. All were seen within the target waiting periods. 79 (33.5%) patients presented with Low grade, 134 (56.8%) with high grade cytological lesions and 5.1% with glandular abnormality.

"See and treat" rates were 60.7% for moderate dysplasia, and 56.4 % for severe dysplasia. Most patients with Moderate and severe dysplasia on Cervical smear showed CIN2 and CIN3 respectively on histological analysis. Only 18.2% of patients with moderate dysplasia and 8.9% of patients with Severe dysplasia justified "first biopsy" management. There appeared to be a higher tendency for "first biopsy" in younger patients.

Only 6 out of 64 patients with "incomplete excision" on LLETZ had positive cervical smears on subsequent 12 month follow up. These included 3 with borderline, 1 with moderate and 2 with severe dyskaryosis on follow up smears.

Conclusions: There is a need for an increase in "See and treat" patients. Conservative "biopsy first" is not justified unless the clinical picture and findings at Colposcopy indicate otherwise. Cytology correlates well with Histology except in Borderline and to an extent mild dysplasia on Cervical Smears. Patients with incomplete excision do well; however caution is needed as high grade lesions can be detected at a later stage.

314

Endometrial stromal tumours - the experience of the Division of Gynecology of Hospital S. Marcos (Portugal) from 1991-2007

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Introduction: Endometrial stromal tumours (EST) are rare tumours that occur primarily in perimenopausal women.

Material and methods: Retrospective study of 8 cases of EST occurred between Jan 1991 – Sep 2007 in the Division of Gynecology of Hospital S. Marcos. Statistical analysis involved SPSS® 15.0 version.

Results: The 8 cases of EST correspond to 4,1% of all primary uterine corpus malignancies (n=193) occurred in that time-span in our institution. The 3 types of EST observed were low-grade endometrial stromal sarcoma (50%), undifferentiated endometrial sarcoma (37,5%) and stromal nodule (12,5%). Mean-age of presentation was 52,2 ± 10.8 years and these neoplasms were usually diagnosed (87,5%) in stage I disease of FIGO classification. Management of EST was always surgical, complemented with adjuvant therapies in 50% (n=4) of cases, being radiation therapy alone in one half of these (n=2) and radiation therapy + chemotherapy in the other half. One patient's contact was lost during follow-up, nevertheless global mean time of follow-up was 7,0 ± 5,2 years. Recurrence of the malignancy was detected in 14,3% (n=1) of the cases. The global 5-year survival rate was 53%.

Conclusion: Although being a small series, this study reproduces the knowledge about endometrial stromal tumours that's available in literature. The majority of EST presented initially as stage I disease but the 5-year survival was only 53% reflecting the aggressive nature of these neoplasms. We observed a lesser rate of recurrence of tumours than in the literature (14,3% vs 50%) perhaps due to the short period of follow-up that some patients still have.

334

Germ cell ovarian tumors with malignant potential casuistic of the Division of Gynecology, S. Marcos Hospital Portugal (1990-2006)

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Introduction: Germ cell tumors represent 20 to 25% of all ovarian neoplasms, but only 3% are malignant. These tumors occur mainly in young women, which involves decisions concerning specially childbearing. Advances in chemotherapy have modified the prognosis of different types of germ cell tumors.

Material and methods: Retrospective study of seventeen cases of germ cell ovarian tumors with malignant potential occurred between January 1990 and December 2006, with particular attention to clinical profile, staging, treatment options and follow-up. The statistical analysis was performed using SPSS for Windows, version 15.0.

Results: Seventeen cases (9,9%) of germ cell tumors with malignant potential were reviewed, representing 2,7% of all gynecologic tumors diagnosed in S. Marcos Hospital – Braga, in a 16-year period. The average age of incidence was 37,9 (14-83) years, with the most affected group ranging from 10 to 30 years (41,2%). The histological types verified were immature teratomas (47,1%), *struma ovarii* (17,6%) dysgerminomas (11,8%), and also 11,8% of mature cystic teratoma with malignant transformation (both with development of squamous cell carcinoma). Most teratomas were diagnosed grade II tumors, although reported one case of grade III with gliomatosis peritonei. All struma carcinoids were stage Ia at diagnosis; dysgerminomas were stage Ic, one of them occurring in a pregnant patient at the first trimester. The initial approach to most of these germ cell malignancies had been unilateral oophorectomy and proper surgical staging. Chemotherapy with BEP regimens was used for treatment of grade II and III immature teratomas, and a second-look laparotomy was performed in a patient with grade II tumor. One dysgerminoma was treated with chemotherapy; the other one with radiation therapy, which led to fertility problems. The 5-year and 10-year survival rates were

excellent (100% for all histological types). Still, one case of mature cystic teratoma with malignant transformation developed metastatic pleural disease and the patient died 11 years after diagnosis.

Conclusions: The obtained results in this retrospective study show that early diagnosis associated to a correct staging allows an appropriate and timely treatment, obtaining a high survival rate. The improvement of current chemotherapy regimens is offering an excellent long term control or cure.

339

Efectiveness and tolerance rates of the hpv quadrivalent prophylactic vaccine: the greek investigation

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Purpose: HPV 6 and 11 are responsible for almost 90% of genital condylomas. HPV 16 and 18 are characterized as definite carcinogens in humans, responsible for 75% of all cervical cancers. Purpose of this study was to determine the effectiveness, tolerance and side effects rates of the HPV quadrivalent prophylactic vaccine.

Methods: We studied the immunologic response, the tolerance and the side effects rates, in 10 women aged from 16 to 23 years old, attending the Division of Pediatric – Adolescent Gynecology and Reconstructive Surgery, 2nd Department of Obstetrics and Gynecology, University of Athens, after the administration of the HPV quadrivalent prophylactic vaccine.

Results: The immunologic response of the HPV quadrivalent prophylactic vaccine was found to be strong and lasting during the 5 years of follow up with high levels of antibodies. It was also found to be very well tolerated and side effects are mostly located at the site of vaccination.

Conclusions: HPV quadrivalent prophylactic vaccine is one of the most effective and well-tolerated, with mild side effects, methods for the prevention of cervical cancer. We strongly support the introduction of this vaccine in the routine vaccination program of young female population in order to raise protection in this group of patients against cervical cancer.

340

Clinical and therapeutics outcomes of uterine sarcomas: results from eight years experience

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Introduction: Uterine sarcomas are relative rare tumours characterized by poor prognosis. Aim of this study was to review the clinical characteristics, prognostic factors and therapeutics results in patients with uterine sarcoma treated in our University Hospital from 1998 until now. Methods: Ten patients with histologically proven uterine sarcoma were evaluated in this retrospective study. Cases were distributed into groups based on definitive diagnosis of uterine sarcoma.

Results: The median age of patients at presentation was 55.8 years (range, 36-80). Six-patients were diagnosed with leiomyosarcoma, three- patients with malignant mixed mullerian tumour and one-patient with endometrial stromal sarcoma. Six- patients (60%) were postmenopausal and abnormal uterine bleeding was the most common manifestation. Preoperative diagnosis of uterine sarcoma was established in 4 patients (40%). Total abdominal hysterectomy with bilateral salpingo-oophorectomy was performed in 80% of the patients. Postoperative adjuvant chemotherapy was delivered in 7 patients. Radiation therapy used in combination with surgery in 3 patients and in one case only for palliation. Survival rates was 60 % in all groups until now.

Discussion: Uterine sarcomas are relative rare malignant tumours and they constitute 2% to 4% of all invasive uterine malignant tumours. Preoperative diagnosis of uterine sarcomas were difficult. The diagnosis is usually accidental and postoperative. In our analysis of the factors affecting survival, aggressive surgery with no residual disease and histologic tumor grade were the most important contributed to disease-free survival.

341

Uterine Sarcoma: A study of 18 cases

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Uterine sarcomas are rare malignant tumours accounting for less than 3% of all female genital tract malignancies. The rarity of these tumours and their pathological diversity have made it difficult to define optimal management.

Objectives: To evaluate the clinical outcome of patients suffering from uterine sarcoma treated in Instituto Português de Oncologia of Lisbon, and to recall the existence and the severity of this pathology.

Method: This study involved a retrospective review and analysis of 18 cases of primary sarcoma of the uterus collected at the Instituto Português de Oncologia of Lisbon from 2001 and 2005.

Results: Minimum age at diagnosis: 44 years, maximum: 88 years, mean: 61,2 years, std deviation: 12,04. The most common presenting symptoms were vaginal bleeding (N=12), and pelvic pain (N=2). The majority of women were in menopause (N= 15). The most common histological type encountered was endometrial stromal sarcoma (N=9) followed by leiomyosarcoma (N=4). Treatment was primarily surgical (total abdominal hysterectomy plus bilateral salpingoophorectomy) in some cases with adjuvant external radiotherapy and brachytherapy. In our experience the overall 3 year survival rate was 46% from surgery.

Conclusions: Uterine sarcomas are rare and aggressive tumours diagnosed late in life, characterised by rapid clinical progression and a poor prognosis, even when presenting at an early stage.

342

Viral load, CD4+ cell count and abnormal cervical cytology in HIV-infected women

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Introduction: There is a well known association between immunosuppression and abnormal cervical cytology although this correlation has never been completely demonstrated. The aim of this study was to determine the correlation between cervical cytology, viral load and CD4+ cell count in HIV seropositive women.

Methods: A retrospective observational study was conducted in the HIV seropositive female population who attended gynaecological care at our hospital between January 1995 and June 2007. Women were evaluated concerning the following variables: women's age, HIV type, mode of transmission, cytology result, CD4+ cell count, viral load and antiretroviral therapy. A multifactorial analysis was performed using Chi-square test and ANOVA.

Results: A total of 368 women were included. Mean age was 34,4 years. Sixty eight percent of HIV infections was acquired by heterosexual transmission and 93% were HIV type 1. No significant difference was found between HIV type and incidence of abnormal cervical cytology (p=0,20). There was a significant association between CD4+ cell count and squamous intraepithelial lesions (p < 0.001). No significant difference was found between the viral load and abnormal cervical cytology.

Conclusion: In our series we have found statistically significant relationship between CD4+ cell count and

abnormal cervical cytology. There was no correlation between viral load count or epidemiologic VIH data and abnormal cytology.

346

Cone biopsy for a two-step discrepancy

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Cone biopsy of the cervix is a diagnostic and therapeutic procedure used in the management of CIN. One of the indications of conization is the lack of concordance between cytology and biopsy. The aim of this study was to evaluate the results of cone biopsy when it was performed for cyto-histological discrepancy.

Methods: Retrospective study based on the information in the processes of women admitted in our Lower Genital Tract Disease Unit. We reviewed the following parameters: the cervical cytology alteration that motivated a colposcopy and the biopsy and conization results.

Results: Since 2000 to 2005, 149 patients were submitted to a cervical cone biopsy. Cyto-histological discrepancy represented 18,8% (28/149) of all the conizations. The cone biopsy confirmed a high grade lesion in 5 patients (17,8%). In 24 women the conization was secondary to a cytological finding of HSIL with a biopsy revealing either normal or CIN I. In these patients the cone biopsy confirmed a high grade lesion (CIN II/III) in 3 patients (3/24). In 2 cases the cone biopsy was performed for a cytological suspect of stratified carcinoma not confirmed in the colposcopic biopsy. A carcinoma in situ was confirmed in one of these patients. In the other 2 cases the cytology revealed a lower grade lesion than the biopsy and in one of these the histological result revealed a CIN III with a focus of stratified carcinoma.

Discussion: This study, despite limited by small numbers, suggests that in most cases of cyto-histological discrepancy, the colposcopic impression and biopsy is reassuring. All discrepancies should be reviewed with the pathologist before consider a cone biopsy.

355

Ovarian thecoma and adenocarcinoma of the endometrium – a case report

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Introduction: Thecomas are stromal tumors that account for only 2 % of all ovarian tumors and that usually occur in older, postmenopausal women. They are rarely bilateral and malignant.

Methods: We report a case of a 67 year old woman with no relevant past history or complaints, admitted in our service due to a left ovarian solid tumor detected by ultrasound. The CA 125 and CEA were normal and the CA 19.9 was slightly elevated. The patient was submitted to a total hysterectomy and bilateral oophorectomy and the histologic examination revealed a bilateral ovarian thecoma and uterus with atrophic endometrium with areas of atypical hyperplasia and focus of adenocarcinoma.

Conclusion: Thecomas are very rare ovarian tumors known to produce estrogen. Due to this unopposed estrogen production they can be associated with endometrial hyperplasia and adenocarcinoma. The prognosis for this patient is good since the tumor was confined to the endometrium, with 5-year survival rates between 81 and 95 %.

363

Intraoperative pathology in ovarian tumours

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Introduction: Ovarian carcinoma is the most lethal form of gynaecological cancer. Exploratory surgery is usually required for diagnosis and staging and extemporaneous histological examination of the anexial mass has been recommended. When malignancy is thus confirmed, total hysterectomy and anexectomy as well as pelvic and paraortic lymphadenectomy are indicated.

Methods: All cases, between January 2002 and December 2006, of ovary tumour that underwent exploratory surgery with extemporaneous histological examination in the Hospital de São Teotónio, were retrospectively reviewed. Clinical and imagiological profile, CA 125 levels, type of surgery and concordance between intraoperative and definitive histopathology results were registered.

Results: 76 cases were reviewed. Patient mean age was 53,7 years and mean tumour size was 11cm. Through intraoperative histological examination, 62 cases were considered to be benign, 12 malign and 2 inconclusive. Definitive diagnosis provided by pathological examination after surgery confirmed the benign nature of the tumours in 58 out of 62 cases and 4 cases were reclassified as borderline malignancy. Malignancy was also confirmed on all cases intraoperatively classified as such and the 2 previously inconclusive cases were deemed as serous papillary cystadenoma and serous borderline bilateral ovarian tumours.

Discussion: Extemporaneous histological examinations are limited by time pressure and the nature of the specimens, being particularly difficult in borderline malignancies. Despite its limitations, it has an established role in the management of the anexial mass, avoiding the risk of misleading an ovarian malignancy and reducing over-treatment of benign pathology.

370

Smooth-muscle tumor of uncertain malignant Potential (STUMP) - a case report.

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Introduction: Smooth muscle tumors of uncertain malignant potential (STUMP) are a rare variant of uterine smooth muscle tumor and can present a diagnostic problem to the pathologist and the clinicians due to their uncertain clinical behavior.

Case report: A 41 year old, nulliparous patient, presented with difficulty in fitting into her clothes. No urinary or bowel symptoms. The periods were regular and light. She did not wish to have children.

Abdominal examination revealed an enormous mass filling the abdomen. CT scan showed huge solid mass arising from the pelvis with cystic components. No ascites and normal para-aortic region. Findings were suggestive of ovarian cancer. CA-125 was 340 and other tumor markers were normal. She underwent staging laparotomy. At the time of surgery the uterus was grossly enlarged. The entire specimen weighs 10.2 kg. Large lobulated tumor was seen arising from the fundus and the posterior surface of the uterus measuring 350x320x170 cm. Both fallopian tubes appeared normal. Total abdominal hysterectomy with bilateral salpingo-oophorectomy, omental biopsy and left pelvic node sampling was carried out.

Histopathology diagnosed the uterine tumor as STUMP based on mitotic index, nuclear atypia and other morphologic features. Lymph nodes and omentum were free of tumor.

The recommendation was careful clinical follow up.

Discussions: STUMP has been a source of concern. Although most will behave in a benign manner, some will display a malignant course. There have been reports of recurrence as high-grade leiomyosarcomas. Most common sites of metastasis are lung and bone. Hence it warrants a close long-term follow up.

379

Extemporaneous examination in endometrial cancer

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Introduction: Endometrial cancer is the fourth most common malignant neoplasia in women and the most frequent gynaecological cancer among developed countries. Intraoperative histological examination is

important to define extent of surgical procedure. Common iliac and paraaortic lymph node dissection should be performed in the presence of cervical involvement, a large tumor (>2cm), deep (>50%) myometrial invasion or certain histological features (poorly differentiated endometrioid, papillary serous or clear cell type). The purpose of this study is to evaluate the usefulness and limitations of intraoperative pathology in endometrial cancer.

Methods: Retrospective study. Between January 2002 and December 2006, all patients with endometrial cancer that underwent surgical treatment at Hospital S. Teotónio, Viseu were selected. Clinical, pathological results and type of surgery were analysed. Extemporary results were compared with definitive histological examination.

Results: 44 of reviewed cases underwent extemporary examination. Patient mean age was 64,4 years-old and 95% were post-menopausal; histological type and grade were known before surgery with 80% of cases being of endometrioid type. Extemporary results ruled out necessity for lymphadenectomy in 27% cases, confirmed by definitive histology.

Conclusion: Extemporary examination may allow a less extended surgical procedure, reducing over-treatment in less severe disease.

383

Photodynamic therapy of primary and recurrent vulva cancer

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Background. The most reason of negative long-term results in therapy of vulva cancer is late diagnostics, lack of treatment schema and concomitant diseases due to elderly patients.

Aim. To study advantage of photodynamic therapy in patient with invasive vulva cancer.

Patients & Methods. 72 women in the middle age 45-79 were divided into 2 groups.

I group: 58 women with primary vulva cancer. 12 has first stage, 29 – second stage, 17 – third stage of cancer.

II group: 14 women with local (12 cases) and regional (11 cases) recurrence of vulva cancer after radical (4 women) and palliative (10 women) treatment.

Was used laser facility with wave-length 670 nm, as sensitizer was used Fotosens, it was injected once 24 hours prior irradiation in 0,5 mg/kg. Was performed interstitial and teleirradiation.

In general was performed one procedure in general anesthesia or 3-4 procedures without general anesthesia in patient with contra-indication to narcosis.

For effect on regional recurrence and metastases was performed interstitial irradiation.

Results. In I group total regression (TR) was observed in 97,9%, partial regression (PR) – in 2,1%. In II group for local recurrence TR in 91,7%, PR – 8,3%.

For regional metastases in I group TR was in 73,7%, PR-was in 23,6%. In II group TR- 72,7%, PR – 27,3%.

Conclusions. Photodynamic therapy is effective in treatment of invasive vulva cancer, and could be performed independently or in combination with standard therapy.

395

Stage III epithelial ovarian cancer: retrospective study about the benefits of paclitaxel in adjuvant treatment

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Objective: Most cases of ovarian cancer are diagnosed at an advanced stage, which contributes to the high mortality rate, in spite of the progresses achieved with the introduction of new treatment regimens. The objective of this study is to determine what are the benefits of paclitaxel plus platinum regimen, when compared to the old standard therapy with cyclophosphamide plus platinum, in adjuvant treatment of stage III epithelial ovarian cancer.

Methods: A retrospective study of patients with the diagnosis of epithelial ovarian cancer, FIGO stage III, treated at our Department, from January 1988 to December 2001, was carried out. Accordingly to chemotherapy agents used in adjuvant therapy and to optimal or nonoptimal debulking primary cytoreductive surgery, four major groups were defined: group 1, patients submitted to optimal debulking surgery and adjuvant therapy with cyclophosphamide plus platinum; group 2, optimal debulking surgery and adjuvant therapy with paclitaxel plus platinum; group 3, nonoptimal debulking surgery and adjuvant therapy with cyclophosphamide plus platinum; group 4, nonoptimal debulking surgery and adjuvant therapy with paclitaxel plus platinum. A follow-up of 5 years was established and overall survival (OS) and progression-free survival (PFS) were calculated for each group of patients and compared for group 1 versus 2 and group 3 versus 4.

Results: Seventy-seven patients submitted to primary cytoreductive surgery followed by adjuvant chemotherapy, independently of administration of consolidation therapy, were selected. Most patients had a serous tumour (76.6%). In group 1 (17 patients), OS was 35.3% and PFS was 23.5%; in group 2 (9 patients), OS and PFS were 33.3%. In group 3 (28 patients), the OS and PFS were 7.1%; group 4, (23 patients), had an OS of 8.7% and a PFS of 0. These differences did not reach statistical significance.

Discussion: The restrict number of patients included in this study, especially those submitted to optimal debulking

primary cytoreductive surgery, had undoubtedly limited the results of this retrospective work. Although, we found that the paclitaxel combination regimen had an advantage in 5-year progression-free survival in optimal debulking surgery patients and in 5-year overall survival rate in the nonoptimal debulking surgery group.

406

Cervix cancer screening in HIV patients: our Centre experience

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Introduction: Different studies showed an high prevalence of SIL and viral infections in HIV positive women. HPV infection was present in many cases, but the way of screening and follow-up isn't very clear. With our study we want to estimate the power of cervical disease screening in HIV positive patients.

Methods: Since December 1992 until July 2007, 471 HIV positive women, in different phase of illness, was referred at the Centre STD and HIV/AIDS in Obstetrics and Gynaecology. All patients received pap test, colposcopic study and gynaecological visit every 6-12 months considering the CDC stage, the antiretroviral therapy and the its compliance.

Results: We have discovered 129 CIN (27,4%); about these 39 were CIN1 with HPV alteration(30,23%), 55 were CIN 2 (42,60%) and 35 were CIN3 (27,3%). As a first diagnosis 6 cases had cancer of cervix: 3 of these were microinvasive cancer and 3 were squamous invasive cancer. Heterosexual transmission has resulted the first modality of acquisition. To value the adequacy of our way of screening we considered only women with a follow-up at least 5 years. On a total of 123 patients on the first visit 89 (72,4%) come out negative after the fifth year of follow-up; the 82,9% of women with negative cytology resulted still the same, and a great part of them (86%) were asymptomatic and didn't practice TARV. The analysis of our dates showed a progression of women with negative cytology to HSIL in less then 5% of the patients and a regression in 50% of the cases of LSIL. So it seems to be that the no progression is correlated to clinic stage A and to the employment of TARV.

Conclusions: In this way it seems justified the way of screening as practiced in our centre: to identify the potential patients at high risk and to plane the next follow-up are useful instrument. So its absolutely necessary to consider not only the gynaecological aspect, but also the clinical- virological-immunological conditions of every patient.

414

Ultrasound guided biopsy of suspicious pelvic masses

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Background: Ultrasound guided needle biopsy (UGB) is an important diagnostic tool in gynecology oncology. It aids in the evaluation and treatment planning of primary malignancies presenting at advanced stage and believed to be beyond the scope of primary cytoreductive surgery and in patients with a known malignancy and a pelvic mass.

Objective: To evaluate ultrasound guided biopsies of pelvic masses and follow up of patients after this procedure.

Methods: Evaluation of 20 patients who had a pelvic mass biopsy by transvaginal ultrasound approach in our department between January 2004 and December 2006.

Results: The indications for UGB were: advanced disease believed to be beyond the scope of primary surgery (55%), poor performance status (20%) and history of cancer whose metastases might mimic ovarian cancer (25%). An histologic diagnosis was obtained in 75% of patients. In 25% the sample has been insufficient for diagnosis. The procedures were well tolerated by patients and no complications have been reported.

54% of patients had diagnosis of ovarian carcinoma. Other biopsy diagnosis were metastatic tumour (27%) and benign disease (19%). Clinical management was made according to these results.

Conclusion: UGB of pelvic masses plays an important role in gynecology oncology patients. The good quality of biopsy samples eliminates the need for more extensive procedures.

419

Ovarian metastasis from malignant melanoma – a case report

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Introduction: Ovarian malignant melanomas are rare and their clinical and biological behavior is highly unpredictable. Our case report describes a metastatic ovarian malignant melanoma where the ovary was the first site of relapse after ten years of remission.

Case: 33-year-old woman presenting abdominal pain was found to have an abdominal mass, detected by ultrasound and CT scan with elevation of CA -125 to 184 and therefore admitted to the department of oncogynaecology. She had positive history of malignant melanoma of the neck which was extirpated in 1997.

Results: Explorative laparotomy with perioperative histology was performed. During the operation, a dark

brown solid omental mass measuring 20x30cm with intestinal metastases was revealed. Pathologist confirmed a metastasis of malignant melanoma. Because of the huge tumorous dissemination in abdominal cavity, the operational range was changed into total omentectomy only. Afterwards there was a radiotherapy and chemotherapy indicated. This resulted in the regression of tumor masses in abdomen, on the contrary with progression of the cancer in meningeal layers. A paliative chemo and radiotherapy was decided to maintain.

Discussion: Metastasis of malignant melanoma in the ovary is usually from a primary cutaneous lesion and may become apparent several years after removal of the skin. . Generally, genital melanomas are uncommon, the first site of dissemination is vulva.

An average tumor has 10-20cm in diameter, affects both sides in 45% of cases and one third of all tumors has a pigmentation. There is also an extraovarian tumor commonly present, usually in the pelvis or upper abdomen. Histologically a multinodular pattern is found.

Conclusion: Relapse after prolonged period of remission of an isolated ovarian metastasis is an unusual presentation of malignant melanoma. As illustrated by this case report, a differential diagnosis in the follow-up examinations must be considered.

434

Management of endometrial hyperplasia

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We present an audit to review the treatment of endometrial hyperplasia and wish to establish the safety of our current practice.

All women who had a primary diagnosis of endometrial hyperplasia in Mayo General Hospital were identified from January 2005 to October 2007 inclusive (34 months). Those women who had a follow up pathological sample were included in the audit.

Thirty-one women with endometrial hyperplasia (27 simple, 4complex) had a follow-up histology. The age range was 36-61 years. Their BMI ranged from 19 to 59. The most common presenting symptom was menorrhagia (21/31). The primary diagnostic procedure carried out was pipelle and out patient hysteroscopy (10/31), inpatient hysteroscopy and curettage (17/31), and transcervical resection of endometrium (4/31). Of the 31 patients, six had persistent hyperplasia at second histology. Two of these patients had hysterectomy, three patients had mirena coil inserted and one patient is on metformin as she is planning to conceive. Twenty five patients showed regression of hyperplasia, eight of them had mirena inserted at the time of primary procedure. Seventeen patients were managed expectantly, but six

of them had subsequent hysterectomy due to symptoms, or due to other gynaecological conditions or as a prophylactic measure.

Mirena is a simple and effective alternative to hysterectomy. Spontaneous regression of hyperplasia is observed in the majority of women.

441

Clinical significance of atypical glandular cells on cervical cytology

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Background: The presence of atypical glandular cells (AGC) on cervical smears may be associated with malignant uterine lesions.

Objective: To increase understanding of AGC on cervical cytology and to suggest a management plan.

Methods: Retrospective case series ranging from 2003 to 2006, from a hospital centre. We identified all cases of AGC, which were classified according to the 2001 Bethesda System Terminology. The following parameters were analyzed: clinical data, colposcopy findings, histological results from colposcopy-directed biopsies, endometrial disease assessment and follow-up.

Results: AGC was found in 50 pap smears, it was an isolated finding in all but one exam. The mean (\pm SD) age of the patients was 44.7 (\pm 13.4) years. There were 37 cases (74%) of AGC-glandular cells not otherwise specified (NOS) and the remaining 13 (26%) were AGC-favor neoplastic. Histological analysis was undertaken in 44 cases (88%). We analyzed separately AGC-NOS and AGC-favor neoplastic. Eight cases of abnormal histologic findings were found in each group (21,6% vs. 61,5%, respectively). In the AGC-NOS group we found 1 cervical adenocarcinoma, 1 squamous cell carcinoma, and 6 grade III intra-epithelial neoplasia. In the AGC-favor neoplastic we found 5 cervical adenocarcinoma, 2 cases of endometrial carcinoma and 1 grade III intra-epithelial neoplasia.

Conclusions: Our data supports the role of AGC as marker for premalignant or malignant lesion of the endocervix or endometrium. All women with AGC identification should be referred for colposcopy, directed cervical biopsies, and sampling of the endocervical canal. All women over age 35 and younger women with unexplained or anovulatory bleeding also need an endometrial biopsy.

448

Embryonal carcinoma of the ovary – Review of the cases with a 5 year follow-up

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Introduction - Germ cell neoplasms are thought to be derived from primitive germ cells of the embryonic gonad. They constitute the second largest group of ovarian neoplasms (~20%). These tumors can occur in women at any age, but peak incidence is seen during the early 20's. Yolk sac tumors (also known as Endodermal sinus tumors) are the second most common germ cell tumor and are associated with elevation of alfa-feto-protein (AFP). The less common germ cell tumors is embryonal carcinoma, that usually occurs in combination with yolk sac tumor and is typically a unilateral, solid tumor with hemorrhage and necrosis composed of undifferentiated, pleomorphic, large cells.

Methods – We performed a review of the new cases of embryonal carcinoma of the ovary during the years 2000, 2001 and 2002 in a reference oncological hospital, concerning age of occurrence, presenting symptoms, stage, treatment and follow-up.

Results – During these 3 years, 61 new cases of ovarian cancers were diagnosed of which 91.67% were epithelial ovarian cancers. There was only one (1) case of embryonal carcinoma of the ovary (1.6%). It was a 40 year-old woman who presented with an increase of abdominal volume in the last 3 months. The Magnetic Resonance revealed a neof ormation of the right ovary. An exploratory laparotomy was decided and we performed a total hysterectomy with bilateral anexectomy, bilateral pelvic linfadenectomy, lombo-aortic linfadenectomy, omentectomy and several biopsies. The anatomopathological exam revealed an embryonal carcinoma of the ovary, with areas of Yolk sac tumor (Stage T1c IC FIGO, N0 Mx). The patient initiated chemotherapy and AFP was monitorized. After 5 years of follow up she had no evidence of disease recurrence.

Discussion – Embryonal Carcinoma of the ovary is a rare tumor of the ovary. It occurs in young woman and it is a highly malignant neoplasm that is radioresistant but responds to combination chemotherapy. In our Institution, we only had one case in the reviewed period, with a good outcome at a 5 year-old follow up, after surgery and chemotherapy.

456

Primary strumal carcinoid of the ovary – a case report

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Introduction: Strumal carcinoid tumor (SCT) is a very rare primary tumor of the ovary, with germ cell origin, in which carcinoid is admixed with tissue resembling thyroid follicles. They account for 0,5-1,7% of all carcinoids and 26-44% of carcinoid tumors of the ovary. The age range is 14-79 years (mean 53). SCT may cause symptoms of functioning thyroid tissue in 8% of cases. Primary carcinoids of the ovary are invariably unilateral. Carcinoids are immunoreactive to at least one of the neuroendocrine markers.

and Results: We report a case of a 35-year-old multiparous, euthyroid, asymptomatic (only mild constipation) women in whom it was decided an exploratory laparotomy followed by a left salpingo-oophorectomy because of a suspicious left ovary solid mass in the pelvic ultrasound and computed tomography. Of notice, she had an elevated CA 19.9 (57U/ml) and a normal CA125 and CEA. Her postoperative course was uneventful.

The anatomo-pathological exam revealed SCT of the left ovary.

Neoplastic cells were immunopositive for thyroglobulin, NSE, AE1/AE3, synaptophysin, chromogranin and were negative for inhibin.

Unless for slightly elevated CA 19.9, the post-operative follow-up and search for carcinoid syndrome was negative.

Discussion: Although the carcinoid component of the strumal carcinoid has been considered a malignant transformation of struma ovarii, it is almost always benign. Usually, SCT occur in women with stage I disease and have an excellent outcome. Correct diagnosis depends on a pathologic examination with the use of special stains. Treatment with a simple oophorectomy or salpingo-oophorectomy is effective.

470

Primary sex cord-like variant of endometrioid adenocarcinoma arising from endometriosis – a cas report

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Introduction: Endometriosis is a relatively common disease generally affecting women in the reproductive age group and it is most common in the pelvic organs. Some malignant tumors may develop in endometriotic

lesions and the majority of endometriosis-associated ovarian malignancies are usual endometrioid adenocarcinomas and clear cell carcinomas.

The sex cord-like variant of endometrioid adenocarcinoma is a rare tumor that histologically closely resembles the sex cord-stromal tumor. Despite its rarity, the correct histological diagnosis of the sex cord-like variant of endometrioid adenocarcinoma is crucial to avoid misdiagnosis of a less aggressive tumor. We here report a 53-year-old woman who was diagnosed having this very rare subtype of endometrioid adenocarcinoma curiously arising from endometriotic lesion at the site of previous salpingo-oophorectomy. A diagnosis of the tumor was made based on light microscopy and immunohistochemistry. To our knowledge, we present a first case report of this uncommon tumor arising from endometriosis.

Results and Discussion: Endometrioid carcinomas with sex cord-like features are infrequent tumors and can easily be misinterpreted as sex cord-stromal tumors. The differential diagnosis in this case includes sex cord-stromal tumors, adnexal tumors of possible Wolffian origin (FATWO) and endometrioid adenocarcinoma.

Sex cord-stromal tumors continue to be a diagnostically challenging issue for the pathologist, and their correct resolution has important therapeutic and prognostic implications. Immunohistochemical studies play a key role in differentiation between endometrioid adenocarcinoma and sex cord-stromal tumor.

488

Vulvar cancer - 10 year experience

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Introduction: Vulvar cancer is a rare entity, accounting for approximately 5% of all gynecologic cancers. The aim of this study was to determinate clinical characteristics and results of individualized therapy in women with vulvar cancer.

Methods: Retrospective study of all 26 women diagnosed with primary vulvar cancer in our institution in the last 10 year (1998-2007). The following data were evaluated: age, gynaecological history, presentation symptoms, tumor characteristics, therapeutic options and results. Data were analyzed according to descriptive statistics and to the following statistic tests: Qui-square and T-Student for independent variables.

Results: Mean age at diagnosis was 73,9 years \pm 9,9 (45-87). Histopathologic study revealed 21 cases of squamous cell carcinoma (80,8%), 5 of them verrucous carcinoma. There were 2 cases of adenocarcinoma, 1 basal cell carcinoma, 1 malignant melanoma and 1 non-Hodgkin's lymphoma. Presentation symptoms were: vulvar mass in 14 patients (54%), pruritus vulvae in 8

(31%), bleeding in 2 and vulvar pain in other 2 patients. Tumor stage (FIGO) was stage I in 28%, stage II in 28%, stage III in 36% and stage IV in 8%. Two patients presented with advanced disease and died before treatment. The remaining 24 were submitted to surgery, 9 underwent adjuvant therapy and 1 neoadjuvant radiation therapy. Survival rates in treated woman were 76,2% at 1 year and 56% at 5 years. We found statistical significance while comparing survival rate with the presence of metastasis to lymph nodes.

Discussion: Vulvar cancer is primarily a disease of post menopausal women. Squamous cell carcinoma is by far the most common type of tumor. The cornerstone of treatment is surgery. Disease prognosis depends on its stage at diagnosis, essentially the presence of metastasis to lymph nodes.

490

Colposcopy and directed biopsy reliability during pregnancy

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Introduction: The reliability of cytology and colposcopy were assessed in pregnancy and compared with a matched non-pregnant control group in order to evaluate the influence of pregnancy.

Methods: Eighty six pregnant women in which a final diagnosis was ascertained were examined by the same colposcopist.

Results: Concordance between cytology and final diagnosis was complete in 39,5%. Colposcopy provided concordance of the final diagnosis in 71,9%. The reliability of cytology and colposcopy was not related to pregnancy.

Discussion: These data show that the physiologic pregnancy do not significantly alter the reliability of colposcopy and directed biopsy.

495

Carcinosarcoma of the ovary – a case report

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Introduction: Carcinosarcomas consist of both malignant epithelial and malignant mesenchymal components. The most common site of occurrence of female genital tract carcinosarcomas is the uterus, followed by the cervix, vagina, and ovaries and fallopian

tubes, in order of decreasing frequency. Carcinosarcoma of the ovary is rare, accounting for less than 1% of all ovarian cancers. Most affected women are postmenopausal, between sixth to eighth decades of life.

Methods: The authors report a case of carcinosarcoma of the ovary in a 55 year old woman. Mrs. M.I.C.J.S. gravida 2 para 2, presented with sudden onset of abdominal distension and abdominal pain. Gynaecological examination revealed the presence of a pelvic mass reaching the periumbilical area, tense, with little mobility.

Abdominopelvic CT showed a complex mass (solid and liquid areas) with approximately 13 x 8.5 x 14cm, presumably in relation with the left ovary. Tumor marker Ca 125 was elevated (69u/ml).

The patient was scheduled for exploratory laparotomy and underwent total hysterectomy, bilateral salpingo-oophorectomy, lymphadenectomy, infracolic omentectomy and tissue biopsies. After this she initiated adjuvant chemotherapy. By the end of the fourth cycle the patient presented with recurrent fever and a palpable mass in the pouch of Douglas, which led to realization of a new abdominopelvic CT that revealed the presence of a mass involving the terminal ileum and compressing the right ureter – probable secondary lesion. The chemotherapy scheme was then changed due to this new data.

Results: Histopathologic examination revealed a homologous carcinosarcoma of the ovary – serous papillary carcinoma and endometrial stromal sarcoma. The tumor was staged as **pT3N1M0** (TNM) / **IIIC** (Figo).

Discussion: Ovarian carcinosarcomas are aggressive neoplasms, and prognosis remains poor despite a combination of surgical debulking and chemotherapy. The stage of the disease at presentation is the most significant prognostic factor.

497

Primary fallopian tube cancer – a report of 4 cases

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Introduction: Primary fallopian tube cancer is the rarest cancer of the female genital tract accounting for less than 1% of all gynaecologic tumours. Secondary tubal cancer due to metastatic disease from the ovaries, endometrium, gastrointestinal tract, or breast is more common. The exact aetiology is unknown.

Methods: The authors report the 4 cases of primary cancer of the fallopian tube diagnosed at our institution between 2000 and 2007 (8 years). The age at diagnosis, presenting signs and symptoms, menopausal status, stage, postoperative histopathologic features and tumor grade were analyzed. Surgical staging and cytologic grading were assessed using the modification of the

International Federation of Gynaecology and Obstetrics (FIGO) nomenclature of epithelial ovarian cancer.

Results: The mean age at diagnosis was 67.8 (63-73) years and all patients were postmenopausal. Only one was nullipara. The mean age of menarche was 15 years. None of the patients had done hormonal contraception, and only one had done replacement hormonal therapy. Family history of breast cancer was present in two patients. The most common clinical presentation was pelvic mass, followed by abnormal vaginal bleeding. Histology showed adenocarcinoma in three cases, and carcinosarcoma in the other one. Tumor stage (FIGO) was: stage **IIA** in 1 patient, stage **IIB** in 2 patients and stage **IIIC** in 1 patient. Surgery was the initial therapy for all patients. Adjuvant chemotherapy was given in 3 women; the other one didn't do any adjuvant therapy due to associated comorbidities.

The median follow-up of survivors was 30 months (range 8-72), and one patient died 10 months after the diagnosis.

Discussion: Preoperative diagnosis of primary fallopian tube carcinoma is difficult due to the rarity of the disease, the lack of specific findings and silent natural course. The most prevailing histology subtype is serous adenocarcinoma, followed by endometrioid adenocarcinoma. It is rarely diagnosed preoperatively. Due to similarity of the clinical presentation and response to treatment, the staging and therapeutic management have been adapted to that of ovarian cancer

501

Rare ovarian tumors: leiomyoma and fibrothecoma - 2 case reports

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Introduction: Primary leiomyoma is a very rare benign ovarian tumor, with fewer than 70 cases reported in the literature. It is usually small, unilateral and incidentally detected, occurring over a wide age range but mainly in premenopausal women. Its origin is still unknown. Sex-cord origin tumors are scarce, and comprise only 5% or less of all ovarian tumors. Fibrothecoma is a sex-cord stromal tumor that has histologic appearances intermediate between fibroma and thecoma. It is usually unilateral and occur in middle-aged to postmenopausal women.

Case reports: 1. We describe a case of unilateral ovarian leiomyoma in a 37-year-old woman in which there was a preoperative suspicion of teratoma. Several seromas found at surgery probably made the ultrasound and CT scan image interpretation difficult. **2.** A case of fibrothecoma in a 77-year-old woman is reported. An adnexal mass was found in a control pelvic ultrasound performed after endometrial polypectomy. On ultrasound it was at first interpreted as a simple ovarian cyst, one month

later as a possible broad ligament fibromioma, and as an adnexal cyst of ill-defined characteristics one year afterwards. She underwent surgery and pathologic findings were consistent with a 11 cm fibrothecoma.

Conclusion: As leiomyomas and fibrothecomas are rare ovarian tumors may be misdiagnosed.

524

Retrospective analysis of the relationship between clinical examination, Pap Smear cytology, colposcopy and histology of cervical biopsies.

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Pap

Examn	Norm	Inflam	HPV/Koilo	Sev. Dysk	BNC	Keratinized Epith	Atyp Endocx Cells	LG SIL
Normal	6	5	15	1	4	1	1	1
Abn	1	1	4	0	3	0	0	0

Colposcopic Examination

Examination	Norm	↑ Vasc.	Mosaicism	Acetowhite	ÄI2 Uptake
Normal	8	1	2	22	8
Abnormal	0	1	2	8	1

Histology

Examination	Normal	HPV	CIN I	CIN II	CIN III	Cervicitis
Normal	3	22	1	3	0	2
Abnormal	1	6	2	0	0	0

Introduction: To investigate the relationship between Clinical Examination, Pap Smear Cytology, Colposcopy and Histology of Cervical Biopsies in patients who underwent Colposcopic Examination.

Method: The results of patients who underwent a Colposcopic Examination were analysed to determine the above relationship.

Results: 43 patients were analysed. On Examination: Normal (34) 79%; Abnormal (9) 21%: Wart (1), Inflamed (5), Contact Bleeding (2), Suspicious (1)

Conclusions: Normal findings on examination do not exclude the need for regular smear tests. 79% of total patients had normal examination findings, and out of these 6 (13.95% of *n*) had normal Pap findings. Of 34 normal examinations, only 3 (6.97% of *n*) had normal histological results. Abnormalities on examination are associated with a high incidence of HPV changes.

A larger sample size is needed for further interpretation.

GYNAECOLOGY

42

Management of asymptomatic and symptomatic endometrial polyps

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Aim: To evaluate the eventual risk of malignant or premalignant pathology in endometrial polyps after hysteroscopy and biopsy.

Methods: 80 women between 45 and 65 years of age were involved in our study. They all underwent hysteroscopic resection the endometrial polyps and all polypectomy specimens were submitted to biopsy. Presence or absence of symptoms, as well as use of hormonal medication and eventually menopausal status, were documented.

Results: 32 women (40%) were asymptomatic. 6,2% of them showed malignancy or atypical neoplasia after biopsy.

48 women were symptomatic and 12,5% showed malignancy or atypical neoplasia after biopsy. Postmenopausal bleeding and age were associated. Older women

with postmenopausal bleeding had a greater prevalence of malignancy and atypical hyperplasia.

Conclusion: There was e prevalence of malignancy and atypical hyperplasia in older women with postmenopausal bleeding. Symptomatic as well asymptomatic polyps seem to be involved in malignant and premalignant pathology, thus endometrial polyps should be removed.

68

Vaginal Misoprostol for cervical priming before hysteroscopy

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Introduction: To investigate the effectiveness of vaginal misoprostol for cervical priming before operative hysteroscopy and to assess the cervicouterine complications related to cervical dilatation and hysteroscopic surgery.

Methods: Eighty women with abnormal uterine bleeding or intrauterine lesions were randomly assigned to receive either 200 µg vaginal misoprostol or placebo. Cervical response and outcome and complications of operative hysteroscopy were assessed.

Results: The mean cervical width estimated by Hegar dilator was significantly different between the treated group (7.8±1.6mm) and the control group (5.6±2.2mm, P<.001).

In the misoprostol group 28 (70%) patients needed cervical dilatation, compared with 38 (95%; P=.001). The median time of cervical dilatation to Hegar number 9 was significantly shorter in the treated group (60 seconds) compared with the control group (180 seconds, P<.001). The mean operative time was significantly shorter in the treated group (8.8 ± 8.7 minutes) compared with the control group (13.1 ± 10.1 minutes, P=.043).

Conclusion: vaginal misoprostol applied before operative hysteroscopy reduced the need for cervical dilatation, facilitated hysteroscopic surgery.

75

Cervical ectopic pregnancy successfully treated with local Methotrexate

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Introduction: Cervical pregnancy is a rare form of ectopic pregnancy and it's defined as an implantation of a fertilized ovum in the cervical canal. The incidence ranges between 1 in 1000 to 1 in 95 000 pregnancies, which represent nearly 0,15% of all ectopic pregnancies. In the past, diagnosis used to be late and this condition often presented with life threatening haemorrhage that frequently require an emergent hysterectomy. Nowadays, early diagnosis has been improved by ultrasonography and sensitive serum ð-human chorionic gonadotrophin assay, which allows a more conservative therapeutic approach, with consequent decrease in morbidity and mortality.

Case report: A case of early cervical pregnancy diagnosed by transvaginal ultrasound and resistant to intramuscular methotrexate therapy is presented, which was successfully treated by intra-amniotic injection of methotrexate (MTX) under ultrasonographic guidance.

Discussion: Local installation of MTX appears to be an effective and safe method; however, choice depends of gestational age, desire of preservation fertility and most of all, hemodynamic stability.

88

Creating a new trend in the private gynecological hospital: minimally invasive surgery for benign uterine pathology

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Introduction: this study was to profile laparoscopic (LAVH), vaginal (VH) and abdominal (AH) hysterectomies done in private hospital. With minimally invasive surgery (MIS) to treat uterine problems available, we were interested in characterizing changes in the performance of hysterectomy.

Materials and Methods: 406 female underwent a hysterectomy, between Jan. 2003 and Dec. 2006, except patients treated for a genital cancer. All the operations took place a technique described with main characteristics for benign condition, duration, equipment, hemostasis was achieved with Liga-Sure sealing vessels system or Ultracision harmonic scalpel. For each operation, specifically for MIS, data was entered: ultrasound to calculate uterine fibroids, caesarean section or adhesion causing abdomino-pelvic surgery, associated surgical procedure during technique (colposuspension, IVS, TOT, meshes), conversion to laparotomy, intra-operative complications and injuries, uterine weight, blood transfusion, hospital stay.

Results: in 2003, 31 (49%) of the hysterectomies were done with laparotomy, 7 (11%) by vaginal way and 25 (40%) with LAVH, wherewith, MIS (LAVH and VH) was 51%, a conversion to laparotomy were necessary in 2 (3%) cases. In 2006, 35 (30%) were AH, 28 (24%) were VH, 54 (46%) with LAVH, with MIS were 82 (70%) of patients, without conversion to laparotomy. The trend has changed gradually through the 2 years, after initial surgical treatment for patients in the hospital, at the beginning of 2002 year. Two bladder injuries by LAVH procedure were done, one managed by laparotomy, second with laparoscopy, successfully.

Conclusion: from 2003 to 2006 trend shift of the operative technique has been seen in private hospital in Skopje, Macedonia, increasing the LAVH, with high initial level of the MIS 51% at the beginning of active surgery in the hospital. With modern equipment and trained staff more the routine hysterectomies can be managed endoscopically.

94

VVC/RVVCPer-Anders Mårdh¹¹Clinical Sciences, Lund University, Sweden

Vulvovaginal candidosis or candidiasis (VVC), when affecting women with a number of attacks annually is named recurrent VVC (RVVC). The latter condition can only infrequently be explained by exogenous and/or endogenous triggering factors. This also holds true for host-parasite interactions. *Candida albicans* is the overall dominating candida species causing both VVC and RVVC, which may be related to its ability to form germ tubes (GTF), which are essential for tissue penetration and the ability of the fungus to cause infection. GTF means a change in the hydrophobicity of the fungal cell which thereby decreases the engulfment of the fungus by phagocytic cells and therefore constitutes a virulence factor.

Progesterone stimulates, while bacterial amines, fibrogen and anaesthetics contradict GTF. In contrast to many other microbes found in the vagina, it seldom causes ascending genital infections which may be due to the presence of natural occurring substances in the cervical channel possessing an anti-candida activity, e.g. calcitropin. In HIV-infected women, RVVC is an uncommon condition, apart from in late uncontrolled infectious stages, i.e. when a woman has developed AIDS. On the other hand, in women with such a fungal infection the number of HIV particles is greater than seen in any other group of women. In this context it is to note that vaginal fissures are common in women with genital candidosis.

These facts highlight the importance to include treatment of VVC/RVVC in HIV-infected women as a measure to try to decrease the spread of the virus. In management of RVVC, refraining from utilizing the possibility to isolate the causative fungus and to perform antifungal susceptibility testing in cases of therapeutic failure means an unsatisfactory "trial and error" therapeutic situation. Strains resistant to the azole preparations commonly used, constitutes a problem in RVVC cases. The use of ibuprofen has a synergistic effect with fluconazole in a large proportion of strains otherwise resistant to the latter drug. The resistance is due to efflux of the drug. The efflux may be hindered by co-therapy with channel blockers. In management of women with complaints that mimic RVVC, candida organisms can not be detected in up to half of the cases. What these women suffer from is still unknown.

128

Remote Complications of Circumcision and Female Genital Cutting

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Introduction and Aim of the Work: Since Lord Cromer decree 1936 the Egyptian government is struggling to stop this brutal ritual, so it's important to understand why people are still performing it. Early complications are well studied by pediatricians, but how does it affect adults is not well studied. The aim of the presented paper is to elucidate the remote effects in adult circumcised women and to what extent.

Materials and Methods: Retrospective studies is carried out on two samples selected from two countries viz.: 1. Egypt: 280 women who attended the Fertility Control Clinic – Galaa Hospital during the period from 1975 to 80 (Egyptian traditional circumcision). 2. Makkah el Mukaramah (Saudi Arabia): 95 Sudanese women who attended the Gynecology Clinic- El Rafie Hospital- during the period from 1992 to 94 (Sudanese Brutal Genital Cutting Method). In addition to...

* 137 Case Reports: Deinfibulation – el Hamidi Hospital, Egypt, during the period from 2001 to 2004.

All of them were subjected to: 1. Patterned Interview (with special emphasis on the sexual history). 2. Using psychometric model. 3. Clinical assessment.

Results: 10 percent of circumcised women did not experience orgasm, as compared to 12 percent of uncircumcised women.

Using model analysis proved that the psychological effect of trauma is long lasting in the circumcised women.

Urinary tract infections are widely prevalent and recurrent in Sudanese circumcised women (60% of all women operated with Sudanese circumcision complained from urinary tract infections – only 18% of non-circumcised women suffered from urinary tract infections during the same period of time and to the same clinic).

Conclusion: Female genital cutting (FGC) is unnecessary and a dangerous procedure which could lead to long lasting psychiatric trauma and genital deformity without significant effect on woman's sexual life.

140

Diagnosis and management of ectopic pregnancies; an audit and re-audit: a success storyKausar Masood¹, Sameena Tahseen¹, Shyam Das¹¹Luton & Dunstable University Hospital, United Kingdom

Introduction: Making a positive diagnosis of ectopic pregnancy is a diagnostic challenge. The aim should be to make a positive diagnosis with non-invasive methods

and subject as few women as possible to an operative diagnostic procedure (i.e. laparoscopy). There is evidence for positive identification of ectopic pregnancy on TV scan. This needs highly developed TV scanning skills. Management should preferably be via laparoscopic route. A Consultant Specialist in Gynaecology Scanning was appointed in 2005 and has been actively involved in EPC management.

Aims: To find the negative laparoscopy rate for suspected ectopic pregnancies and to assess improvement in diagnosis and management of ectopic pregnancies following the appointment of EPC Consultant specialised in scanning.

Methods: We performed an audit (6 months period 2005) and then a re-audit (9 months 2007). All cases of ectopic pregnancy managed surgically were reviewed. Data was collected for demographics, presenting symptoms, diagnostic procedures (USS findings, β HCG and number of scans & β HCGs) and surgical procedure. We reviewed individual negative laparoscopy cases, to find common patterns for recourse to laparoscopy.

Results: 12% negative laparoscopy rate in 2005 audit as compared to 0% in 2007. No cases were scanned by EPC consultant in 2005 audit as compared to over 48% in 2007 following revised EPC protocol. Most of the cases were managed laparoscopically in both audits (80% and 68% respectively).

Conclusion: Following the recommendations of the first audit (i.e. robust EPC protocol, scan by skilled consultant gynaecologist in difficult cases, awaiting results of investigations in stable patients, raising staff awareness), a significant reduction in negative laparoscopy rate was achieved. Continuing the audit is planned to ensure maintenance of our standards.

142

Pelvic tuberculosis – two clinical cases

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Introduction: the authors present two clinical cases of Pelvic Tuberculosis by performing a review of the most up to date literature on the subject.

Tuberculosis remains a global health problem, primarily in developing countries where inadequate health services and high human immunodeficiency virus prevalence have increased the burden of disease. A significant portion of tuberculosis in these settings is extrapulmonary, including tuberculosis of the genitourinary tract.

Methods: we made a retrospective review of the patients's clinical reports as well as by analysing the most up to date literature on the subject.

Results: Case 1: 31 years old healthy woman Caucasian, with a previous bacilliform contact history, caesarean

section 8 months before the beginning of the symptomatology, whose clinical presentation was an adnexal mass, ascitis and elevated CA 125 emulating an ovary carcinoma. Case 2: 17 years old healthy woman caucasian, without previous bacilliform contact history, caesarean section 2 months before the beginning of the symptomatology whose clinical presentation was a pelvic mass associated to ascitis.

Discussion: the authors describe 2 cases of pelvic tuberculosis with an unusual clinical presentation. Some of the related considerations to the suspicion signs (clinical, imagiologic, analytical and surgical findings) , definitive diagnosis and most adequate treatment to these situations are done in this work.

Its very important its previous clinical suspicion before an invasive diagnostic attitude (i.e. laparoscopy/explo-ratory laparotomy), by the possibility of acting in a most conservative way, given that most of these patients are in a reproductive age group.

171

Characterization of hysteroscopic procedures performed in a 1-year span in a public hospital

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Introduction: The importance of hysteroscopic techniques in current Gynaecology cannot be over stressed. Hysteroscopy has become a diagnostic gold standard. Operative hysteroscopy continues to gain popularity- it often allows avoidance of laparotomy. The recent approval of a well-tolerated and safe hysteroscopic sterilization technique contributes to the increasing usage of hysteroscopy. We aimed to characterize all hysteroscopy-related activity developed in our institution in a 1-year span.

Methods: The clinical files of all patients undergoing hysteroscopy in 2006 were reviewed.

Results: During 2006, 332 hysteroscopic procedures were performed in our institution. A total of 320 women, aged 24 to 82 years old, were subjected to a hysteroscopic procedure. Of these, 112 were menopausal women (56 registered as menopausal for over 10 years). Twenty-eight women reported breast cancer history; 26 had a history of treatment with tamoxifen. Fifty-nine women reported previous endometrial pathology.

The procedures included 143 diagnostic hysteroscopies, 149 operative hysteroscopies, 14 resectoscopies and 37 hysteroscopies performed for Essure® placement.

A total of 117 women reported abnormal uterine bleeding; 92 were asymptomatic (excluding the Essure® group); infertility studies were the reason behind 63 other procedures. We found 1 pre-malignant lesion and 4 malignant lesions. Complications were registered in 6 cases.

Discussion: Hysteroscopic procedures are invaluable techniques in every-day Gynaecology. They occupy an important share of ambulatory and inpatient care in our institution. It is noticeable that 31% of the interventions were performed on asymptomatic patients. However, the pre-malignant lesion and 2 of the malignant lesions were found in these patients. We report a complication rate of 1.2%. We hope that present data will be used for future comparison.

175

Hysteroscopic resection of endometrial polyps in pre- and postmenopausal women

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Introduction: To evaluate the prevalence of premalignant and malignant endometrial polyps in pre- and postmenopausal women, and their association with clinical parameters.

Methods: A surgical database was used to select pre- and postmenopausal women submitted to hysteroscopy for suspicion of endometrial polyps in our gynecology department during the period of one year (1st January to 31st December of 2006). The medical records of 154 women (corresponding to 160 procedures) were reviewed and clinical characteristics (namely age, menopausal status, presence or absence of symptoms, use of hormonal medication, presence of breast cancer and other comorbidities, dimension of polyps, complications), and histological diagnosis of the resected polyps were assessed.

Results: Of the 160 procedures, 106 were operative hysteroscopies, 48 diagnostic hysteroscopies (with or without biopsy), and 6 resectoscopies. In 6 patients the diagnostic procedure was followed by an operative hysteroscopy.

Eighty-eight of the women were postmenopausal (57,14%), and of these, 56% had more than 10 years in menopause. Abnormal uterine bleeding was the most reported symptom, present in 78 (50,65%) women (39 premenopausal and 39 postmenopausal), but 64 (41,55%) were asymptomatic. The majority of women had benign endometrial lesion (77,27%), and only 2,60% (4/154) had malignant polyps. The remaining lesions (12,34%) were classified in other condition, and in 7,71% there were no histological result. Of the benign condition 59,66% had hyperplasia without atypia, but we found no premalignant condition (hyperplasia with atypia). All the 4 malignant lesions were diagnosed in postmenopausal women with polyps >15mm, and 2 cases were asymptomatic.

Discussion: The presence of endometrial polyps is mainly suspected by abnormal uterine bleeding or as a random finding in pelvic ultrasound. These lesions are benign in most cases but the evaluation by hysteroscopy is fundamental to determine the nature of these lesions. Although endometrial polyps have a low malignancy potential, postmenopausal women with those lesions are at increased risk of malignancy, and should be resected by hysteroscopy, even when asymptomatic.

190

Pelvic tuberculosis in a pregnant women – a case Report

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Introduction: Pelvic tuberculosis is an extrapulmonary form of tuberculosis with increasing incidence in the world. Clinical and laboratory findings are frequently unspecific and mimic a variety of different disorders, including gynecologic malignant tumors.

Methods and Results: Pregnant woman, eighteen years old, nulliparous, African, natural from Senegal, with no relevant personal or family antecedents, was admitted to the urgency room with premature membrane rupture at 38 weeks and 4 days. Routine ecographic evaluation detected a large complex right anexial mass. There were no complications during eutocic delivery or early puerperium. Analytically an elevated CA 125 (96 U/mL) was registered and Magnetic resonance (MRI) was compatible with the ecographic findings. On the 28th day of puerperium the patient was submitted to an exploratory laparotomy, with identification of an irresectable retroperitoneal cystic mass, which was biopsied. Liquid sample was collected for cytological examination and one external iliac lymph node was extracted. There were no relevant interurrences during the postoperative period, except evening fever. Acid-fast bacilli were identified in the cytology sample. Histological results were compatible with tuberculosis necrotic granulomatosis. Antituberculostatic drugs were initiated. MRI of the lumbar-sacrum region revealed a psoas abscess with extension into the spinal canal and spondylodiscitis. Patient was released on the 18th postoperative day, medicated with antituberculostatic drugs and referred to a Tuberculosis and Neurosurgical consultation.

Discussion: The diagnosis of pelvic tuberculosis can be hard to make, being often mistaken with gynecologic malignancies. It requires, therefore, high index of suspicion, mainly when there is no typical clinic manifestations. Clinical diagnosis can be even more difficult when done during pregnancy because various physiologic changes can mask the disease.

196

Vulvo-vaginal-gingival syndrome: report of three new cases

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Background: erosive lichen planus is one of the three subtypes of lichen planus that affect the vulva. The vulvo-vaginal-gingival syndrome is a variant of erosive lichen planus, involving the epithelium of the vulva, vestibule, vagina and mouth. In the vulva, patients characteristically exhibit glassy, brightly, erythematous erosions with white striae (Wickham's striae); dyspareunia is a frequent complain. The vaginal epithelium is friable and easily bleeding, resulting in seropurulent or serosanguinous vaginal discharge. The gingival epithelium is usually involved, but erosions, white plaques or reticulae may also occur on buccal mucosa, tongue and palate.

Case: we report three cases of women with long complains of dyspareunia, post-coital bleeding, vulvar pruritus and vulvar, vaginal and oral signs characteristic of the vulvo-vaginal-gingival syndrome, highlighting the clinical features and response to medical therapy.

Conclusions: this syndrome is a rare condition and often difficult to diagnose. Patients seldom report genital symptoms to the dentist and dentists do not generally investigate about genital lesions. Delays in diagnosis and appropriate treatment may result in irreversible complications and adversely affect the quality of life of the patients.

209

A case report of herpes gestationis

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Herpes gestationis (HP) is a rare autoimmune bullous dermatosis of pregnancy, with a commonly cited prevalence of about one in every 50,000 pregnancies. Although this noninfectious skin disorder shares the name of the more common viral infection, the connection is only etymological, since it is actually an autoimmune disease caused by development of an immunoglobulin G1 antibody to the basement membrane in the epidermis. It is also called *pemphigoid gestationis* because it is immunologically similar to *bullous pemphigoid* seen in elderly patients. Clinically, this disease is characterized by an extremely pruritic widespread eruption with lesions that vary from erythematous and edematous papules to large, tense vesicles and bullae. In subsequent pregnancies the disease invariably recurs, and it usually does so earlier and more aggressively. The authors describe a case

report of a 34-year-old primigravida, blood group AB Rh negative, followed in our Hospital due to gestational diabetes and diffuse thyroid enlargement. At 28 weeks gestation, after administration of anti-D immunoglobulin, there was a sudden onset of generalized pruritic skin lesions, predominant in upper and lower extremities. The patient was treated initially with prednisone 40mg followed by 30mg PO daily, besides antihistamines, tepid baths and local emollients. Clinical surveillance was performed about every two weeks since diagnosis until spontaneous normal vaginal delivery at 37 weeks gestation, with live birth of a male, 3415g, Apgar Index 10/10. There was progressive improvement in symptoms and lesions after treatment and the patient was discharged two days postpartum. Follow up was conducted in outpatient regimen and the skin lesions were completely absent at the 6-week-postpartum appointment. More than 50% of women with this disease have HLA-DR3 and HLA-DR4 antigens, also associated with autoimmune disorders like Graves disease and Diabetes Mellitus. Histologically, the classical finding is subepidermal edema with perivascular infiltrates of lymphocytes, histocytes and eosinophils. Severe HP can be serious and pruritus may be quite severe; preterm birth and growth restriction have been reported and therefore increased antepartum surveillance is recommended. Lesions similar to those of the mother develop in up to ten percent of neonates and usually clear spontaneously within a few weeks.

220

Medical therapy for ectopic pregnancy: an effective alternative

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Introduction: Medical management of an unruptured ectopic pregnancy with intramuscular Methotrexate (MTX) has become an alternative medical treatment to the traditional surgical treatment. Our purpose was to assess the efficiency of methotrexate therapy for unruptured pregnancy in our department.

Methods: A retrospective study with the review of 34 cases treated with Methotrexate (50 mg/m² IM), from May 2003 and September 2007. Inclusion criteria were hemodynamical stability, normal hemogram, liver and kidney function tests, serum beta-hCG < 10.000mIU/ml, adnexal mass <3,5cm and no evidence of hemo-peritoneum on ultrasound.

Serum beta-hCG levels were evaluated day 1, 4 and 7 after initial MTX and thereafter weekly. Success of treatment was defined as a single dose of MTX that resulted in appropriate lowering of levels to levels below

< 10mIU/ml. A second MTX dose was administered if on the 7th day there had not been 15% reduction when compared with levels on day 4.

Results: Methotrexate treatment of ectopic pregnancy was effective with a single dose in 76% of cases.

Four cases required a second dose of MTX with a success response in 50% percent. The mean pre-treatment serum beta-hCG levels were higher in these patients (5690 mIU/ml when compared with 3109 mIU/ml – one dose). Of the 6 patients who required surgical treatment, initial beta-hCG levels were higher than 3500mIU/ml, but had an adnexal mass d" 25mm in diameter and no evidence of positive fetal cardiac activity. Serum beta-hCG levels on day 4 pos-MTX did not predict successful single-dose therapy or the need for surgery. Thirteen (38%) patients had minor side effects, the most frequent being mild abdominal pain, vaginal bleeding, nausea and vomits.

The mean time of resolution for beta-hCG levels was 38 days.

Discussion: Methotrexate treatment is a safe and effective option with an overall success rate in our experience of 76%. Women with pretreatment beta-hCG levels > 3500 mIU/ml had a greater probability of requiring a second dose of MTX or surgical intervention. Side effects with MTX therapy were considered minor and generally limited.

248

Hysteroscopy for endometrial thickening

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Introduction: Endometrial thickening (ET) is a frequent ultrasonographic finding, being hysteroscopy or curettage the most common methods of assessment. Our objective was to evaluate the underlying causes of ET not associated with bleeding and to find the accuracy rate of hysteroscopy when compared to biopsy.

Methods: Retrospective study with 614 women who underwent hysteroscopy after ultrasonographic diagnosis of ET, without metrorrhagia. Frequency tables were made considering: normal findings, polyps, fibroma, hyperplasia, cancer and others. Analysis was done by direct comparison. Sensitivity, specificity, likelihood ratio (LR) and the post test probability were calculated. K index was used to assess the inter-rater reliability. Afterwards sub-group analysis between younger and older than 50 was performed.

Results: Women were aged between 25 and 87 years (average of 56,2). Histological diagnosis was: 30,6% normal, 51% polyps, 5% sub-mucous fibromioma, 10,8% hyperplastic lesions (2,5% were carcinomas). Overall K index was 0,75 (substantial agreement). Normal hysteroscopies and the suspicion of carcinoma had the highest LR+ (56,15 and 106,31), while polyps had the

best LR- (0,13). Comparing older vs younger women, the first had more polyps (58,7% vs 36,7%), less proliferative lesions (14,1% vs 5,6%) but more carcinomas (3,4% vs 0,5%). Inter-rater reliability was better in the older group (0,78 vs 0,67). The LR+ for proliferative lesions was 9,04 (16,3 vs 4,85) and the negative 0,30 (0,37 vs 0,21).

Only 8 out of 15 carcinomas were correctly identified in hysteroscopy and 3,6% of the hysteroscopically diagnosed polyps were proliferative lesions in pathology, 0,98% being carcinomas.

Discussion: Concerning ET without metrorrhagia the most frequent diagnosis was polyps (51,55%), being normal exam the second (26,1%). Women older than 50 had 1,6 times more polyps, 2,5 less proliferative lesions, but 6,7 more carcinomas. Overall hysteroscopy had a substantial agreement with the pathology, being better for older women which also had better LR. Hysteroscopically diagnosed polyps should be taken to pathology, as 3,6% of them were proliferative lesions.

253

Twin tubal pregnancy – a case report

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Ectopic pregnancy presents a major health problem for women of childbearing age. It is the result of a flaw in human reproductive physiology that allows the conceptus to implant and mature outside the endometrial cavity.

Since 1970, the frequency of ectopic pregnancy has increased 6-fold, and it now occurs in 2% of all pregnancies. Multiple factors contribute to the relative risk of ectopic pregnancy, however, most patients presenting with an ectopic pregnancy have no identifiable risk factor.

Most ectopic pregnancies are located in the fallopian tube. The most common site is the ampullary portion of the tube (80%). The next most common sites are the isthmic segment of the tube (12%), the fimbria (5%), and the cornual and interstitial region of the tube (2%). Nontubal sites of ectopic pregnancy are a rare occurrence, with abdominal pregnancies accounting for 1.4% of ectopic pregnancies and ovarian and cervical sites accounting for 0.2% each.

The authors describe a case of a twin tubal pregnancy in a 31-year-old woman, who went to the Emergency Service in June of 2007, with abdominal pain in the left inferior quadrant. The clinical history revealed amenorrhea (7 weeks), oral contraceptive intake, a previous spontaneous abortion and a previous cesarean section. The pelvic examination revealed same tenderness, especially on motion of the cervix, but no suspicious masses were palpable. Abdominal examination didn't reveal acute abdominal signs. The ultrasound performed

showed a left twin tubal pregnancy, both with cardiac activity. The Hemogram was within the normal limits and the serum Chorionic Gonadotropin was 15741 IU/ml. We proceeded to a left salpingectomy, and the patient was discharged 3 days later.

Multifetal tubal pregnancy is a rare situation and it has been reported with both embryos in the same tube, as well as with one in each tube.

Without timely diagnosis and treatment, ectopic pregnancy can become a life-threatening situation. In addition to the immediate morbidity caused by ectopic pregnancy, the woman's future ability to reproduce may be adversely affected as well.

257

The accuracy of transvaginal ultrasonography for the diagnosis of ectopic pregnancy

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Background: To evaluate the accuracy of transvaginal ultrasonography (TVS) for the detection of ectopic pregnancies (EP) in women undergoing surgery for presumed ectopic pregnancy.

Materials and Methods: A retrospective study was performed in 100 women diagnosed with EP attending our facilities between January 2002 and December 2006. Women were diagnosed with an EP using TVS if any of the following were noted in the adnexal region: (i) an inhomogeneous mass or blob sign adjacent to the ovary and moving separately from the ovary; or (ii) a mass with a hyper-echoic ring around the gestational sac or bagel sign; or (iii) a gestational sac with a fetal pole with or without cardiac activity. The final diagnosis was based on the findings at surgery and subsequent histology of removed tissues.

Results: The mean diagnostic gestational age was 6.1 weeks. All women had a positive immunologic pregnancy test. 85% of women presented with symptoms and 15% were asymptomatic. In 84% of cases an inhomogeneous mass or blob sign was visualized and in 38% an embryo. In 6% there was no evidence of either an intra-uterine (IUP) or EP on ultrasound. One IUP was subsequently diagnosed as heterotopic pregnancy. 100 surgical procedures were performed. In 6% of these cases no EPs were confirmed in fallopian tube or pelvis at laparotomy. In 4% of cases an EP was visualized at surgery when not seen on the index ultrasound scan.

Discussion: 94% of ectopic pregnancies in this study population can be accurately diagnosed using TVS prior to surgery. The diagnosis of an ectopic pregnancy should be based on the positive visualization of an adnexal mass using TVS. This should in turn result in a decrease in the number of false positive laparoscopies.

262

Hysteroscopy: two years of experience

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Introduction: hysteroscopy is by far the best technical choice for the intra uterine pathology study, described for the 1st time by Pantaleoni in 1969, but only in the last few years has won some recognition as a diagnostic and therapeutical technique.

This work objectives are: to determine the n^o of hysteroscopies done per year (between 2005 and 2006), to determine the indications, ultrasound and hysteroscopic endometrial appearance, procedures, histopathology and complications.

Methods: this is a retrospective study done by the analysis of the Hysteroscopy Department database and clinical reports.

Results: in the period that the study refers to 657 hysteroscopies were performed. The average annual exam results were 319 in 2005 and 338 in 2006. The average age varied between 20 and 91 years (mean age 52±12). The most common indication was ultrasound changes (n=315, 47.9%), mostly endometrial thickness (n=250, 46.8%), followed by abnormal uterine bleeding (n=277, 42.2%). As for hysteroscopy appearance polyp was the most frequent diagnosis (n=245, 37.3%), confirmed by histopathology in 242 cases. Surgical hysteroscopy was performed in 280 cases (42.6%) mainly polypectomy and uterine fibroid resection. Complications occurred in 19 cases specially bleeding obscuring histeroscopic visualization (n=15).

Conclusions: though it is an invasive technique, complications are not frequent, it is of easy access, of low cost and possible to be treated as an outpatient, allowing for a more conservative approach in selected cases.

267

Endometrial thickening after menopause: experience with hysteroscopy for diagnosis

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Introduction: Office hysteroscopy use for the investigation of endometrial thickening, with or without abnormal uterine bleeding, is widespread nowadays. The purpose of this work is to evaluate the efficacy of hysteroscopy in the study of endometrial pathology in the post-menopausal period.

Methods: A retrospective study of 245 pos-menopausal women submitted to office hysteroscopy for sonographic

endometrial thickening (cut-off 4mm) during 20 consecutive months in our department. Two groups were analysed separately: Group A -172 patients with asymptomatic thickening and Group B – 73 patients also with uterine bleeding. Both groups were evaluated for age, hormonal therapy, hysteroscopic findings, procedure duration, associated pain and complications, and pathological diagnosis. Pearson χ^2 test was used for statistical analysis (SPSS 10.0, Inc.).

Results: Mean-age was 65 years old (46-87) for Group A and 68 years old (47-89) for Group B. 6,4% (11/172) and 6,8% (5/73) of women had hormonal replacement therapy, respectively in group A and B. The most frequent hysteroscopic finding was endometrial polyp in both groups, representing 69,8% (120/172) of the cases in group A and 67,1% (49/73) in group B (NS). In group A there were 4 hysteroscopies suggestive for neoplasia, all of them confirmed by histology. In group B there were 10 suspected neoplasias, with 9 histologically confirmed. Mean procedure duration was 31,5 minutes (7-120) in group A and 36,1 (10-90) in group B. Pain was subjectively assessed in a numeric scale from 0-10 and mean value was 4 in both groups. There were no complications reported. Overall the global neoplasia rate was 2,9% (5/172) for asymptomatic patients and 16,4% (12/73) for symptomatic ones ($p < 0,05$). On the other hand, endometrial hyperplasia was found in 5% (5/172) and 10,2% (5/73) of the patients in group A and B, respectively ($p < 0,05$).

Discussion: Endometrial thickening associated with postmenopausal metrorrhagia gives patient a significant higher risk for neoplasia or hyperplasia, comparing with asymptomatic patients. There was a high index of correlation between hysteroscopic appearance and pathological findings. Current hysteroscopic technology allows a rapid, safe and efficacious ambulatory technique which offers the opportunity for the diagnosis, and sometimes treatment, of endometrial pathology after menopause.

Materials and Methods: Retrospective study of 137 hysteroscopic reports, performed in our department, from January 2003 to January 2006, to study asymptomatic postmenopausal women with endometrial thickness (≥ 4 mm) in transvaginal ultrasound. All underwent diagnostic or surgical hysteroscopy followed by histologic endometrial sampling.

Results: We study 137 asymptomatic postmenopausal women. The mean age was 61,8 years old (46-84). The mean endometrial thickness was 11,2mm(4,4-26). Only 2,2%(n=3) were taking tamoxifen and 2,2% (n=3) were taking hormonal therapy. Endometrial polyp was the main pathology found (82,4%, n=113). The others pathologic findings were atrophic endometrium- 7,3%(n=10); submucous myoma-5,8% (n=8), sinequias-3,6% (n=4) endometrial carcinoma-0.7% (n=1); no alterations 0,7% (n=1). We found 96% correlation between the hysteroscopic and pathologic diagnosis. The only case of carcinoma was diagnosed in a polyp, without suspected hysteroscopic finding. Ressectoscopy was performed in 54 cases (39,4%) and hysteroscopic polypectomy was performed in 53 cases (38,7%) without any major complications. In the follow up period of 3 months a transvaginal ultrasound was done. It revealed endometrial thickness < 4 mm in 89% (n=122), recidiva in 8,8% (n=12), 2 cases missed follow up and 1 underwent hysterectomy.

Discussion: Hysteroscopic evaluation of asymptomatic postmenopausal endometrial thickening (≥ 4 mm) is a safe and accuracy procedure. The most frequent endometrial pathology found were endometrial polyps. Endometrial carcinoma is a rare finding in asymptomatic postmenopausal women with endometrial thickness. The authors think that postmenopausal women with a finding of endometrial thickness in routine ultrasound, should be tranquilized, and probably managed with expectant attitude, in particular if there are major risk factors for surgery.

276

Hystopathological Findings In Asymptomatic Postmenopausal Women With Endometrial Thickness

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Introduction: Transvaginal ultrasound seems to be an excellent initial diagnostic method, with high sensitivity in diagnosing endometrial abnormalities. Its combination with aspiration biopsy seems to be safe in women with a thin endometrium. Hysteroscopy is necessary in postmenopausal women with an endometrium of 4 mm or more.

Objectives: Evaluate endometrial pathology in asymptomatic postmenopausal women with endometrial thickness ≥ 4 mm in transvaginal ultrasound

298

Non-puerperal uterine inversion in association with uterine myoma – a case report

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Introduction: Uterine inversion is an uncommon clinical problem occurring in approximately 1: 3500 deliveries. Non-puerperal inversion is so rare that there is not an accurate estimation of its incidence. A case of non-puerperal uterine inversion due to uterine myoma is presented.

Case report: A 32-year-old nulliparous woman was referred to our institution due to hipermenorhea and methrorragia. Vaginal examination revealed a large mass (approximately 7cm) protruding through a dilated thin cervix into the upper third of the vagina. Transvaginal ultrasound showed a submucous pedunculated

vascularized myoma measuring 70x55x80mm arising from the posterior wall of the uterus and an intramural, submucous and subserous myoma of the posterior wall with 30x29mm. Treatment with GnRH analogs was performed over 2 months as an attempt to reduce the mass and undertake a conservative surgical treatment. Two months after the treatment she was admitted at the emergency room for extensive vaginal bleeding (haemoglobin 5,3 g/dL) and hypogastric pain. Vaginal exam showed a large solid smooth mass consistent with myoma occupying the vaginal cavity up to the introitus. Vaginal myomectomy was performed. Posterior transvaginal ultrasound revealed what seemed to be another 40x40mm submucous myoma filling the whole uterine cavity. She was discharged without haemorrhage, but 26 days later was re-admitted with genital bleeding. On vaginal examination, a 40mm mass was felt and interpreted as another myoma abortion. The day after severe pelvic pain developed and the patient decided to undergo hysterectomy rejecting beforehand any attempt to preserve the uterus. At laparotomy the uterus was found to be totally inverted through the cervix. Total hysterectomy was performed without reducing the inversion and post-operative period was uneventful.

Discussion: The diagnosis of a non-puerperal uterine inversion can be quite difficult and often only made during surgery as happened in this case. The mass identified at ultrasound and vaginal examination after myomectomy was not another myoma but the uterine fundus itself, resulting of a progressive uterine inversion. It must always be kept on mind that uterine inversion is a possible complication of a pedunculated lesion abortion.

315

Laparoscopic myomectomy versus laparotomy myomectomy - a five-year experience

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Introduction: Surgical management of miomas includes myomectomy for women who wish to retain their uterus and enhance their reproductive potential. Recently there is an increasing trend for minimal access surgery, and laparoscopic myomectomy has provided an alternative to laparotomy for subserosal and intramural myomas. The aim of this study was to evaluate and compare the cases of laparoscopic myomectomy with those treated by laparotomic myomectomy, in a 5-year retrospective study.

Methods: We collected data for all myomectomies performed in Dona Estefânia Hospital, between January 2003 and September 2007. Data were available for 92 patients, divided in two groups: G1-Laparoscopic

myomectomy (n=35) and G2-Laparotomy myomectomy (n=57). The authors evaluated and compared: number, localization and largest diameter of the myoma(s); operative time; blood loss; mean hospital stay; postoperative pain and complications.

Results: The laparotomic myomectomy group had more and larger myomas excised per intervention (mean diameter of 50 mm in G1 and 75 mm in G2). The patients submitted to laparoscopic myomectomy had a mean operative time significantly bigger, but they had advantages: less blood loss, shorter hospitalization, decreased incidence of postoperative pain and a faster recovery. There were two cases of laparoconversions (5.7%). The rate of complications was not significantly different between the two groups.

Discussion: Laparoscopic myomectomy is a recent procedure in the field of gynecological surgery, requires proper patient selection, meticulous technique, and experience in laparoscopic suturing skills. The authors concluded that, in well-selected cases, the laparoscopic route is an appropriate alternative to laparotomic myomectomy, in the hand of experienced laparoscopists.

330

Microwave endometrial ablation in the out-patient setting - study of patient satisfaction.

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Introduction: Microwave endometrial ablation (MEA) is a second generation endometrial ablation procedure and has evolved as an effective alternative to hysterectomy for management of abnormal uterine bleeding. MEA is now being performed more and more in the out-patient setting due to the ease of treatment, safety and cost implications in comparison to hysterectomy. This study is to determine patient satisfaction with out-patient MEA in a dedicated clinic.

Methods: This study was conducted at the University Hospital of Coventry and Warwickshire. Patients who underwent MEA more than 6 months previously were selected at random to participate in this postal questionnaire survey. An anonymous questionnaire was set to the patients with questions pertaining to pre-treatment counselling, comfort and pain relief during MEA, post-treatment care and follow-up. Patients were also asked whether they would recommend out-patient MEA to other and what suggestions they had regarding improving the service at the dedicated MEA clinic.

Results: 90% of patients were satisfied with the treatment provided in a dedicated MEA clinic. However, 15% felt pain relief during the procedure was inadequate and would

not have it again. 85% of patients said they would recommend it to a friend or relative. Suggestions for improvement were with regards to better pre-treatment counselling and follow-up.

Discussion: Majority of MEA is still performed in the setting of the operation theatre under regional or general anaesthesia. However, it can be safely performed with high patient satisfaction in the out-patient setting as demonstrated in this study. Careful patient selection is vital to ensure safety and success of out-patient MEA. Appropriate counselling of patients and meticulous pre-treatment preparation is vital. In our opinion out-patient MEA has many advantages such as lower risk of uterine perforation, freeing up operative time in theatre and has significant cost implications.

364

Dysfunctional uterine bleeding in adolescents attending outpatient clinic of the institute of mother and child in Warsaw, Poland

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Introduction: Dysfunctional Uterine Bleeding (DUB) is one of the most important problems reported by adolescents. Although DUB may appear to be simply a defect in positive feedback and the lack of establishment of anovulatory cycles. DUB connotes excessive, prolonged, unpatterned bleeding from the endometrium unrelated to structural or systemic disease and thus other diagnoses must be excluded.

Aim: We describe our experience of treatment of abnormal uterine bleeding in adolescence.

Methods: 67 girls with bleeding disturbances were involved in this study between 2003- 2007. We performed gynecological examination. The following diagnostic tests were performed: ultrasound examination (US), a complete blood count, a coagulation profile and an estimation of the thyroid function (fT4, fT3, TSH) and PRL. All patients were treated with estrogens (estrofem) and progestins (dydrogesteron), some of them required iron supplements and antibiotic.

Results: Their mean age was 13.±.1,53, the average age at menarche was 12,4± 1,23years and duration of bleeding was 21,37±11,3. The thickness of endometrium before of treatment was 6,15± 2,03 in US. Coagulation disorders were discovered in 4 cases (5,9%) and thyroid disorders in 11 cases (16,4%). 6 of girls (8,9%) were hospitalized and received intramuscularly hormonal treatment. We never used oral contraception. D&C wasn't needed in any cases.

Conclusion: Dysfunctional uterine bleeding is common problem for the first postmenarche year, which can be treated by estrogens and progesterone but not by oral contraception and D&C

368

Outpatient hysteroscopy: a valuable diagnostic and therapeutic tool

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Introduction: Hysteroscopy became an indispensable tool for gynaecologists in the last decades. Hysteroscopy is a safe, easily accessible, fast and accurate exam, available in an outpatient setting. Its use has developed focusing priority areas, like cancer, and treatment of patients without long hospital stay. Outpatient hysteroscopy has proven to be a cost-effective technique in diagnosis and treatment in gynaecology.

The aim of this work was to evaluate the diagnostic accuracy of outpatient hysteroscopy in our department.

Methods: All 657 outpatient hysteroscopies performed between January 2005 and December 2006 were reviewed. Indication, hysteroscopy diagnosis and histological result were compared. Sensitivity and specificity were computed for polyps/myomas, endometrial hyperplasia and endometrial carcinomas.

Results: Abnormal ultrasound finding was indication for the exam in almost half of cases (47.9%), followed by abnormal uterine bleeding (42.2%). Twenty one patients didn't undergo hysteroscopic biopsy.

Specificity for diagnosis of polyps or myomas was 89.3% and sensitivity 88.7%. As for malignant pathology, sensitivity for hyperplastic lesions and for endometrial carcinoma was 31.4% and 88.0%, and specificity 77.2% and 99.2%, respectively. Positive predictive value for diagnosis of endometrial carcinoma was 75% and negative predictive value 99.7%.

In 80.5% of patients diagnosed as endometrial polyp, successful polypectomy was performed.

Conclusion: Outpatient hysteroscopy was an accurate mean of diagnosis, showing a high specificity and sensibility for benign pathology, like polyps, but also, and more important, for malignant lesions. In most patients with endometrial polyps it was also a valuable therapeutic tool. Hysteroscopy performed in an outpatient setting was a less expensive way of diagnosing and treating many patients.

373

CO₂ laser in the excisional treatment of Bartholin duct cysts

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The Bartholin's gland cyst is a condition that occurs in approximately 2% of women, most of whom are of reproductive age. It is a cystic expansion of the gland tubes, which is caused by scar and infection. Many methods have been used to treat this condition such as excision, marsupialization and use of Word catheter, all of them associated to recurrence, persistent drainage, hemorrhage, or considerable scarring. Excision with CO₂ Laser was latter introduced and has been linked with lesser complications.

Objective: The aim of study is to evaluate the feasibility, complication rate, and results obtained with CO₂ Laser excision with CO₂ of Bartholin duct cysts, in Maternidade Dr Alfredo da Costa, Lisbon, Portugal (department of Gynaecology)

Methods: 39 outpatients with noninfected Bartholin duct cysts treated with CO₂ Laser excision were evaluated, on a period starting on January 2005 and until June 2007. Women were followed at 1st month and at 6 months interval afterwards until 2 years after treatment. Failure and complications rate was evaluated.

Results: Mean age was 35 years. Parity: 15 nulliparous; 14 primiparous; 10 multiparous. Overall there were 4 recurrences (failure rate: 10,2%), occurring mostly at 6 month follow-up (8,3% vs 2,5% at 1st month). In one case a residual assymptomatic cyst was identified.

Conclusion: CO₂ laser treatment of the Bartholin's gland cyst offers several advantages over conventional methods: can be carried out safely in an outpatient setting, with minimum patient discomfort and high long-term cure rates.

374

Laparoscopic-assisted vaginal hysterectomy and total laparoscopic hysterectomy – experience of Hospital São Sebastião

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Introduction: In 1989, when Reich *et al* reported the first case of a laparoscopic-assisted vaginal hysterectomy (LAVH), an alternative to abdominal hysterectomy was created. The main goal of performing LAVH was to convert an abdominal hysterectomy into a vaginal hysterectomy and, therefore, reduce trauma and morbidity.

Objectives: To evaluate the surgical results of patients undergoing LAVH or total laparoscopic hysterectomy (TLH).

Materials and methods: Retrospective study of 53 medical records of patients submitted to these procedures between January 2000 and October 2007. Data collected included: age; obstetrical history; associated pathology; past abdominal surgeries; indication for surgery; histopathologic result; mean duration of surgery; mean length of hospital stay and short and long term complications.

Results: The proportion of hysterectomies performed by laparoscopic assistance is increasing in our hospital, with growing experience on the procedure. Patients submitted to LAVH and LH have a short post-operative recovery and less associated morbidity. These procedures are feasible options in patients who would otherwise require an abdominal hysterectomy.

388

Endometrial tuberculosis in a postmenopausal woman

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Introduction: Female genital TB is a rare disease and it is almost invariably secondary to disease elsewhere. Clinical presentation is variable, it may be asymptomatic or it may present with a variety of gynaecological symptoms. The most frequent manifestations are infertility in the reproductive age group and methrorragia in postmenopausal women.

Methods: The authors report a case of endometrial tuberculosis (TB) presenting with pyometra in a postmenopausal woman. Mrs. M.D., 77 years old, gravida 0 para 0, was first seen in July/2006 for detection of distortion of the endometrial cavity, which raised suspicion of malignant disease. The patient also had recent weight loss and an elevated erythrocyte sedimentation rate. There was no abdominal pain, foul smelling discharge, fever, loss of appetite, or vaginal bleeding.

Results: Endometrial tissue was obtained at hysteroscopy and the histopathologic examination found an **epithelioid granulomatous endometritis**, without malignant cells. Microscopy for alcohol and acid-fast bacilli (AAFB) was negative.

Discussion: Genital TB tends to be an indolent infection and it may not manifest for years after initial seeding. The diagnosis requires a high index of suspicion, especially when we are facing an uncommon manifestation of the disease, like pyometra. The majority of cases are diagnosed by histopathologic examination, once isolation of *M. tuberculosis* is rare. Failing to consider the possibility of TB may result in unnecessary and ineffective interventions.

391

Disorders in androgen synthesis or action

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Introduction: Complete form of X-linked androgen insensitivity syndrome (CAIS) is characterized by 46,XY karyotype, external female phenotype, intra-abdominal testes, absence of uterus and ovaries, blindly ending vagina and gynecomastia. There is also a group of disorders of androgen action that results from partial androgen insensitivity (PAIS). 46,XY patients with deficiencies of 5 α -reductase or 17 β -hydroxysteroid dehydrogenase-3 enzymes present at birth with external genitalia similar to that of PAIS.

Methods: Report of 3 patients followed in our department with disorders in androgen synthesis or action.

Results: Our first report is an 18-year-old girl whose main complaints were amenorrhea and lack of pubic and axillary hair development. Breast development was normal. Based on those features, male karyotype (46,XY) as well as high levels of blood testosterone and lack of uterus on ultrasound examination allowed for establishing the diagnosis of CAIS. A second patient presented at birth with ambiguous genitalia (two palpable tests and clitoromegaly). Pelvic ultrasonography found no evidence of müllerian structures. Karyotype was 46,XY. Diagnosis of PAIS was made with a report of a G2881T missense mutation in the AR gene. Gonadectomy plus clitorovaginoplasty was performed at two years of age. Estrogens were initiated at twelve years of age. The third patient was a newborn with a predominantly female phenotype who presented ambiguous genitalia, with two palpable tests. Pelvic ultrasonography found no müllerian structures and karyotype was 46,XY. Further studies revealed a 17 β -hydroxysteroid dehydrogenase-3 deficiency. Gonadectomy was performed at five months of age. Hormone replacement was initiated at twelve years of age.

Discussion: CAIS must be considered in any case of primary amenorrhea. Karyotyping girls with inguinal hernias is essential, and further attention should be given to genetic counseling for families of CAIS patients. Management of suspected androgen insensitivity should involve a specific sequence of clinical, radiological, biochemical and molecular investigations. Gonadectomy must be planned to eliminate the risk of gonadal malignancy. Hormone replacement therapy with estrogens should be considered.

438

Bilateral tubal ectopic pregnancy

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Introduction Bilateral ectopic pregnancy is a rare twin gestation with few cases reported in the literature. We report a case of a 25-year-old woman who presented with an acute abdomen and was subsequently found to have this unusual phenomenon.

Methods Case report.

Results An emergency laparotomy performed under general anaesthesia revealed a hemoperitoneum of 1.8 litres, a ruptured left tubal pregnancy with active bleeding and a mass in the right tube. A bilateral salpingectomy was performed. Histopathology confirmed presence of chorionic villi in both tubes with the pregnancy on the left being a lesser gestation than the right. These fulfil the Norris criteria, which requires the demonstration of chorionic villi in each fallopian tube.

Discussion Laparoscopy is the best surgical approach for most women with bilateral tubal pregnancy. In theory, laparoscopic salpingostomy is the most appropriate and safest treatment. However, bilateral salpingectomy may be necessary when both tubes are extensively damaged and/or actively bleeding. Although successful pregnancies have been reported after conservative surgical treatment of bilateral tubal pregnancies, the risk of recurrence is high. While laparoscopy is considered the gold standard, our decision on an emergency laparotomy was based on the fact that the patient presented with an acute abdomen and was haemodynamically unstable.

The implications for future fertility for such patients are significant with the only option for this patient being an assisted reproductive technique. In this case, we referred her to the *in vitro* fertilization clinic.

With the incidence of ectopic pregnancy likely to continue rising concurrently with the incidences of pelvic inflammatory disease and the use of assisted fertility techniques, it may be that these "rare ectopics" will become less uncommon.

442

Central precocious puberty - a case report

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Introduction: Precocious Puberty refers to the appearance of physical and hormonal signs of pubertal development at an earlier age than is considered normal. Central

Precocious Puberty, which is gonadotropin-dependent, is the early maturation of the entire hypothalamic-pituitary-gonadal axis, with the full spectrum of physical and hormonal changes of puberty. Early onset of puberty can cause several problems. The early growth spurt initially can cause tall stature, but rapid bone maturation can cause linear growth to cease too early and can result in short adult stature. The early appearance of breasts or menses can cause emotional distress for some girls.

Case: We report the case of a 7 years-old girl, who was presented to our centre with an early pubertal development. She had had thelarche at 5 years-old, pubarche at 5,5 years-old and menarche at 7 years-old. There was no relevant familiar history. From personal history, we noticed that this girl was submitted to a ventriculocisternotomy at seventh day of life, because of a triventricular hydrocephalus. According to parents' information, she always had a normal development. On physical examination, we noticed a tall stature (p90), a large weight (>p90) for age and Tanner development B4-5 P4. From the laboratory studies done, we highlight sex steroid levels compatible with central precocious puberty (E2=75pg/ml; LH=7,7mUI/ml; FSH=6,54mUI/ml), pubertal levels of androgens and normal thyroid tests. From the imaging studies, we obtained a normal adrenal ultrasound and a pelvic ultrasound showing multiple small follicular cysts compatible with ovarian activity. Radiography of the hand and wrist demonstrated a bone age within chronological age. We initiated treatment with three month depot of goserelin acetate during a twelve months period. There was a partial regression of pubertal development to Tanner B3-4 P4 and amenorrhea was rapidly reinstalled. The patient, now 8,6 years-old, keeps growing with similar bone and chronological ages.

Discussion: This is a case report of a central precocious puberty process started at 5 years-old with menarche presentation at 7. A history of a central nervous system surgery at seventh day of life is the only identifiable cause for the disorder. An adequate treatment is crucial to avoid short adult stature due to rapid bone maturation and emotional distress.

457

Clinical study of uterine adenomyosis. One year review

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Introduction: Adenomyosis is defined by the presence of endometrial mucosa within the myometrium. The pathogenesis of adenomyosis is not known. The two major theories are that it either develops from endomyometrial invagination of the endometrium or de novo from mullerian rests.

Objective: Investigate the prevalence of adenomyosis histopathological examinations of patients who had undergone hysterectomy in a hospital centre.

Methods: A retrospective analysis was carried out on 52 patients who underwent hysterectomy, for a variety of reasons, between August 1, 2006, and July 31, 2007; and whose histologic analysis of hysterectomy specimen revealed adenomyosis. Epidemiological characteristics, predisposing risk factors, symptoms, clinical and ultrasound findings of adenomyosis were evaluated.

Results: 619 hysterectomy were performed during the study period: frequency of adenomyosis in hysterectomy specimen is of 8.4%. The mean (\pm SD) age of the patients was 50.5 (\pm 7.4) years. Obesity was diagnosed in 36.5% of the women and 23.1% were overweight. 96% were multiparous and 36.5% of them are postmenopausal. Abnormal uterine bleeding was reported as a main symptom in 63.5% of cases and pelvic pain in 17.3%. Preoperative diagnosis has been suspected on transvaginal sonography in 55.7%. 50% had medical treatment with progestins (including the levonorgestrel realising intrauterine contraception). Histologic analysis of the hysterectomy specimen shows associated myoma in 55.8% of cases, polyps in 48.1% and hyperplasia in 13.5%. We found no cases of endometriosis.

Discussion: Adenomyosis is not a rare histopathological finding. But most women with this disorder have another pathologic process that obscures the diagnosis of adenomyosis. Due to diagnostic and therapeutic methods which are being developed as an alternative to hysterectomy, the clinical effects of adenomyosis and its association with other gynaecological conditions, adenomyosis appears to be an issue which will be more intensively investigated in the future.

471

Pimecrolimus cream 1% in the treatment of lichen sclerosus

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Introduction: Lichen sclerosus is a chronic inflammatory skin condition, which most commonly causes dysuria, pruritus and soreness of the vulval and perianal areas. Potent topical corticosteroids are used for the treatment of LS, but it is well known that they inhibit collagen synthesis and cause skin atrophy as a side effect.

Methods: The present pilot study evaluated the efficacy and safety of pimecrolimus cream 1% applied twice daily for up to 6 months in 29 women with severe LS

Results: Of the 26 subjects who completed the follow-up period, 42 % (11/26) were in complete remission with relief from itch, pain and inflammation. An 3.5-fold increase in type I collagen synthesis and 7.5-fold increase in type III collagen synthesis of the affected areas was detected

after two months of pimecrolimus treatment. There were no systemic adverse reactions, although mild local skin reactions were reported by 50 % of the patients. Blood concentrations of pimecrolimus were checked in 10/26 patients (39 %) and were undetectable in all cases.

Discussion: Lichen sclerosus is a chronic and painful disease affecting patients quality of life. Some patients respond poorly to treatment with topical corticosteroids, which also are known to cause skin atrophy. Therefore, new effective treatments for LS are needed. At the end of this study 11 patients had achieved complete clinical remission for the first time since their disease started and no significant side effects were reported. We conclude from our results that pimecrolimus is a safe and effective treatment of the LS. However, randomized controlled studies are required to confirm the efficacy of pimecrolimus in this disease.

472 Tuberculosis was a surprisiling...diagnosis on the XXI century

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Background: The axillary nodes drain the arm, thoracic wall, and breast territories. Cancer and infection are common etiologies of axillary lymphadenopathy.

Objective: We report 2 cases of isolated enlarged axillary lymph nodes that became a challenging diagnostic workup.

Clinical History: Two women, 30 and 44 years-old, were referred to our senology center with isolated unilateral axillary lymphadenopathy. Both had neither constitutional symptoms, nor signs suggestive of infection or malignancy. There was also no history of high-risk infectious exposure or use of medications. In both cases the first approach included fine needle aspiration cytology (FNAC), which was inconclusive. Excisional biopsy was then performed, and histology results showed granulomatous lymphadenitis with caseous necrosis consistent with tuberculosis.

Discussion: Axillary masses are an uncommon isolated finding. FNAC may distinguish between benign and malignant pathologies. In the case of indeterminate results, excisional biopsy for a precise histologic diagnosis is indicated.

484 Patient satisfaction in an ambulatory surgical unit in a tertiary referral hospital

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Introduction: surgical and anaesthetic advances have allowed the development of adequate ambulatory surgical programs and ambulatory units promoting a rational and cost-effective use of hospital resorts. Since 1997 our hospital has implemented a Surgical Unit devoted to ambulatory procedures namely gynaecological endoscopic procedures like laparoscopic tubal ligation. These procedures are performed under general anaesthesia but patients are discharged after a period of recovery (approximately 4h) and may contact the surgeon by phone until the next day.

Material and methods: 127 consecutive patients submitted to ambulatory laparoscopic tubal ligation at the ambulatory surgical Unity of our hospital during this year were chosen to be submitted to a phone interview. In the interview they answered a questionnaire about socio- demographic factors, and regarding to this new surgical approach, they rated their general satisfaction, accessibility to medical care, satisfaction regarding unit facilities and professionals performance in a scale from 0-4 in which 0 is terrible, 1 is bad, 2 acceptable, 3 good and 4 extremely good.

Results: It was possible to contact 58 (45,67%) of the initial 127 chosen patients. Mean age was 37,21 (27-44) and 37 (63,79%) patients were currently working when the surgical procedure occurred. The results are in relation to patient satisfaction to this different approach to surgical procedures.

Patient qualifications	N (%)
4th grade	18 (31,03)
6th grade	14 (24,14)
9th grade	17 (29,31)
12th grade	4 (6,90)
University degree	5 (8,62)

Conclusion: Global satisfaction was high and of the patients would recommend this type of treatment to their family or friends and would repeat the experience in the same unit. The best appreciated items where the quality of treatment and relation, respect and information along the assistential circuit by implicated professionals but facilities of the unit were also considered extremely good by the majority of patients.

502

She did nothing... but she could have died!

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Unsafe abortion remains a public health concern today due to the higher incidence and severity of its associated complications, such as incomplete abortion, sepsis, hemorrhage, and damage to internal organs. WHO estimates that 19 million unsafe abortions occur around the world annually and that 68,000 of these result in the woman's death. Complications of unsafe abortion are said to account, globally, for approximately 13% of all maternal mortalities.

We report the case of a 27 year-old woman with a previously immunologic pregnancy positive test and 14 amenorrhea week's who was presented to our emergency room with heavy vaginal bleeding and severe pelvic pain, for 5 days.

During the clinical examination there was a discrepancy between uterine size and time of amenorrhea. Furthermore the uterine scan suggested the presence of fetal parts in the pouch of Douglas. She always denied any abortive maneuvers. We decided to perform a laparotomy.

	N (%)				
	0	1	2	3	4
General satisfaction	0	1 (1,73)	3 (5,17)	13 (22,41)	41 (70,69)
Facilities	0	1 (1,73)	9 (15,52)	4 (6,89)	44 (75,86)
Professionals	0	0	0	3 (5,17)	55 (94,83)
Information	0	1 (1,73)	0	9 (15,52)	48 (82,75)

The procedure revealed a uterine perforation with extensive haemoperitoneum and severe lacerations of the mesorectum and promontorium so, a multidisciplinary approach was required with the participation of a general surgeon. The fetal head and spine were located in the pouch of Douglas.

The authors highlight the need for health education, family planning, and improvements in health care during and after abortion to address the phenomenon of unsafe abortion.

505

Evaluation and management of uterine myomas - experience of our Department

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Introduction: Uterine myomas are among the most frequent benign entities encountered in gynecologic practice, occurring in 25 to 50% of women during reproductive years.

The purpose of this work was the evaluation of uterine fibroids and their management in women in fertile age.

Methods: Retrospective study of 366 women aged 45 years or younger, which performed transvaginal ultrasound in our institution, between January 2005 and June 2007. The authors analysed their clinical file and the informatic records of the ultrasound relatories (Astraya Program). The following parameters were analysed: age, PMI, menarche, parity, oral contraception, smoking and background of arterial hypertension or pelvic inflammatory disease. It was also proceed to an evaluation of the type, location, and dimensions of myomas, clinical manifestations presented, management adopted and follow-up of these patients.

Results: The mean age of the patients was 38,9 years. 46,6% of these women present single myomas and 53,4% with multiple myomas. The most frequent myomas were intramural (73%), had posterior location (51,2%) and size d" 4 cm (94,7%). Clinically 47,3% of these women were asymptomatic, 62,7% presented with abnormal uterine bleeding, 28% infertility, 21,7% pelvic pain and 1,5% have abdominal distension. The management adopted was: expectant management with clinical and ultrasound surveillance in 63,1% of women; medical therapy in 15,6% and conservative surgery (myomectomy) in 12,8%; definitive treatment with hysterectomy in 17,7% of the cases.

Discussion: Most women with fibroids were 35 years or older. The majority of myomas were of small dimension and asymptomatic, and their preferential management was ultrasound surveillance. The type of myomas related more frequently with clinical manifestations were the submucous and intramural fibroids, as the ones more than 4cm of dimension. As this work was about evaluation of myomas in women in reproductive age, the majority with the wish of preserve their fertility, the conservative approach (ultrasound surveillance, medical therapy and conservative surgery) were the predominant management.

REPRODUCTIVE MEDICINE / CONTRACEPTION / MENOPAUSE

36

The ignored in recurrent endometriomas - appendix

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Introduction: The objective of our current retrospective case series study is to characterize the involvement of the appendix by endometriosis in patients who underwent a secondary laparoscopy for recurrent endometrioma.

Methods: The study was done in a university ambulatory endoscopic surgery center—tertiary referral center. Fifty one patient who had appendectomy during laparoscopic surgery for recurrent endometrioma were included to the study.

Macroscopic and histological appendiceal endometriosis in patients who had a second laparoscopy for recurrent endometrioma were evaluated.

Result(s): Fifty one patients underwent a secondary laparoscopic procedure from January 1998 to July 2007 because of a symptomatic recurrent endometrioma. Of the patients, 21 (52.5%) had appendectomy due to macroscopic pathological findings of the appendix. Histologically, in 12 (57.14%) appendiceal endometriosis was documented.

Conclusion(s): The incidence of appendiceal involvement with endometriosis in patients undergoing a secondary surgical procedure for recurrent endometrioma is 57.14%. We, therefore, suggest that the appendix be assessed thoroughly during a secondary surgical procedure for endometriosis, and appendectomy be considered in this unique group of patients.

49

Abdominal wall endometriosis – a case report

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Introduction: Endometriosis is defined as functional endometrial tissue outside the lining of uterine cavity. It occurs most often in the pelvic area, although rarely it may show as an abdominal wall mass. Abdominal wall endometriosis is usually associated with obstetric or gynaecologic surgical procedures. The incidence of caesarean section scar endometriosis is 0.03 to 0.8%. In general there is no history of pelvic endometriosis.

The mean time until onset of symptoms varies from three months to ten years after surgical procedure. The diagnosis may be overlooked as it has nonspecific clinical or imaging findings. Differential diagnosis must be done with other abdominal wall masses as stitch granuloma, incisional hernia, abscess, hematoma, or the neoplasms.

Case: A 41-year-old multipara woman was referred to our department because of a slow and gradual enhancement of a palpable nodule located in the left edge of a Pfannenstiel's incision scar. The mass was cyclically painful during menses. These complaints appeared two years before, one year after a cesarean section had been performed. On examination there was a firm, painless, well circumscribed, brownish mass 3.5x1.5mm in the left edge of the laparotomy scar. In that location, ultrasonography showed an hypoecho-genic mass (37x33x14mm), compatible with sub-aponeurotic endometriosis.

She was submitted to wide local excision. At the same time, laparoscopy revealed endometriotic peritoneal foci in the bladder fold. No other endometriotic lesions were present namely in the anterior abdominal wall peritoneum. Histopathological examination confirmed the suspicion.

Conclusion: We should keep in mind abdominal wall endometriosis as a possible cause of post cesarean section scar related masses. These patients need to be followed up because of the chances of recurrence, which require re-excision. Caution should exist during obstetric and gynaecologic procedures to avoid endometrial tissue transplantation to the anterior abdominal wall.

71

Relationship between microvessel density and expression of vascular endothelial growth factor in patients with painful ovarian endometriosis

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Introduction: The aim of this investigation was to assess whether a correlation exists between microvascular density, expression of endothelial growth factor and pelvic pain in patients with ovarian endometriosis.

Methods: Sixty- five patients (mean age 33.3 years; range 20-49 years) were diagnosed as having suspected

cystic ovarian endometriosis, and were scheduled for surgery. Patients were classified in two groups according to clinical complaints: group A, asymptomatic patients or patients presenting mild dysmenorrhea; and group B, severe dysmenorrhea and/or chronic pelvic pain and/or dyspareunia. Immunohistochemical staining for CD34 and VEGF in histological specimens for microvessel density (MVD) and VEGF cellular expression assessment was performed.

Results: Five patients were excluded after surgery because no ovarian endometriosis was found in histological analysis. Thirty women were included in each group. Microvascular vessel density was higher in symptomatic group. No differences were found in VEGF cellular expression.

Discussion: We conclude that pain symptoms in ovarian endometriosis are directly correlated with MVD but not with VEGF cellular expression. Based on our results, we suppose that in endometriotic cysts the angiogenic processes are still present but not completely mediated by VEGF.

74

Comparative study on the hormone replacement therapy (HRT) in improving the climacteric neurovegetative syndrome

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Introduction: The main objective of the study was to compare the efficiency of three HRT approaches on the climacteric symptoms and biochemical parameters and to determine the factors influencing the treatment compliance of the HRT patients.

Methods: We monitored 165 menopausal patients who were subjected to 3 different HRT approaches in order to eliminate/improve climacteric symptoms. The criteria for including the patients into the three different groups were: installed and stabilised menopause, installed and intense neurovegetative symptoms, patients who had not received HRT in the past 6 months, uterus present and age group under 60. Patients whose medical conditions forbade the HRT were ruled out. The subjects were divided into 3 groups: group 1 – sequential combined approach; group 2 – intermittent combined approach; group 3 – continuous combined approach. The intensity of the climacteric symptoms and the improvement of those symptoms after administering HRT were measured using the Kupperman index.

Results: All three groups had similar median characteristics according to the categories of age, amenorrhea, socio-demographic features up to the moment of the administration of HRT. 32 patients refused to take HRT. The compliance of the patients in group 1 was significantly reduced in comparison to the other two groups due to

irregular bleedings, the presence of the pre-menstrual syndrome or the patients desire not to keep the menstrual activity. The group with the least side-effects and with insignificant irregular bleedings was the one under the continuous combined administration. A patient from this group and two patients from the sequential combined group needed endometrial biopsies taken and all three patients were found with histological aspects of inactive endometrial polyps. All three groups presented similar results under the efficiency of elimination or improvement of the neurovegetative symptoms after one year of treatment. Group 3 showed lower levels of HDL and triglycerides than the other two groups. No other significant differences were noticed in the blood biochemical parameters.

Discussion: Both safety of the patient and the efficiency of the treatment should be taken into account when choosing a HRT. The compliance with the treatment seems to depend greatly on the comfort and the well being of the patients and those factors are supported and enhanced by treatments that do not produce irregular bleeding episodes.

138

Role of E-cadherin – catenin complex in adenomyosis development

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Introduction: Adenomyosis is a common gynecological disease that is suggested to be related to bleeding disorders, dysmenorrhoea and sterility in women. The molecular mechanisms underlining the pathogenesis of adenomyosis are far from being understood. In this study we tried to reveal if generation and persistence adenomyotic lesions are due to more invasive character of epithelium. For this reason we investigated cell adhesion molecule E-cadherin and β -catenin which are known to participate in cell adhesion and invasion.

Aim: To investigate features of E-cadherin and β -catenin disturbances in endometrium and myometrium from patients with adenomyosis and reveal the possible role of E-cadherin-catenin complex in adenomyosis ectopic loci formation.

Materials and methods: Endometrial biopsies and endometriotic tissues were obtained from patients undergoing curettage or being hysterectomized at the Department of Gynaecology of the Moscow Medical Academy. E-cadherin determination using ELISA test (R&D, USA) was carried out in endometrial and myometrial samples of 53 patients with adenomyosis and 24 women with benign lesions except adenomyosis (control group). For immunohistochemistry 30 patients with adenomyosis

and 12 patients in control group were investigated using monoclonal mouse antibodies against E-cadherin and β -catenin (DAKO, Denmark). Statistical analysis was performed using SPSS 13 computer program.

Results: The equal ratio of the glands and stroma and myometrial hyperplasia was revealed in a majority of the foci of adenomyosis. No relationship was found between clinical state and adenomyosis foci structure. The ectopic endometrium corresponded to proliferative phase eutopic endometrium in the most cases but some cases showed moderate hyperplasia. We observed irregularities of the stratum basalis that dipped into myometrium in all cases of adenomyosis. The concentration of E-cadherin in endometrium was significantly higher in the group with adenomyosis (15.95 ± 2.07 ng/ml) than in the control group (8.98 ± 1.64 ng/ml, $p < 0.05$). The concentrations in myometrium were 1.76 ± 0.12 ng/ml and 0.66 ± 0.22 ng/ml respectively ($p < 0.05$). Correlation between E-cadherin concentration and disease duration was revealed. When the history of adenomyosis was less than 3 years the concentration in endometrium was 8.77 ± 0.98 ng/ml, in cases with duration of disease 4-7 years – 15.96 ± 1.91 ng/ml ($p < 0.05$), more than 7 years – 24.88 ± 5.93 ng/ml ($p < 0.05$). These values in myometrium were 0.61 ± 0.04 , 1.64 ± 0.43 ($p < 0.05$), 4.61 ± 1.31 ng/ml ($p < 0.05$) respectively. It is possible that changed environment surrounding ectopic foci results in increasing adhesive properties of glandular adenomyotic epithelium. Immunostaining of E-cadherin was significantly increased in adenomyotic lesions ($p < 0.05$). Functional and basalis endometrium mainly showed moderate staining while the foci of adenomyosis showed strong staining in most cases. β -Catenin expression in adenomyosis was significantly decreased in eutopic endometrium as compared with control group ($p < 0.05$).

Conclusion: The present study has demonstrated that E-cadherin concentration in endometrial and myometrial homogenates was significantly higher in specimens with adenomyosis. Immunohistochemistry showed similar results: the staining intensity was stronger in the adenomyotic lesions. Thus, we suppose that ectopic foci appearing in adenomyosis aren't related with disturbances of adhesive properties of epithelium cells. It can be also speculated that invasive properties appearance in endometrium are unlikely reason of adenomyotic lesions.

143

Atypical presentation of endometriosis

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Introduction: endometriosis is defined by the presence and endometrial working tissue growth outside the uterus.

The occurrence of pelvic endometriosis in women in reproductive age is 7%.

The ovary endometriosis pathogenesis is controversial, being commonly accepted that is originated in the retrograde menstruation theory associated to immunologic factors and coelomic metaplasia theory.

The physical exam may reveal fixed adnexal masses; the pelvic scan is important in the evaluation of an ovary endometriosis being the nuclear magnetic scan one of the best non invasive means of endometriosis diagnosis but is not very practical or very accessible.

Ovary endometriosis, namely in the form of large endometriomas, are considered a marking of an extensive illness.

Methods: we made a retrospective review of the patient clinical report as well as by analysing the most up to date literature on the subject.

Results: the authors present an atypical endometriosis clinical case in a 20 year old healthy woman without any gynaecological complaints except for the increase in abdominal volume which suggested a pelvic scan which in turn, revealed large and complex adnexal masses.

The authors present some relevant considerations about the endometriosis clinic, differential diagnosis and the most adequate therapeutical management to these clinical cases.

Discussion: this is an endometriosis clinical case less frequent because of the patient's age when the diagnosis was done and by the atypical presentation form, showing this way, the weak correlation between the symptomatology and the gravity of the illness.

In young women in reproductive age, the preferential endometrioma treatment larger than 3 cm is conservative surgery, in other words, cystectomy with ovary rebuild. In the presence of ovarian endometriomas (greater than 3 cm in diameter) and deeply infiltrating disease, histology should be obtained to identify endometriosis and to exclude rare instances of malignancy.

186

Uterus didelphys, obstructed hemivagina, and ipsilateral renal agenesis - a case report and literature review

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Introduction: The Uterine malformations result of multiple anomalies that occur between 4^a-10^a week of embryonic development. The real incidence of these malformations is unknown.

Maldevelopment of the Mullerian duct system with total absence of fusion, implies the appearance of two uteri and two cols. The vaginal duplication is frequent and is characterized by the longitudinal presence of one septo

that extends in sagittal orientation between cols that is complete in 75 % of the cases. The presence of unilateral vaginal obstruction in uterus didelphys is rare, and when present it associates the agenesis of the kidney and to ureter ipsilateral, that it is known as Syndrome of Wunderlich-Herlyn-Werner. The blind hemivagina and the renal malformation are for reasons not known more prevalent to the right. The aim of this work was to describe a case of the this Syndrome and make a literature review.

Methods: It will be described the patient symptoms, the clinical course, specific anatomic findings, treatment(s) offered and follow-up.

Results: A 14-year-old girl presented to the emergency department complaining of lower abdominal pain with two weeks' duration. She has been interned with suspicion of torsion of voluminous anexial cyst. Laparoscopy established the diagnosis of hematometracolpos secondary to uterus didelphys with unilateral imperforate hemivagina. An incision in the vaginal septum allowed drainage of the hematocolpos, providing relief of the patient's symptoms. The patient is actually without symptoms.

Conclusion: The diagnosis of uterine malformation, in adolescents with normal menstrual cycles and gradual dysmenorrhea or cyclical abdominal pain, always must be considered. A greater awareness of the syndrome of uterus didelphys, obstructed hemivagina, and ipsilateral renal agenesis should lead to its prompt diagnosis, allowing for early and appropriate surgical intervention as well as decreased long-term morbidity.

204

Twin pregnancy in a woman with Turner syndrome

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Fertility in patients with a diagnosis of Turner's syndrome is extremely rare. Only in 2% of all cases the pregnancy is a result of a spontaneous ovulation and intrauterine fertilization. Ovarian failure is a typical feature in Turner's syndrome. Therefore, hormone replacement therapy (HRT) is necessary to achieve the development of normal female sexual characteristics and to prevent cardiovascular complications and osteoporosis. Oocyte donation is now a treatment option for infertility of these women. Excellent results have been obtained with 46% of embryo transfers resulting in pregnancy. Authors describe a case report of a 38 year-old patient with Turner syndrome with a 45, XO karyotype submitted to ovum donation and intrauterine transfer of two embryos. A twin pregnancy was achieved with an unremarkable evolution. A cesarean section was made at term, with the birth of two healthy boys.

205

Experience of Vila Nova de Gaia Hospital Centre in Portugal with the Essure micro-insert device

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Introduction: The aim of this study is to present the experience and evaluate the results of the Essure procedure, in 74 patients, in an outpatient setting, in the Vila Nova de Gaia Hospital Centre, Portugal.

Methods: Retrospective study. Ambulatory surgery unit, Gynaecology service, Vila Nova de Gaia Hospital Centre, Portugal. Women who, between December 2004 and July 2007, asked, and met the manufacturer criteria, for tubal sterilization by hysteroscopy, two surgeons only performed all the procedures. Essure micro-inserts were placed under hysteroscopic visualization, using intravenous sedation, paracervical block or no anaesthesia at all. Demographic data mean operative time, intensity of pain, success rate of device implantation and confirmation of correct placement were collected and analysed. Patient satisfaction was accessed through a telephonical query.

Results: Seventy four women were included. All Caucasians, mean age 36,3 years (range 25-46 years), mean parity 2,43 (range 1-5 para) and average body mass index of 28,7 (range 16,7-45,7). Sedation was used in 12 patients (16%), paracervical block in 59 (78,7%) and no anaesthesia in 4 (5,3%). Mean operation time was 15,9 minutes (range 10-40 minutes). Successful placement was achieved in 67 patients (90,5%); in one case (1,49%), a second procedure was required to accomplish bilateral placement. No major intraoperative complications were detected. There was one case (1,35%) of unilateral device expulsion, 17 months after its placement. At the third month, all 67 had either a pelvic x ray (43 patients, 64,2%) or transvaginal ultrasound (24 patients, 35,8%). In 12 cases (17,9%), with inconclusive results, a HSG was performed with 100% bilateral tubar occlusion confirmation. In the 3 to 37 month follow up of our series, all women, except one, found the procedure highly acceptable (98,1%). No pregnancies have been reported to date. One patient was lost to follow up.

Discussion: In our institution and experience, Essure seems to be a safe, effective, minimally invasive procedure, in an outpatient setting, with high patient acceptance, performable with paracervical block in most of the cases, or with even no anaesthesia in some others. In accordance with the literature, in our series, Essure system seems to be a realistic alternative to laparoscopic sterilization.

208

Pregnancy after infertility: maternal and fetal complications, delivery and perinatal outcomes

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Introduction: Infertile couples represent about 10–15% of all couples. With the increase of effective infertility treatments, it becomes necessary to evaluate maternal and fetal complications of these pregnancies.

The objective of this study is to characterize the infertility type and factors, medical and/or surgical treatments, pregnancy and fetal complications, type of delivery, weight, gestational age and Apgar score of the newborns.

Methods: Retrospective study based on the clinical process analysis of 57 women that became pregnant between 2004 and 2005, while followed in infertility consultation.

Results: The most represented age group was 30-34 years old, with 43% (24/57). 73% (42/57) of women were nuliparous and the infertility type was in 53% (30/57) secondary. The average duration of infertility was 29,4 months. In 88% (50/57) of cases it was possible to find at least one infertility factor, being disovulation the most common in 56% (32/57). 84% (48/57) of women had medical or surgical treatment, or both. Ovulation inductors were used in 70% (40/57) of women. The most frequent surgical treatments were bilateral ovarian *drilling* in 15,5% and surgical treatment of endometriosis in 10,5%.

Of the 57 pregnancies, 46 resulted in term deliveries and 5 in preterm deliveries. There were 4 miscarriages, 1 ectopic pregnancy and 1 case of 21 trisomy resulting in medical interruption of pregnancy. The most common maternal complication was gestational diabetes in 15,7% (9/57), and oligoamnios was the most common fetal complication in 5% (3/57). Two gemelar pregnancies in 57 were registered (3,5%).

The way of delivery was vaginal in 58,8% (30/51) and cesarean delivery in 41,2% (21/51), with fetopelvic incompatibility being the most frequent cause of cesarean delivery.

The newborns weight was between 2500-4000 g in 85% (45/53). The Apgar score at 5 minutes was 8 or superior in 100% (53/53). There were not any fetal malformations.

Discussion: The outcome of the analysed pregnancies after infertility was good, with all the newborns having good Apgar scores, most of them having normal weight and no malformations. Also there weren't any serious maternal complications.

229

Thrombophilia and thrombotic complication of hormonal replacement therapy

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Background: Hormonal replacement therapy (HRT) has been shown to be associated with arterial and venous thromboembolic complications. Nevertheless pathogenetic mechanisms of this phenomenon are not completely understood.

Aims: To evaluate the role of multigenic thrombophilia and antiphospholipid syndrome (APS) as pathogenetic factors of HRT-induced thrombosis.

Methods: We examined 27 women with thromboembolic complications of HRT (deep vein thrombosis, pulmonary embolism, superficial thrombophlebitis, Budd-Chiari syndrome, retinal thrombosis, and stroke) for genetic thrombophilia and antiphospholipid antibodies (APA). Of note, 75% women had obstetric complications in their personal history (placental abruption, preeclampsia, fetal loss syndrome).

Results: Thrombophilia was detected in 100% patients: APA in 44,5%; homozygous and heterozygous FV Leiden in 7,4% and 26,9% respectively; PAI-1 4G/5G polymorphism in 40,7%; prothrombin G20210A in 11,1%; homozygous and heterozygous GPIIb/IIIa 807T/T in 3,7% and 14,8%, homozygous and heterozygous ACE I/D in 11,1% and 22,2% respectively; combination of genetic thrombophilia and APA-circulation in 37%; multigenic thrombophilia in 85,1%.

Nonconclusions: Genetic thrombophilia and APS have synergic effect with HRT and may induce prothrombotic state due to the activation of coagulation, inflammation and endothelial dysfunction. Multigenic thrombophilia and combination of genetic and acquired (APS) thrombophilia might be the most unfavorable condition. Screening for thrombophilia seems to be useful before the administration of HRT. If thrombophilia is detected, HRT is absolutely contraindicated. Special attention should be paid to the history of obstetrics complications.

241

Dosage of combined oral contraceptives and bone mineral density in young girls

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Introduction: Adolescence is a critical period because the velocity of bone growth doubles and approximately

40% of the peak bone mass is laid down. Bone mass continues to increase and by the age of about 20, 90-95% of peak bone mass is attained. Some studies in young combined oral contraceptives (COC) users show that bone mineral density (BMD) may be compromised in users of low-dose COCs.

Objectives: Evaluate if there's any difference in BMD of young girls taking different dosages of COC.

MATERIAL AND METHODS: Cross-sectional study of 22 healthy female aged 18 to 22 years, taking COC for at least one year, without eating disorders and no differences to sun exposure, that were submitted to one measurement of the BMD at the spine (L2-L4) and hip (femoral neck) with Dual-energy x-ray absorptiometry (DEXA). We performed data analysis with the programme Statistical Package for the Social Sciences (SPSS) version 15. The chi-square, T student, and One-way Anova tests were used, when appropriate. A value of $p < 0,05$ was considered significant.

Results: The authors obtained 3 groups depending on the dose of ethinylestradiol (EE). Seven adolescents taking 20 µg of EE, eight taking 30 µg of EE and seven taking 35 µg of EE. Mean age was $20,36 \pm 1,14$ years. All of them were caucasian and had regular menstrual cycles. Mean body mass index was $21,9 \pm 2,4$ kg/m². Mean age at menarche was $12,18 \pm 1,05$ years. Three were smokers. There was no history of drug abuse or medications known to affect calcium metabolism. In average they exercised for $1,73 \pm 1,16$ hours weekly and were taking COC for $3 \pm 1,44$ years. Mean calcium intake was $1541,2 \pm 499,3$ mg/day. There were no differences in the sociodemographic, lifestyle and reproductive characteristics of the three groups. After analysing the data there was no statistical differences between groups in which concerns BMD at the spine and hip.

Conclusions: Although we found no differences between the different groups we'll continue this study because the sample is small to give us a definitive result. This is an important study because we should know the impact that different doses of EE will have in BMD of young COC users, allowing us to minimize the risk of future osteoporosis.

249

Severe phenotypic expression in a 30% mosaic Turner Syndrome

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Introduction: Turner Syndrome is a well established clinical entity associated with X chromosome monosomy or other X chromosome anomalies such as mosaicism,

ring formation or deletions. Knowledge regarding genotype and phenotype correlations is poor, specially those presenting mosaicism. It would be expected that cases with low percentage of abnormal cells would be associated to milder phenotypes, however the prognosis for 45,X/46,XX mosaicism diagnosed prenatally is yet to be established. The more commonly reported features of Turner syndrome include short stature, gonadal dysgenesis, lymphedema, low set ears, widely spaced nipples and congenital heart disease being hypoplastic left heart syndrome a severe condition.

Case report: We report a case of a 40 year-old woman, GIII, PI, SAB I (first trimester), with past medical history of Hashimoto's Thyroiditis and morbid obesity (BMI: 41,5). On ultrasound examination at 13 weeks, nuchal translucency was 1,3mm, with no anomalies reported. Amniocentesis performed at 16 weeks due to advanced maternal age, revealed a 45,X/46,XX karyotype with 30% mosaicism (6 abnormal cells out of 20). Anomaly scan at 20 weeks revealed cardiac defects with no other fetal anomalies. The patient was referred to our center at 21 weeks in order to perform a fetal echocardiogram. Due to suboptimal visualization of cardiac structures because of obesity, it was repeated at 23 weeks. A hypoplastic left heart syndrome with aortic and mitral atresia was diagnosed. The couple decided pregnancy interruption by that time. Postmortem examination confirmed the hypoplastic left heart syndrome with aortic atresia, mitral stenosis, in addition to low set ears, and widely spaced nipples.

Conclusion: Trying to predict phenotype only on the basis of the proportion of 46,XX cells can be highly misleading. Low percentage of abnormal cells detected in amniocentesis, can be associated with severe phenotypic expression. These findings underscore the importance of directed follow up in all cases of Turner Syndrome mosaicism, in order to provide appropriate prenatal counselling.

338

Initiation of sexual activity and use of contraception among youngsters in Greece

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Introduction: Adolescent pregnancies are considered to be high-risk pregnancies because of their increased perinatal and maternal mortality, due to frequent obstetric complications. In developed countries, 7.5% - 10% of adolescent women get pregnant, while half of these cases end in technical abortion with all possible

complications. Purpose of this study was to determine the age at first intercourse as well as the sexual behavior concerning contraceptive issues.

Material and methods: We conducted a survey, regarding sexual behavior, age at first intercourse and contraceptive methods used during adolescence.

Results: our study revealed that approximately 40 % of teenagers aged between 16 and 18 years old are sexually active. At the time of their first sexual intercourse, 4,5% aged between 12-14 years old, 8,5% between 14-16 years old and approximately 27% aged between 16-18 years old. Despite all the initiatives on educational programs concerning sexuality and contraceptive issues, a large percentage of adolescents uses none (27%) or ineffective contraceptive methods such as withdrawal (25%).

Conclusions: it is noted that teenagers are sexually active in younger ages and demonstrate lower compliance to contraceptive methods. The fact that most of these unintended pregnancies, are out-of-wedlock pregnancies of low financial status, imply the necessity for specialized youth sexual, health-counseling programs and extended follow up in adequate adolescent gynecological, well-organized clinics, for the support of teen mothers.

349

Hysteroscopic sterilization with Essure device on out-patient setting

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Introduction: The Essure permanent birth control system is a female contraceptive method more and more used because it could be performed in out-patient setting without anaesthesia, with minimal discomfort and rapid recovery.

Objective: The author reports her experience of hysteroscopic sterilization with Essure device on out-patient setting, presenting data about safety, tolerance and effectiveness.

Material and method: Using a hysteroscope with a 5,5 Fr shaft and a 2,9 mm scope the Essure micro-insert is placed under hysteroscopic visualization in the proximal portion of the Fallopian tubes. The Essure method offered to the couples that wish permanent birth control, without contraindications. The informed consent is obtained. The procedure scheduled during the early proliferative phase, or anytime but menstruation, if the woman was under hormonal contraceptives, ensure the best view of the openings of the fallopian tubes to a successful bilateral placement. The patients leave the ambulatory unity after two hours and scheduled for evaluation at three month, by ultrasound. If a unsatisfactory placement is suspected by ultrasound, the patient is scheduled for hysterosal-

pingography (HSG) to verify tubal occlusion. The author analysed retrospectively all clinical files to evaluate safety, tolerance of the procedure and effectiveness of device placement.

Results: From April 2003 to July 2007, 131 women underwent Essure placement procedure. The women age between 27 and 44 years, average age 34 years old. Mean parity was 2, 4 children. The Essure successful placement was achieved in 128 patients, in one procedure. Two of them only need one placement, (previous Salpingectomy), what was accomplished. In three cases (2,3%), a second procedure was necessary for bilateral placement, two of them without success on two sites placement. The procedure average time was 10 minutes. The micro-insert placement done with local anaesthesia and sedation in 97 cases (74%), 12 (9,2%) patients had paracervical anaesthesia, 22 (16,8%) women only had pre-medication, (diclofenac 75mg). After procedure all patients showed very good tolerance. In this series of 131 patients the major complication was one tube perforation. In three cases the ultrasound suggests a too distal device placement, but the HSG confirmed tubal occlusion. The most frequent minor complaints are spotting the following week in 8 cases and pelvic or back pain in 7 cases and one patient had persistent rash for three month. At present 128 (97,7%) women have successful Essure placements without pregnancies and 126 (96,2%) women are very pleased with the Essure method of birth control .

Conclusions: The Essure placement had low rate of complications and the major difficulties are associated to the operator learning period. The hysteroscopic sterilization by Essure micro-insert, is a safety, well tolerated and accepted method for permanent contraception on ambulatory sterilization procedure. The introduction of vaginoscopy technique reduced the need of medication associated to better patient satisfaction, such as pointed in the literature.

350

The evaluation of tubal patency by hy-co-sy and laparoscopy – comparative study

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Introduction: Hysterosono-contrast-salpingography (Hy-Co-Sy) is a simple procedure that could be used in the evaluation of uterine cavity as well as tubal patency. The aim of this study is to compare the evaluation of tubal patency by Hy-Co-Sy and laparoscopy.

Methods: Retrospective study of 125 women who performed Hy-Co-Sy and laparoscopy for evaluation of tubal patency. We reviewed the Hy-Co-Sy and laparoscopic findings and the concordance rate between the two technics.

Results: Since 1999 to 2006, we performed 935 Hy-Co-Sy in our Reproductive Medicine Department. A hundred and twenty five (125) women suspected of pelvic or tubal pathology were also submitted to laparoscopy.

The concordance rate between Hy-Co-Sy and laparoscopy was elevated (92 %). The gap time between Hy-Co-Sy and laparoscopy in the discordant cases were more than 6 months.

Discussion: Hy-Co-Sy is a simple, well tolerated, low risk, outpatient procedure in the initial screening of tubal patency with also a recognized high sensitivity in the diagnosis of intrauterine pathology.

356

Pure gonadal dysgenesis (Swyer's syndrome)- a case report

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Introduction: Pure gonadal dysgenesis is characterized by a delay in the pubertal development, primary amenorrhea, immature secondary sexual characteristics, hypergonadotrophic hypogonadism and also a 46,XY karyotype

(*Swyer's syndrome*). 46,XY gonadal dysgenesis patients are diagnosed in early adolescence and as expected they show elevated gonadotropins, normal female levels of androgens, low levels of estrogens and lack of sexual development. The patient usually has a female phenotype with a palpable müllerian system. There are fibrous bands in place of the gonads, yielding primary amenorrhea and immature secondary sexual characteristics. To avoid the possibility of malignant transformation, removal of these streak gonads is advocated as soon as the diagnosis is made.

Case report: 16-year-old female patient with primary amenorrhea, in a Tanner stage 2 with normal female external genitalia, elevated FSH and LH levels and low levels of estrogens. During the study a 46,XY karyotype was confirmed. The patient was submitted to laparoscopic bilateral gonadectomy, after visualization of pelvis with a rudimentary uterus and streak gonads. The patient was referred to Paediatric and Adolescent Gynaecology assistance: an estimation of skeletal bone age was carried and a hormone supplementation with exogenous estrogens was applied. The screening for mutations of the coding region of the SRY gene was also done.

Discussion: Cases like this are rare. It is important to be aware of the consequences for the patient in fertility, in bone density, in gonads malignant transformation and in patient's self-confidence and sexual behaviour.

358

Post-coital bleeding's management

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Introduction: Post-coital bleeding is the term used to describe vaginal bleeding relating to intercourse. Often due to benign conditions, is a distressing symptom for the patient. Identification of the etiology of the post-coital bleeding in woman referred to Cervix Pathology Department of Maternidade Júlio Dinis.

Methods: Retrospective study of the records of 47 women referred to the Cervix Pathology Department with post-coital bleeding of unclear etiology that were submitted to colposcopy between 2005 and 2006.

Results: The age range of the study population was 21-46 years, with a coitarch's age range of 13-24 years (mean age 18 years). The number of sexual partners was 1-3 with one case of undefined partners. The mean time of onset of this symptom was 16 months. Only 10,6% were active smokers. There were one case of HIV positive, two cases of syphilis and none of hepatitis B or C. Associated symptoms included vaginal discharge (21%), dyspareunia (15%), menstrual abnormalities (4%) and pelvic pain (6%). All women were submitted to cervical cytology (55% NLIM, 35% NLIM and inflammation, 6% ASC-US and 4% LSIL) and colposcopy. Cervix biopsy was made in 40 patients (51,2% chronic cervicitis, 25,5% HPV without Displasia, 2,1% CIN1, 4,3% CIN3 and 2,1% submucousus mioma). Thirteen of the 47 women were submitted to the analysis of the vaginal discharge that found 4 cases of Chlamydia, 4 with Gardnerella and 5 cases with both. The treatment was medical in 55,3%, criocoagulation in 12,8%, laser vaporization in 6,4% and conization with laser vaporization in 4,3% of the cases. In 21,3% there was no need of any treatment.

Discussion: Most of the post-coital bleeding was due to benign condition as cervical ectropion and cervical and vaginal infection but there were one case of CIN1 and two cases of CIN3. This report shows the need to evaluate carefully a patient with post-coital bleeding, therefore this symptom should remain an indication for colposcopy.

376

Efficacy, acceptability and adverse effects of the etonogestrel contraceptive implant. Experience of Centro Hospitalar de Vila Nova de Gaia

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Objectives: to determine the efficacy, acceptability and adverse effects of the etonogestrel contraceptive implant (Implanon®), used for long-term reversible contraception.

Materials and methods: retrospective single-center study of 942 patients, aged 13-47 years who chose Implanon® for long-term contraception between January 2000 and December 2006. Data collected were: demographic profile, medical, obstetrical and contraceptive history, reason(s) for choosing the implant, time of insertion, bleeding pattern, adverse effects, efficacy, satisfaction rate, continuation rates and time and reason(s) for removal.

Results: Change in bleeding patterns was the main cause for removal before 3 years. Reasons for satisfaction and renewal of the implant after 3 years were mainly its ease of use and efficacy. Adverse effects comprised breast tenderness, acne, headache and dizziness, irritability, loss of libido, and altered body weight. No problems were described during its placement, and in only one case of non palpable implant was needed ultrasound to help in the identification of the implant rod. Only one pregnancy occurred during this period, in a woman who initiated tuberculostatics.

Conclusions: Implanon is a highly effective and acceptable contraception to women in all reproductive age groups. Early discontinuation of implant use is primarily due to bleeding patterns and patients must be carefully informed about its expected side effects before placement.

385

Successful management of massive ovarian bleeding after oocyte retrieval in IVF-Therapy with the use of a fibrin-coated collagen fleece (TachoComb)

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Objective: To evaluate the usefulness of surgically applying TachoComb in case of massive ovarian bleeding, as a complication of oocyte retrieval in IVF-Therapy

Design: Case Study and literature review

Setting: University hospital

Intervention: Laparotomic applying of TachoComb on the ovarian surface in order to stop massive ovarian bleeding, resulting as a complication of oocyte retrieval

Main outcome: In most countries is the IVF/ICSI-Therapy, one of the most practised methods of ART. Millions of women undergo IVF Therapy yearly in order to fulfil their wish of an own child. The awareness of medical complications is important. These complications are either linked to medications or oocyte retrieval. Ovarian bleeding after retrieval is maybe the most serious procedure related complication which can occur in 0.2% of the cases. The early diagnosis and operative intervention is essential in order to save life and ovaries. Because of the ovarian hyperstimulation and the resulted fragility and sensitivity,

it is very difficult to perform adequate haemostasis. Sometimes it is necessary to perform an ovariectomy in order to control the life threatening situation. In the case of 35 year old patient, we applied TachoComb on both ovaries since the routine operative measures like suturing and coagulation was not successful.

Results: The ovarian bleeding could be stopped after applying TachoComb

Conclusions: In cases of sever ovarian bleeding after oocyte retrieval, when the routine surgical interventions can not seal the bleeding, using TachoComb can save the ovaries.

387

Hysteroscopic tubal ligation – Essure: our Center experience after 3 years

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Background: Hysteroscopic options for permanent birth control, such as the ESSURE device, are becoming increasingly popular as an alternative to laparoscopic tubal ligation. The success of the technique hinges upon correct device placement within the intramural portion of the fallopian tube. In our institution the method was introduced in 2004.

Objective: To evaluate the results of hysteroscopic sterilization pursued in our Hospital between January 2004 and October 2007, in an outpatient setting.

Methods: Retrospective analysis of clinical data of 33 women submitted to histeroscopic tubal ligation. All women did an x-ray 3 month after the surgery. Age, body mass index (BMI), contraception method used before and after the surgery indication and failure rate of the procedure were evaluated.

Results: Patient's age range between 31 and 45 years (mean – 37,2). Mean BMI was 30,21. All women were using contraception before and after surgery. Physicians described technical difficulties in introduction of the device in 6 cases (18,2%) but successful placement was achieved in all patients. Preliminar analysis of the 3-month follow-up period (which ends in January 2008) is possible for 27 women in which unilateral expulsion of essure occurred in 2 cases (7%), all of them were submitted to laparoscopic tubal ligation. In 3 of these 27 cases X-ray was abnormal and histerossalpingography was undertaken.

Conclusion: In our series, failure occurred in only 2 cases. Essure® is a safe, effective, and minimally aggressive procedure that does not require anesthesia or hospitalization. Furthermore is a better method for those women in risk for complications in laparoscopic procedure and in those who have medical conditions that raise surgical and anesthetic risk

392

Cerclage in the cervical insufficiency

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Introduction: Cerclage is performed by securing suture material around the cervix to prevent cervical opening and shortening. In singleton gestations, there is evidence for history-indicated cerclage in women with 3 or more prior second trimester losses (STL) or prior preterm births (PTB); women with 2 STL can also be considered, with less evidence. Women with a prior PTB and a transvaginal ultrasound cervical length <25mm between 14 and 23 weeks benefit from cerclage (ultrasound indicated). At this time, there is no evidence that cerclage should be performed in any woman carrying a multiple gestation.

Methods: We report a singleton gestation of a 36 year-old woman with a history of one prior PTB at 25 weeks and one spontaneous abortion at 17 weeks, both with painless dilatation. Cerclage was placed at 17 weeks, using the McDonald technique.

Results: Cerclage was done without any complications. Immediate ultrasound screening revealed suture material at 15mm of the external os. Amniocentesis for fetal karyotyping was performed at 19 weeks, due to age>35 years. Gestational diabetes was diagnosed at 28 weeks. Ultrasound, at 29 weeks, revealed a cervical length of 12,5mm with "funneling". Gestational hypertension was present since 36 weeks. Cerclage was removed at 37 weeks and elective cesarean delivery was done due to maternal pathology. The newborn had a 5-minute Apgar score of 10 and a 3240g weight. Puerperium had no complications.

Discussion: History-indicated cerclage is a valid option in a singleton gestation with obstetric history of cervical insufficiency, and, therefore, should be considered and placed before cervical changes occur. Sonography of the cervix, postcerclage, is indicated to identify risk for preterm birth and suggest those who need modification of activities, tocolysis or steroid administration for lung maturity. Cerclage should be maintained, if possible, until 36 weeks.

394

Etonogestrel implant in women with diabetes

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Etonogestrel contraceptive implant has shown to be a safe and effective contraceptive method in healthy women. But there are no studies addressing the use of the etonogestrel implant in women with diabetes.

Aim: The primary objective of this study was to assess the effect of etonogestrel implant on glycometabolic

control in women with diabetes. The secondary objective was to evaluate the acceptability of the method.

Methods: This is a prospective observational study of 23 women with insulin-treated diabetes who used etonogestrel implant for at least 1 year. Evaluation was performed before implant insertion and at 3, 6, 12, 24 and 36 months after implant insertion.

Results: 23 women entered the study but 1 was lost to follow-up. The mean age was 27,59 years (range 12-37 years) and the mean duration of diabetes was 13,23 years (range 1-25 years). There were no contraceptive failures. Among users there were no increment of daily needs of insulin and no significant variation of HbA1c along the study. There were no significant changes of blood pressure, body mass index or in the lipidic profile with implant use. Among women with vascular complications (18/22) there was no aggravation of the clinical parameters during the time of the study. Menstrual changes were the most common side-effect noted. Two women asked for removal of the implant before scheduled because of frequent bleeding.

Discussion: In this group of women with diabetes the etonogestrel implant was a safe and well accepted contraceptive method, with little clinical impact on glycaemic control and cardiovascular risk parameters. Etonogestrel implant may provide a good contraceptive choice among women with diabetes, even with coexisting vascular disease.

397

Obesity and infertility

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Introduction: Obesity interferes with normal ovulation: increases peripheral aromatization of androgens to estrogens, decreases levels of sex hormone-binding globulin resulting in increased levels of free estradiol and testosterone, and increases insulin levels that can stimulate ovarian stromal tissue production of androgens. Most of the reproductive sequelae of obesity are thought to derive from modulation of insulin sensitivity. Metformin (a biguanide) improves insulin sensitivity, and lifestyle programmes (diet and daily exercise) may improve the lipid profile and promote weight loss with potential benefit on fertility. Furthermore, in obese women with infertility and polycystic ovary syndrome (PCOS) clomifene is still the first-line choice for ovulation induction.

Our purpose was to evaluate the impact of weight loss (achieved with diet, daily exercise), metformin and clomifene on fertility in obese women.

Methods: Retrospective study of women with diagnosis of infertility and a body mass index (BMI) $\geq 30 \text{Kg/m}^2$ followed in our department since January of 2003 until December of 2006.

Lifestyle programmes (diet and daily exercise), metformin and clomifene were prescribed according to the clinical condition. The following data were evaluated: age, BMI, menarche, menstrual cycle, parity, hormonal blood values, fasting glycemia and fasting insulinemia. Data were analyzed according to descriptive statistics.

Results and discussion: Obesity independent of PCOS is associated with anovulation, and minimal weight loss alone is an effective therapy for restoration of ovulation in both PCOS and non-PCOS obese women. Insulin sensitizing agents, as metformin, may give an improvement in reproductive function, particularly in obese PCOS women. Even though, achieving a pregnancy may require treatments for ovulation induction such as clomifene. Finally, weight loss and correction of both metabolic and endocrine problems can minimize important obstetric risks.

398

Management of infertility in women with advanced reproductive age

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Introduction: Today's tendency to delay childbirth has been increasing rates of infertility among women. This is primarily due to the diminished ovarian reserve and poor oocyte quality that is associated with advancing age. Although there is no strict definition of advanced reproductive age, infertility becomes more pronounced after the age of 35. This study was undertaken to evaluate the management of infertility, treatment results and reproductive outcome in these women.

Methods: Retrospective study of 160 patients with 35 years or older who attended our department for infertility during 2005 and 2006. We focused on: personal and gynaecological history, probable cause of infertility, therapeutic options and results. We used day 3 serum FSH (Follicle Stimulating Hormone) and estradiol to assess ovarian reserve. Obstetric outcomes were analysed as well.

Results: Mean age was 39,2 years \pm 3,1 (35-48). The cause of infertility was: ovulatory dysfunction in 40 (25%), male factor in 31 (19,4%), tubal and peritoneal pathology in 35 (21,9%), male and tubal factor in 6 (3,7%), and unusual problems in 15 (9,4%). In 33 patients (20,6%) there was unexplained infertility. 65 (31,4%) patients were treated with ovulation induction, 58 of them with Clomiphene Citrate and 23 with exogenous gonadotropins (recombinant FSH). 41 women were submitted to Assisted Reproductive Technologies (ARTs). Pregnancy rates were 22,5% in all women studied; 23,1% in ovulation induction group, 19,5% in woman submitted to ARTs and 13,7% in the remaining.

Discussion: Spontaneous conception rates in women with advanced reproductive age are reduced. The presence of male factor, tubal or peritoneal disease argues for proceeding directly for ARTs in these women. Induction of ovulation is still an option in some selected cases, with reasonable results.

402

Expression of several components of the plasminogen activator system, fibronectin and CA 125, in plasma and peritoneal fluid, in endometriosis

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Introduction: Endometriosis, a common condition among women of reproductive age, is considered a benign disease that has the ability to invade normal tissue. The role of endometriosis-associated inflammatory changes in the local peritoneal environment has been receiving increasing attention. The goal of this prospective study was to assess the value of urokinase-type plasminogen activator (uPA), PA inhibitor type 1 (PAI-1), PA inhibitor type 2 (PAI-2), fibronectin and Ca125 measurements in endometriosis diagnosis.

Methods: Prospective analysis of plasma and peritoneal fluid levels of uPA, PAI1, PAI2, fibronectin and CA-125 in 71 cases undergoing laparoscopic surgery: one group of 18 cases with endometriosis and another group of 51 cases without endometriosis.

Results: Average age at time of diagnosis was 36,2 years \pm 7,3 (26-49) for endometriosis group and 37,6 years \pm 9,2 (19-53) for the non endometriosis group. Most patients were in reproductive age (91,6%). No statistically significant differences were found between the two groups either in plasma levels or peritoneal levels.

Conclusions: Contrarily to others studies, no significant differences were found between endometriosis and no endometriosis groups, this could be explained by the small sample of our study.

418

Low intervertebral disc height in postmenopausal women with osteoporotic vertebral fractures compared to hormone-treated and untreated postmenopausal women and premenopausal women without fractures

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Objective: To assess the intervertebral disc height in postmenopausal women with osteoporotic vertebral fractures.

Methods: A total of 203 women were recruited from a bone densitometer directory. The disc heights measured were those between the 12th thoracic and 3rd lumbar vertebrae. The discs were assigned the symbols D, whereby D(1) refers to the disc between the 12th thoracic and 1st lumbar vertebrae. The disc height of the group of women (n = 38) with osteoporotic vertebral fractures was compared to the disc heights of hormone-treated women (n = 47), untreated postmenopausal women (n = 77) and another group of premenopausal women (n = 41).

Results: The total disc height (D(1) - D(3)) (mean +/- standard deviation) in the fracture group was 1.58 +/- 0.1 cm, significantly lower (p < 0.0001) than in the untreated group (1.82 +/- 0.06 cm), which in turn was significantly (p < 0.0001) lower than in the hormone-treated group (2.15 +/- 0.08 cm) and in the premenopausal group (2.01 +/- 0.09 cm).

Conclusion: The fracture group was noted to have the lowest intervertebral disc height compared to the other three groups. The hormone-treated and the premenopausal women had the highest disc heights recorded. These results may be due to the effect that the menopause and senescence have on the discal connective tissue components. This may lead to loss of the shock-absorbing properties of the intervertebral disc and an altered discoid shape, influencing the occurrence of osteoporotic vertebral body fractures.

425

Recurrence and reproductive results after myomectomy

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Objectives: Evaluate recurrences and reproductive results after myomectomy

Material and methods: Analysis of 78 patients submitted to laparotomic myomectomy from January 1995 to December 2004 and clinical and pelvic ultrasound evaluation more than two years after surgery.

Results: Mean age at surgery 34 (24-49), 65% were nullipara, 24% had one or more gestations and 11% had only spontaneous abortion. Main diagnosis was: 63% infertility, 23% pelvic pain, 8% uterine bleeding and 6% asymptomatic with pelvic ultrasound abnormality. Number of excised myomas: one in 48%, 2 to 4 in 43% and 5 or more in 9%. Fifty-six percent were interstitial, 40% exclusively subserous and 4% had a significant submucous component. Endometrial cavity was involved in 4% of the patients. It was possible to control 51 women, with 57% recurrences. Comparing recurrent group vs. non-recurrent group, it was excised one myoma in 30% vs. 67% (p=0.009), 2 to 4 myomas in 60% vs. 19% (p=0.006) and 5 or more myomas in 10% vs. 14% (p=ns). It was found exclusively subserous myomas in 24% vs. 59% (p=0.011) and interstitial component in 76% vs. 45% (p=0.026). Endometrial cavity was involved during surgery in 21% vs. 5% (p=0.042). Of the 31 women with infertility submitted to myomectomy, 35% got pregnant, mean 28 months after surgery. Comparing pregnancy group vs. non-pregnancy group, it was excised one myoma in 73% vs. 45% (p=ns), 2 to 4 myomas in 27% vs. 50% (p=ns) and five or more myomas in 0% vs 5% (p= ns). It was found exclusively subserous myomas in 36% vs.20% (p=ns), interstitial component in 80% vs. 70% (p=ns) and submucous component in 0% vs. 10% (p=ns). Endometrial cavity was involved during surgery in 0% vs. 20% (p=0.05).

Conclusions: Recurrence after myomectomy was statistically more frequent in patients with several excised myomas, with interstitial component and endometrial cavity involved during surgery. Among infertile women, pregnancy was more frequent if endometrial cavity was not surgically involved, reaching statistic significance. Number and location of excised myomas did not influence pregnancy rates.

445

Vasectomy: review of current practice - a study of 10 cases

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Contraception is a crucial human right for its role on health, development and quality of life. Vasectomy is one of the safest and most effective permanent contraceptive methods available. It can be an ambulatory procedure, with relatively uncommon complications. Postvasectomy semen analysis (PVSA) is critical to establish the success of this sterilization procedure.

The family planning consultation of Maternidade Dr. Alfredo da Costa, began to offer vasectomy as a family planning method in January of 2006.

Materials and Methods: Between January, 2006 and May, 2007, 10 men had a first vasectomy performed at Maternidade Dr. Alfredo da Costa. The authors did a retrospective review and analysis of this 10 cases (sociodemographic characteristics, procedure complications, semen analysis results, and information concerning the follow-up of each man were investigated). A range of techniques to occlude the vas deferents, has been developed in an attempt to reduce complications and failure rates of the vasectomy procedure. In our Maternity the technique consists of suture ligation with excision of a small segment of the vas.

Results: mean age at vasectomy 34,8 years-old; minimum 25; maximum 49; Std deviation 8,43. All patients, except one did post-vasectomy semen analysis (N=9, one patient refused), and only 2 hadn't a semen analysis showing azoospermia.

Conclusions: vasectomy is a highly reliable and safe contraceptive method, which has been extensively studied. Spreading of the procedure is needed. Return visits are often difficult, impractical, and embarrassing for men, so health professionals must find new ways of improving men compliance.

474

Contraceptive efficacy of ethanolic extract of solanum xanthocarpum s & w in rats

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Objective: To evaluate contraceptive efficacy of *S. xanthocarpum* S & W (roots) in male albino rats.

Introduction: Many plant(s) products have been used by ancient herbalist / physicians for contraceptive and abortive purposes. The 50 % ethanolic extract of the roots of *S xanthocarpum* administered orally at three different dose levels (i.e. 50,100,200 mg/kg B.Wt) to male rats for 8 weeks to search a cheap, safe, easily administrable, orally effective and reversible male fertility regulating agent from traditional medicinal plants.

Material and methods: Colony bred, healthy, weighing between 150-200 gms, fertility proven adult albino rats were distributed in four treatment groups. All the animals were maintained at controlled conditions and fed with standard rat pelleted diet and water was provided *ad libitum*. CPCSEA and ICMR guidelines were followed for the maintenance of animals. The ethanolic extracts were prepared according to the WHO protocol. A suspension of extract was prepared daily in sterile distilled water prior to administration. A required quantity of the extracts was administered orally in male rats with a glass syringe fitted with a feeding needle. After 24

hours of the last dose, the body weights of animals were recorded and sacrificed under mild ether anesthesia. Immediately after the anaesthesia small pieces of the testis and cauda epididymides were dissected out and sperm motility sperm density was estimated by routine procedure. The testis and accessory reproductive organs were weighed. The vital, and testis and other sex accessory reproductive organs were dissected out weighed after removing the adherent tissue. The testis and pieces of sex accessory reproductive organs were processed for biochemical estimation and histological examinations. The study was carried out under the supervision of ethical committee of the Department of Zoology, University of Rajasthan, Jaipur. The data were analyzed statistically by Students "t" test.

Results: The body weight of the rats was altered within the normal ranges; however, the weights of testis and sex accessory reproductive organs were significantly decreased with the treatment. The sperm motility in cauda and density in testis as well as in cauda were significantly declined after the extract treatment. The results of histological observations of the testis of rats treated with extracts reveals degenerative changes in the germinal epithelium and progressive loss of germinal elements in seminiferous tubules. The diameter of seminiferous tubules was reduced, whereas, inter tubular tissue area was elevated. The photomicrographs of testis, epididymides, seminal vesicle and ventral prostate showed degenerative changes in epithelium and reduction in secretory material in the rats treated with extract. The decreased protein, ascorbic acid, sialic acid contents and fructose levels in testis and sex accessory organs of treated rats resulted inhibition of spermatogenic elements.

Conclusions: The declined sperm motility, density and number of mature sperms in the lumen of seminiferous tubules and decreased biochemical parameters reflects antiandrogenic effects of the extract, since maintenance of reproductive organs, initiation and maturation of spermatogenic process are androgen dependents.

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Key Words: Contraceptive, testis, *S xanthocarpum*, epididymis etc.

475

Office hysteroscopic sterilization using the Essure micro-insert device an efficacious alternative to laparoscopic tubal ligation

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Objective: The Essure permanent birth control (pbc) device is a minimally invasive transcervically placed

micro-insert that occludes the Fallopian tubes, resulting in permanent female sterilization. This device is the first medical device to obtain the FDA approval, for hysteroscopic sterilization. The author's report their experience using this device in an office setting and present data about the safety, effectiveness and tolerance of the procedure and discuss the method as an efficacious alternative to laparoscopic tubal ligation.

Methods: The method was presented to women seeking permanent birth control that met the patient selection criteria recommended. Due to financial limitations procedures per year were limited to 28 and associated pathologies increasing operative risk were taken in consideration and favoured the choice of this method. The procedure was thoroughly explained to all women, a written informed consent was obtained and the procedures were scheduled preferentially to the follicular phase of the cycle and women were advised to use an effective contraception method. Essure pbc micro-inserts were inserted in the proximal portion of the Fallopian tubes under hysteroscopic visualisation with paracervical block or no local anaesthesia, in an office setting. Patients were evaluated 1 month after the procedure and a pelvic x-ray/hysterosalpingogram scheduled at 3 months. We analysed retrospectively all clinical files and evaluated, the safety of the procedure, the tolerance and recovery from the procedure, tubal occlusion and device placement.

Results: From May 2002 to October 2006, 129 women aged 26- 47 (37,87%) were submitted to the procedure; Associated pathology increasing the operative risk was present in 124 (96,12%) patients. Bilateral device placement was achieved in 124 (96,12%) women. In 6 (4,84%) women a second procedure was required to accomplish bilateral placement. In 2 (1,55%) only unilateral placement was possible but 1 patient had unilateral adnexectomy. In 4 cases (3,17%) expulsion of one device occurred. The procedure was classified to be highly acceptable by 122 (94,57%) women. Regarding medication, 31 (24,03%) women received diazepam, 5mg, orally prior placement and N butil bromide of hioscine i.v. during procedure and 102 (79,06%) ibuprofen, 30 minutes before the procedure; 17 (13,18%) patients had paracervical block and 43 (33,33%) needed analgesic medication during or immediately after the procedure but, no patient complaint from post-procedure pain at the moment of discharge. No major complications occurred. All patients but 6 (95,2%) had a correct device location and/or bilateral tubal occlusion 3 month after procedure as confirmed by HSG/pelvic x-ray. Three of these patients achieved it at the 6th month post-procedure with an overall occlusion rate of 97,6%. At present, 117 women rely on Essure for permanent birth control and no pregnancies occurred. Mean duration of the procedure was 8,4 minutes.

Conclusion: According to our experience this method is equally efficacious comparatively to surgical tubal ligation and can be safely performed with minimal patient's discomfort in an office setting, with a rapid recovery, high patient satisfaction and low rate of complications; The

main advantage of this method is to avoid the need of a surgical procedure and general anaesthesia to achieve permanent birth control and it should, at present, be considered an effective alternative to women seeking sterilization especially to those with increased operative risk. Cost-benefit analysis should be done to find if this method should also be favoured considering cost aspects.

476

Laparoscopic ovarian endometriotic multiple cystectomy using intraoperative ultrasound

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Objective: the aim of this study is to investigate the efficacy of intraoperative ultrasound in detecting multiple ovarian endometriotic cysts.

Materials: We used a laparoscopic ultrasound system "Sharplan u Sight 9010", which is a real time 2-D mechanical sector scanning diagnostic ultrasound system. The probe used was a 10-mm laparoscopic probe of 8 MHz. Laparoscopic system used was provided by Karl Storz. Intravaginal ultrasound was performed prior to operation using a VOLUSON 730 Expert BT-05 with a 5-9 MHz RIC5-9 curved linear array volumetric real time 3D endovaginal probe.

Method: prospective, randomized, double blind study. 61 patients were included in this study. Inclusion criteria: preoperative echographic demonstration of multiple endometriotic cysts in either one or both of the ovaries. Exclusion criteria: hemoragic postovulatory cysts, dermoid cysts, ovarian cancer. Patients were randomly divided in a study group of 31 and a control group of 30 subjects, after have signed IC. Laparoscopy was performed by the same surgeon who didn't know the location and number of the cysts. In the study group intraoperative scanning of the ovaries was done in order to locate the endometriotic cysts and pointed cystectomy was performed afterwards. In control group cystectomy was performed "blindfold". We compared postoperative existence of endometriotic cysts after one week, at 6 and 12 months, respectively.

Results: of 61 patients enrolled in study, all matched inclusion criteria. In the study group there was no endometriotic cyst in any of the postoperative visits. In the control group we discovered 4 cases of endometriotic restant cysts (13.3%) p<0.005, ranging from 10 to 22 mm in the V1 (one week) and 7 endometriotic cysts ranging from 15 mm to 45 mm (23.3 %), in both V2 (6 months) and V3 (12 months) p<0.005.

Conclusions: intraoperative ultrasound in cases of multiple endometriotic cysts is a valuable and simple tool to use in order to have total removal of multiple cysts, far better than simple visual inspection of the ovaries.

478

How reliable is HSG in diagnosing infertility?

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Objective: the aim of this study is to investigate the efficacy of HSG as a detection tool of causes for infertility.

Study design: prospective, nonrandomized study. We included in the study 977 female subjects in their reproductive age, willing to conceive. A hysterosalpingography (HSG) was performed in each of these patients in order to demonstrate tubal patency. Laparoscopy was afterwards performed to seek for causes which may lead to infertility problems. Inclusion criteria: patients in their reproductive age trying to conceive after at least one year of unprotected intercourse. Exclusion criteria: poor spermogram of their partners, ovulation problems as depicted by serial ultrasound, PCOS, obesity, secondary or primary amenorrhea.

Method: all laparoscopies were performed by the same team, using a Karl Storz system. During laparoscopy we looked for: tubal patency (chromopertubation with blue methylene), evaluation and scoring of fimbrial and tubal mucosa aspect, existence of peritoneal endometriosis, existence of adhesions, existence of abnormal rapport between ovaries and fallopian tubes, existence of uterine fibroids. Primary aims: correlation between HSG results and chromopertubation results. Secondary aims: comparison between HCG positive results and existence of other causes of infertility discovered by laparoscopy.

Results: all 977 patients were enrolled in study after signed IC. After HSG, 453 had abnormal results on at least one fallopian tube. After laparoscopy only 338 were confirmed with lack of tubal patency (25.3% false positive). More over, 74 from the "normal HSG" subjects were diagnosed with abnormal patency after laparoscopy. From the rest of normal HSG patients we discovered 206 patients (39.3%) with abnormal fimbria and tubal mucosa (tubal patency present but lack of functionality). Another 24 subjects had normal tubes but filmy adhesions around ovaries (which impeded ovocyte capitation by the fimbriae) and 4 cases had abnormal rapport between tubes and ovaries. In 251 cases there were concomitant adhesions of different grades, distorting tubal architecture. In 572 cases we discovered endometriosis in different stages.

Conclusions: HSG is an obsolete, subjective and painful method for investigating infertility, unreliable regarding tubal functionality, unable to discover other causes of infertility and nonetheless inducing a state of false normality in subjects with "positive patency" results conducting to losing valuable time in diagnosing real causes of infertility.

528

Hormonal contraception in women with migraine headache

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Objectives: Migraine, as a primary headache is often in the young women in reproductive period. Nowadays most women prefer to use hormonal contraception methods, namely „antibaby pills”. It is known that using these hormone-contained tablets can influence headache course. In our clinical study we assessed the effects of combined oral contraceptives (COC) to migraine in Hungarian women.

Methods: With approval of the local ethical committee (University of Szeged, Szeged, Hungary) 25 questions contained questionnaires were delivered by postal way to the patients. Questions referred to menstrual cycle, to features of headache, and to contraception habits. The 115 questionnaires were sent out, and 75 were got back. The migraine patients were 20-45 year old, and they are the patients of the Headache Center of the Department of Neurology, University of Szeged, Szeged, Hungary.

Results: The response rate of the sent-out questionnaires was 65%. Based on data from 75 questionnaires, 15 women did not use COC who had been outclosed. Sixty out of 75 women migraineurs, who used COC, the migraine worsened in 35% (21 cases), did not change in 58.33% (35 cases), and improved in 4 cases (6.67%).

Conclusion: The response rate of the applied postal written interview was good (65%). In our study the effects of the combined oral contraceptives on the migraine headache were: mostly no change, in one-third of our patients worsening, and only in a few cases improving. These data are in correlation of other similar clinical studies.

OBSTETRICS / NEONATOLOGY

4

Prenatal screening of structural and chromosomal defects with ultrasound and biochemical markers

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Objective: To show our experience on detection of structural and chromosomal defects with ultrasound and biochemical markers on patients with risk pregnancy.

Materials and methods: A retrospective analysis on prenatal screening tests of patients with risk pregnancy has been made, our hospital obtain certificate from FMF – London UK, for prenatal screening of chromosomal defects before six years. We were served ultrasound marker NT between 11+0 and 13+6 Gestational Weeks, combined by biochemical marker, b-HCG and AFP between 15 and 16 G. Weeks. Examination were performed on Siemens-Versa-Pro ultrasound machine by transabdominal sound and all data were saved in PIA-Fetal Data Base. Biochemical analyses were performed in our laboratory.

Results: We were analyzed 485 examined patients. Half of these patients were by high risk pregnancy and other half were as a control group. On high risk pregnancy group, we found 37 (7,6%) cases with increase of NT. From them, on 26 (70,2%) were found retreat from normal biochemical parameters. 112 (23%) of patients were over 35 years old, 64 (13,2%) were with 3 or more spontaneously or missed miscarriage 18 (3,7%) previous history of chromosomal defect, 6 (1.3%) were with diabetes and 42 (8,6%) of cases were by mothers smokers. Risk of chromosomal aberrations, 1:300 and more, (calculation risk software for chromosomal defects) were founded in 19 (3,9%) of cases. Only on 91% of them, were analyzed samples of amniotic fluid by amniocentesis. From kariotipized samples were identified 5 cases with Trisomy, 21,3 cases with Trisomy 18 and 7 with Turner SY.

Conclusion: First trimester NT measurement combined by biochemical markers in second trimester are an effective screening test for early prenatal detection of fetuses with structural and chromosomal abnormalities. Combination with analyses of samples amniotic fluid and kariotipization in suspect cases, we prevent more than 97% from chromosomal aberrations.

7

Obstetric Cholestasis

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Introduction: Obstetric cholestasis (OC) is a multifactorial condition of pregnancy characterised by new onset pruritus with no rash and abnormal liver function tests (LFTs) including bile salts. It is associated with increased incidence of spontaneous as well as iatrogenic prematurity, intrauterine death and significant maternal morbidity due to intense pruritus and sleep deprivation. Absence of specific diagnostic test makes the condition a diagnosis of exclusion and inability to predict foetal death and unavailability of an effective medical treatment support the popular practise of early delivery at 37 weeks of gestation in order to minimize the foetal risks.

Objective: To evaluate the management and outcome of patients diagnosed with OC in a tertiary referral obstetric unit in UK.

Methodology: Systematic review of case notes of pregnancies associated with altered liver functions managed in Royal Jubilee Maternity Hospital, Belfast, UK, between January 2004 and December 2005, to detect the pregnancies presented with pruritus without a rash. 23 case notes were identified and data collected and analysed.

Results: There were 23 pregnancies diagnosed and managed as OC although 52% of them were not investigated to exclude other liver pathology. 52% of pregnancies were induced before 40 weeks of gestation due to persistent deterioration of LFTs and 17% of them were between 35-37 weeks of gestation while incidence of spontaneous premature labour was only 13%. 17% of all inductions resulted in emergency caesarean section (EMCS) and 75% of those were due to failure to progress. Incidence of both abnormal CTG and meconium stained liquor in labour was 8.6% in this group and there were no foetal deaths.

Conclusion: Although the significance of the results is doubtful due to the small group of patients studied, we were unable to find any increase in foetal distress, meconium stained liquor or foetal death in this group. This may be due to the increased level of intervention and this in turn was responsible for the increased rate of EMCS among these patients. Therefore active management should be balanced against possible reduction in foetal complications. Establishment of the diagnosis of OC is also important to prevent unnecessary interventions.

10

Inter- and intraobserver variability in sonographic measurements of the cross-sectional area of the umbilical cord and its vessels during pregnancy

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Purpose: To evaluate inter- and intraobserver variability in sonographic measurements of the cross-sectional area of the umbilical cord and the diameters of its vessels in low-risk pregnancies of 12 to 40 weeks of gestation.

Methods: A prospective cross sectional study was performed to measure the diameters of the arteries and umbilical vein, as well as the diameter and area of the umbilical cord by ultrasonography in 221 pregnant women at different gestational ages. Measurements were carried out also by a second observer to evaluate interobserver variability and repeated once again by the first observer to assess intraobserver variability. The linear correlation between the measurements (Spearman's coefficient of correlation) and their reliability through the intraclass correlation coefficient (ICC), the Cronbach's alpha coefficient and the limits of agreement proposed by Bland and Altman were evaluated. **Results:** Interobserver and intraobserver variability did not show any significant difference between examiners. A good linear correlation between the measurements and reliability, with values of R, ICC and Cronbach's alpha above 0.9, excepting the values for umbilical artery, were obtained.

Conclusion: Inter- and intraobserver variability in the measurements of the umbilical cord and its vessels was small; their reliability and agreement were good.

11

Sonographic measurement of the area of the umbilical cord and the diameters of its vessels during pregnancy

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Purpose: To evaluate the cross-sectional area of the umbilical cord, its diameter and the diameter of its internal vessels in low-risk pregnancies of 12-40 weeks to establish a reference curve for these parameters.

Method: A prospective study was carried out between June 2005 and December 2006 in 2310 low-risk pregnancies to determine the diameter of the umbilical arteries and vein, and the cross-sectional area of the umbilical cord. A minimum of 59 cases was evaluated

for each gestational age. Means and their respective standard deviations were calculated, as well as the 10th, 50th and 90th percentiles for each measurement. Mann-Whitney, Kruskal-Wallis and Wilcoxon tests for independent variables were used in the statistical analysis. Polynomial regression analysis was used to calculate percentiles.

Results: Diameters of the umbilical cord, artery and vein, and the area of the cord increased significantly with gestational age. The area of the cord also varied significantly with parity. The reference curve of the cross-sectional area of the umbilical cord and its vessels was calculated using polynomial regression, and an almost linear increase in values was found up to 32 weeks of pregnancy, tending to stabilize from then onwards. The regression equation of the area of the umbilical cord according to gestational age (GA) was: $\text{Log}_{10}(\text{cord}) = -1.417 + 0.3026 \cdot \text{GA} - 0.008 \cdot \text{GA}^2 + 0.000007 \cdot \text{GA}^3$.

Conclusion: Sonographic measurements of the umbilical cord and its vessels increase with gestational age and this progressive increase was observed up to 32 weeks of pregnancy.

12

Validation of the capacity of ultrasonographic measurements of the umbilical cord to identify deviations in estimated fetal weight

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Purpose: The objective of this study was to evaluate the capacity of the cross-sectional area and diameter of the umbilical cord, and the area of Wharton's jelly to predict abnormalities in estimated fetal weight (EFW) in 20-40 week, low-risk pregnancies.

Methods: A validation study was performed in 1,828 pregnant women. Fetal weight was estimated by ultrasonography and classified as: small for gestational age (SGA), appropriate for gestational age (AGA) or large for gestational age (LGA) according to the 10th and 90th percentiles of the reference curve. Measurements of the parameters of the cord were used to classify it as thin, normal or thick using the 10th and 90th percentiles of the reference curves as limits. The capacity of the diameter and total area of the cord and the area of Wharton's jelly to predict abnormal EFW were calculated for different gestational ages.

Results: The capacity of the diameter of thin cords to predict SGA fetuses (S=8.3%, PPV=16.5%) or thick cords to predict LGA fetuses (S=5.5%, PPV=30.1) was weak, similar to the capacity of the area of the umbilical

cord to predict SGA (S=8.3%; PPV=16.3%) or LGA fetuses (S=5.5%; PPV=27.8%). The capacity of the area of Wharton's jelly to predict SGA fetuses (S=5.7%, PPV=11.7%) was similar to its capacity to predict LGA fetuses (S=4%, PPV=27.1%).

Conclusion: Despite the correlation between the diameter and cross-sectional area of the cord and EFW, these measurements were not found to be useful for predicting alterations in EFW and should not be used for this purpose.

14

Closed rectosacropexy for rectal prolapse in children

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This report describes a simple, effective, and permanent surgical solution for persistent rectal prolapse (RP). The technique simply involves passing multiple U-shaped sutures through the stab incisions made in the skin posterior to the anus, into the sacral fascia, then into the wall of rectum, down to the anal canal, and out through the stab incisions. The strands of the suture are tied subcutaneously through the stab incisions. This operation was successfully performed in 42 children (mean age, 3.5 years) who had suffered from recurrent RP for 3–5 months. None of the children experienced any further recurrence or specific complications during follow-up ranging from 1 to 3 years. Thus, I believe that closed rectosacropexy offers a simple, minimally invasive, and effective method of treating complete RP in children.

Key words Rectosacropexy - Rectum – Prolapse

16

The abortion in Cuba from gender's perspective.

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The abortion in Cuba is safe, accessible and free. Abortion's rates are elevated in the country and they have stayed that way during many years. Many investigations have been made around the topic looking for their causes and consequences. The particularity of this investigation resides in study from the approach of men and women the peculiarity of the process of making decisions. The objective is to understand the process of the making decisions to carry out a voluntary abortion, and how this it is from the couple.

It dates and methods: A qualitative methodology was used to make interviews to men and women that would interrupt pregnancies, as well as to medical personal. The investigation was carried out in a hospital from the capital, and in the period between March and October 2005, they interviewed women and men that went to the consultation for the interruption of pregnancies, without any specific selection, only those who agreement and the time for the interview. The only distinction was among women older than 20 years and adolescents. There was made a total of 24 interviews to women (9 out of them were adolescents) and 11 interviews to men.

Results: The main result is the understanding that a previous wide and articulate process doesn't exist for the realization of an abortion. The decision is made more often for the woman than for the man or the couple. It is used in many occasions as a mean of contraception, and not only that, but also many times the contraceptive is not used in an appropriate way, or it is not used at all and before a pregnancy it is then necessary to the voluntary interruption. It is interesting that there is a formal knowledge of the contraceptives as well as high rates of its use, however we check that their use is unstable and in many occasions incorrect.

On the other hand, it was proven that many women appeal to the voluntary abortion in more than an occasion even when it is for different reasons, and transmitted experiences exist of their use among generations.

Conclusions: A historical social construction exists in the society of the abortion that conditions its use, independently that there is wide knowledge of its risks and disadvantages.

17

Amnioinfusion to treat very early premature rupture of membranes

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Introduction – Amnioinfusion is the instillation of a solution into the pregnant uterine cavity before delivery and was first described by Carey in 1957. The indications are cord compression, oligohydramnios and meconium, but it can also be used in situations of premature rupture of membranes or even as prophylaxis or treatment of chorioamnionitis.

Transabdominal amnioinfusion, performed via amniocentesis spinal needle, has been used for both diagnostic and therapeutic purposes in preterm pregnancies with severe oligohydramnios.

We present a case report of amnioinfusion to treat very early premature rupture of membranes, with a good outcome.

Methods – A 36 year-old primigravida was submitted to an amniocentesis due to maternal age at 14 weeks of

gestation. On the day after the procedure there was premature rupture of membranes, with severe oligohydramnios. She was tested for hematologic markers of infection as well as culture of urine and antibiotics were initiated. She consented to be submitted to amnioinfusion that was performed with an amniocentesis spinal needle guided by ultrasound, and 120 cc of warm normal saline fluid were instilled.

Results – There was a partial loss of the infused liquid on the following week, despite absolute rest and hydration. Serial ultrasounds and laboratory evaluations for infection were performed. There was a progressive recovery of the lost fluid, and the growth, fetal anatomy and Doppler indices remained normal. Fetal karyotype was 46 XY, normal. At 18 weeks of gestation she was discharged of the hospital with stable condition, and was followed in the High-Risk Appointment. The pregnancy went well, with normal amniotic fluid and normal fetal anatomy.

At 38 weeks of gestation, there was rupture of membranes, and labour was induced with misoprostol. Because of fetal bradycardia, a cesarean section was performed, with delivery of a normal male new-born, with 2780g and good vitality (Apgar score 9/10).

Discussion – Amnioinfusion in early premature rupture of membranes allows prolongation of pregnancy, with a decrease in the risk of pulmonary hypoplasia. In this case we had a good outcome for both mother and child.

20

Comparison of pregnancy outcome in obese women between a North East London and a South East Kent Hospital in the UK

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Background: In the UK, obesity in pregnant women is a major public health issue and ranges from 18.5% - 38.35%. Pregravid overweight has been highlighted as the most common high risk obstetric factor increasing maternal and neonatal morbidity. In our study, we compared the incidence, ethnic association and complications of raised body mass index in pregnant women between an inner London and a busy Kent Hospital.

Methods: This is a prospective cohort study performed in 2 maternity units: Medway Maritime NHS Trust, a South East Kent Hospital and Whipps Cross NHS Trust, a North East London over a 4 month period, April to July 2006. Women with multiple pregnancies were excluded from the study. During that period there were 2767 deliveries in the 2 units, 25 were multiple pregnancy and the body mass index (BMI) was not documented in 113 cases,

these were excluded from the study. An assessment of pregnancy outcomes was made on the basis of maternal body mass index at the time of booking. A total of 2629 singleton pregnancies in the 2 hospital units were studied. There were 1018 (38.7%) normal weight (BMI 19-24.9), 954 (36.2%) overweight (BMI 25-29.9), 415 (15.7%) obese (BMI=30-39.9) and 242 (9.2%) extremely obese (BMI>40). The following antenatal complications were studied: Development of pregnancy induced hypertension, gestational diabetes mellitus, intervention in labor and postpartum complications were examined. The data is presented as frequencies. Adjusted odds ratios looking for trend with 95% confidence interval were used.

Results: There was a higher percentage of pregnant women with BMI > 25 and above in the South East Region (1220/ 1469: 83%) as compared to the North East London area (391/ 1160: 33.7%) p<0.001. The following outcomes were more common with no significant difference in the above 2 units in women with body mass index of 25 or more compared to women with normal body mass index {odds ratio (95% confidence interval)} . Pregnancy induced hypertension: 2.65(1.73-4.07) p<0.001, Gestational diabetes mellitus: 1.98(0.63-6.19) p<0.05, Emergency Caesarean section 1.89(1.89-3.2) p<0.001, Postpartum haemorrhage: 5.11(2.51-10.38) p<0.001. Women of Afro-Caribbean origin at Whipps Cross Hospital were more likely to have a high BMI :1.86 (CI: 1.32 –2.62) p< 0.001 as compared to Caucasian women at Medway Maritime Hospital who were more likely to have a raised BMI : 2.0 (CI: 1.9 –4.62)

Conclusion: The prevalence of obesity in the South East has been increasing at a higher rate than the national average, making it an important public health issue for this region. The latest Confidential Enquiry into Maternal and Child Health 2000 - 2002¹, shows 35% of women who had a pregnancy related death were obese (BMI>30kg/m²). The findings of this report, and the increasing regional rates of obesity, have led to concerns from service providers about the potential harmful effects of obesity during pregnancy on both mother and child, and the effect it may have on running regional obstetric services complications.

21

Anti-Lewis alloimmunization

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Introduction: Red cell alloimmunization is an immune disorder caused by incompatibility between maternal and fetal red blood cell antigens. D-antigen incompatibility is the most frequent cause of significant perinatal hemolytic disease (PHD). However, red blood cells have over 300 other surface antigens and at least 43 of these are capable of producing hemolytic disease. The Lewis

system is represented by two red cell antigens: Le^a and Le^b. Since most species of anti-Lewis antibodies are exclusively immunoglobulin M (IgM), which cannot cross the placenta, they rarely cause perinatal hemolytic disease (PHD). OBJECTIVES: Report the perinatal results of seven pregnant women with anti-Lewis antibodies.

Methods: This was a retrospective observational descriptive study of all (200) pregnancies with a positive indirect Coombs test during a 6-year period (2000-2005). In fifteen of these women, other red cell antibodies were detected: 7 Lewis, 3 MNS, 3 Kell and 2 Diego.

Results: Table I presents the results of the seven patients. DISCUSSION: There are no reports of PHD related to anti-Lewis alloimmunization. The only fetal death was unrelated to anti-Lewis sensitization and occurred in a patient who had lost a previous child due to severe muscular dystrophy. In summary, we believe this study contributed to reinforce the argument against ordering anti-Lewis antibody screening in routine prenatal care. This is especially true in developing countries, such as Brazil, where public health resources are limited and the money spent on this exam could be used in other more relevant tests to identify significant maternal and fetal disorders.

22

Nomogram of sac gestational volume using vocal technique in first trimester of pregnancy

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Objectives: To determine values of reference of sac gestational volume in the first trimester by three dimensional ultrasound using VOCAL™ technique.

Methods: An observational and transversal study were performed in 41 low-risk patients with gestation times ranging from seven to ten weeks, using SONOACE 80000LIVE (Medison, Seoul, Korea) with a multiple frequency endocavity transducer (3D5-8EK). The VOCAL (Virtual Organ Computer-aided Analysis) technique was used to obtain a sequence of six sections of each gestational sac around a fixed axis, each after a 30 degrees rotation from the previous one. The contour of the gestational sac was drawn manually in the six different rotation planes to obtain the 3D volume measurement. Regression analysis was used to determine correlation between gestational age and gestational sac volume. The level of significance was set at $p < 0.05$.

Results: Gestational sac volume increased from 8,28 to 45,13 cc from the 7th to the 10th week ($p < 0.05$) and there was a correlation between gestational age and gestational sac volume in the range from the 7th to the 10th week. ($VSG = 3,2557 * IDADE GESTACIONAL^2 - 43,154 * IDADE GESTACIONAL + 150,98$, $r^2 = 58,18\%$)

Conclusion: In the first trimester, the gestational sac volume, using the VOCAL™ technique, increased and we showed a correlation between gestational age and gestational sac volume.

23

Comparison of normal fetal lung volumes estimated by multiplanar and Vocal techniques

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Objective: Compare the lung volumes estimated by multiplanar and VOCAL™ techniques in normal fetuses between 20-35 weeks gestation.

Methods: This was a cross-sectional study involving 51 normal pregnancies between 20 and 35 weeks gestation. The volume of each fetal lung was estimated separately. Multiple sequential planes, at 2 mm intervals, were obtained to calculate the multiplanar lung volume. A rotation angle of 30° was used to estimate the lung volume by the VOCAL™ technique. The intraclass correlation coefficient (ICC), paired Student T test (P) and Bland-Altman plots were used to compare the volumes estimated by both techniques. Intraclass correlation was used to evaluate the intraobserver variability and the P was used for comparing the means between two measures.

Results: There was a high correlation between lung volumes estimated by both techniques: ICC= 0.943 and 0.940 for right and left lungs, respectively. Concordance was also high: $P=0.061$ and $P=0,202$ for right and left lungs, respectively. Intraobserver reproducibility was good for the right lung ($P= 0.64$ and 0.22 , multiplanar and VOCAL™ techniques, respectively) and for the left lung ($P= 0.43$ and 0.63 , multiplanar and VOCAL™ techniques, respectively).

Conclusion: The multiplanar and VOCAL™ techniques are adequate methods for estimation of fetal lung volumes in normal fetuses.

25

Determine the effectiveness of Pyridoxine for nausea and vomiting of pregnancy

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Two hundred pregnant women at 17 weeks Gestational age were selected according to the following criteria.

1. presence of emesis.
2. absence of any disease inducing N&V (Nausea & Vomiting).

3. no therapy at least 3 days before treatment. 4. not having treat end abortion, molar and multiple pregnancy, recognized by ultra sonography & clinical evaluation.

The samples were divided randomly in 2 equal groups.

For one (case group) 20mg pyridoxine was used for (5 days tds) and for the another group placebo was used with the same pattern. There was not any significant difference between the two groups regarding, education level of the sample and her husband, job, Family in come, gravidity age, gestational age frequency of abortion. The data's didn't shown any significant difference of nausea (at the base of 4 points scale), at last 24 hours before drug therapy and the worst day.

Results: The situation of nausea between 2 groups 24 hours before treatment and 5 days after treatment were seen a significant difference in a subgroup of patient who received pyridoxine compared with in the placebo. To our knowledge there has been only one randomized double-blind. Placebo-controlled trial of pyridoxine of nausea and vomiting in pregnancy. The situation of nausea in 2 groups are show no significant difference in first and second days of therapy. $P=0.574$ and $p=0.393$.

We did find a significant difference in day 3, day 4 and day 5 with $p=0.030$, $p=0.021$, $p=0.000$ The number of vomiting in the day 1 and day 2 $p=0.574$ and $p=0.394$ are not show any significant difference and in day 3, day 4 and day 5 with $p=0.343$, $p=0.380$, $p=0.392$ are not show no significant difference. We found that there was a greater reduction in the number of vomiting episode in the pyridoxine than in the placebo group.

Appetite situation in first day is not show any significant difference and in day 2, day 3, day 4 and day 5 with $p=0.022$, $p=0.000$, $p=0.007$, $p=0.004$, were seen a significant difference in a subgroup of patient who received pyridoxine compared with that in the placebo.

Conclusion: Pyridoxine with (20 mg tds for 4 days) relieves the morning sickness.

26

Prevalence of asymptomatic bacteriuria and drug sensitivity pattern in pregnant women

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Background: Urinary tract infection (UTI) is the most common disease during pregnancy and usually symptomatic infections are due to asymptomatic bacteriuria (ASM). Untreated ASM has some serious consequences for both of the mother and fetus. According to important of screening for ASM in pregnant women, this study conducted in order to determine prevalence of ASM and relation with some factors and pattern of drug sensitivity as well.

Material & Methods: We conducted a cross sectional study in 900 pregnant women who attended the antenatal service at Hazrate Zynab outpatient clinic depended to Tehran university. All pregnant women was visited by obstetricians. A clean-voided urine specimen containing more than 100/000 organism per ml was considered evidence for ASM, then Anti biogram was made with Bauer Kirby method.

Results: The prevalence of ASM was 3.7% and the most common micro organism was Eshershia coli (33.3%), Staphylococcus negative coagulaze (30.3%) and klebsiella (15.2%) respectively. There was no statistical meaningful between group with and without ASM in history of urinary tract infection and Kidney stone. The highest sensitivity was related to Amikacin.

Discussion: Screening of ASM in all pregnant women specially in old age and the high gravidity is essential. Regard to the high Prevalence of ASM in Second trimester of pregnancy, if the urine analysis is negative in the first visit of pregnancy, the repeat of the U/A in the second and third trimester is recommended. Considering of change in pattern of anti microbial drug sensitivity and use of suitable drugs is recommended. Other studies for treatment and follow of pregnant women is necessary.

Key Words: Asymptomatic bacteriuria, drug sensitivity pattern, pregnant women

30

Pregnancy following total trachelectomy

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This is a case of 28 year old para 2+0. She had previous normal delivery in first pregnancy and emergency caesarean section for fetal distress in second pregnancy. Three years after this pregnancy she was diagnosed with cervical cancer, FIGO I B. Since she was keen to preserve her fertility she opted for conservative surgical management of cervical cancer. She underwent lymphadenectomy and total trachelectomy. She also had cervical circlage during this procedure.

She had spontaneous conception 10 months after above procedure. She was diagnosed with threatened preterm labour at 25 weeks of gestation and was given Betamethasone 12mg 24 hours apart and Nefidipine for tocolysis. She was scheduled for elective classical caesarean section at 37 - 38 weeks.

She attended hospital with painful and regular uterine contractions at 35+1 weeks. Therefore she had emergency classical caesarean section. The patient made good postoperative recovery. The infant developed neonatal respiratory distress syndrome but made good recovery.

Postnatally she attended with signs and symptoms of retained lochia. She underwent dilatation and suction evacuation of retained products of conception twice at 4 weeks and 6 weeks of postnatal period.

The case demonstrates that women can have successful pregnancy following total trachelectomy. However risks of preterm labour and retained products of conception in postnatal period may be increased.

31

Soluble Fas antigen in term labour

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Introduction: Apoptosis process is important for the regulation of trophoblast development. The Fas/FasL system is one of the main apoptotic pathways controlling placental apoptosis. In contrast to membrane-bound form, soluble Fas (sFas) is unable to induce apoptotic signal, therefore, presumably inhibit this process. We hypothesize that sFas might play a role in the placental apoptosis, thus we measured maternal and cord blood sFas serum levels in term labor.

Methods: Twenty six, non-smoking, women at term vaginal delivery (gestational age, mean=40 weeks) with uncomplicated singleton pregnancies and 16 healthy non pregnant women were included in the study. sFas concentrations were determined in women serum and in respective umbilical cord blood, by a sandwich enzyme-linked immunosorbent assay, Student's test was performed to compare groups and Pearson's correlation coefficient test was used to analyze the relation between maternal and cord blood sFas serum levels.

Results: sFas serum levels of women at labour and non pregnant were similar (mean: 887.35pg/ml and 978,62pg/ml, respectively, $p=0.36$). On the other hand, sFas maternal serum concentrations were significantly higher than umbilical cord blood (887.35pg/ml and 431.81pg/ml, respectively, $p<0,0001$). There was no correlation between maternal and umbilical cord blood sFas levels ($r=0.21$, $p=0.28$).

Discussion: Delivery at term did not affect sFas serum levels, although placental suffers an intense apoptotic process. In contrast, sFas cord blood concentration was lower, suggesting that foetus may be undergoing a more accelerate condition of Fas-FasL mediated apoptosis. Placental apoptosis seems to contribute to rupture of membranes; it's a physiological process that might be locally restricted without systemic consequences, thus sFas maternal remains at normal levels. Another hypothesis is that labour is a special condition and only after some time sFas levels increase, as a compensatory mechanism.

33

Nomogram of fetal cerebellum volume by three-dimensional ultrasonography using Vocal technique

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Objective: To establish a reference range of fetal cerebellum volume by three-dimensional ultrasonography using VOCAL™ (Virtual Organ Computer-aided Analysis) technique and to test the intraobserver variability.

Methods: This was a longitudinal prospective study performed with 52 normal pregnant women between 20 to 32 weeks. The measurements of fetal cerebellum were performed at intervals of two weeks, using the VOCAL™ technique with rotation angle of 30°. Normality patterns were established between percentiles 10 and 90 for each gestational age studied, using mean calculation, standard deviation (SD), and confidence interval of 95% (95%CI). The Intraobserver variability was also tested in five pregnant women different gestational age, using intraclass correlation coefficient (ICC), variation coefficient, and T-Student test (P).

Results: The volume of fetal cerebellum varied from 1.1 mL (SD= 0.19; 95%CI [0.76 – 1.52]) (20th week) to 10.9 mL (SD= 0,95; 95%CI [9.09 – 12.81]) (32nd week). The variation coefficients were 57.8% and 60.4%, respectively, on the first and second measurements. The ICC was 0.996 and means were similar both in the first and on the second measurements ($P= 0.208$), concluding by excellent intraobserver variability.

Conclusion: The normal range of fetal cerebellum volume by three-dimensional ultrasonography was established.

35

HELLP syndrome – a case report

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Introduction: The elevation of liver enzymes is classically described in HELLP syndrome (Hemolysis with a microangiopathic blood smear, Elevated Liver enzymes, and a Low Platelet count) and in preeclampsia, reflecting severity and, in the majority of cases, being an indication for prompt delivery. These analytic disorders may also be associated with other hepatic manifestations such as infarction, hemorrhage or rupture.

Clinical case: A 40 years old woman, smoker of 40 cig/day and without any medical illness or disease, consults to ER in her 36 weeks of pregnancy for headache, epigastric pain, obnubilation and diplopia, presenting generalized anasarca, and registering 225/170 of blood pressure.

With the diagnose of severe pre-eclampsia and suspecting the instauration of a HELLP syndrome, we indicate the need of prompt delivery and undergo a cesarean section, done with no surgical complications, obtaining a fetus girl of 2.050 gr, APGAR 9/10/10 and pHa 7.20, pHv 7.22, without any neonatal problems. Anti-hypertensive treatment is restored with hydralazine and magnesium sulphate. Post-operatively the diagnosed of HELLP syndrome is confirmed.

A cerebral and abdominal CT is done (Figs. 1 and 2), diagnosing a right IVA and a slight spleen laceration.

The patient needed transfusion support with plasma, platelets and RBC. Despite maximum dose of furosemide, she continued anury, being then diagnosed as acute renal failure for acute tubular necrosis, reaching values of 5 of creatinine and 102 of urea. She was daily hemodialysed.

After 12 days of dialysis, renal function is reestablished, with normal lab values: Cr 2.4, Urea 115, creatinine clearance 37.6ml/min, diuresis 2.4l/day. Normal hepatic function: GOT 10, LDH 458, Platelets 163.000. She remained anemic with 9.9g/l of hemoglobin.

Hypertension is medically controlled with amlodipine and enalapril. IVA recovers ad integrum (fig 3) in treatment with dexametasone

37

Is there a role of midpregnancy insulin resistance in the subsequent development of hypertensive disorders in pregnancy?

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Introduction: Insulin resistance (IR) have been associated with essential hypertension in nonpregnant individuals in different studies. The aim of the study was to investigate the relationship in between insulin resistance and subsequent pregnancy-induced hypertension (PIH) and pre-eclampsia (PE) in normoglycemic and gestational diabetic pregnant women.

Methods: The 75 gram oral glucose tolerance test (OGTT) was performed according to WHO criteria in 3692 indiscriminately pregnant women at 24-28 weeks of gestation between 01 August 2001 and 01 March 2007. Serum glucose and C-peptide concentrations were measured in fast and 2h after glucose ingestion. Of the 3692 participants, 738 were excluded from analysis.

Results: GDM was diagnosed in 176 cases (6.0%) from 2954 women, who had not been excluded. Of the 2954 expectants, 183 (6.2%) developed PIH, and 49 (1.7%) pre-eclampsia. The incidence of PIH was 15.9 % (28/ 176) and of PE was 5.1 % (9/176) in GDM compared with 5.6 % (155/2778) and 1.5 % (40/2778) in normoglycemic pregnant women. The control group (normotensive women

with normal glucose tolerance (n=2583): fasting C-peptide-glucose-ratio (FCGR): 0.35 and 2h C-peptide-glucose-ratio (2CGR): 1.00. The data of normotensive GDM group: FCGR: 0.45, 2CGR: 1.02. In the PIH of normoglycemic gravids (n=155): FCGR: 0.54 (p<0.02) and 2CGR: 1.39 (p<0.01). In the lower BMI subdivision of PIH (n=78): FCGR: 0.49 (p<0.02) and 2CGR: 1.31 (p<0.01). The data of GDM of PIH (n=28): FCGR: 0.59 (p<0.01). 2CGR: 1.16 (p<0.05) and in lower BMI subgroup of GDM of PIH (n=16): FCGR: 0.57 (p<0.01) and 2CGR: 1.09. In the PE of normoglycemic expectants: FCGR: 0.40 and 2CGR: 1.04. In the lower BMI subgroup of PE (n=28): FCGR: 0.39 and 2CGR: 1.02. The data of GDM of PE (n=9): FCGR: 0.45 and 2CGR: 0.97 and in lower BMI subdivision of GDM of PE (n=5): FCGR: 0.44 and 2CGR: 0.98.

Discussion: IR is associated with subsequent development of PIH both in normal glucose tolerance and in GDM, and this relationship is independent of maternal weight. IR is not in PE both with normoglycemic pregnancy and with GDM. PE and PIH have different pathophysiological mechanism

38

Prediction of fetal weight using upper-arm volume estimated by three-dimensional ultrasound – a pilot study

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Objective: evaluate the accuracy of fetal upper-arm volume in the prediction of fetal weight and compare this three-dimensional ultrasound (3DUS) method of fetal weight estimation (FWE) with Shepard's and Hadlock's two-dimensional ultrasound (2DUS) formulas.

Methods: prospective study involving 25 Brazilian women with singleton, euploid and structurally normal fetuses. All ultrasounds were performed within 48 hours of delivery. The fetal upper-arm volume was obtained using 3DUS slices at 5mm intervals. Linear regression analysis was used to generate a best-fit formula for the prediction of fetal weight based on upper-arm volume. The accuracy of FWE obtained with this formula was compared with fetal weight predicted using 2DUS parameters and Shepard's and Hadlock's formulas.

Results: FWE using upper-arm volume assessed through 3DUS was highly correlated with actual fetal weight. Using linear regression, the best fit formula was: Estimated fetal weight (g) = 681.59 + 43.23 x upper-arm volume (cm³). FWE using 3DUS had a lower predictive error, absolute error and absolute percent error than Shepard's formula, but differences were not significant. The percent error of FWE using 3DUS was significantly lower than Shepard's formula. The absolute error, percent error and absolute percent error of FWE

using Hadlock's formula were all lower than using 3DUS but differences were not significant.

Conclusion: Unlike previously published studies, in this preliminary report, FWE based on upper-arm volume obtained by 3DUS did not differ significantly from FWE derived from 2DUS parameters.

45

Cerebral transverse sinus – umbilical artery doppler ratio in the prediction of acidemia at birth in pregnancies with placental insufficiency

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Objectives: Evaluate the prediction of acidemia at birth using the cerebral transverse sinus-umbilical artery pulsatility index ratio (CTS-PI/ UA-PI) and to determine the best cut-off for this prediction in pregnancies complicated with placental insufficiency.

Methods: A prospective cross-sectional study was performed. Sixty nine patients with placental insufficiency and gestational ages ranging from 26 to 40 weeks were submitted to fetal Doppler velocimetry in the last 24 hours before delivery. Umbilical artery and venous blood samples were collected at birth to assess acid-base status. A ROC curve was calculated using the venous-arterial ratio as the independent variable and acidemia as the dependent variable and a cut-off point was established. Sensitivity (S), specificity (Sp), positive and negative predictive values (PPV and NPV) and accuracy (A) were calculated for the cut-off point.

Results: The CTS-PI/ UA-PI ratio was a good predictor of acidemia (ROC curve area 0.768; $p < 0.001$). With a cut-off of 0.66, S= 71%, Sp= 70.8%, PPV= 51.7%, NPV= 85% and A= 71%.

Conclusion: The CTS-PI/ UA-PI ratio was a good predictor of acidemia at birth in pregnancies with placental insufficiency

52

Antenatal protection of the mothers who gave birth to a newborn with congenital anomaly in the region of Tuzla Canton

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The aim of this study was to present the medical control of the mothers who gave birth to a newborn with congenital anomaly in the region of Tuzla canton.

Methodology: We have retrospectively analyzed antenatal protection of 647 mothers who gave birth to a newborn with congenital anomaly at The Clinic for gynecology and obstetrics in Tuzla, in the time period of eight years (from January 1995 to the end of December of 2003). We have estimated the antenatal protection based on the number of gynecologic and ultrasound checkups during pregnancy.

Results: No gynecological checkups had 132 mothers (20,40%), and less than 5 checkups during pregnancy had 246 mothers (38,02%). Between 5 and 7 checkups had 211 mothers (32,61%), 53 mothers (8,18%) had satisfactory number of checkups, meaning between 8 and 10, and only 5 mothers (0,78%) had more than 10 checkups during pregnancy.

The mean number of the gynecological checkups for 647 mothers was 3,70 with standard deviation 2,80. The mean number of the ultrasound checkups was 2,34 with standard deviation 2,08. 132 mothers (20,20%) did not have any ultrasound checkups during pregnancy, between 1 and 3 checkups had 316 (48,80%), between 4 and 7 ultrasound checkups had 152 mothers (23,50%), and 47 mothers (7,30%) had more than 8 checkups. Early amniocentesis had only 5 mothers.

Conclusion: Antenatal protection in the region of Tuzla canton is substandard, the mean number of gynecological checkups was 3,70, and ultrasound checkups was 2,34.

Key words: antenatal protection, congenital anomalies.

58

Hydatiform mole – a retrospective analysis

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Introduction: Gestational Trophoblastic disease (GTD) is among the rare human tumors that can be cured even in presence of widespread dissemination. The incidence of GTD vary in the different regions of the world. The incidence of molar pregnancy in Europe is approximately 0,6 to 1 per 1000 pregnancies. GTD including complete (CHM) and partial hydatiform mole (PHM), placental-site trophoblastic tumor and choriocarcinoma. The specific diagnosis is histological. Persistent tumor (PGTT), usually nonmetastatic, develops in 4% of patients with PHM. In patients with CHM local uterine invasion occurs in 15% of patients and metastases occurs in 4% of the patients. In the Service, after molar evacuation, patients are monitored with weekly determinations of β -hCG levels until these are normal for 3 consecutive weeks, followed by monthly determinations until the levels are normal for 6 consecutive months for PHM and during more 6 months (determinations each 2 months) for CHM.

Material and Methods: A retrospective study was performed included 24 pregnant women with hydatiform mole diagnosed between January 2003 and December 2006.

Results: Average age at the time of pregnancy was 29.7 years (19-48). Sixty three percent of the mothers were nullipara and 37% multipara. The mean interval from the last pregnancy was 4.2 years (1-11). None of the patients had a history of prior molar pregnancy. Average gestational age at the time of diagnosis was 10.3 weeks (PHM) and 10,5 (CHM). The most common symptom was metrorrhagia that occurred in 50% of the patients. Ultrasonography showed trophoblastic disease in 19 patients, incomplete abortion in 4 and fetal malformation (cystic hygroma) in 1. The final diagnosis was obtained after histological examination and showed PHM in 18 patients and CHM in 6. Eighty three percent of the patients were submitted to suction curettage (UC), 16% medical treatment. The mean preevacuation β -hCG value in patients with PHM was 547847 IU/L and 213370 IU/L in patients with CHM. The bad prognosis factors included: β -hCG > 100000 IU/L in 6 patients with PHM, 3 with CHM; >40 years in 2 patients with PHM, 2 with CHM; and uterus bigger than amenorrhea in 3 with PHM and 2 with CHM. The mean time to attain an undetectable β -hCG value was 4.7 weeks in patients with PHM and 4.6 in patients with CHM. Twenty two patients achieved remission, 1 patient with PHM developed persistent gestational trophoblastic tumor (PGTT) and 1 was lost to follow up before attaining an undetectable β -hCG value. There were no complications in patients with CHM. Only 1 patient with PHM developed hyperthyroidism and hyperstimulation syndrome. During the follow-up period all the patients used oral contraceptives.

Conclusions: Twelve patients had at least one bad prognosis risk factor and only one developed PGTT.

59

Puerperal Group A Streptococcus infection - a report of two cases

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Background: Group A beta-hemolytic streptococci cause a wide range of infectious diseases such as pharyngitis, impetigo, rheumatic fever and even septic shock. Group A Streptococcus (GAS) sepsis is a rare event but recent reports indicate a re-emergence of virulent strains. It carries a high risk of maternal morbidity and mortality. It can present in several ways ranging from asymptomatic to septic shock and multi system organ failure.

Cases: We present two cases of puerperal infection occurred with GAS. The first case was haemodynamically unstable and had to undergo an urgent laparotomy. The blood cultures and the pus from the peritoneal cavity were positive for Group A streptococcus. The second patient

presented with high spiking fever in the immediate post-partum period. A high vaginal swab grew Group A streptococcus. Both were started on broad coverage antibiotics and improved.

Conclusion: Patients with puerperal Group A streptococcus sepsis can have diverse presentation. GAS may produce virulent factors and cause host tissue pathology. Aggressive intensive care treatment, early diagnosis and the correct choice of anti-streptococcal antibiotics are crucial for management

61

Audit on emergency caesarean sections with focus on second stage deliveries

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Background: The feeling that we may be doing too many Emergency CS in the second stage of labour. Concern that very little found by way of guidelines for Caesarean sections in the second stage. National CS rate is 33%. Concern about maternal and neonatal outcomes following either instrumental vaginal delivery or CS in the second stage of labour. Further research on the short and longer term health impacts needed.

Aim: To provide a benchmark for the indications for emergency caesarean sections with emphasis on second stage.

Standard: Auditable standards based on findings of National Sentinel CS audit

Method: 82 case notes reviewed. Retrospective audit/ 3 month period. Proforma designed-data collection

Conclusion: Failure to progress – 37(47%). Failure to progress at full dilatation – 31 (41%). Of these women Primigravida - 51. Failed ventouse - 2. Failed forceps - 1. Failed Ventouse and Forceps – 4.

62

Medical responsibility in Obstetrics/ Gynaecology – The Portuguese medical professionals' perspective

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Introduction: The set of problems posed by the medical responsibility processes in Obstetrics/Gynaecology and its consequences, are far well known and debated in the U.S.A. and more recently in Europe. Our purpose was to appreciate the knowledge and involvement that the medical

professionals of this speciality (specialists and trainees) have on the subject, as well as the impact of this kind of litigation on professional and daily clinical choices.

Material/methods: Inquiries regarding the subject under discussion were elaborated and sent to Portuguese medical professionals of Obstetrics/Gynaecology.

Results: Both specialists and trainees considered that Obstetrics/Gynaecology was between the three more aimed of the totality of the specialities. The majority pointed the existence of 3-4 processes of obstetrics for each of gynaecology. The most common motive appointed in the cause of litigation was perinatal asphyxia in Obstetrics, and surgical complications in Gynaecology. About 75% of the professionals have considered the clinical files to be badly fulfilled. Half of the specialists and 9.8% of trainees have already been involved in at least one process of medical responsibility. Of the specialists involved a quarter related involvements in three or more processes, mainly in judicial set and as a witness; an expert opinion was asked to 12% of them; among those involved was an argued, 5.3% were considered responsible at the end of the process. Near half of the respondents admitted to practice a positive defensive medicine, because of fear of litigation. Twenty five percent of the specialists and 10% of the trainees also admit the practice of a negative defensive medicine (avoidance of high risk areas).

Conclusions: Medical responsibility processes in Obstetrics/Gynaecology are a very important problem involving both specialists and trainees, due to the involvement described and to the consequences of that involvement (or to the afraid of it) in the daily professional practice and/or decisions. We also can extract from this study the need and importance of alerting and counselling on this subject during professional training.

63

Medical responsibility in Obstetrics/Gynaecology – The Portuguese medical reality in the Medical-Law Council

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Introduction : The set of problems posed by the medical responsibility processes in Obstetrics/Gynaecology and its consequences, are far well known and debated in the U.S.A. and more recently in Europe. Our purpose was to appreciate Portuguese reality regarding this subject.

Material/methods : Analysis of the medical responsibility processes of Obstetrics/Gynaecology sent to technical-scientific consultation in the Medical-Law Council between 2001 and 2006.

Results: The number of obstetric/gynaecology complains in the Portuguese Medical-Law Council, although still in second place of the totality of the specialities, have stabilized between 2004 and 2006. The three most common motives in the origin of litigation in Obstetrics were perinatal asphyxia, maternal sequels and traumatic lesions on the newborn. In Gynaecology, the most frequent motives of litigation were surgical complications, inappropriate evaluation and/or follow-up of symptom, signal or exam and failure of definitive contraception. The quality of the clinical files sent to technical-scientific consultation was considered bad (bad quality copies and/or lack of information) in 60% of the obstetrics and in 20% of the gynaecology cases. These badly fulfil clinical files have interfered with the expertise conclusions in 3.8% of the obstetrics cases.

Conclusions: In Portuguese Medical Law Council, the speciality of Obstetrics/Gynaecology is the second most implicated in medical responsibility processes.

65

Interference of epilepsy in pregnancy

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INTRODUCTION: Pregnancy in epileptic women is considered of high risk because the changes in the metabolism and plasma concentrations of the antiepileptic drugs make the control of seizures more difficult. The risk of an increase in the frequency of seizures during pregnancy and labour is high (25-33%). These women also have a higher risk of complications during pregnancy and labour and their children have a higher morbidity and mortality. We aimed to assess the influence of the epilepsy on pregnant women, studying the evolution of epilepsy and the development of pregnancy.

MATERIAL/METHODS: A prospective study was conducted at the Outpatient Epilepsy and Obstetrics Clinics of Coimbra's University Hospital between Jan2004 and Set2007 regarding 19 pregnant epileptic women. A control group, composed of 40 pregnant women without any pre-existent pathology was selected among pregnant women who, during the same period of time, attended the Outpatient Consultation.

RESULTS: During pregnancy 73.7% of epileptic women received antiepileptic drugs, with 26.3% having to initiate or increase their medication. Epileptic seizures occurred in 26.3%. There were no statistically significant differences between the two groups (epileptic vs. non-epileptic) regarding intrauterine growth restriction (5vs2.5%), foetal malformations (10vs2.5%), pregnancy complications (26.3vs22.5%), mode of delivery (c-section in 47.4vs30%)

and neonatal birth weight (3309+436vs3261+490 gr). In the epileptic group 57.9% of the women underwent first trimester foetal ultrasound (against 87.5% of the non-epileptic group; $p = .0015$). In the epileptic group 36.8% initiated folic acid therapy in the preconceptional period (vs. 7.5%), 31.6% in the first trimester (vs. 80%) and 31.6% after the 13th week (vs. 12.5%).

CONCLUSIONS: Our data suggest a similar incidence of maternal, foetal and perinatal morbidities, compared with the general population, which can reflect an enhanced prenatal surveillance. However the preconceptional care needs to be improved.

66

Case report of a rare spontaneous twin pregnancy in each horn of a uterus with a type IV anomaly of the Müllerian Duct

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The authors describe a very rare case report of a twin pregnancy in a 25-year-old primigravida with a previously diagnosed posterior pedunculated fibroid with 63x47mm. They found a twin in each horn of a bicornuate uterus in a pregnancy spontaneously generated. The diagnosis came up with the first ultrasound examination, performed at about five weeks gestation in order to monitorize the mentioned fibroid. The patient refused biochemical screening. The first trimester ultrasound confirmed a type IV anomaly of the Müllerian Duct and revealed nuchal translucencies of 1.1 and 1.2mm, with normal ductus venosus, nasal bones visualized and no signs of tricuspid regurgitation for both twins. The patient remained asymptomatic throughout pregnancy. The second trimester scan was normal apart from unilateral talipes of the male twin. Cervical assessment at 24 weeks gestation revealed closed cervix with 31mm and normal flow pattern of the uterine arteries; the fibroid was 93x66mm. The third trimester scan revealed normal growth curves, as well as normal amniotic fluid index and umbilical artery flow for both twins. Clinical surveillance was performed about every two weeks during the second and third trimesters. The patient was admitted at 35 weeks and 6 days gestation due to premature rupture of membranes and pre-eclampsia. A cesarian section was performed, with live birth of first twin cephalic, female, 2345g, Apgar 10/10, and second twin, also cephalic, male, 2280g, Apgar Index 10/10. A type IV anomaly of the Müllerian Duct was confirmed, with visualization of a complete antero-posterior septum occupying about two thirds of the uterus from the fundus; the fibroid initially described was left untouched. There were no complications after surgery and patient was discharged four days postpartum. Slight unilateral talipes of the male twin was confirmed and followed-up by Pediatric Orthopedic Surgeon in outpatient regimen.

67

Unknown pregnancy and unknown prolactinoma

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We report a 27 years-old woman presented to the Obstetric clinic sent by her family physician due to an unknown pregnancy, abnormal blood tests and radiological alterations. A more detailed medical history was obtained. It revealed past menstrual irregularities (3 to 4 months of amenorrhea for almost 7 years) and frontal headaches (started a month before attending to the family physician). A month later, the headaches had gotten worse and the patient also reported changes in the location of the headaches; they were mainly occipital and followed by nausea, vomiting, dizziness and diminished visual acuity. The exams brought to us by the patient were: an abdominal U.S that revealed an 11 weeks gestation; Prolactin (PRL) level of 513 ng/ml and a skull X-Ray that showed a high radiodensity of the sella turcica.

An MRI showed a 21x12,9 mm seller mass, abutting but not invading the optic chiasm. The visual field testing and the neurological exam were both normal. The PRL level was 126ng/ml. Cabergoline 0,5mg twice a week was then started. A month after the introduction of cabergoline the prolactin concentration was 53,3 ng/ml. In this period the patient did not report headaches, nausea, vomiting, and dizziness nor diminished visual acuity. During the patient's follow-up a PRL concentration of 56,1 ng/ml was obtained (in the 26th week of pregnancy). The patient remained with cabergoline 0,5 mg twice a week but complained of mild occipital headaches. A repeat MRI showed no reduction in the tumour size. PRL increased to 67, 7 ng/ml (in the 34th week of pregnancy) and the patient reported mild symptoms. In the 38th week of pregnancy she had an elective cesarean section and delivered a healthy baby.

Currently the patient is being followed in the Neurosurgery clinic.

70

Urgent caesarean section for intrapartum fetal distress: the role of tocolysis in fetal resuscitation

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Objective: To evaluate the effect of tocolysis prior to urgent caesarean section (CS) for acute intrapartum fetal distress on maternal and neonatal outcome.

Methods: The electronic files of patients undergoing an emergency CS for intrapartum fetal distress between

January 2005 and December 2006 were studied. Patients in which tocolytics were administered prior to emergency CS (Study group) were compared to patients not receiving tocolytics (Control group). Groups were compared for pregnancy characteristics, operative and neonatal outcome variables.

Results: During the study period, 4401 patients delivered at our institution, of which 1137 (25,8%) by caesarean section. 137 (12,1%) CS were performed for acute intrapartum fetal distress. Of these, 36 (26,5%) received tocolytic treatment prior to the operative delivery. Tocolytics administered were ritodrine (N=12) or atosiban (N=24). Both groups were comparable regarding gestational age at delivery and percentage, indication and technique for induction of labour. Mean (SD) arterial pH was 7.24 (0.11) in the study group compared to 7,19 (0.12) in the controls (P=0.04). The occurrence of low 5 min Apgar (d"7) was 3/36 (8,3%) in the study group, compared to 23/101 (22,7%) the controls (P=0.05). Blood loss during caesarean section [530 (285) vs. 558 (209) mls. (P=0.5)] and postoperative HB levels [10.3 (1.1) vs. 10.8 (1.7) mls. (P=0.1)] were not different between the study group and the controls respectively.

Conclusions: This study supports the use of routine administration of tocolysis prior to emergency caesarean section as it resulted in significantly better neonatal outcome, without important maternal complications.

Keywords: fetal distress, tocolysis, emergency caesarean section

72

Perinatal and obstetric outcome of adolescent pregnancies

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Introduction: The aim of this study was to examine the perinatal and obstetric outcome of adolescent pregnancies compared with a general obstetrical population.

Methods: A three year retrospective review of the Departments of Obstetrics and Gynecology of Filiates and Amfissa in Greece was carried out. Information was available on 209 (8.72%) patients < 19 years age between January 2004 and December 2006. This was compared to information available from data-base of all women delivering at the two hospitals and the data are reported as adolescent group vs. adult group.

Results: Labour was induced in 25.5% vs. 21.8%. The incidence of preterm delivery (<37wks) was 13.5% vs. 8.1%, low-birth-weight newborns (<2500g) 13.4% vs. 8.6% and small-for-gestational age (SGA) newborns 1.9% vs 2.3%. The incidence of postterm delivery (>41wks) was 12.5% vs. 4.3%, macrosomia (>4000g) 1.9% vs.

9.2% and large-for-gestational age newborns 0.5%. Operative delivery occurred in 19.7% vs. 19.9% and caesarean section in 6.2% vs. 20.1%. APGAR score <7 at five minutes were found in 2.4% vs. 3.1%. 12.0% of infants were admitted to the neonatal nursery. There were no stillbirths.

Discussion: Both preterm deliveries and low-birth-weight babies were more frequent in the adolescent group although the incidence of SGA newborns was low. The low caesarean section rate also likely reflects these findings. Postterm delivery was also more common and macrosomia occurred less frequently.

73

Pregnancies without prenatal care

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Introduction: The aim of this study was to examine the obstetric outcome and the social conditions of women without prenatal care and to evaluate the perinatal outcome of their newborns.

Methods: A retrospective analysis of pregnancies of women who never attended prenatal care and who delivered at the Departments of Obstetrics and Gynecology of Filiates and Amfissa in Greece between 1 January 2004 and 31 December 2006, was carried out. There were 2398 deliveries during this period, of which 48 (2%) had no prenatal care. Matched controls (96 cases) were selected on the basis of maternal age, educational level, the number of gravidity and parity, and marital status.

Results: Poor social conditions, undesired pregnancy and the intention of hiding the pregnancy were the most common causes of neglecting prenatal care. The mean age of women without prenatal care was 23±2.9 years. 5 women (10.4%) were under 18, 18 (37.5%) were unmarried, 5 (10.4%) did not finish elementary school and 37 (77%) had only elementary school education. Compared to the controls there were preterm labours (36.7 vs 13.3%), vaginal delivery (87.7 vs 86.7%), caesarean section (12.3 vs 13.3%), mean birth weight (2427±652 vs 3057±723gr), intrauterine growth retardation (24.5 vs 14.2%), Apgar score at 5min <7 (10.2 vs 4%) admission to the neonatal intensive care unit (16.3 vs 10.2%) and more given up for adoption (8.2 vs 1%).

Discussion: These data underline that mothers who have never attended prenatal care are at higher risk to deliver a pathological newborn compared to a control group and also the importance of prenatal care in the prevention of preterm delivery.

76

Postpartum haemorrhage requiring ICU admission – a 10-year retrospective study

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Introduction: Postpartum haemorrhage (PPH) is an obstetric condition that range from mild to life-threatening and several medical and surgical measures were conceived to treat it. There are some risk factors and preventive procedures. Uterine atony is the most common aetiology.

Objectives: To present a comprehensive analysis of PPH requiring ICU admission in our institution in a 10-year period. To compare this group of patients with other postpartum admissions into ICU during the same period.

Materials & Methods: All deliveries were included from January 1st, 1997 until December 31st, 2006. Each case was studied for medical history, clinical picture, route of delivery, evolution, complications, interventions, morbidity and mortality. Retrospective application of APACHE IV, APS, SAPS II and SAPS II expanded.

Results: 49833 deliveries, 147 (0,3%) postpartum ICU admissions, from which 19 (13%) because of PPH. Aetiology: uterine atony (63%), placental causes (32%), cervical laceration (5%). DIC in 53% of patients, hypovolaemic shock in 63%. Treatment: primary hysterectomy/hysterectomy after other surgical technique – 63%, medical treatment of atony – 10%, other – 27%. Gestational age at birth: 38,0 weeks (vs. 34,5 in non-PPH group, $p<0,01$). Route of delivery: C-section – 58% (vs. 90%, $p<0001$), spontaneous – 37% (vs. 6%, $p<0,001$), forceps – 5% (vs. 1%, $p<0,01$). Severity indices: APACHE IV – 66,5 (vs. 45,2, $p<0,001$), APS – 66,5 (vs. 44,0, $p<0,001$), SAPS II – 34,1 (vs. 22,9, $p<0,001$), SAPS II expanded – 4,3 (vs. 3,5, $p<0,01$). ICU length of stay: 4,0 days (vs. 3,5). Procedures: mechanical ventilation: 1,6 days (vs. 0,9), transfusion therapy: 24,2 units/patient (vs. 11,0, $p<0,001$). Only one patient required inotropic support. Complications: the most severe was ARDS (5%). Mortality: predicted – APACHE IV (12,8% vs. 4,4%, $p<0,001$), SAPS II (7,7% vs. 3,4%, $p<0,01$); actual – 0% vs. 2,3%. Neonatal outcomes: there was 1 stillbirth (5%, vs. 6%); APGAR index: 1' (7,2 vs. 7,0), 5' (8,8 vs. 8,4), 10' (9,2 vs. 8,8).

Discussion & Conclusions: Early recognition, thorough evaluation and prompt treatment are crucial to achieve favourable maternal outcome. Severity indices were higher in PPH group and overestimated mortality and ICU LOS. There was no mortality in our series.

77

Acute puerperal uterine inversion – a 10-year retrospective study

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Introduction: Acute puerperal uterine inversion, although rare, is a life-threatening obstetric emergency. Excessive traction of the umbilical cord and fundal pressure during the third stage of labour are possible aetiologies. Immediate treatment is essential and includes several pharmacological measures and replacement techniques.

Objectives: To determine the frequency of acute puerperal uterine inversion after vaginal birth in our institution in a 10-year period (1997-2006) and to describe the clinical presentation, treatment and follow-up.

Materials & Methods: All vaginal deliveries were included from January 1st, 1997 until December 31st, 2006. A comprehensive review of clinical records was performed.

Results: 36069 vaginal deliveries and one uterine inversion occurred during the study period. It was a 23-year old female with an obstetric history of a forceps delivery two years before. Current pregnancy had no complications and she was admitted at 39th week in active phase of labour. She had a spontaneous cephalic delivery and a forth degree acute puerperal uterine inversion occurred during umbilical cord traction. Manual replacement of the uterus under general anaesthesia was successfully achieved. Three years later she had a spontaneous delivery without complications and remained asymptomatic until 2007.

Discussion & Conclusions: In our institution acute puerperal uterine inversion is a rare event. Immediate diagnosis and mobilization of Obstetric and Anaesthesiology teams are essential. Proper clinical management prevents maternal mortality and morbidity. It is possible to safeguard fertility.

78

Resection of incidental adnexal masses at caesarean section: a case of Tubal Schistosomiasis

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Introduction: Resection of incidental adnexal masses at caesarean section is still a controversial topic in Obstetric literature.

Human Schistosomiasis is widespread in tropical regions and can cause considerable morbidity. Infection

arises when the parasite penetrates the skin, however disease is the outcome of parasitological, host and environmental factors. Parasites elicit both humoral and cell-mediated immunological response. Clinical manifestations depend on the affected organs but infection may also be asymptomatic. Praziquantel is the drug of choice and achieves cure in 85% of the cases.

Objectives: To describe a rare case of tubal Schistosomiasis diagnosed after resection of an incidental adnexal mass at caesarean section.

Materials & Methods: A case report from our personal experience.

Results / Case report: A 31-year old multiparous woman from Guiné Bissau with a 40-week pregnancy was admitted in active phase of labour. Her pregnancy had no complications and she was previously asymptomatic. A caesarean section was performed because of cephalopelvic disproportion. During the intervention it was detected and surgically removed a firm tubal mass with 1 cm of diameter. Histopathologic typical changes of Schistosomiasis (parasites, fibrosis and inflammatory response) rendered the diagnosis. The patient was referred to the Department of Infectious Diseases and, after thorough evaluation, she initiated praziquantel treatment.

Discussion & Conclusions: While excising adnexal masses during caesarean section reasonable intraoperative judgement is crucial. Immigration trends poses new clinical challenges. Multidisciplinary approach to schistosomiasis is essential.

80

Inferior vena cava thrombosis during pregnancy – a 10-year retrospective study

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Introduction: Inferior vena cava (IVC) thrombosis is a life-threatening pathology since there is a high risk of pulmonary embolism. Several biochemical and mechanical disorders activate haemostasis pathways, allowing intraluminal thrombus formation. Pregnancy itself is considered a prethrombotic state. Prompt diagnosis and treatment of IVC thrombosis is crucial to achieve a good maternal and foetal outcome.

Objectives: To determine the frequency of inferior vena cava thrombosis in our institution in a 10-year period (1997-2006) and to describe the clinical presentation, treatment and follow-up.

Materials & Methods: All women whose deliveries took place from January 1st, 1997 until December 31st, 2006. A comprehensive review of clinical records was performed.

Results: 49833 deliveries and two IVC thromboses occurred during the study period. **Case 1:** A 34-year old primigesta with sickle cell anaemia admitted at 37th week.

A caesarean section was performed after 3 days of LMWH therapy. Afterwards she was admitted to ICU (APACHE IV – 55; SAPS – 25) and an IVC filter was placed (removed at 12th day). **Case 2:** A 24-year old primigesta with gestational diabetes admitted at 33rd week. A caesarean section was immediately performed. She was transferred to ICU (APACHE – 31; SAPS – 20) and started UFH. In both cases there was neither neonatal morbidity nor maternal major complications. Neither woman suffered another deep venous thrombosis until 2007.

Discussion & Conclusions: In our institution IVC thrombosis is a rare event. Immediate diagnosis and mobilization of multidisciplinary efforts are essential. Proper clinical management prevents maternal and foetal mortality and morbidity

81

Pemphigoid gestationis – a case report

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Pemphigoid gestationis refers to a blistering disease that is clearly associated with pregnancy and increased fetal risk. It happens in approximately 1 in 50,000 pregnancies. It usually occurs in the second and third trimesters beginning with urticarial papules and plaques around the periumbilical region. With time, the lesions spread to the trunk and extremities becoming bullous. They usually subside with delivery but rarely may persist for months to years. It may recur in subsequent pregnancies.

We report the case of a mother with immunofluorescence confirmed herpes gestationis who had extensive cutaneous involvement. It started at 31 weeks of gestation and became worse in the postpartum.

Skin biopsies taken from lesional skin for immunofluorescent examination showed complement 3 (C3) in a homogeneous, linear band at the BMZ. Symptoms improved with oral corticosteroids.

At 37 weeks and 5 days she delivered a healthy girl after spontaneous membrane rupture.

83

Pregnant woman that have fetus with malformation of urinary system attended at fetal medicine ambulatory

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Background: The urinary system is the third more affect system by congenital malformations; it is preceded by central nervous system and by cardiovascular system.

In an updated review of literature, it was observed that the urinary tract anomalies are responsible by 12-30% of all fetal malformations and by the most part of alterations that leads to a chronic kidney injury and to a kidney disease in the last step in the childhood. **Aims:** Describe the pregnant women that have fetus with Urinary System anomalies and determine the prevalence of anatomical and functional anomalies of fetal urinary tract.

Method: Transversal study has done in Fetal Medicine clinic of Federal University of São Paulo (UNIFESP). In this study were included all pregnant women attended at this clinical, during January, 2003 to December, 2006. Of all 1538 pregnant women attended in this period, 143 pregnant women, whose fetus had urinary system anomalies, were selected.

Results: Of 143 pregnant women that were part of this study, we have found as more prevalent the urinary tract alterations associated to others malformations (18,9%); obstruction of ureteropelvic junction (15,4%) followed by posterior urethra valvule (14,6%).

Regarding the population characteristic about the identification of risk factors, it was found young population with 26,6% of abortion antecedents; 10,5% of malformation among the offspring and 23,8% of familiar antecedents with malformations.

Conclusion: This study has evidenced the importance of adjustment and improvement of the pregnancy care quality, increasing the value of data regarding personal and familiar antecedents to identify in an early way pregnant woman with potential risk factor to raise a offspring that has anomalies. This still highlights the need of early pregnancy diagnosis providing care, approach and specialized treatment, assuring a better prognosis.

86

Measurement of embryo volume at 7 to 10 weeks of gestation by 3d-sonography using the Vocal method

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Objective: Establish normative data for embryo volume (EV) at 7-10 weeks of gestation with three-dimensional ultrasonography (3DUS) using the VOCAL method.

Methods: A cross-sectional study involving 50 pregnancies was performed. An endocavitary volumetric transducer (3D5-8EK) SONOACE 8000LIVE (Medison, Seoul, Korea) was used for all measurements. The VOCAL (Virtual Organ Computer-aided AnaLysis) method with a 30° rotation angle was used for volumetric calculations. To analyze the correlation between EV and gestational age (GA), regression models were constructed. The mean, standard deviation, median,

minimum and maximum values as well as the 5th, 25th, 50th, 75th and 90th percentiles were calculated for each gestational age.

Results: There was a significant correlation between EV and GA ($r=0.756$) and the exponential equation was the model that best expressed the correlation between these variables: $[EV = \exp(0.9481 \times GA - 8.117)]$. The mean EV went from 0.23 cm³ (95% CI 0.03; 0.42) at 7 weeks to 3.91 cm³ (95%CI 3.85; 3.96) at 10 weeks.

Conclusions: Embryo volume assessed through 3DUS increased from 7 to 10 weeks. Reference limits were generated for first trimester EV using 3DUS.

93

Fetal abdominal tumors. Case report and review of the literature

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Introduction: A fetal tumor is a mass which is diagnosed in the fetus or newborn in the 1st month of life. They differ greatly from those observed in adults because of the histology, localization and physiopathology. Prenatal diagnosis plays a crucial role in perinatal management. Prevalence: 1,7-13,5/10⁶ live births. Teratoma is the dominant type.

Case Report: 29 year old primigesta, 32,3 weeks, twin bicorial biamniotic pregnancy who is admitted to Emergency Service with Threat of Preterm Labour. Tocolysis and fetal lung maturation pattern are provided. Third trimester fetal ultrasonography is performed. It reveals the presence, in the first fetus (cephalic presentation), of an abdominal mass that occupies the entire left hemiabdomen, with mixed echogenicity and moderately vascularized septums. Neuroblastoma or other histological lineage abdominal tumors are suspected among the differential diagnosis. Second fetus (transverse presentation) with no apparent pathology.

On fetal magnetic resonance, a 72 x 58mm, giant, heterogeneous, mesenteric mass without necrotic areas is detected. It's difficult to categorize but could be a teratoma, and it's causing a major distortion of the small intestine to the left. No findings in the rest of abdominal structures.

At 32,6 weeks of gestation, urgent cesarean section is performed, due to preterm labour associated with fetal malposition.

Laparotomy and bowel resection are performed on the first day of life to the newborn. During surgery, a 10cm long, volvulated and necrotic portion of small intestine is identified, separated 10 cm from ileocecal valve. Small bowel volvulus resection and termino-terminal anastomosis. Pathological anatomy reports

reveal distal ileum vascular congestion, intestinal wall bleeding and acute inflammation areas. Final diagnosis: perforated ileum volvulus and meconium peritonitis secondary to perforation. The neonate is hospitalized so far with a good evolution.

Conclusion: The diagnosis of fetal abdominal tumors in prenatal life it's a challenge for ultrasonographers. Small bowel volvulus is not a common cause of fetal abdominal tumor, but we should take it in consideration among the differential diagnosis.

98

Diagnostic and prognostic value of the PI of the uterine arteries in the 2nd and 3rd trimester of gestation

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Objective: determining the diagnostic and prognostic value of the PI of the uterine arteries in the 2nd and 3rd trimester of gestation, related to Intrauterine Growth Restriction (IUGR) and Hypertensive Pregnancy Disorders.

Study design: this is a longitudinal prospective study, in pregnant women who had the 20 weeks ultrasound in Hospital Sant Joan de Déu of Barcelona and had a pathologic PI of the uterine arteries. We divided them in three subgroups:

1. Pathologic Doppler at 20 weeks but normal afterwards.
2. Pathologic Doppler at 20 weeks and at 24-26 weeks, but normalized at third trimester.
3. Pathologic Doppler also in the third trimester.

The variables that we have studied are: IUGR, hypertensive pregnancy disorders, prematurity, delivery inductions due to IUGR or preeclampsia, caesarean sections rate, and admissions to neonatal service.

Results: there is a higher rate of IUGR when there is a pathologic Doppler in a more advanced gestational age (1. 16%, 2. 25%, 3. 30%), as there is also a higher rate of ultrasound detection of these small-for-gestational-age fetuses (1. 4,8%, 2. 8,6%, 3. 30%). There is also more incidence of hypertensive pregnancy disorders (1. 8%, 2. 21,7%, 3. 30%), prematurity (1. 14,5%, 2. 13%, 3. 40%), delivery inductions due to IUGR or preeclampsia (1. 17,7%, 2. 26%, 3. 40%), caesarean sections rate (1. 24%, 2. 47%, 3. 50%), and admissions in the neonatal service (1. 3,2%, 2. 8,6%, 3. 40%).

Conclusions: pregnancies with IUGR and hypertensive disorders have an elevated PI of the uterine arteries in the 2nd and 3rd trimester. The use of this parameter can lead to a better ability to diagnose these complications during pregnancy, and also to improve the prediction of bad perinatal results.

101

Severe preeclampsia before 28 weeks - subsequent pregnancy outcome

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Objective: The aim of this study was to report outcome of subsequent pregnancy after early-onset severe preeclampsia in previous pregnancy.

Study design: A descriptive report of subsequent pregnancies from women with previous severe preeclampsia delivered before 28 weeks from March 1992 to April 2007 at Hospital Santo António.

Results: Subsequent pregnancy outcome data were available for 11 women. All mothers were followed at our centre. Mean maternal age at delivery was 32,2 years (range 27-37), 4,2 years older than in previous pregnancies. Three women had chronic hypertension (27%), 2 had antiphospholipid syndrome (18,2%) and 2 had inherited thrombophilia. All women were on low dose aspirin (ASA) and 4 were also on dalteparin since beginning of pregnancy. In the absence of complications, labor was induced at 37-38 weeks. Mean gestational age at delivery was 36.74 (range 34 4/7-38 1/7), 10.97 weeks more than previous pregnancies and mean birthweight was 2737g, 2075g more than in previous pregnancies, with 3 cases of fetal growth restriction (FGR) (27%). There were no other reported complications in newborns except for one case admitted to neonatal intensive care unit for two days because of FGR. Overall, preeclampsia reoccurred in the next pregnancy in two cases (18%), at 36 1/7 weeks and 36 2/7 weeks. There was also one case of HELLP syndrome recurrence at 35 3/7 weeks.

Conclusion: With targeted prenatal care, women with previous severe preeclampsia before 28 weeks can have successful pregnancies.

102

Pregnancy outcome in liver transplant recipients

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Objective: To evaluate pregnancy outcome in liver transplant recipients.

Methods: We conducted a retrospective review of 10 pregnancies conceived between 1996 and 2002 in 9 women who underwent liver transplantation at Hospital Santo António.

Results: Nine patients who underwent orthotopic liver transplantation between June 1991 and August 1999 became pregnant 13 months to 9 years after transplan-

tation. All patients were on immunosuppressive regimens that included cyclosporine A and a low-dose steroid therapy. The most common reason for transplantation was Familial Amyloid Polyneuropathy. There were 10 live births to 9 patients. Pregnancy complications included one case of spontaneous preterm birth less than 37 weeks and another case of intra-hepatic cholestasis. There were five vaginal deliveries and five cesarean sections. The mean gestational age at delivery was 37.05 weeks, and the mean birth weight was 2655 g. There were no congenital malformations. Postnatal follow-up revealed appropriate physical growth to date. No intrauterine nor neonatal deaths were recorded, and all 5-minute Apgar scores were higher than 7. No patient had a graft loss and there were no lethal complications.

Conclusion: Pregnancy after liver transplantation with stable allograft function can have a very good maternal and neonatal outcome.

107

Twin-twin transfusion syndrome. A retrospective review in Maternidade Bissaya Barreto

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Introduction: Twin-twin transfusion syndrome (TTTS) is one of the most serious complications of monochorionic twin fetuses, occurring in 5 to 20% of monochorionic pregnancies and accounting for 15% of overall prenatal mortality in twins. There is unequal flow of blood across the shared placenta, by net fetofetal transfusion along the anastomoses, from one twin (the donor) to the other (the recipient). The diagnosis is primarily based upon ultrasonographic evidence of a single monochorionic placenta with polyhydramnios/oligohydramnios sequence (vertical amniotic fluid pockets of >8 cm and <2 cm, respectively). If untreated, severe TTTS is associated with a perinatal mortality rate exceeding 90% and more than 30% of survivors having associated neurodevelopmental anomalies.

Objective: The purpose of this study was to determine long-term outcomes among pregnancies complicated by twin-twin transfusion syndrome in our institution.

Methods and Materials: Review monochorionic twin pregnancies with twin-twin transfusion syndrome, admitted between January of 1999 and August of 2007, to assess the gestational age at diagnosis, the clinical and therapeutic management, and the perinatal outcomes.

Results: A total of 24 pregnancies with TTTS were identified, 15 of them had the prenatal diagnostic. The

mean gestational age at presentation was 22.9 weeks (range, 18-30 weeks). Eight duplets had fetoscopic laser ablation of vascular anastomoses, six duplets have been managed expectantly (without intrauterine intervention), and one duplet had amnioreduction and amniotic septostomy. The mean gestational age at delivery was 29.9 weeks (range, 22-35 weeks). The perinatal mortality rate was 43.3% (13/30 infants). Neonatal morbidities found were hyaline membrane disease, periventricular leucomalacia, acute respiratory distress and anemia. All infants were followed up; 5 of them (26.3%) had significant neurological morbidity such as cerebral palsy and global developmental delay.

Conclusions: TTTS is a heterogeneous disorder in its clinical manifestations and progress. With early and accurate chorionicity determination becoming standard practice more information will become available on the long-term outcome of monochorionic twins. The authors emphasize the importance of the early screening of chorionicity, the frequent follow-up in the monochorionic twin fetuses with timely identification of TTTS, and the orientation to specialized centers.

111

Should we abandon Kielland's forceps?

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Objective: This study was conducted to assess the safety of Kielland's forceps delivery in a teaching hospital where the approximately 5500 women are delivered per annum.

Methodology: This was a retrospective case review from September of 2000 to September of 2007. Case note analysis was performed individually. The main outcomes measures were maternal perineal trauma and neonatal injuries.

Results: 83 case records have so far been analyzed. Further analyses of case notes are being currently undertaken. We record a rate of 14% perineal trauma. Third degree tears were noted in 4% of the sample population. These results were no different to the rate of similar injuries following other instrumental deliveries. Significant neonatal injuries were noted in 5% of babies although none of this required admission to neonatal unit.

Conclusion: The use of Kielland's forceps does not increase either maternal or fetal morbidity in comparison to other methods of instrumental delivery

120

Should the kiwi cup be a preferred instrument for ventouse delivery?

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Introduction: Ventouse is one of the commonly employed methods to effect Delivery. When appropriately performed, its safety is well documented but when it fails there is a need for a second instrument or Caesarean section which can increase the neonatal morbidity. We undertook a retrospective audit reviewing 152 case notes.

Materials & Methods: 152 case notes were manually reviewed with the aim: To determine 1)if the local practice was in conformity with the Guidelines 2) failure rate and 3) to find out if the Kiwi cup is better than the other Ventouse cups.

Results: Of all the Ventouse Deliveries, 84% were Primiparous women and 89% were term pregnancies. Fetal distress and failure to progress in II stage were the major Indications. 87% of the attempted deliveries were effected within three traction efforts and 60% of them were delivered using kiwi cup. Of the failed Ventouse Deliveries 64% were associated with Kiwi cup and 21% with silastic cup. 63% of the failed ventouse were delivered using Neville Barnes forceps whereas 14% needed a Caesarean Section. Amongst the failed ventouse deliveries 29% were in occipito posterior position and 22% in occipito transverse position.

Discussion: Unless other Ventouse cups are used as commonly as Kiwi cup, a higher failure rate cannot be attributed to the use of a Kiwi Cup. If a difficult delivery is anticipated (malposition, a high station etc); after appropriate abdomino-vaginal examination ventouse delivery should be attempted in theatre under adequate analgesia. Further studies with larger numbers are required to determine if a Kiwi Cup is better than the other ventouse cups.

121

Is sinal anaesthesia a safe option for caesarean section in Syringomyelia?

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Case report: 31 year old lady booked into ante-natal clinic at 13 weeks of gestation. She had a history of syringomyelia (C2-T9) which is one of the rare complications of Noonan's syndrome. She had paraesthesia and numbness of the arms and underwent insertion of syringo-pleural shunt at D4-D5 at age 13 which resulted

in loss of pain and temperature sensation in her right arm. Follow up MRI scan revealed complete resolution of the syrinx. At 13weeks scan, Nuchal translucency was 3.4, hence she was referred to a geneticist as increased NT may be an indicator of Noonan's syndrome. 50% risk of inheritance of Noonans was explained. She declined invasive testing and wished to go ahead with the pregnancy. She had a normal echocardiogram. She was under consultant led shared care. growth scans were normal. NT at 20 weeks was normal. Fetal echocardiogram at 24 weeks was normal. She had an uneventful antenatal period and had an elective caesarean under spinal anaesthesia at 38 weeks and delivered a healthy male baby weighing 2800gms.

Discussion: Syringomyelia is one of the rare complications of Noonan's syndrome. It is a chronic progressive disease characterized by expanding cystic cavity within the spinal cord Ms X did have a sensory deficit with motor sparing. MRI helps early diagnosis. Noonans can be associated with congenital heart disease, learning difficulties and deranged clotting and polyhydramnios. However Ms X was of normal intelligence had no clotting abnormalities. Babies with Noonan's syndrome are often small and have feeding difficulties, but Ms X's baby was appropriate for gestational age, but had a 50% risk of having Noonan's. Caesarean section is usually selected for women in labour who have syringomyelia to avoid possible deterioration of neurological symptoms due to bearing down. The medical literature sometimes reports neurological complications after spinal or epidural anaesthesia. Safe use of general anesthesia for Cesarean section in a patient with syringomyelia has been reported taking precautions to avoid increases in intracranial pressure. After discussion with the neurosurgeon the anesthetist decided on spinal anaesthesia for caesarean which was successfully carried out. Hence spinal can be a safe option.

122

An audit into the management of growth restricted fetus

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Background: Growth restricted fetuses are at a greater risk of stillbirth, birth hypoxia and long term sequelae. Customized growth charts improve the identification of the truly growth restricted fetus.

Aims: To determine whether the use of customized growth charts has improved our management of truly growth restricted babies and to determine whether the predicted reduction in interventions has taken place.

Objectives: To analyze obstetric interventions and neonatal outcomes in a cohort of small for gestational age babies:

- <10th centile on standard growth charts) who were normally grown on CGC'S

- <10th centile on standard growth charts who were also small for gestational age on CGC'S

Methodology: Identification through Euroking of 51 women delivered of a baby <10th centile for gestational age on traditional growth charts

Results: 27% of babies small on standard growth charts, were normal on customised growth charts. In the <10th centile group -65% were Caucasians. Almost 70% of both the truly small and the constitutionally small babies had more than one scan. 65% of truly small, and 30 % of constitutionally small babies had reduced AFI. 5% of truly small babies had abnormal dopplers. There were more than 4 visits to ADU in truly small babies group.

- IOL for IUGR (57%) occurred only in the truly small babies
- 86% of emergency caesareans for fetal distress were in the truly small babies group

Conclusion: Customised growth charts are accurately identifying an at risk group of babies. By doing so, there is less intervention in pregnancies where the baby is small, but constitutionally so.

123

Is prematurity and low birth weight more common in teenage pregnancies?

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Introduction: Teenagers are a vulnerable group and consequences of pregnancy in this age group can lead to poor physical and mental health. Research states that teenagers tend to have poorer outcomes in pregnancy and labour with an increased risk of low birth weight and prematurity in comparison to older mothers. A multidisciplinary audit involving doctors, midwives and teenage pregnant women from Hyndburn and Ribblesdale valley, Rossendale, Burnley and Blackburn area was carried out.

Aims/Objectives: To determine if duration of labour and its outcome was different for teenage pregnancies.

Methodology: Selection of cases from computer database. Retrospective review of 105 case notes over 6 months time period

Results: 6% of the teenagers were 14-15 years old, 49% were 16-17 years old and 46% were 18-19 years. 24% were students and 22% were employed. There was a history of smoking in 57%, alcohol intake - 8%, drug abuse -3%, anti-depressants-6% and domestic violence in 4%. 9% were late bookers beyond 17 weeks. 19% required induction of labour of which 30% was for prolonged pregnancy. 28% had epidural for pain relief, 50% used entonox +/- pethidine and 6% did not request pain relief. Only 5 % had a preterm delivery. One woman had a prolonged 1st stage (>18 hours) and 12% had a prolonged 2nd stage (> 3hours). 82% had a spontaneous

vaginal delivery, 13% had an instrumental delivery and 9 % had a Caesarean section. 5% of babies had an apgar score of < 7 at 1 minute and this improved at 5 minutes. 3 babies required admission to NICU. 8% had a birth weight of <2.5 kgs. 40% of the mothers breast fed their babies and 89% continued with education following a break due to pregnancy and delivery.

Conclusion: There was good progress in labour with a lower rate of caesarean section amongst teenage pregnant mothers than the general ante-natal population (9% vs 21%). The rate of induction of labour, prematurity and low birth weight was no different than the general population.

124

Pathogenetic approach to the prophylaxis fetal loss in women with metabolic syndrome and thrombophilia

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Introduction: Predisposition to thrombosis and elevated plasminogen activator inhibitor-1 (PAI-1) level are the components of metabolic syndrome (MS). Women with MS have an increased risk of adverse pregnancy outcomes. Thrombophilia contributes to a variety of pregnancy complications including fetal loss. Aim our study was to evaluate the antithrombotic prophylaxis efficiency of fetal loss in women with MS and thrombophilia.

Methods: We examined 77 patients aged 22 to 43 years with MS who had the fetal loss in 70,1% of cases in previous pregnancies. Estimation of the count and functional activity of platelets, the marker of thrombinemia and fibrinogenesis (D-dimer), testing for acquired and inherited forms of thrombophilia. 32 women (I group) received antithrombotic prophylaxis from the fertile cycle and early terms of pregnancy; 45 women (II group) – from the second or third trimester during all pregnancy. Antithrombotic prophylaxis involved low molecular-weight heparin, vitamins B, folic acid, antioxidants and also aspirin 75 mg in patients with acquired thrombophilia.

Results: In the study group the multigenic defects were verified in 100 % of cases; the feature of multigenic defects is that the 4G/5G polymorphism of PAI-1 gene was found in 94,8% of cases, the 4G/4G phenotype of the gene PAI-1 was verified in 66,7% of cases. Acquired antiphospholipid antibodies were verified in 18,2% of cases. Due to differential antithrombotic prophylaxis pregnancy ended with birth of alive baby in 100% of cases in women of I group. The antithrombotic prophylaxis had little effect when women received it in case pre-eclampsia and fetoplacental insufficiency occurred. Fetal loss occurred in 11,1% of cases in women of II group.

Conclusions: The genetic assay demonstrates the presence of hypofibrinolysis genetic form in patients with MS. It may play an important role in impaired invasion cytotrophoblast and impaired placental development contributing to obstetrics complications including fetal loss. The earlier the differential antithrombotic prophylaxis was begun, the more successful results of treatment were.

127

Outcome of monochorionic twin pregnancy in a UK District General Hospital

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Introduction: Monochorionic twin pregnancy accounts for 20-30% of all twins. The perinatal mortality is three to four times greater for monochorionic twins than dichorionic twins. Although monochorionic twins are concordant for chromosomal or genetic defects but majority are discordant for fetal malformations.

We aim to evaluate the outcome of monochorionic twin pregnancies in our unit.

Methods: This study was carried out in a district general Hospital in the UK between November 2006 and October 2007. Twelve women with a confirmed ultrasonographic diagnosis of monochorionic twin pregnancy in the first trimester have been included for analysis. The demographic details, complications of the pregnancy (presence of TTTS, intrauterine growth retardation and fetal abnormalities) and pregnancy outcome were analysed.

Results: The mean age was 29 (21-37) years, parity (0-3). 10 were monochorionic diamniotic (MCDA), Two were monochorionic monoamniotic (MCMA) of which one was a conjoined twin. Three set of twins had vaginal delivery, four delivered by caesarean section (CS), three had termination of pregnancy for fetal abnormalities and two are ongoing pregnancies. Fetal abnormalities included hydrocephalus (following co-twin death), cystic hygroma (45 X/46XY mosaic) and conjoined twin (thoracophagus with hydrops). The mean gestational age for others was 31.7 weeks ranging from 24-36 weeks. One developed TTTS at 20 weeks, despite laser ablation twin 1 died at 21 weeks and other delivered prematurely at 24 weeks. CS was done for the following indications: eclampsia with IUGR at 27 weeks, suspected fetal compromise in labour at 35 weeks and failure to progress in 1st stage of labour at 36 weeks. The median birth weight was 1930 gm, ranging from 500 to 2880 gm. Two sets of twins died in the early neonatal period.

Discussion: In this study monochorionic twins are associated with varying complications including TTTS, IUGR, fetal abnormalities and preterm labour. Therefore these pregnancies are associated with high perinatal morbidity and mortality which require close fetal surveillance.

130

A successful intrauterine therapy of fetal hemolytic disease with hydrops introduced at 18th week of gestation – a case report

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A case of severe fetal hemolytic disease with hydrops due to RhD fetomaternal immunization, successfully treated in utero, is described. A 32-year-old multipara presented at the Outpatient Clinic of the 1st Department of Obstetrics and Gynecology, Medical University of Warsaw, at the 16th week of her fourth gestation. Rhesus D immunization was diagnosed and a positive obstetric history of hemolytic disease revealed.

Hydrops fetalis and increased peak systolic velocity in the middle cerebral artery (MCA PSV) were found at the ultrasound examination at the 18th week of gestation. On the first day, MCA PSV was 41.4cm/sec, equivalent to 1.78 MoM (multiples of median; upper normal range <1.5), on the following day PSV increased to 50.6cm/sec (2.08 MoM). A decision to introduce intrauterine therapy was taken immediately and the first transfusion was performed at the 18th week of gestation. 5 mls of packed 0 Rh negative red cells were transfused into the intrahepatic portion of a portal vein, which was only 2.5mm in diameter. After the second transfusion 4 days later, the signs of hydrops began to withdraw.

The patient had 9 consecutive intrauterine transfusions performed during gestation. At the end of therapy the fetus showed normal hematological parameters and no signs of hydrops. A healthy female newborn, 2530g, Apgar score 9, was delivered by cesarean section at 36th week of pregnancy (indication: 2 cesarean sections in anamnesis). No exchange transfusions were required in the postnatal period.

134

Factors affecting neonatal death in Fars province, Southern Iran, 2006

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Introduction: Annually four million infant die in the first four weeks of life, around the world, while 99% of these deaths occur in low & middle-income countries. Neonatal death is the third most common factor of mortality in our country. One of the worldwide obligations of our country is to reduce the mortality rate of children

under the age of five years. So, attention to factors of child death, particularly neonatal death is of importance. This study was conducted to determine factors affecting neonatal death in Fars province, Southern Iran in 2006.

Methods: This descriptive study was carried out on 529 cases of neonatal death in Fars province in 2006. A questionnaire including reasons for neonatal death was submitted to Fars hospitals & health centers. Any deaths, were recorded in the questionnaire. Collected data was entered into Access Software & was statistically analyzed.

Results: The ratio of death to live births was 11.61/1000. The most common cause of neonatal death was prematurity (60.6%). The percentage of normal labor (50.2%) was more than that by emergency Caesarian section (36.7%) & elective Caesarian section (11.4%). In the present study, 48.3% of neonates died before 34 week.

Discussion: Regarding the high preterm labor or premature neonates & congenital malformations, more attention to care pre & during pregnancy seems necessary. Also, during labor & post labor care, special attention is required to reduce neonatal death.

Keywords: Neonatal death, Factors, Iran.

141

Acute fatty liver of pregnancy

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Introduction: Acute Fatty Liver of pregnancy (AFLP) is a maternal liver disease unique to pregnancy. It is a rare, but serious condition that occurs in the third trimester and carries a significant perinatal and maternal mortality. AFLP can lead to hepatic failure and encephalopathy and, if diagnosis is delayed, death for the fetus and mother.

In this presentation, we review the recent advances in understanding the pathogenesis of AFLP. The screening for a genetic defect can be life saving to the newborn and would allow genetic counselling in subsequent pregnancies. The treatment plan is usually supportive.

Methods: we made a retrospective review of the patient clinical report as well as by analysing the most up to date literature on the subject.

Results: the authors present a clinical case of AFLP in a 29-year-old primigravid woman at 32 weeks gestation, bichorionic twin gestation, after IVF. The clinical presentation, evolution and genetic tests will be presented.

Discussion: recent research suggests that AFLP is associated with gene mutation in short, medium or in the long chain fatty acid β oxidation defects. According to some authors a careful history and physical examination in conjunction with compatible laboratory and imaging results are often sufficient to confirm diagnosis; if necessary, liver biopsy should be performed, in absence

of coagulopathy, early in the post partum, in a period not exceeding 15 days and when jaundice is still present. The differential diagnosis included: AFLP of pregnancy, complications of pre-eclampsia and hepatitis. HELLP syndrome was entertained as a diagnosis initially, but eliminated because the patient had normal arterial tension and platelet level. Furthermore, hepatitis were ruled out by negative serologies and liver enzymes <1000 UI/L.

151

Reasons of formula milk consumption in infants in Fars province, Southern Iran

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Introduction: Breastfeeding promotion is a key child survival strategy. Human milk is the preferred feeding for all infants including premature & sick newborns, with rare exception. In 2005, result of a national survey, IMES (Integrated Monitoring & Evaluation Survey) were shown that 88% of infants were breast fed in Iran. This study was conducted to determine reasons of formula milk consumption in infants.

Methods: In this descriptive analytic study, we studied 1063 infants who were formula fed & referred to health centers.

Results: The findings showed that 47.1% of infants were boys & 52.9 were girls. 53.6% of them were the first child in their family & 66.4% were delivered by caesarian section. From all reasons for formula consumption, the most reasons were 35.4% failure to thrive, 17.7% twin birth & 12.6% nipple refusing. It is notable that in 68.9% of infants, formula was recommended by physicians & in 20.5% by health providers.

Discussion: This study showed that physicians & other health care professionals have made great efforts to recommend formula feeding therefore promoting infant growth monitoring, paying further attention to physicians & health workers awareness are the important determinates on the formula feeding reduction.

154

Rate and the most common indication for cesarean section

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Objective: To present rate and the indications associated with the increase in cesarean section rate during the past seven years, from 2000. to 2006.g.

Methods: Aretrospective transversal analysis of 19300 births in period of seven years (2000.- 2006.), which are established rate and the mostcommon indications of the cesarean section, for every year separatly.

Results: Rate of cesarean section: 2000. – 307 (10,33%); 2001. – 372 (13%); 2002. – 357 (12,9%); 2003. – 382 (14%); 2004. – 353 (13,4%); 2005. – 378 (14,3%) i 2006. – 448 (16,1%). The major indication during given period was previous cesarean section (33%) – from 27,7 in 2002. to 37,4 in 2004. Dystotio and cephalo-pelvic disproportion (20%) were second, malpraesentation 11%, fetal distress 9% and other 27 %.

Conclusion: We have increase the percentage of the cesarean section, although there is a slight fall in births during this period. The leading indication in our clinic is previous cesarean section. According to the great number of repeted cesarean section, we suggested serious opservation before the first cesarean section done. Cesarean section without obstetric indication should be reconsidered to lower the cesarean section rate.

Keywords: cesarean section, dystotio, dispropoortio cephalo-pelvina, fetal distress, malpraesentatio

155

Abnormal uterine doppler velocimetry: prenatal doppler evaluation of very preterm fetuses and cerebral neonatal outcome

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Objective: To evaluate neonatal mortality and brain damage in a group of infants born prior to 32 weeks' EG, with increased uterine artery resistances, classified on the basis of different prenatal Doppler parameters.

Methods: The last prenatal feto-maternal Doppler evaluation was considered for the analysis. The absence (AEDV) or reversal (REDV) or the presence (PEDV) of end-diastolic velocity in umbilical artery (UA) were recorded. In PEDV fetuses a PI at the level of the middle cerebral artery (MCA) lower or equal-higher than 10th Pc defined "Brain spared fetuses" (BSF) and "Non brain spared fetuses" (non BSF).

Results: AEDV/REDV (N° 61) and PEDV (N° 33) fetuses significantly differed in birthweight (707g vs 961g) and in the rate of Small for Gestational Age (85% vs 38%); no differences were found in neonatal mortality and prevalence of intraventricular haemorrhage (IVH). The only case of IVH occurred in the PEDV group. REDV fetuses had a low birthweight (p<0.005 vs BSF/ BSF) and a high prevalence of mortality (p<0.005 vs AEDV/BSF).

Non BSF fetuses were characterized by a similar rate of neonatal mortality and IVH when compared to REDV fetuses, and by a very high of preeclampsia (97%).

Conclusions. In very preterm fetuses with abnormal velocimetry condition AEDV, if compared to PEDV, is not a major risk factor in predicting perinatal mortality and neurological complications, while REDV appears to be a relevant Doppler feature for neonatal mortality. Fetuses born prior to 32 weeks because of preeclampsia, characterized by positive end-diastolic flow in UA and no vasodilation in MCA, resulted to be a high risk group. Surprisingly, the neonatal mortality and neurological morbidity of these fetuses was similar to those of REDV ones.

158

Late preterm delivery

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Introduction: Late preterm (LPT) delivery, occurring between 34-36⁺⁶ weeks of gestation, represents a high proportion of all the preterm births. The purpose of this study is to characterize the subgroup of women whose newborns were admitted to the Neonatology Unit (NU) and to compare these babies, in terms of morbidity, with those who had been delivered at term.

Methods: A retrospective study was undertaken from January 2002 to December 2006. Maternal age, parity and morbidity, risk factors for preterm labour and gestational complications were evaluated. Gestational age at the time of delivery and type of delivery, as well as gender, birth weight, morbidity and mortality of the newborns were determined.

Results: The total number of deliveries was 13838, from which 5,2% were LPT deliveries. 44,1% of these newborns were admitted to the NU and in 39,2% morbid conditions were diagnosed, metabolic (56%), respiratory (35%) and infeccious (23%) complications being the most frequent. 5% had an Apgar score < 7 at the 5th minute and there were 3 early neonatal deaths. Spontaneous preterm labour had occurred in 74,1% of cases, with premature rupture of membranes in 62,7% of these. Preeclampsia (27,6%) and HELLP Syndrome (24,2%) had been the major causes of iatrogenic LPT labour. Among the newborns delivered at term, 11,8% were admitted to the NU, mainly due to respiratory (26,0%), metabolic (18,4%) and infeccious (17,5%) problems, and there were 7 deaths during the early neonatal period.

Conclusions: The proportion of LPT deliveries remained approximately constant during the period of study. History of preterm labour was the major risk factor. The morbidity of these newborns appeared to be much higher

than among those delivered at term (39,2 vs 11,8%). The early neonatal mortality rate was also significantly higher (4,20 vs 0,54 ‰). These facts suggest that newborns delivered between 34-36⁺⁶ and 37-41 weeks of gestation still represent two distinct groups.

163

Use of clamp application on the uterine vessels per vaginam in postpartum haemorrhage

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Introduction: Improvement of management of postpartum haemorrhage (PPH) is topical problem as far as PPH remains an important cause of maternal morbidity and mortality. The number of nonsurgical treatment procedures of PPH is limited. Aim of our work is to describe nonsurgical treatment procedure - clamp application on the uterine vessels per vaginam in postpartum haemorrhage that we use in our practice since 1990 till now. This procedure is called Genkel-Tikanadze's clamp application.

Methods: 100 puerperas aged 18 to 39 years were observed with PPH since 1990 till now. We used clamp application on the uterine vessels per vaginam when blood loss was more than 500 ml and blood loss was in progress in case of other nonsurgical treatment was failed. Anesthesia is not required during clamp application. There is necessary urinary output before this procedure. Clamp application on the uterine vessels per vaginam usually lasts no more than 10-12 min. It requires restore blood loss and correct coagulation defect if present at the same time. If clamp application is failed and blood loss is in progress during 10-12 min then surgical treatment of PPH is performed. Declamping is usually performed in 4 hours in case of clamp application is effective, a puerpera is in stable state and bleeding is stopped.

Results: There were 20 puerperas with PPH after cesarean section and 80 puerperas with PPH after vaginal birth. The value of blood loss was varied from 500 ml up to 3000 ml. Clamp application is failed in 7% (7 puerperas) of cases and surgical treatment of PPH was performed. This procedure was very effective in cases of bleeding due to coagulopathy confirmed by the laboratory data. There was not maternal mortality because of PPH in our practice until now. Analysis of catamnesis of these 100 puerperas indicates that there are not negative effects for women's health after use of clamp application.

Conclusions: Clamp application on the uterine vessels per vaginam is sufficiently effective but not exclusive procedure in management of PPH. Clamp application on the uterine vessels is simple, effective, safe and available for each physician. We may recommend clamp application on the uterine vessels as procedure of

treatment of PPH after cesarean section, miscarriages and in late PPH.

166

Vaginal birth after cesarean section – outcome at Bissaya Barreto Maternity

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Objectives: To evaluate and compare maternal and perinatal risks associated with a trial of labor (TOL) after cesarean section versus an elective repeat cesarean section and to analyse some predictive factors of vaginal birth after cesarean (VBAC) success.

Methods: A retrospective transversal analysis of medical files of **896 women** with one previous cesarean who delivered at Bissaya Barreto Maternity in Coimbra, Portugal, between the years 1997 and 2006. All had no more than one previous cesarean section and more than 26 weeks gestation.

We considered a trial of labor an oxytocin infusion or a spontaneous progression to a cervical dilation e"4 cm.

Results: An elective repeat cesarean section (EC) was performed in 418 (46.7%) cases and VBAC was attempted by 401 women (44.8%); 77 (8.5%) women had a cesarean for an obstetric indication precluding vaginal delivery (ex: malpresentation, placenta praevia, etc). The rate of vaginal deliveries was 27.6% out of 896 pregnancies and 61.2% amongst those who underwent TOL. Predictive factors of success were a previous vaginal birth, 1st cesarean indication not being dystocia and spontaneous labor.

There were no maternal deaths. Major complications like uterine rupture were higher in the TOL group; no perinatal deaths occurred in either group. A uterine rupture occurred in 3 (0.7%) of the 401 women who attempted a VBAC, and 3 neonates (0.7%) had a 5 minute APGAR d"7. Haemorrhage requiring transfusion rates were higher in the EC group.

Conclusions: A trial of VBAC reduced the cesarean rate by 27.6%. Although the rates of uterine rupture and neonatal complications were higher in this group, women submitted to elective cesarean had more serious haemorrhages. Nevertheless the absolute risk of complications is low and almost 2/3 of women submitted to TOL will deliver vaginally, with fewer hospitalization days and a more humanized birth.

169

Natural progression of unilateral isolated ventriculomegaly: right vs. left

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Introduction: Mild lateral ventriculomegaly, (between 10 and 15 mm), occurs bilaterally in 0.15% to 0.7% of fetuses, and unilaterally in 0.07% of fetuses. Up to 40% of these resolve- however, little is known about the significance of whether the right or left side is affected. Our objective was to evaluate the progression of unilateral isolated ventriculomegaly in relation to its site.

Methods: The ultrasound obstetric database of our Hospital was searched for all cases of isolated ventriculomegaly between 2000 and 2007. Cases with CNS and other structural abnormalities, and cases of bilateral ventriculomegaly were excluded. Cases with only one ultrasonographic examination were excluded.

Results: 38 cases of isolated unilateral ventriculomegaly were identified. In 60% of fetuses, the left ventricle was affected, and in 40%, the right ventricle was affected ($p < 0.05$). Left sided ventriculomegaly at presentation was 11.2 +/- 1.3mm while right sided ventriculomegaly at presentation was 10.9 +/- 0.5mm ($p = NS$). Both maternal age and fetal gestation at presentation had no significant association with the site of ventriculomegaly. Significantly fewer cases of left sided ventriculomegaly resolved compared to cases of right sided ventriculomegaly (48% vs. 60%, $p < 0.05$). Cases of left sided ventriculomegaly progressed at a rate of 0.07mm / week while cases of right sided ventriculomegaly regressed at a rate of -0.47mm / week. This was statistically significant ($p < 0.05$).

Discussion: Our results indicate that in cases of uncomplicated unilateral ventriculomegaly, fetuses with the left ventricle affected are more likely to undergo progression of their ventriculomegaly compared to those with right sided ventriculomegaly. The implications of this are uncertain and warrants further investigation

170

Clavicle fracture in the newborn - risk factors

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Introduction/Objectives: Neonatal clavicle fracture has been previously reported to occur in association with shoulder dystocia, suggesting liability on behalf of the obstetrician. However, this diagnosis is often inconsistent

and shoulder dystocia commonly subjectively defined. Our main aim is to determine the incidence, labor risk factors and maternal risk factors of the clavicle fracture and its potential association with shoulder dystocia. **Methods** – We included in our study all deliveries in 2006 with reports on the newborn clinical file of clavicle fracture. We further analyse the paediatric file in order to search if the chest/clavicle x-ray was used to help in the diagnosis. The following variables were studied: maternal age, gestational age, parity, mode of delivery, birth weight and Apgar at one and five minutes. **Results** – Among 2972 deliveries, 63 were complicated by clavicle fracture (2,1%). We had 100% of cephalic presentation.

Conclusion: Neonatal clavicle fracture is often clinically silent, thus the majority of cases would have escaped detection unless it was looked for. The long-term prognosis of the fractured clavicle is excellent as this heals without clinical sequelae.

The majority of the affected infants did not go through a difficult labor or delivery process. Thus, this appears to be an unavoidable event of vaginal birth.

172

Correlation between changes in atmospheric pressure and the rate of spontaneous rupture of membranes

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Objective: the aim of this study is to determine if there is any relation between the rupture of the membranes in pregnant women and atmospheric pressure.

Study design : this is a retrospective study, whose patients were taken from the database of Hospital Sant Joan de Déu of Barcelona (4605 deliveries in 2006).

We included all pregnant women e"37 weeks of gestation, between January 1st 2006 and December 31st 2006 ($n = 2831$), that were admitted in our hospital due to spontaneous ruptures of membranes, but not in active labor. We tried to correlate them with the average atmospheric pressure (mm Hg) registered in two meteorological observatories in the area where the patients come from (data provided by the Servei Català de Meteorologia).

Results: we used the Pearson coefficient to correlate the variables, obtaining no association between them ($r = -0, 04945$).

Conclusion: there is no evidence that changes in atmospheric pressure can cause an increase or decrease of spontaneous rupture of membranes, as was expected, and against popular belief.

176

Induced abortion for 'non- medical' reasons in Portugal - the beginning

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Introduction: Maternal health is one of the main global health challenges, and reduction of maternal mortality ratio by 2015 is the target for the fifth Millennium Development Goal (MDG 5). Because unsafe abortion is an important cause of maternal morbidity and mortality, measures have been taken worldwide to allow the realization of abortion as a safe medical procedure. In Portugal abortion for 'non-medical' reasons was legalized according to Law 16/2007 of April 17th. The authors propose to analyse the first procedures realized in a tertiary referral hospital from July 2007 to February 2008.

Methods: A retrospective study will be realized with analysis of the data of the abortions realized in our institution for 'non-medical' reasons, i.e. abortion on woman's request.

Results: Preliminary results show that, during the first three months, 155 women were referred to our institution in order to proceed with abortion on request. Mean age was 28 years (14 to 45 years), and 39% were primigravidas. Mean gestational age at first visit was 7w 3d (5 to 14 weeks). Twenty-five (16%) were not submitted to induced abortion due to: abandon of the idea, gestational age over 10 weeks or spontaneous abortion in the mean time. Twenty-four women (15%) had a psychology consultation, with 4 being further on referred to psychiatry, and 3 giving up on the idea of abortion. One hundred twenty-four (95%) were submitted to medical treatment and 6 (5%) were submitted to surgical treatment. Three (2%) viable pregnancies were found on follow-up echography; 6 (5%) women required further treatment with uterine aspiration for persistence of products of conception.

Discussion: Even where family planning is widely accessible, unwanted pregnancies occur due to contraceptive failure, which women may seek to end by induced abortion. In order to reduce maternal morbidity and mortality, abortion for 'non-medical' reasons should be easily accessible, in order to prevent the occurrence of unsafe procedures. Demographic characteristics of the population who undergo induced abortion vary widely; the best therapeutic regimen is still under discussion.

177

Congenital cytomegalovirus – a case report

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Cytomegalovirus (CMV) infection is the most common congenital infection, caused either by primary infection and reactivation of virus during pregnancy. Approximately 5 to 20 percent of infants born to mothers with primary CMV infection will have clinically apparent disease, with 90 percent developing sequelae.

A thirty-years-old nuliparous pregnant woman was remitted to our hospital at the stage of 34 weeks of gestation because of the detection of Intrauterine Growth Restriction (IUGR) and ventriculomegaly on a routinely ultrasonography (US) exploration. Previous obstetric controls were correct, except that she presented both positive Ig G and Ig M for Toxoplasma in the first trimester analysis. The only anomaly found in the study of the IUGR was a serology of cytomegalovirus compatible with recent maternal infection. The obstetric ultrasonography showed a IUGR fetus with bilateral ventriculomegaly and some little periventricular hyperechogenic foci that were supposed to correspond to calcifications. The study was completed with a fetal NMR, which confirmed the findings of the US, and also the presence of corpus callosum. Since the income of the patient, she presented normal cardiotocographic registries. However, the detection of vasodilatation in the Doppler of the middle cerebral artery along with the highly suspected diagnostic of congenital cytomegalovirus infection and its prognostic it was decided to finalize the pregnancy at the point of 34.3 weeks. The labour induction finished with and eutocic delivery of a female newborn, with 1740gr of weight and correct Apgar test (8-10). The clinical manifestations of the suspect congenital cytomegalovirus infection on the newborn consisted in disseminated petechiae, hepatosplenomegaly, jaundice as well as neurologic symptoms such as lethargy, hyporeactivity and hipoactivity. Laboratory abnormalities included thrombocytopenia and elevated direct and indirect bilirubin. The ocular examination revealed glaucoma signs in one eye and possible retinal scars on the other. The diagnosis of congenital CMV was confirmed with the detection of CMV DNA in the urine and blood of the newborn with PCR techniques.

180

Risk factors and outcomes in gestational diabetes

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Introduction: 90% of diabetes cases encountered during pregnancy are gestational-onset. Maternal age >30 years old, obesity, family history of diabetes mellitus, gestational diabetes in prior pregnancy and history of stillbirth, congenital malformations and macrosomia are risk factors and a number of adverse outcomes could be present.

The objective of this study was to determine, the risk factors weight to the gestational diabetes, and the outcomes, in a population of pregnant women.

Methods: A retrospective study was carried out. Clinic processes of all pregnant with a diagnosis of "gestational diabetes", in our hospital, between January 1, 2003, and July 1, 2007 (5 years) were consulted.

Results: 264 pregnant women met the inclusion criteria. 187 pregnant had more than 30 years old. 70 were clinically obese before pregnancy and 28 had chronic hypertension. The risk factors found were: family history of diabetes mellitus (48.48%), gestational diabetes in prior pregnancy (10.98%), obstetric history of macrosomia (8.33%), stillbirth (2.69%) and congenital malformations (1.51%). There was a case of brachial plexus palsy in the past. We reported cases of hydramnios (2%) and preeclampsia (2%), and none eclampsia. We didn't noticed cases of stillbirth. 56.62% of labours finished in cesarean (fetopelvic disproportion (53%)). There was no reference to difficulty deliveries. Preterm birth happened in 12 cases. Macrosomia was reported in 22. We have found a case of a heart disease in newborn and 2 of neonatal hypoglycemia.

Discussion: Round about ¾ of pregnant women out of our target population had risk factors for gestational diabetes. The risk factor found most frequently was maternal age > 30 years. Obesity and family history of diabetes mellitus were present often. Majority of the cases were diagnosed in a later stage and only controlled regarding their diet. 1/3 of pregnant were overweight during pregnancy. The number of pregnancy complications was less than expected initially. We reported 3 cases of stillbirth. The cesarean rate delivery was not significantly higher than vaginal delivery being the fetopelvic disproportion the mainstay cause. The most frequent neonatal outcomes was macrosomia. None resulted in birth trauma; however only one was vaginal delivery.

182

Unsafe abortion in Europe in the XXI Century – a case report

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Every day, approximately 186 women die around the world due to complications from unsafe abortion; many of these deaths are in countries where access to abortion is legally restricted. Abortion is unsafe when it is "carried out either by persons lacking the necessary skills or in an environment that does not conform to minimal medical standards, or both" (WHO, 2004a).

Case report: A 26 year old women arrives at the emergency department with moderate to severe vaginal bleeding and acute abdominal pain after ingestion of 40 pills of misoprostol (200 µg). Last menses date is unknown, no past medical history for gynecology abnormality or other disease, no contraception is used and a 13th weeks gestation is presumed. At observation, she is conscious, pale, afebrile and tachycardic with hypotension. Vaginal speculum observation confirms moderate vaginal bleeding with no vaginal or cervical trauma. A smooth, mobile, avascular, malodorous, tubular mass with 30 cm is identified emerging from the uterine cavity through the cervix. Bimanual examination finds an enlarged and painful uterus. She is started on intravenous fluid support with withdrawal of symptoms. A pelvic ultrasound shows enlarged and distended uterine cavity by a heterogeneous mass, posterior cul-de-sac filled with liquid and bony material within the abdomen. Uterine perforation was assumed and a diagnostic laparotomy was undertaken. We found an uterine wound complicated with bowel extrusion and a macerated fetus in the abdominal cavity. A 60cm ileon resection with end-to-end anastomosis was done followed by a uterine curettage.

Although rare, complications as severe as this presented here, still occurs in those countries in which abortion is not legal and is putted into practice under unsafe conditions. We look forward to see the benefits of the legislation reviews towards the end of these dramatic scenary in Portugal.

183

Factors associated with low birth weight

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Objective: To identify the risk factors associated with the occurrence of low birth weight (<2500 grams) in a historical series of births.

Design: An unmatched case-control study. Setting: A tertiary maternity hospital in the city of Campinas, Brazil. Population: A total of 43,499 liveborn infants delivered in the institute between 1986 and 2004.

Methods: Analysis of the database containing information on deliveries of women who gave birth to infants with low (6,477 cases) and normal (37,467) birth weight. Factors associated with low birth weight were identified according to the odds ratio (OR) and 95% confidence interval (95%CI) in the bivariate analysis and according to the adjusted OR in the multivariate analysis. Main outcome measures: Sociodemographic characteristics, reproductive history, previous morbidity and factors related to current prenatal care.

Results: Age, poor education, low maternal weight, smoking beyond the fourth month of pregnancy, previous cesarean section, interdelivery interval >24 months and <37 months, maternal history of hypertension, cardiopathy and premature delivery, few (<5) prenatal visits and beginning prenatal care late in pregnancy (after the 3rd month), premature rupture of membranes, increased blood pressure, infectious diseases and hemorrhages during current pregnancy were all associated with low birth weight. Maternal obesity and being a primipara were found to be protective factors.

Conclusion: These results confirm the findings of previous studies. The detection and prenatal management of modifiable factors, counseling, pre-conception intervention, adequate prenatal care and the implementation of primary and secondary prevention of maternal morbidity may contribute towards reducing the incidence of low birth weight.

184

Giant chorangioma - about a clinical case

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Placental vascular lesions are a group of possibly interrelated alterations, with different gestational age distribution.

Chorangioma is a benign hypervascular lesion of hamartomatous origin with arterial and venous flow that contains numerous cystic spaces. Its incidence is approximately 1%. When bigger than 4 cm it is called giant chorangioma, which may be associated with maternal and fetal complications. This placental condition may, sometimes, be associated with chorangiosis, which is characterized microscopically, by an increase in the number of vessels in the chorionic villi.

We present a case report of one pregnancy complicated by a giant chorangioma and chorangiosis, in

order to make a brief review of these clinical-pathological entities.

Our patient, a 38 year-old woman, was diagnosed a giant chorangioma by ecography at the twenty-second gestational week, measuring 100x70 mm, associated with placenta previa. She was admitted to the hospital at 31 weeks and 1 day for a small vaginal bleed and was kept under maternal and fetal surveillance. At 37 weeks, she was submitted to an elective caesarean section. A healthy baby girl was delivered, weighing 2800 g and with an Apgar score of 9 at the first minute. The placenta weighed 337g and, although its parenchyma was highly fragmented due to its location, microscopically, it had aspects of chorangiosis. The puerperium was complicated by maternal coagulopathy, necessitating hysterectomy and admission to the intensive care unit.

Although our case had a favourable neonatal outcome, both chorangiosis and giant chorangioma have been associated with increased perinatal morbidity and mortality. Therefore, they must be considered as signs of potential clinical significance.

191

Gestational weight gain in overweight and obese women

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Introduction: In industrialized countries, the prevalence of overweight and obesity has reached epidemic proportions. Numerous papers have demonstrated that increasing pregravid Body Mass Index (BMI) is a significant risk factor for adverse pregnancy outcomes. Although there is no universal consensus on the definition of an optimal outcome in pregnancy, cesarean delivery rates and birth weights have often been used as a quality outcome measure.

Objective: The purpose of this study was to evaluate the influence of gestational weight gain on cesarean delivery and fetal macrosomia rates, in overweight and obese women.

Methods: Retrospective analysis of a population of overweight and obese pregnant women with a nutrition counseling consultation between January 2005 e December 2006. Subjects were grouped by gestational weight gain, Group A (weight gain <5Kg) Group B (weight gain >5 and <10 Kg) Group C (weight gain >10Kg and <15 Kg) and Group D (weight gain >15 Kg). Records of 199 pregnant women with singleton deliveries were evaluated: Group A: (n= 59), Group B: (n= 55), Group C: (n= 55) Group D: (n= 30)

Results: Women with higher gestational weight gain had a significantly increased risk of cesarean delivery (CD), when compared with women with lower gesta-

tional weight gain, who have a higher proportion of vaginal delivery (VD). (Group A CD12,6% vs VD17,1%; Group B 10,1% vs 17,6%; Group C 14,1% vs 13,6% Group D 10,1% vs 5,0% p=.01). Women with higher gestational weight gain had a significantly higher risk of delivering a macrosomic fetus. (A 6,7% vs B 6,7% vs C 60% vs D 26,7%; p=.003).

Conclusion: In this group of overweight and obese women, a gestational weight gain <10 Kg is associated with a lower risk of cesarean delivery and fetal macrosomia. These results suggest that limiting gestational weight gain can improve pregnancy outcome in this specific group of women.

192

Fetal ovarian cyst: prenatal ultrasound diagnosis

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As a result of refinements in Prenatal Ultrasonography (US), neonatal ovarian cysts are more frequently encountered than in the past. The management of fetal ovarian cysts is still controversial despite the improvement in prenatal diagnosis with ultrasonography

The aim is to highlight the problems posed by the prenatal diagnosis of abdominal cysts in order to outline the most appropriate therapeutic approach in case of suspected ovarian cysts.

In this paper we present a case report of unilateral fetus ovarian cyst diagnosed by antenatal ultrasonographic examination in 29 weeks of gestation. Cyst was a simple, diameter of the cyst was 40mm. Patient was followed up with serial ultrasound examinations. After three weeks there was ultrasonographic evidence of torsion. Intracystic flocculation, which typically was deposited on the sloping part of the cyst, gave a characteristic liquid interface that was regarded as ultrasonographic evidence of torsion. Postnatal ultrasound controls confirmed the prenatal diagnosis. Newborn was managed surgically.

The most appropriate clinical approach in the management of benign fetoneonatal ovarian cysts is to adopt a wait-and-see policy, assessing the course of the condition by means of periodic ultrasound monitoring. Sometimes, however, complications such as torsion or rupture can occur which often require surgical intervention after delivery. Without complications, however, aspiration of the cystic contents is possible even in ovarian cysts exceeding 4 cm in diameter. Diagnosis is important, given the possible complications and the current management options.

Key words: fetal ovarian cyst, antenatal diagnosis.

193

Toxoplasmosis rate among pregnant women and evaluation of congenital infection in patients attended at pre-natal care at CAISM/UNICAMP during the period between 2001 to 2005

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Objective: To analyze the infection rate among pregnant women in pre-natal care at CAISM/UNICAMP and to correlate different diagnostic methods for detecting fetal infection.

Methods: Observational study, evaluating serology tests considered to be "suspect" for acute toxoplasmosis, comparing the results of different tests and the presence of documented fetal infection.

Results: 4759 serology tests from pregnant women were enrolled comprising a period ranging from 2000 to 2005. 1377 tests were initially identified as negative, 3169 were consistent with serological scars and 213 could be considered suspect for representing acute infection (4,5%). Of these, 114 were found to have high affinity antibodies in their first trimester, therefore recent infection was ruled out; 80 underwent invasive investigation and were treated for acute infection; 19 were treated, even though invasive procedures aimed at determining fetal infection were unavailable in face of advanced gestational ages. There were 7 infected fetuses/newborns: 1 with hydrocephalus, 1 abortion and 2 fetal deaths, 2 with cerebral calcifications (one of which associated with ventricular dilation) and 1 with myelomeningocele, all of these were born from women for whom invasive diagnosis was not available because of advanced gestational age. A total of 21 amniocentesis were performed, with 1 positive test result for fetal infection, not confirmed at birth (test performed at another facility).

Conclusion: Antibody affinity is an excellent confirmatory method for acute infection when executed in early gestational ages; the greatest obstacle for the optimal evaluation of toxoplasmosis in pregnancy and the risk of fetal infection is the time window in which screening methods can be applied

194

Coombs test and pregnancy – a clinical report

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Introduction: It is recommended that all pregnant women be tested for Rh-D type on their first prenatal visit and

screened for the presence of erythrocyte antibodies and irregular antibodies. Hence, following an a positive indirect Coombs test and within an appropriate clinical context, Rh-alloimmunization would seem like the most correct diagnostical hypothesis. However, other clinical situations should be evaluated.

Case report: Authors describe a case of a 19 year-old hypertensive pregnant woman, blood type O Rh (neg), husband ORh (pos), 2G0P. She had had a first trimester spontaneous miscarriage, without Immunoglobulin administration. She was sent to our Institution on the 28th week of gestation for having positive Coombs test (both direct and indirect). She had been taking oral iron and alpha-methyl dopa 250 mg tid since the beginning of her pregnancy. The ultrasound at 28 weeks of gestation was normal. The patient was instructed to stop taking alpha-methyl dopa and on the 29th week began to take amlodipine 5 mg/day. Laboratory investigation was performed to exclude autoimmune diseases and thrombophilias. With the evolution of the pregnancy we observed a progressive decrease of serum reactivity, both in indirect and direct Coombs tests, which became negative on the 37th week of gestation. On the 37th week and 2 days of gestation, a growth deceleration was detected and labour induction was performed. The labour took place on the day after, with delivery of a healthy girl, weighing 2700g, apgar 8/10, blood type O Rh positive.

Immunoglobulin anti-D was administered to the puerpera before discharge.

Discussion: This clinical case is an excellent example of how the physician should always do a differential diagnosis, even when the situation seems as straightforward as this one. In fact, one would think that the most probable cause of positive indirect Coombs test in a Rh negative women with a previous first trimester miscarriage and no administration of immunoglobulin anti-D, would be alloimmunization. The recognition of a positive direct Coombs test in a pregnant woman taking alpha-methyl dopa is indeed of great importance. This way, following exclusion of other possible causes, physicians aware of this rather common secondary reaction to the drug are able to stop its administration in time to prevent a potential severe hemolytic anemia.

195

Maternal age as risk factor for preterm labour

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Objective: in this study we investigate the relationship between preterm labour and age of mother when she is younger than 19 and older than 35 years.

Study design: We studied the birth registry of the delivery room in clinic of obstetrics and gynecology in Clinical

Centre of Montenegro. The study included 5237 women, who delivered single infants (after 24th weeks of gestation, or infants heavier than 500gr) between January 2005 and December 2006. We considered the preterm labour (before the 37th week of gestation) and the age of mother (<19 and >35years old).

Results: in the total of 5237 women, there were 309 (5,9%) cases of preterm labour and 4928 (94,1%) women whose delivery took place after the 37th week of gestation. In a group of women younger than 19 years old were 12 (10,8%) with preterm labour and 111 (89,2%) with labour on term. Preterm labour was ocured in 48 (6,98%) cases in the group older than 35 years, and 688 (93,02%) had a labour on term. The percentage of preterm birth in a group of women aged 20-35 years was 249 (5,61%) and 4438 (94,39%) labour on term. We found significantly increase rate of preterm delivery in the group younger than 19 years old. The percentage of preterm delivery is also higher in a group older than 35 years but not significantly.

Conclusion: Despite major socio-economic changes resulting in improvements in obstetric care teenagers remained a higher risk group.

197

Accidental pregnancy exposure to Verteporfin - obstetrical and neonatal outcome

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Background: Verteporfin is a second generation agent used in photodynamic therapy of age-related macular degeneration and pathological myopia in patients with subfoveal choroidal neovascularization. Food and Drug Administration classifies it as pregnancy C category drug: it should only be used if the potential benefit justifies the potential risk to the fetus.

Case: We present a case of a 45 year old woman, with late pregnancy diagnosis, accidentally exposed to verteporfin twice, once in the first and once in the second trimesters. After adequate counseling she chose to carry on with her pregnancy. There were no obstetrical or neonatal adverse results. The child five month follow up was normal.

Conclusions: This is the second reported accidental exposure to verteporfin during pregnancy, with favourable obstetrical, fetal and neonatal outcomes. Nevertheless, we recommend caution with verteporfin therapy during pregnancy.

198

We have to give a chance on vaginal birth!

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Objective: Analyse our caesarean birth rate (CBR), compare it with the international guidelines, propose strategies to reduce CBR and evaluate the results.

Material and Methods: It is a retrospective study, based on the consultation of clinical records of all deliveries that occurred in our Institution during the year 2006, and their division by 3 distinct periods of the day (00h00-08h00, 08h00-16h00, 16h00-24h00) and by delivery route (vaginal versus (vs) caesarean). A caesarean audit concerning the year 2006 was performed.

Results: In 2006 occurred 2031 deliveries in our Institution. In the period of 00h00-08h00 the vaginal birth rate (VBR) was 73,77% vs 26,23% of caesarean birth rate (CBR); in the 08h00-16h00 period there were 62,47% of vaginal deliveries vs 37,53% of caesarean sections; in the 16h00-24h00 period, the VBR was 64,07% vs 35,93% of CBR.

The global rate of caesarean sections in 2006 was 33,97%; 1/3 of them were elective caesarean section deliveries.

Discussion: The World Health Organization (WHO) recommends that there is no reason that global caesarean section rate is higher than 10-15%; The Royal College of Gynecological and Obstetricians (RCOG) propose for Europe a CBR of 21%.

Our cesarean section rate is far away from WHO and RCOG goals. We notice that the CBR during the night period is (00h00-08h00) is about 10% less than the CBR during the 2 diurnal periods.

We conclude that: the major difference in the CBR at the night period vs diurnal periods is due to the high rate of elective cesarean section deliveries; Therefore, after our audit, we reevaluated the indications for caesarean section and avoided interference in the normal process of labor and vaginal birth.

In the period of January to October 2007 we achieved a 29,5% CBR without an increase in the neonatal morbidity-mortality. These, and other strategies, are on the way to reduce our planned cesarean section rates.

199

Fetal death in a twin pregnancy

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Clinical history: 30 year old secundigravida primipara with a twin dichorionic gestation achieved through ovulation stimulation treatment (Omifin®) because of previous polycystic ovarian syndrome (POS).

In the obstetrical control, scan done at 5-6 weeks showed 3 incipient intrauterine images. Scan I (13,3w) showed twin dichorionic gestation. Both foetus presented a CRL according to amenorrhea and normal SN. Triple screening showed low risk and AFP was normal.

In scan II (20,3w), both foetus (masculine and feminine) showed correct morphology and growth. Ovular membranes and amniotic fluid were normal (both umbilical cords had 2 arteries and 1 vein).

At 29,3w gestational diabetes in the mother and several IUGR (<P2 and normal doppler) in the feminine fetus were diagnosed.

After conducting fetal pulmonary maturation according to Liggins standard and controlling fetal well-being with NST at ambulatory level, the patient was admitted at 29,5 w because of a non satisfactory NST in feminine fetus, whose scan showed normal doppler but pleural bleeding, small size stomach, cardiomegaly without malformations and subcutaneous edema (face and body).

Because of the low gestational age and owing to Doppler study remained normal in both foetus expectant management with NST/12h was carried out until feminine fetus deceased at 29,6w.

First in the hospital and later at ambulatory level, the pregnant was periodically controlled by analysis (coagulation, C-reactive protein and fibrinogen degradation product) and by doppler scan and NST fetus control, obtaining always results within normal limits.

At 34,5 w gestational period was ended by elective cesarean without incidences. A masculine, 2250g alive fetus was born, with Apgar 9-10, followed by a deceased feminine fetus with macroscopical normal aspect.

Placental culture, anatomopatological study and fetal post-mortem are being done. Results are yet to be obtained.

206

Maternal and perinatal outcomes of twins and higher-order multiple pregnancies

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Introduction: Advances in assisted reproductive techniques resulted in an increased number of higher-order multiple pregnancies with three or more fetuses. Higher-order multiple gestations are associated with a high incidence of maternal, foetal and neonatal complications.

Objectives: To compare maternal and perinatal outcomes of twins and higher-order multiple pregnancies in our institution within a nine year period.

Methods: Between January 1998 and December 2006, 25 higher-order multiple pregnancies (triplets and above) who were delivered at Coimbra's University Hospital were reviewed. Maternal and perinatal outcomes were compared with the 50 twins pregnancies delivered before and after each index case in the same hospital population. The results were assessed by a retrospective analysis.

Results: In the group of higher-order multiple pregnancies, 68% were conceived through infertility therapy versus 45.6% in twins. We found that mothers of higher-order gestations were significantly older and had longer hospital stays when compared with mothers of twins. There was a statistically significant difference in antenatal steroid use, preterm labour, premature rupture of membranes between both groups, but not in the incidence of preeclampsia or gestational diabetes. Triplets and quadruplets had significantly higher rates of low birth weight, neonatal intensive care admission and mortality than twins. There was no significant increase in major anomalies or in intrauterine growth restriction.

Conclusions: Higher-order multiple pregnancies were associated with a worse perinatal outcome when compared with twin pregnancies, with a lower birth weight, higher rates of preterm birth and a mortality rate twice as high. Even though the literature describes an increased risk for developing pregnancy-induced hypertension and gestational diabetes in triplets gestations, these data were not supported in this study.

was then successfully placed for urinary diversion. At 37 weeks of GA, dislodgment of the catheter was suspected. An elective cesarean was performed with delivery of a male newborn, with Apgar scores of 9/9 at 1st and 5th minutes, weighting 3100g, with immediate and spontaneous first voiding. Postnatal renal studies excluded any anomaly of the urinary tract and demonstrated normal renal function with complete resolution of bilateral hydronephrosis. Over a few days, however, a respiratory disorder of perinatal transition was detected with coexisting patent ductus arteriosus. It was diagnosed severe pulmonary persistent hypertension from pulmonary disease of unknown etiology. Management has been largely supportive. Now with 2 years old of age, he has been growing under 5th percentile for his age, with serious tolerance limitations to efforts, but with a normal psychomotor development. Genetic and metabolic studies were normal.

Discussion: Interpretation of prenatal data must be extremely cautious. The case illustrates an unexpected postnatal event, since the prenatal suspected obstructive uropathy was not confirmed and a new postnatal diagnosis was made (pulmonary disease with severe complications), apparently not related to amniotic fluid index or fetal renal function. We hope that these findings will shed new light on the possible pathogenesis of dilatation of fetal urinary tract.

207

Fetal urinary tract dilatation underlying etiology: a prenatal diagnosis challenge – a case report

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Introduction: Fetal urinary tract dilatation is commonly and accurately recognized in the prenatal period by ultrasound, but precise identification of the underlying etiology remains an antenatal challenge.

Case Report: A 38 year-old woman and her 42 year-old husband were suffering from primary infertility for 15 years (male factor). The pregnancy was achieved by ICSI. She was referred to our institution at 22 weeks of gestational age (GA) for sonographic evidence of fetal megacystis (reported since 13 weeks) and severe bilateral hydronephrosis with a normal karyotype study (46, XY). There were no increased renal cortical echogenicity or cysts, nor extrarenal anomalies and amniotic fluid index was normal. A vesicocentesis was performed, revealing normal fetal renal function, but failed to normalize bladder volume. A vesicoamniotic shunt

212

Are risk factors to Group B Streptococcus Disease still considered when there is a positive culture?

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Introduction: Group B streptococcus disease remains the leading infectious cause of neonatal morbidity and mortality. Currently, International Guidelines recommend a culture-based intrapartum prophylaxis.

Material and Methods: Retrospective review of clinical charts of all pregnant women diagnosed with group B streptococcus (GBS) colonization between January and December/2005. Data were analyzed in SPSS 10.0 program, using Kruskal Wallis and Spearman tests for the statistic correlations. Sample has a normal distribution.

Results: 190 pregnant women had a positive culture (vaginal and rectal swab or urine sample) for GBS. 9 were excluded as they end up delivering in other institution. 178 were single pregnancies and 3 were twin pregnancies; as so, we included 184 cases. Maternal average age was 30,5. 47,8% were nuliparas. 9,8% had

GBS bacteriuria earlier in the pregnancy – swabs were not performed on these women. None of these women had previous newborn with GBS early-onset disease. 13,6% were elective cesarian-sections. Intrapartum Chemoprophylaxis (IP) with, at least, 4 hours duration was administered in 57,8% of the cases (64,8% were nuliparas [p=0,00]); 16,4% did not receive IP at all. Penicilin was the drug of choice in 88,5% (p=0,00). Rupture of fetal membranes >18h occurred in 5% (2 cases received less than 4 h of IP). There was no case of intrapartum fever. 92,9% were term delivery. Of a total of 11 preterm newborns, just one was delivered by elective C-section; 8 in 10 received IP (precipitous delivery justifies 2 cases without IP). 12,5% of the newborns were admitted to neonatal intensive care – 60,9% received intrapartum prophylaxis. Most of them were babies born from mothers without bacteriuria (p=0,05). Discharge diagnosis was prematurity in 3,3% of the cases and, in 1,6%, was early onset sepsis. These early onset sepsis were diagnosed in newborns whose mothers received prophylaxis.

Discussion: Even though not all pregnant women with GBS colonization received IP, all women with risk factors, when possible, did receive IP. With this study we stress the importance of risk factors in the individual management of GBS positive women in labour.

214

Labor induction after previous cesarean delivery

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Introduction - There are few issues in modern obstetrics that have been as controversial as the management of women with a prior cesarean delivery (PCD). The objective of this study is to evaluate the efficacy and safety of labor induction in women with a previous cesarean delivery.

Methods - Retrospective study in 394 women who had a previous low-transverse cesarean and delivered in our unit between January 2006 and February 2007. Patients included in the study were divided into 2 groups: group A (n=82) – induction of labor; group B (n=174) - spontaneous labor. Labor induction was undertaken by administration of 1 mg of PG E₂ gel (dinoprostone) intravaginal, with 6 hours interval between administrations.

Results - A total of 256 women were enrolled. Mean age was 65,8 years. Demographic data was analyzed. In **group A** (induction of labor) mean time between the first vaginal application of dinoprostone and delivery was 32 hours. The dose of dinoprostone used to induce labor ranged from 1 mg to 6 mg. Mean duration of labor was 3,6 hours. Fifty women (61%) had a vaginal delivery after well controlled labor induction. The number of women with an normal delivery (eutocic), vacuum extraction or

forceps delivery was 38 (41,5%), 8 (9,8%) and 9 (11%), respectively. One patient had a placenta abruption. There were no cases of uterine rupture. Mean time of inpatient stay was 2,3 days. In **group B** (spontaneous labor) 65,5% of women had a vaginal delivery: 76 (43,7%) had an eutocic delivery, 22 (12,6%) vacuum extraction and 16 (9,1%) forceps delivery. Mean duration of labor was 3,9 hours. Major complications recorded: one placenta abruption and one case of uterine rupture. Mean time of inpatient stay was 2,6 days. Women who had spontaneous delivery had higher rates of cesarean during labor (p=0,018; Odds ratio 1,7; CI 95%, [1,06-3,01]). There were no differences between these two groups as far as type of delivery, labor duration and nonstress test intrapartum profile is concerned. In both groups there were no major neonatal complications or maternal mortality. The rate of uterine rupture was higher in women who had spontaneous delivery (0,6%; p>0,005).

Discussion - In our series, labor induction has proven to be a safe procedure for women who had a PCD. Morbidity associated with this procedure was low. The rate of uterine rupture was higher in women who had spontaneous delivery.

219

Complications during pregnancies in women with epilepsy

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Objective: The purpose of this study as to investigate whether women with epilepsy have an increased risk of complications in pregnancy.

Methods: Using data from the compulsory Medical Birth Registry in Norway 1999-2005, we included pregnancies by 2805 women with epilepsy and 362 302 pregnancies by women without such a diagnosis. Preeclampsia (any, mild or severe), fetal growth retardation and bleeding were the main outcomes. Odds ratios (OR) and corresponding 95% confidence limits (CI) of complications were computed and adjusted for maternal age, education and smoking.

Results: Comparing mothers with and without epilepsy, the OR of having any type of preeclampsia was 1.3 (CI 1.1-1.5). Among mothers with epilepsy, the risk of mild preeclampsia was increased, OR 1.4 (1.1-1.7); whereas the risk of severe preeclampsia was not increased, OR 1.2 (0.9-1.5). The OR of eclampsia was 3.2 (1.6-6.1) comparing mothers with epilepsy with reference group.

Among women with epilepsy, 33.5% (n=942) were exposed to anticonvulsive medication during pregnancy. For mothers with epilepsy using anticonvulsive medication, the risks of any or mild preeclampsia were 1.5 (1.2-2.0) and 1.7 (1.3-2.4) respectively, whereas the risks of severe preeclampsia or eclampsia were not increased compared to reference group, OR 1.2 (0.7-1.8) and 1.0 (0.1-7.2) respectively. Mothers using anticonvulsive medications also had increased risks of having a growth retarded baby, OR 1.8 (1.1-3.1) and bleeding late in pregnancy 1.9 (1.1-3.2), but not in early pregnancy OR 1.1 (0.7-1.7). Stratification by parity did not change the results; however, the risks of preeclampsia or fetal growth retardation were further increased in nulliparae with epilepsy using anticonvulsive medication, OR 1.5 (1.1-2.1) and 2.8 (1.5-5.1), respectively.

Conclusion: Mothers with epilepsy had an increased risk of any or mild preeclampsia but the risk of severe preeclampsia was not increased. Using anticonvulsive therapy was associated with an increased risk of growth retardation, particularly in nulliparae. Mothers with epilepsy using anticonvulsive therapy waiting their first baby, have the highest risk and should be observed for growth retardation and preeclampsia at the antenatal clinics.

222

Complicated second stage of labour in stillbirths: is there a role for destructive operations in developed countries?

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Introduction: Fetal destructive operations are a viable alternative to CS as they are often associated with fewer complications when performed by expert accouchers. We discuss two recent cases in which destructive operations could have been considered. **Case 1:** A 23 year old Afro Caribbean primigravida had an intrauterine death IUD at 40 weeks. Labour was induced with prostaglandin but the delivery was complicated by severe shoulder dystocia which required cephalic replacement using Zavanelli manoeuvre. A 3.18 kg baby was later delivered by CS. **Case 2:** A 30 year old Eastern European primigravida had an intrapartum IUD and had a failed trial of forceps after which a CS was performed and a 4.2 kg baby delivered.

Discussion: In developed countries, CS is generally regarded as the more civilised option compared to destructive operations for managing obstructed labour *prior* to full cervical dilatation in an IUD. However, the situation is different when the cervix is fully dilated or if severe shoulder dystocia is encountered. In these cases, the risk of maternal morbidity and mortality from CS, even in western countries, can be high whereas this is

low in expert hands with fetal destructive operations. Obviously, the mutilation of a dead fetus is disturbing for any mother and the psychological repercussions can be extensive. One of the main obstacles in performing destructive operations in developed countries is the lack of skilled practitioners. It is possible, however, to educate and provide simulated training with manikins and to have sessions dedicated to basic destructive operations. We suggest that if obstructed labour occurs in an IUD following full cervical dilatation, the patient should be informed that there are alternatives to CS, albeit that these procedures are not usually performed in developed countries.

Conclusion: Many obstetricians are now less conversant in the art of destructive operations and are unwilling to perform the procedure in stillbirths, resulting in a uterine scar in the mother. Ethical and psychological constraints may discourage the use of such procedures although the global benefit to the mother including future pregnancies must be taken into consideration. The issue of training probably poses the greatest obstacle but this can be overcome by use of simulated drills. Destructive operations can avoid unnecessary CS and we feel that this art should be revived.

225

Isolated ventriculomegaly – a four years retrospective study

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Introduction: Isolated ventriculomegaly is defined as a lateral cerebral ventricles dilatation, with no other structural abnormalities observed at the time of diagnosis. Ventriculomegaly is divided according to lateral ventricles atrium diameter into three degrees: mild (10.0-12.0 mm), moderate (12.1-15.0 mm) and severe (>15.0 mm). Reported incidence of ventriculomegaly is between 1.48-2.2/1000 newborns. Targeted ultrasound, TORCH analysis, in most cases, karyotype and fetal brain magnetic resonance imaging are most often used for further investigation of this findings. Prognostic definition of truly isolated ventriculomegaly do not represent an easy task to clinical team responsible for advisement.

Methods: Authors reviewed all cases of isolated ventriculomegaly detected during the period between 2003 and 2006. The main goal of the study was evaluate clinical and ultrasonographic evolution of isolated ventriculomegaly in prenatal and postnatal period.

Results: A total of 25 cases were evaluated: 18 with mild ventriculomegaly, 5 with moderate ventriculomegaly and 2 with severe ventriculomegaly. In the mild one group, values return to normal at prenatal period in 13 cases. All

newborns were evaluated in postnatal period. Two fetal death occurred: 1 in severe ventriculomegaly group (Congenital infection with cytomegalovirus) and another one in mild ventriculomegaly group.

Postnatal ultrasound was normal in 14 cases of mild ventriculomegaly group and in 1 case of moderate ventriculomegaly.

Discussion: Although sample size limitation, our results suggest, that, in most cases, mild ventriculomegalies are not associated with poor prognosis. This fact does not exclude the importance of systematic postnatal surveillance of these newborns.

226

Fetal cardiocography before and after moderate physical activity in water during pregnancy

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Objective: to evaluate the effect of moderate aerobic physical activity in water on fetal cardiocographic patterns among sedentary pregnant women.

Method: in a non-randomized controlled trial, 133 sedentary pregnant women performed water aerobics in a heated swimming pool, with cardiocographic exam during 20 minutes before and after the exercise. The cardiocographic patterns were analyzed pre and post exercise by intervals of gestational age (24-27, 28-31, 32-35 and 36-40 weeks). Student t and Wilcoxon, and McNemar tests were respectively used for numerical and categorical variables.

Results: No significant variations were found in fetal heart rate (FHR), number of fetal movements (FM) and accelerations (A), ratio FM/A and presence of decelerations before and after water aerobics. The variability of FHR was significantly higher after exercise only in the gestational interval of 24-27 weeks.

Conclusions: The moderate physical activity in water is safe and not associated with significant alterations of fetal cardiocographic patterns

232

Labor induction with vaginal capsules of 25mg of Misoprostol

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Introduction: In Portugal, misoprostol for labor induction is prepared from 200µg oral tablets, which is divided in

four pieces. As the resulting amount of misoprostol is inaccurate in each piece, a new vaginal formulation was developed – capsules of 25µg of misoprostol, with no excipients added.

Objectives : To evaluate the success rate and the safety of labor induction with vaginal capsules of 25µg of misoprostol.

Methods: An observational study was performed between July of 2006 and September of 2007. Singleton pregnancies with ≥37 weeks and no contraindications for labor induction were included. Vaginal type I capsules with 25µg of misoprostol were used every 6 hours. Failed induction was considered when labor not started after two trials (3 administrations of 25g of misoprostol) with 12h interval. Success rate, mean Bishop index, mean vaginal administrations, abnormalities of contractility and fetal heart rate, mean time of induction to beginning labor and cesarean section rate were determined. Fetal morbidity and mortality were evaluated.

Results : One hundred seventy seven pregnant women with mean gestational age of 39,7 weeks were included. Labor induction was performed for gestational age ≥41 weeks in 94 cases, premature rupture of membranes in 41 cases, maternal causes in 26 cases and fetal causes in 16 cases. The mean Bishop index at the beginning of induction was 3,4 and the average of vaginal administrations was 1,6. The mean interval between induction and the beginning of labor was 655 minutes. The success rate of labor induction was 96%; cesarean section rate was 22,6%. There were 14 cases of tachysistole (7,9%); one case of hypertonia (0,05%) was associated with fetal distress. No adverse neonatal outcomes were registered.

Conclusions: The interim analyse of this study allow to conclude that labor induction with vaginal capsules of 25µg of misoprostol was associated with a good success rate and with an excellent safety profile.

235

Self-reported maternal morbidity and associated factors among Brazilian women

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Purpose: Demographic health surveys may constitute a valuable source of information on maternal morbidity, particularly in locations in which an integrated system of epidemiological surveillance with wide geographic coverage has not yet been developed.

Methods: This study consisted in the analysis of the database obtained as a result of the last national Demographic Health Survey carried out in Brazil. Data regarding

how the survey was conducted, the characteristics of the women interviewed who had given birth to live infants in the five years that preceded the survey, the characteristics of the obstetrical care they received and any complications reported by them were evaluated.

Results: Responses from a weighted total of 3,635 women were analyzed. Statistically significant differences ($p < 0.001$) were found between geographic domains for the majority of the characteristics studied. Deliveries were predominantly hospital-based throughout the whole country. The prevalence of self-reported maternal morbidity ranged from 15.5-22.9% in the different geographic domains analyzed. This geographic factor was found to be associated with differences in the occurrence of complications in general and specifically for the occurrence of prolonged labour.

Conclusions: These differences in morbidity may reflect the intricate relationship that exists between the determinants of human development and maternal health conditions.

239

VATER Association – a case report

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Introduction: The VATER association as a combination of three or more of these defects: vertebral defects (V), anal atresia (A), esophageal atresia and/or tracheo-esophageal fistula (TE), and radial and renal anomalies (R standing for both of them). Thereafter, a number of others defects were added to the originally described set, mainly on clinical grounds. Cardiac and genital anomalies, single umbilical artery, limb anomalies, others than radial, and the caudal regression complex among others, were included as part of the spectrum. VACTERL is the acronym most frequently used in the literature, where C stands for cardiovascular anomalies and L for radial or other limb component, leaving R for the renal anomaly.

Case report: Patient, 20 years old, followed in Fetal Medicine Service of UNIFESP/EPM, due to fetal malformation. The following findings were observed in ultrasound: large intestine dilatation, horseshoe kidney, genital anomaly and ventricular septal defect. The fetal Magnetic Resonance confirmed these findings. During gestation also occurred oligoamnio and fetal growing restriction. Patient was submitted to vaginal delivering with 37 weeks of gestation, newborn 2.260g of weight, Apgar 7 and 8, with the following clinical findings: atresia anal and genital anomalies (micropenis and hypospadias). Colostomy was realized with 24 hours of life. After exams, the followings findings also were observed: horseshoe kidney, lombar hemivertebra L3, ventricular septal defect, pulmonary stenosis, patent foramen ovale.

Cariotype 46 XY. At 59th day of life, infant died due to septic shock. Necropsy confirmed all alterations described.

Discussion: Lorenzo et al, in 1997, concluded the existence of “cranial” and “caudal” VATER subtypes. The “cranial” phenotype would include esophageal atresia, preaxial limb anomalies, and defects of the thoracic vertebrae. The “caudal” phenotype would include lower vertebral defects, renal anomalies, anal atresia, and possibly genital defects (“caudal dysgenesis complex”). Besides, infants with VATER association that included both renal anomalies and anorectal atresia were significantly more likely to have genital defects. In this related case, we found renal anomaly, anal atresia, lower vertebral defect and genital defect, and also cardiac defect. So, this case could be included in the “caudal” VATER subtype (“caudal dysgenesis complex”).

240

A retrospective analysis of the outcome of patients with unexplained recurrent miscarriages attending a miscarriage clinic

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No of misc	No of Total No of Pts	No of Pts who conceive on Rx	No of Pts lost to follow up	No of Pts with Live on Rx	No of Pts with Misc on Rx	No of Pts Currently Preg on Rx
2	28	14 50%	2 7.15%	11 78.6%	3 21.4%	0
≥3	16	11 68.75%	2 12.5%	6 54.5%	4 36.4%	1 9.1%

Introduction: To determine the outcomes of patients suffering from unexplained recurrent miscarriages following investigation and treatment as per protocol at the miscarriage clinic.

Method: Patients referred to the Miscarriage Clinic are investigated applying a comprehensive investigation protocol which addresses all the known causes of recurrent miscarriage. The patients were divided into 2 groups and the following treatment protocols were prescribed:

2 recurrent miscarriages: folic acid, dydrogesterone and low dose aspirin

≥3 recurrent miscarriages: folic acid, dydrogesterone, low dose aspirin and heparin

Results: 224 patients have been assessed at the recurrent miscarriage clinic to date. In 44 cases (19.64%), no cause for their recurrent miscarriages was found; classified as *idiopathic recurrent miscarriages*. Out of the 15 patients (34.1%) without further pregnancies 6 are still in their immediate post-miscarriage period (<6 months).

Conclusions: i) incidence of unexplained recurrent miscarriage is much lower than that reported by other clinics (probably because a very comprehensive investigation protocol is employed). ii) patients with 2 miscarriages had a much better prognosis than those with 3 iii) The generally recognised risk factors of age and miscarriage history were unaffected by the treatment protocols and this should serve to reassess these protocols in our patients with unexplained recurrent miscarriage.

243

Evaluation of the lymphocytes' profile in patients with severe pregnancy induced hypertension or preeclampsia.

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Introduction: The etiology of pregnancy induced hypertension is still unclear. Recently a lot of attention is attracted by the immunologic hypothesis of the disease. There are described changes in relation of lymphocyte T CD4+/CD8+, increased percent of cytotoxic and memory lymphocytes, predominance of Th1 over Th2 type of immunological response. The results of published studies differ significantly.

Study design: The purpose of the study was evaluation of lymphocytes' profile in delivering patients with severe pregnancy induced hypertension and patients with preeclampsia.

Material and methods: Studied group consisted of 48 patients with severe pregnancy induced hypertension (blood pressure over 160/110 mm Hg, poorly controlled with antihypertensive drugs) or preeclampsia (blood pressure over 140/90 mm Hg and proteinuria over 0,3g/L) that deliver between 24-40 weeks of pregnancy. Control group included 35 patients paired with the age of pregnancy to the studied group, without hypertension. All patients give birth in The Obstetrics and Gynecologic Department of Institute of Mother and Child in Warsaw between 2004-2005 years. Exclusion criteria for both groups were: chorionamnionitis, diabetes mellitus, kidneys' disease. The mean age of patients in the study group was 28,5±5,3 years, while in the control group 29,4±4,4 years. The mean age of pregnancy at the time of delivery was 35,5 ± 4,2 weeks in the study group, while 35,6 ± 4,5 weeks in the control group. Cesarean section was the mode of delivery in 84,6% and 49,3% patients respectively.

Perinatally (2 hours before or two hour after delivery) we take 2 ml of vein blood to the probe with EDTA. Lymphocyte's subpopulations were evaluated with the tricolour flow cytometry. All probes were analysed with the flow cytometer Coulter Epics XL (Beckman Coulter, USA). We estimate the percent of lymphocytes with following surface markers: CD8, CD4, CD56, CD16, CD11b. For the comparison of our results we used Mann-Whitney test.

Results: We did not find statistically significant differences in the percent of lymphocytes CD4+ (studied group: 38,5% vs control group: 41,6%) and CD8+ lymphocytes (24,6% vs 25,2% respectively). The relation of lymphocytes T CD4+/CD8+ in the studied group was: 1,7±0,7, and was similar to the result in the control group: 1,8±0,6. We found statistically significant difference in the percent of the lymphocytes CD16+ (7,4±3,1% studied group, 5,0±2,5% control group, p<0,001) and CD11b+ (26,0±11,3%, control group: 20,3±7,6%, respectively, p=0,01). There was no difference in the total number of natural killer cells with phenotype CD56+ (studied group: 13,6% vs control group: 10,6%), while statistically significant difference was in the percent of subpopulation of natural killers cells with phenotype CD56+CD16+ (called by some authors "typical NK cells") (studied group: 5,75%, control group 2,1%, p<0,01). This subpopulation of NK cells is known for its natural (without previous immunization) cytotoxic properties. We found statistically significant difference in the percent of lymphocytes T CD8+, that immunophenotype indicate for its terminal differentiation into mature cytotoxic lymphocytes: CD8+CD11b+ (studied group: 9,7% vs 6,2% control group, p=0,01).

Conclusion: Increased percent of lymphocytes with the markers of activation CD11b, CD16, and the rise in the percent of mature cytotoxic lymphocytes and typical NK cells could be responsible for damage of endothelial cells described in this pathology.

Study is a part of project NR 3 PO5 E 07125 "Immunological aspects of proliferation and apoptosis disturbances in placentas in pregnancies complicated by preeclampsia" financed by Polish Ministry of Science and Higher Education.

245

Prospective screening for chromosomal defects using first-trimester ultrasound markers in an unselected population

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Objective: This study was undertaken to evaluate the performance of first-trimester ultrasound markers in the assessment of risk for aneuploidies in an unselected population.

Study design: Nuchal translucency (NT) measurement, nasal bone (NB) evaluation as present or absent, qualitative and quantitative (PIV) assessment of ductus venosus (DV) flow wave and tricuspid regurgitation (TR) were carried out in 163 pregnant women (165 foetuses) at 11 to 13+6 weeks. Detection and screen positive rates were calculated for each sonographic marker. All the examinations were performed by two sonographers certified by FMF for the 11-13 weeks scan. Technical feasibility to perform all the markers in one-step sonographic screening was noted.

Results: The median maternal age was 31 (range 17-46) years. Chromosomal abnormalities were identified

in 6 pregnancies (2 cases of trisomy 21, 1 case of trisomy 18, 2 cases of triploidy and 1 case of monosomy X). NT was increased in both cases of trisomy 21, in the fetus with trisomy 18 and with monosomy X. This marker had normal values in both cases of triploidy. Absence of NB occurred in both cases of trisomy 21 but in no other chromosomal abnormality. TR was found in one case of trisomy 21 and DV was abnormal in monosomy X, in one case of trisomy 21 and in one fetus with triploidy. Screen positive rates for NT, NB, TR and DV were 4.4%, 0%, 0% and 4.4% respectively.

Conclusion: First trimester ultrasound markers are technically feasible in an unselected population risk assessment setting with detection and screen positive rates similar to those described in literature for selected population attending referral foetal medicine centres.

250

Pyelonephritis in pregnancy – a local experience

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Objectives: To evaluate the incidence of risk factors, obstetric complications, microbial pathogens and their resistance to common antibiotics in women with acute antepartum pyelonephritis diagnosed in Santa Maria Hospital (Lisbon).

Methods: Retrospective evaluation (January 2005 to October 2007) of all admissions of pregnant women with suspected pyelonephritis based on clinical (fever, flank pain, costovertebral angle tenderness) and laboratory findings (leucocytosis, elevated PCR, pyuria). Data were evaluated concerning to pathogen isolated and its antibiotics susceptibility, maternal risk factors (Diabetes, human immunodeficiency virus, urolithiasis, sickle cell disease/trait, urinary tract infection before pregnancy, prior preterm birth, chronic hypertension, illicit drug use) and complications (sepsis syndrome, preterm delivery, low birthweight).

Results: Ninety-eight women were admitted with acute pyelonephritis. More than half of our cases occurred in the second trimester and 11% were readmitted for reinfection. Overall, 64% of women had positive urine cultures, 29% were sterile (approximately half of these had antibiotics done before urine had been collected for culture) and 7% were inconclusive or unavailable. The predominant organism (87%) was *Escherichia coli* and 31% of the strains were resistant to ampicillin. Only 23,5% of women had a maternal risk factor for antepartum pyelonephritis and the most common was urolithiasis. No women developed sepsis syndrome and the average hospital stay was 4 days. There were no preterm births and no infant weighted less than 2,500g.

Conclusion : Our data shows that pregnancy is a strong risk factor for acute pyelonephritis (76,5% of women had no other identified risk). Probably due to early diagnosis followed by immediate and adequate care no serious

maternal and neonatal complications were registered. Since almost a third of *E.coli* were resistant to ampicillin, in our local hospital setting we do not recommend it as first line treatment.

254

Placental accretism – 5 year review

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Background: Placenta accreta is the abnormal attachment of the placenta to the uterus. It occurs when the decidua basalis is either absent or incomplete. It is uncommon and most often presents with a retained placenta and hemorrhage.

Methods and materials: The authors present the retrospective review of 7 cases of placenta accretism between January 2002 and December 2006 in our facilities. The aim was to review the cases of caesarean and post-partum hysterectomy, due to accretism, performed over a 5-year period in a teaching hospital, looking specifically at the associated morbidity.

Results: During the study period, there were 7 cases of post-partum hysterectomy. Uterine atony was associated in 4 cases. Six had a prior C-section delivery. Histological evidence of placenta accreta was noted in 7 (100%) cases, and one case had also placenta praevia. A subtotal hysterectomy was performed in 5 cases, and in the remaining two a total hysterectomy. There were no maternal deaths. Anemia, fever, urinary tract infection and chest infection/atelectasis were the most common post-operative morbidity. Relaparotomy for continuing vaginal bleeding was required in 1 case.

Comments: Emergency peri-partum hysterectomy for obstetric haemorrhage is a rare operation (1 in 2,550 deliveries). In spite of the intra-operative risks and post-operative morbidity, it remains a potentially life-saving procedure.

255

Fetal abnormalities – management in Institute of Mother and Child, Warsaw, Poland

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Introduction: Congenital fetal abnormalities are very serious medical and social problem. Every year 250,000 children are born in Poland. 2% of them have some congenital defects. Perinatal diagnosis of a defect is an indication to

admission to a hospital with high level of reference. These hospitals must be prepared to manage pregnant women and newborn child. Every patient should be treated very individually. In some cases there are no treatment options for baby during and after pregnancy. Termination should be considered. In case of mild defect it is tremendously important to plan management after multidisciplinary consultation. An interdisciplinary team was created in year 2003. The team consists of obstetricians, geneticists, surgeons, neonatologists, radiologists and other specialists. The aim of this team is to analyze every single case. The team plan diagnostic process, assess prognosis and treatment options. The aim of this study was to describe activity of interdisciplinary team of Institute of Mother and Child between 2003 and 2007.

Fetal abnormalities	Quantity	%
CNS abnormalities	81	37,67
Urinary tract abnormalities	22	10,23
Genetic disorders	19	8,83
Abdominal Wall defects	16	7,44
Skeletal system abnormalities	7	3,25
Heart abnormalities	12	5,58
Mouth disorder	4	1,86
Others	54	25,11
The way of treatment	%	
Surgery after labour	24,4	
Referred to specialist after discharge	38,4	
Died in 24 hour after labour	10,3	
Termination	26,9	

Methods: 215 fetal abnormalities were analyzed. The mean age in our group was 29 (17-41). The most frequent are central nervous system abnormalities.

256

Fibrinolytic defect associated with pregnancy – a case report

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Background: Studies in adults have demonstrated that the genetic mutations C677T methylenetetrahydrofolate reductase (MTHFR), prothrombin 20210A, and the 4G polymorphism of the plasminogen activator inhibitor-1 (PAI-1) gene are associated with elevated plasma levels of homocysteine, prothrombin and PAI-1, respectively, with an increased risk of thrombosis and recurrent fetal loss.

Case Report: The authors describe the case of a 30 year old pregnant women with previous miscarriage history diagnosed with a severe fibrinolytic defect, presenting PAI and XII factor defects associated with MTHFR mutation. Pregnancy underwent without remarks. Fibrinolytic therapy was included. She delivered a healthy baby at 36 weeks gestation.

Discussion: Inherited thrombophilia (IT) is found more frequently in women with pregnancy complications. The

diagnosis of IT is important since antithrombotic therapy has to be considered to protect the mother and the fetus. In pregnant women a successful outcome depends on proper placental formation. Such polymorphisms, interfere with fibrin cross-linking and regulation of fibrinolysis and may therefore contribute to early pregnancy loss.

258

Gestational Diabetes – 5 years experience in our Institution

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Gestational Diabetes (GD) is defined by carbohydrates intolerance that is recognized or identified for the first time during pregnancy. GD occurs in about 3 to 6% of the gestations.

Objective: The authors present a review of the epidemiologic characteristics and outcome of pregnancies complicated with GD in the population of pregnant women of our institution.

Material/methods: Retrospective study of all pregnancies complicated with GD, in our institution from January 1st of 2002 to December 31st of 2006. Variables reviewed: maternal age; parity; antecedents of GD and macrosomic newborns; body mass index (BMI); total weight gain during pregnancy; gestational age of diagnosis; need of insulin therapy; gestational age for beginning of insulin therapy; gestational age of delivery; cesarean rate; birthweight; stillbirth rate and reclassification test.

Results: Of the 497 pregnancies assessed, the mean maternal age was 32,4 years (range: 17 to 50 years). 42,1% of the cases were nulliparas. 9,3% had previous GD and 8,1% had previous macrosomic newborns. The mean BMI was 27,6, and 63,1% had pre-pregnancy overweight (BMI²⁵) and 28,1% had pre-pregnancy obesity (BMI³⁰). Mean total weight gain during pregnancy was 10,1Kg (range: -9 to 25Kg). Mean gestational age (GA) of diagnosis was 27,3 weeks and insulin therapy was needed in 33,7% of the cases with a mean gestational age for beginning of insulin therapy at 28,8 weeks. Mean GA of delivery was 38,6 weeks, with a cesarean rate of 47,8%. Mean birthweight was 3287g (range: 740 to 4780g). 2 cases of stillbirth were reported. Reclassification test was made in 46,4% of the cases, and 10,3% of the results were abnormal.

Discussion: GD is a common complication of pregnancy. Early diagnosis and close follow-up with strict blood glucose control is important to optimize pregnancy outcome. Further studies are needed to compare results with a control population in our institution.

259

Obstetrical risk factors for asphyxia

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Introduction: Modern medical practice has changed during the past decades because of improved technology. New born infants are still suffering from birth asphyxia and in severe cases leading to cerebral palsy (C.P). This study was to assess the incidence obstetric risk factors and sequel of severe asphyxia and cp in neonatal at zinabie university hospital (ZUH).

Method: This study is a descriptive analytic research was performed on all of the infants born at (ZUH) from 2002-2006 with birth asphyxia, defined as five-minute APGAR score <5 that admitted in NICU, were included in the study clinical information such as type of birth, birth weight the presence of meconium, prolong active phase, birth asphyxia and CP in the neonatal period were collected.

Results: The incidence of birth asphyxia was 68% in live term & CP was 16% amniotic Fluid was meconium in 48% of cases. prolong active phase were associated with asphyxia in 26% of full term neonates. There is a significant relationship between gestational age & C.P.

Conclusion: obstetrical factors producing asphyxia were assumed to be the principle cause of CP and birth asphyxia plays a relatively major role improving fetal status monitoring could help reduce neonatal asphyxia .

260

Acute deep vein thrombosis with failure to anticoagulation during pregnancy

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A 27-year-old multiparous presented at 15 weeks' gestation with severe acute deep vein thrombosis at the right limb. She had a medical history of multiple thrombophilia and two episodes of acute deep vein thrombosis. She was started on low molecular weight heparine (Fraxiparine® 0,6cc tid). At 18 weeks a decision was made to start warfine and aspirin after Doppler studies showed no improvement.

Following two weeks a partial occlusion was still evident in Doppler studies.

At 30 weeks gestation, for prevention of pulmonary embolism during partum and postpartum period, a permanent vena cava filter was introduced percutaneously. There were no complications and a vaginal delivery was accomplished at 37 weeks gestation.

Venal placement of inferior vena cava filters as prophylaxis for pulmonary embolism during partum and postpartum period is an increasingly attractive option.

261

Prenatal diagnosis of alobar holoprosencephaly with cyclopia in a complete trisomy 13

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First reported in 1657 by *Bartholin*, trisomy 13 has an incidence of about 1 in 5,000 births and ninety-one percent of patients die within the first year of life; survivors have severe mental retardation. The incidence of cyclopia is approximately 1 in 100,000 births, including stillbirths. Holoprosencephaly affects 1 in every 20,000 neonates at birth. The authors describe a case report of a 16-year-old primigravida, who was referred to our Hospital at 20 weeks gestation for invasive testing due to multiple defects detected during the second trimester routine scan. This ultrasound examination was performed immediately after her first medical appointment and there hadn't been any previous antenatal surveillance. We performed an amniocentesis which revealed complete trisomy 13, with a cariotype 47,XX,+13. Our ultrasound examination, performed at 21 weeks gestation, described proboscis, central nervous system malformation, pulmonary stenosis and ventricular septal defect, left diaphragmatic hernia, polydactily and single umbilical artery. The patient opted for termination of pregnancy at 21 weeks gestation, according to the portuguese law. The autopsy confirmed our findings, as well as alobar holoprosencephaly, cyclopia, arrinencephaly, left pulmonary hypoplasia and gastroschisis. The placenta showed low weight for gestational age and inadequate placentation, both consistent with fetal aneuploidy. During the third week of fetal development, the prechordal mesoderm migrates forward into the area anterior to the notochord and is necessary for the development of the midface and morphogenesis of the forebrain. The holoprosencephaly sequence with cyclopia represents a severe deficit in this early midline facial development, with the olfactory placodes consolidating into a single tube-like proboscis above the eye. The prognosis for central nervous system function in individuals with this infrequent anomaly of the forebrain system is very poor, and therefore the specific antenatal diagnosis can be of paramount importance.

263

Obstetrical outcome according to the cervical cerclage indication

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Objectives: To evaluate the obstetrical outcome of pregnancies in which a cervical cerclage was performed according to its indication.

Material e methods: Retrospective study (Jan 2005 – Aug 2007) of all pregnancies in which a cerclage was performed. All patients had neither clinical evidence of amniotic infection nor uterine contraction in the moment of the cerclage and tocolysis with indometacine was performed for 24 hours. MacDonal or Shirodkar procedure was performed according to the surgeon decision and, if no acute complication arise, the women were discharged after 24-48h with indication of avoiding unnecessary physical efforts. Prophylatic cerclage was considered when it was performed just for past obstetrical history suggesting cervical incompetence; urgent cerclage when there was ultrasonographic evidence of cervical shortening without cervical dilatation; emergent cerclage when there was evidence of cervical dilatation. The groups were compared according to obstetrical complications (premature rupture of membranes, pre-term labour, vaginal hemorrhage, amniotitis) occurred after the cerclage and to the week in which delivery occurred.

Results: Thirty five pregnancies were reviewed (4 multiple pregnancies). Cerclage was performed for prophylatic reasons in 9 women (22% of obstetrical complications, no delivery before 32 wks), for cervical shortening (mean 13,5mm) in 21 women (33% of obstetrical complications, 23% deliveries before 32 wks) and for emergent reason on 5 (60% of obstetrical complications, 60% deliveries before 32 wks). All women had no complications after the surgical procedure.

Conclusion: Cervical cerclage is not associated with immediate maternal or obstetrical complications but the outcomes is far worse when the cerclage is performed with the cervix already dilation.

266

Fetal alloimmune thrombocytopenia due to anti-HPA-5b antibodies - a case report

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Introduction: Fetal and neonatal alloimmune thrombocytopenia (FNAIT) is a rare condition, caused by placental transfer of maternal IgG antibodies against major fetal platelet antigens, resulting in fetal thrombocytopenia and potential hemorrhagic complications, including intracranial

hemorrhage (ICH) in 10-20% of severely affected fetuses. Human platelet antigen (HPA) 5b is associated with this disease in 3,5% cases, the majority being due to HPA-1a (77-85%). Antenatal management of FNAIT is essential to prevent severe complications, but remains controversial.

Case report: 37-year-old healthy woman, gravida 2/para 1, with a diagnosed fetal alloimmune thrombocytopenia due to HPA-5b in her first pregnancy. No history of ICH. First admitted to our hospital at 10 weeks gestation. Maternal administration of IVIG (1 g/kg) weekly started at 19 weeks of gestational age. Cordocentesis was avoided. No relevant abnormalities were found in monthly ultrasounds, except fetal's left renal dilation, detected since 23 weeks gestational age. The 2nd trimester routine serological tests to CMV and Toxoplasmosis showed presence of IgG for both, not detected in the 1st trimester. Neither IgM nor CMV-DNA or Toxoplasma antigen was detected in the mother's blood. Cesarean-section was performed at 37th week gestation, delivering a male newborn, 3040g, Apgar score 9/10 at 1st and 5th minute, admitted to the Neonatal Intensive Care Unit. Platelets count at birth was $163 \times 10^9/l$. No hemorrhagic complications were detected. Discharge at 7th day. Presently 6 months old and with adequate psychomotor development.

Discussion: FNAIT is one of the most frequent causes of both severe thrombocytopenia and ICH in fetuses and term neonates. Although severe FNAIT is more frequently associated with anti-HPA-1a antibody, anti-HPA-5b may also be observed, and there are cases registered of ICH associated with HPA-5b antibody. The management of FNAIT is still not standardized, but a less invasive antenatal approach, avoiding fetal blood sampling, using maternal IVIG therapy is becoming more accepted. Passive transmission of various antibodies from IVIG has been reported.

268

Hypothyroidism and pregnancy - analysis of 20 clinical cases

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Introduction: Hypothyroidism is a relatively rare clinical entity in childbearing women. An increased incidence of maternofetal complications, such as spontaneous abortion and low birth weight, have been described regarding this condition in pregnancy.

Objectives: The aim of this study was to relate maternal hypothyroidism with pregnancy outcome.

Materials and Methods: We have analysed a group of 20 patients with primary hypothyroidism, diagnosed prior to pregnancy. Incidence of complications was determined and related to thyroidal function. Furthermore, we have verified retrospectively dosage adjustments which were performed across each trimester.

Results: Ten patients (50%) showed auto-immune thyroiditis, six (30%) had congenital hypothyroiditis, and in the remaining four (20%) it was not possible to determine the etiology. In the 1st trimester nine (45%) patients were euthyroid, five (10%) were overtly hypothyroid and 3 (15%) had subclinical hypothyroidism. There was a single patient (5%) with subclinical hyperthyroidism.

Five patients quitted therapy upon being informed that they were pregnant. Average dosage of levothyroxin (LT4) in the first trimester was 0.150ig, 0.155ig in the 2nd trimester and 0.162ig in the 3rd trimester. All the differences among these values were significant (t-test, <0.05). The ratio LT4/weight was 0.0022 in the 1st and 3rd trimester and 0.0023 in the 2nd. The small differences between these values were obviously non significant. The incidence of complications was extremely high (40%). We have indeed observed 2 cases of spontaneous abortion, 1 still-birth, 2 cases of low weight, as well as two cases of prematurity and a single case of post-partum bleeding. Given the reduced number of cases, one can only relate the levels of TSH in all trimesters as a whole, with complication incidence. This analysis yielded a significant effect (ANOVA p=0.039) which was mainly due to the cases of hypothyroidism (ANOVA post hoc Fischer p=0.046).

Conclusions: Young hypothyroid women should be advised regarding the need to perform biochemical evaluation previous to pregnancy in order to optimize therapy. In this way one can minimize the risk of developing maternal hypothyroidism as well as subsequent maternal and fetal complications.

269

Isthmic pregnancy: does early diagnosis offer conservative treatment?

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Background: Isthmic pregnancy is a rare condition accounting only for 0.2% of ectopic pregnancies. With increasing incidence of caesarean section worldwide, more cases have been reported in the last decade. Various treatment options are available and management plan should be tailored to each case.

Case report: A 35-year-old woman with a previous caesarean section and an amenorrhea of 10 weeks was submitted to an unsuccessful uterine curettage for a non-viable pregnancy. A diagnosis of isthmic pregnancy was made thereafter. Medical treatment with a single course of systemic methotrexate was realized, followed by laparotomy and hysterotomy with resection of the gestational mass.

Conclusion: Early diagnosis of isthmic pregnancy can offer conservative treatment options thus preserving the uterus and future fertility, avoiding uterine rupture and haemorrhage.

275

Anencephaly – MBB casuistry

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Introduction - Anencephaly is a malformation of the nervous system, caused by failure of the anterior neuropore to close. The skull is only partially formed but eyes are usually normal. Folic acid deficiency is the most important risk factor identified to date.

Methods - The authors present the casuistry of DPN-MBB, from 1999 to 2005, with a total of 26 cases of anencephaly. We try to identify others risk factors by evaluating the prenatal care, residence and profession of the parents, the use of alcohol and tobacco by the pregnant; folic acid supplementation.

Results - In a total of 26 cases, the authors found that the mean age of the mother was 27, 1 year- old and 30,3 for the father.

There wasn't any particularly disease found in both parents. About 61% of all cases had folic acid supplementation. Relatively to the diagnosis of the anencephaly the mean of gestacional weeks was 14,7 w and about 53,8% was the first pregnancy.

279

Hypokalemic periodic paralysis and pregnancy – a case report

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Hypokalemic periodic paralysis (HPP) is an inherited autosomal dominant congenital disorder associated with alteration in serum potassium levels that result from defective ion channels, causing occasional and intermittent episodes of muscle weakness and, sometimes, severe paralysis. Precipitating factors include strenuous exercise, high carbonate meals, stress and drugs, especially those that affect the CNS or act as muscle relaxants. It occurs in approximately 1 out of 100,000 people.

A 29-yr-old nulliparous woman diagnosed with HPP presented for routine obstetric care. She reported a familial history of paralytic episodes, namely her father and other relatives on her father's side. The onset of symptoms occurred by adolescence, with attacks typically lasting for a few hours and affecting mainly lower limbs. Before pregnancy she was under treatment with acetazolamide 250mg daily and potassium chloride during crisis. The pregnancy management plan included avoidance of precipitating factors, such as large carbohydrate-rich meals, emotional stress and exercise, and intake of potassium chloride at the first sign of an attack. Other than a

threatened miscarriage at eleven weeks, there were no other complications during gestation. The patient reported several episodes of paralysis during pregnancy, controlled with potassium chloride. There were no anomalies in both blood tests and fetal ultrasounds. She delivered a healthy newborn by cesarian section under epidural anesthesia, weighing 3075g with an Apgar score of 9/10/10. No crisis of infant paralysis has been reported so far. During labor and postpartum the management included continuous potassium chloride supplementation, avoidance of IV glucose and insertion of an arterial catheter for frequent assessment of maternal potassium concentration. She restarted treatment with acetazolamide soon after delivery. It seems that having periodic paralysis has little impact on pregnancy, labor and delivery. A woman's general strength and health and how frequently she experiences episodes are a better predictor of her course throughout pregnancy and delivery. The medical team must be prepared to appropriately handle an episode of weakness or paralysis during labor and delivery, and also to support a newborn that experiences an episode of flaccid paralysis within moments or hours of birth.

280

Spontaneous cessation of umbilical blood flow in an acardiac twin – a case report

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Acardiac twinning affects 1 in 100 monozygotic twins and 1 in 35000 pregnancies overall and it is due to twin reverse arterial perfusion syndrome (TRAP-sequence). It is lethal for the affected fetus and in the largest series – on the perinatal course of 49 acardiac twin pregnancies without intrauterine surgery – mortality was 51% of normal co-twins and delivery occurred in only 24% after 36 weeks' gestation. The donor (pump twin) provides circulation for itself and the recipient, with a high risk for heart failure and intrauterine demise or preterm delivery.

We describe a case of an acardiac fetus diagnosed at the 11th week ultrasound. At 16 weeks the acardiac fetus was growing and measured 58x29mm, with blood flow in the umbilical cord. The patient was referred to the Centre Hospitalier Intercommunal – Poissy Saint-Germain-en-Laye (France) for the fetoscopic laser coagulation of the umbilical cord in the acardiac fetus. No coagulation was performed because there was a spontaneous cessation of the umbilical artery's blood flow.

The pregnancy is now at the 36th week, the surviving twin is growing well and there are no signs of cerebral injury.

282

Invasive hydatidiform mole – a case report

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Gestational trophoblastic disease is caused by a growth disturbance of the human trophoblast.

Hydatidiform mole is a rare condition with an incidence of approximately 1:2.000 pregnancies, and the invasive type as an incidence of approximately 1:15.000.

The histological characteristics of Invasive uterine mole are similar to the complete mole, but as a more aggressive behaviour, directly involving the myometrium and its vessels, which can result in pulmonary embolization.

The authors report a case of a 31-year-old nulliparous woman, with invasive mole and pulmonary metastasis. She presented at the emergency room, with 14 weeks amenorrhea and mild methrorragia with one month of evolution. Pelvic ultrasound demonstrated molar pregnancy and a β -hCG measurement of 225.000mUI/mL. Uterine aspiration was performed and the pathologic exam confirmed the diagnosis of complete hydatidiform mole. At the time of discharge, ultrasound evaluation demonstrated empty uterine cavity with small hypoechoic areas infiltrating the anterior wall of the myometrium. β -hCG levels decreased for two weeks until the value of 160.000mUI/mL, and then the value increased again. Control pelvic ultrasound was repeated and the recurrence of the molar pregnancy was confirmed, with invasion of the anterior wall of the uterus. In the meanwhile the patient developed haemoptysis.

Cerebral MRI was negative and the abdominopelvic MRI showed the presence of multiple nodular lesions in the uterine cavity with invasion of the anterior myometrium extending to the serosa, without any other abdominopelvic abnormalities. Thoracic CAT scan showed a single pericentimetric nodule in the inferior left pulmonary lobule.

The patient is now under treatment with combined chemotherapy with good response and after five cycles the β -hCG measurement was 20.9mUI/mL. The prognosis is generally good, with maintenance of fertility, and the risk of recurrence in a future pregnancy is about 1-2%. The follow up in these cases is very important and should include serial determination of serum B-HCG levels and adequate contraception to avoid pregnancy for a period of at least one year.

284

Rubella – immunization and post partum vaccination

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The rubella virus belongs to the Togaviridae family, and man is the only known reservoir. This agent has high teratogenic potential, and the syndrome of congenital rubella is a serious entity which can present with severe sequels.

Since the introduction of the vaccine in the national plan of vaccination in 1987, the cases of rubella have decreased dramatically. Recent national data demonstrate that about 95,5% of the population is immunized for rubella.

The authors evaluated the immunity of all puerperae admitted in our institution for the period between 24 January and 25 February of 2005. Age, obstetric history and the mechanism of acquisition of Immunity were also evaluated. The sample included 265 puerperae, 13 of which (5%) were not immune. In the group of the not immune puerperae, 3 had previous gestations, which mean that there was a miss opportunity of diagnosis and immunization in the previous puerperium that exposed the following pregnancy to an unnecessary theoretical risk of congenital infection.

The mechanism of acquisition of Immunity was in 90% of the cases by vaccination, in 5% by previous infection, undetermined mechanism in 4% and in 1% by vaccination during the pre-conception evaluation.

The strategy to prevent the rubella infection during pregnancy should guarantee the maternal immunity in the pre-conception. The recommendations are unanimous towards the vaccination of all not immune puerperae, and in the following stream of actuation we applied in our institution a protocol of rubella vaccination to all not immune puerperae after childbirth.

285

Evaluation of knowledge on prenatal care among pregnant women referred to health clinics in Shiraz, Iran

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Introduction : The preventive medicine is the most rapid way for health establishment in the society & can be carried out through upgrading the knowledge level of the citizens including mothers. Therefore , the aim of this study was to investigate the knowledge of pregnant women referred to the health clinics of Shiraz regarding the prenatal care.

Methods: This study is a descriptive research was performed on 600 pregnant women selected through random & cluster sampling with regard to population density. A standard questionnaire was applied to all pregnant women. Trained interviewers visited these women, covering knowledge concerning prenatal care & pregnancy risk factors.

Results : They has an average age of 25.7 ± 3.8 years, number of pregnancies as 2.5 ± 1.8. 11.1% knew that tetanus vaccination was necessary during pregnancy. Only two thirds felt that vaginal bleeding & abdominal pain were serious signs during gestation, other signs & symptoms

were reported by a maximum of one-third of the women. Misinformation was clearly present about time of the first prenatal visit, pica management, coitus & dental care during pregnancy. 50.5% of them implied that caesarian section is the best delivery method.

Conclusion: Although prenatal care at our health clinics is free, adequacy was thought to be low these findings must be taken into consideration in educative programs promoting prenatal care.

286

Ultrasound diagnosis of conjoined twins at 9 weeks gestation - a case report

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Introduction: Conjoined twins are a rare and complex complication of monozygotic twinning, caused by incomplete division of the embryonic disc more than 13 days after fertilisation. The perinatal mortality is high, with half of the fetuses dying in utero and another 44% dying during the neonatal period. The technical evolution in two and three dimensional (2 and 3-D) ultrasound has allowed for increasingly earlier prenatal detection in the first trimester.

Methods: We report the case of a 39 year old primigravida who presented at our department at 9 weeks of amenorrhea. A transvaginal 2-D ultrasound was performed to date the pregnancy, which detected the presence of conjoined thoraco-omphalopagus twins, without cardiac activity. They shared a common liver. The 3-D ultrasound confirmed the diagnosis. Vaginal prostaglandins were administered and led to the expulsion of the twins. The ultrasound diagnosis was confirmed.

Discussion: A correct ultrasound examination can accurately detect the presence of conjoined twins as early as 9 weeks of pregnancy. This allows for timely management of these situations.

288

Macroscopic and microscopic examination of placenta in cases of fetal growth restriction

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Objectives One of the causes of intrauterine fetal growth restriction (FGR) can be pathology of the placenta. The main objective of the study is evaluation and comparison of macroscopic and microscopic structure of the placenta

between growths restricted pregnancies and pregnancies with normal fetal development.

Methods We started our study in May 2007. Macroscopic and histological examination of placentas in cases of antenatally confirmed diagnosis of fetal growth restriction (FGR group) and cases of normal developed fetuses (control group) were performed. All included cases were singleton pregnancies. Placentas were obtained after delivery, for microscopic examination conventional histological methods were used.

Results: The mean birth weight was 1836g (2740-944) in FGR group vs. 3557 g (4190-2750) in control group. Mean weight of placenta in FGR group was 447g (740-300) versus 672g (980-560) in the controls. The fetal-placental weight ratio tends to be lower in FGR group 4.1 (range 3.7-3.15) vs. 5.29 (4.27-4.91) in control group. There was no difference in the medium length of umbilical cord, in FGR group entanglement of cord around fetal parts and its attachment to membranes were found more frequently. Stromal fibrosis, cytotrophoblastic hyperplasia, the incidence of infarction, basement membrane thickening, intervillous hemorrhages were found more frequently in cases of FGR vs. control group. There was no difference in intervillous fibrin deposition between two groups.

Conclusions Placental factors play important role in aetiology of foetal growth restriction. All the major histological findings pointed towards reduced blood flow. Placentas in FGR cases should be elaborately examined. The next step of our study will be analyzes of fetal blood flow in relation to placental morphology

289

Pregnancy and delivery in Polish adolescents

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With regard for the process of both increasing age of sexual initiation in Poland among young people and becoming pregnant and first birth, the problem of adolescent pregnancy and motherhood slowly appears to become a serious social issue. The aim of the study was a retrospective analysis of 345 pregnant women aged 15-25 years. The study population was arranged into two groups: 15-18 years as a research group (mean age 17.45) and 20-25 years (mean age) as a control group. In our study we used the data from the obstetrical registry of the DFMMG in RIPMMH in Lodz (Poland) between 2000 to 2006. In both groups, obstetric history, gestational age, mode of delivery, fetal weight, Apgar score and ultrasound examination were analyzed. Among adolescents 62.7% (n=69) delivered naturally, 30.9% (n=34) of them by caesarean section; in the control group 67.6% (n=159) and 32.4% (n=71), respectively. 24.5% (n=27) of the examined women delivered before term (<37 week of

gestation, WG) and 20% (n=50) of the controls. Most of the women (71.8%; n=79) gave birth to their children between 37.-40. WG and only 3.6% (n=4) after term. Fetal malformations were found prenatally and confirmed later in 7.2% (n=8) of pregnancies (5 congenital heart defects, 2 hydrocephaly, 1 hydronephrosis). Preterm rupture of membranes occurred in 15.45% (n=17) women. Birth weight of 24 out of 110 neonates (21.8%) was below 2500g (range 620g – 4100g). In conclusion, pregnancy in a very young woman is related to the high risk of several complications both for the her (f.ex. anemia) and for the child (f.ex. low birth weight, fetal malformations).

290

Hydrops fetalis: an unusual prenatal presentation of congenital lymphedema

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Primary congenital lymphedema is an autosomal dominant disease with incomplete penetrance (80-84%) and variable expressivity. It is estimated to occur with an incidence of approximately 1:6000 newborn, and with a male to female ratio of 1:2,3. This condition is characterize by chronic tissue swelling, most commonly manifest in lower limb, caused by deficient lymphatic drainage due to intrinsic abnormalities of lymphatic microvessels. The exact location of the genetic alteration has not been described, but recent investigation demonstrated that the gene is located to the region 5q34-q35, and might be associated with mutations in the FLT4 that encode the vascular endothelial growth factor receptor-3 (VEGFR-3).

We report a rare case of primary congenital lymphedema (PCL) presenting as hydrops fetalis at 20 weeks gestation. The differential diagnoses of nonimmune hydrops fetalis are discussed.

291

Clinical randomized trial: antibiotic prophylaxis with Prulifloxacin for suction curettage abortion

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Objective: To asses sprophylactic use of prulifloxacin in prevention of infectival morbidity in women who were to undergo first trimester induced abortion. First goal of the

study was prevalence of infection in the four weeks following abortion as assessed by symptoms who require general practitioner prescription or hospitalization. In a second time was assessed compliance and safety of prulifloxacin. **Design:** randomized controlled trial.

Setting: sexualological research group; familiar planning service – Microbiological and Gynecological science Department, University of Catania. From September 2005 to March 2007.

Materials and methods: four hundred and sixty six women, age included between fourteen and forty four (average age 26.7). Women were randomized in three different groups. A group (153 subject) treated with 600mg of prulifloxacin a day for five days after abortion; B group (155 subject) treated with 600mg of prulifloxacin a day for three days after abortion; C group treated with 600mg of prulifloxacin a day for one day before and two days after abortion.

Results: two hundred and sixteen were nulliparous (47%), 96 were pluriparous (38.5%). Among nulliparous, 32 women (15%) were under eighteen. Among pluriparous, 96 (38.5%) have had previous caesarean section and 154 (61.5%) spontaneous delivery; moreover, 56 women have had previous surgical interruption of first-trimester pregnancy. Surgical abortion was practiced in a range of gestational age between six and eleven weeks of amenorrhea (average weeks 8.2). Symptoms about pelvic inflammatory disease (pain, fever, leucoxanthorrhoea) were about 10.5% in A group, 7.1% in B group and 2.5% in C group. C protocol is statistically more effective than A protocol ($P < 0.05$), but not to B group, even if prevalence of adverse events were less.

Conclusion: antibiotic prophylaxis before surgical abortion and shortening supplies after abortion is more effective than post abortion treatment alone.

293

Ectopic pregnancy rupture after induced abortion - a case report

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Introduction: Abortion at women request recently became legal in Portugal if performed until 10 weeks gestation. Before that public hospitals received some serious, albeit rare, complications of illegal abortions. Authors present a case of one of these complications.

Case report: A 35 years old, Gravida 4 Para 2, Abortion 1, presented at the emergency room with 14 weeks and 3 days of amenorrhea, severe abdominal pain, diarrhoea and vomiting. She had made an illegal abortion 8 weeks before. Physical examination revealed a tender abdomen with rebound, mostly in the inferior quadrants. Vaginal examination was very painful and revealed a normal size uterus and an irregular tender mass occupying the posterior cul de sac. She was sub-febrile and had normal arterial pressure. Ultrasound and magnetic resonance exams showed

a 14 weeks gestational age dead fetus in the abdominal cavity, an apparently posterior placenta, free intraperitoneal fluid and blood coats in the posterior cul de sac. There was also a suspicion of right ovary artery rupture. These facts were interpreted as the result of an iatrogenic uterine perforation at the time of the abortive manoeuvres. At laparotomy a large amount of blood and blood clots was found with continued bleeding from the uterine wall. An inflammatory and necrotic mass that contained the placenta and involved the right adnexa and uterine wall, sigmoid and ascendant colon was identified. Fetus was lying free in the right pelvis. An hysterectomy and right salpingo-oophorectomy was performed. Pathologic exam revealed a 15 weeks ruptured ectopic pregnancy of the right tube and uterine wall integrity.

Discussion: Clinical suspicion of uterine wall iatrogenic perforation with pregnancy maintenance was not confirmed by the pathologic exam. Induced abortion should be made in such a way that ensures definitive pregnancy termination and ectopic pregnancy must always be previously excluded. A complete medical history and physical exam are required and ultrasound must be used liberally.

299

Dubin-Johnson Syndrome and pregnancy – a case report

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Introduction: Dubin-Johnson syndrome is a benign and rare autosomal recessive inherited disorder of bilirubin metabolism, characterized by the elevation of conjugated bilirubin. It's characterized by recurring jaundice but no pruritus, and it can present at any age, but rarely presents in infancy, usually becoming apparent in late teens or early 20's. There is reduced penetrance in females although it may be precipitated by pregnancy or oral contraceptives. Clinically there is often nothing to find except for jaundice, and differential diagnosis with other diseases that cause hyperbilirubinaemia must be made. There's no need for treatment once diagnosis is made, and no further investigation necessary but differential diagnosis with other pathologies is necessary, specially in pregnancy. There have been related complications in pregnancy but no confirmation was possible with further studies.

Case report: A 24 year old primigesta with a 25 week pregnancy was sent to the hospital by her assistant physician because jaundice, pruritus and mild conjugated hyperbilirubinemia, being diagnosed a pruritus gravidarum and therapy with colestiramine 4 i.d. was prescribed. At 27 weeks, she returned to the hospital with fever and abdominal pain, where, after detailed study, she was diagnosed a familial conjugated hyperbilirubinemia syndrome (Dubin-johnson) and febrile syndrome of unknown cause, which resolved after empiric antibio-

therapy. The delivery occurred spontaneously at 38 weeks, with a normal delivery of a female newborn with 2980g and Apgar 10, without sequelae or pathology detected. The puerperium had no complications, and mother and baby were discharged from the hospital.

Discussion: Pregnancy is a physiological status that can trigger certain pathologies, such as the familial conjugated hiperbilirrubinemia, and confusion with hepatobiliary diseases related to pregnancy can occur. A detailed study must be conducted, and in this case related to a benign condition that needs no treatment, further investigation is needed to assess pregnancy outcomes and fetal pathology prevented

300

Placenta Percreta – a case report

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Introduction: Placenta percreta is a very rare but serious complication of pregnancy. Penetration of placental tissue beyond the endometrial lining of the uterus falls into three forms of abnormal placentation: placenta accreta, increta and percreta. The last, representing 5-7% of all abnormal placentations, is the most severe form because infiltration of neighbouring organs can occur. The incidence varies between 1:540 and 1:93000 with an average of 1:7000 pregnancies. Predisposing factors include a history of caesarean section, placenta previa, manual placenta extraction, multiparity, dilatation and curettage and advanced maternal age. Both sonography and MRI have been used to diagnosed or characterize abnormal placental adhesion. Placenta percreta can be life-threatening if the diagnose is not made sufficiently early. That's why timely diagnosis is of great importance for both mother and infant.

Case report: A 44 years-old woman, G3P0 with previous history of two curettages, spontaneously delivered a 28 week infant via vaginal delivery after premature rupture of membranes at 24 weeks. Although the patient experienced no serious hemorrhage during or after delivery, she didn't deliver the placenta, and a diagnosis of placenta accreta was considered. A manual removal of the placenta with subsequent curettage was tried, without success. One dose of 50 mg of intramuscular methotrexate was considered, but due to a progressive abdominal pain, a hysterectomy was performed. The pathology showed chorionic villi invading the myometrium all the way through the serosa, consistent with the diagnosis of placenta percreta.

Conclusions: Hysterectomy is the treatment of choice for placenta percreta, but a conservative therapy with methotrexate after delivery, in some cases avoiding a hysterectomy, can be performed. The last is especially desirable in case of involvement of an adjacent organ such as the urinary bladder and the bowel. Maternal and foetal

death occurs in approximately 7-10% and 9% respectively of reported cases of placental adhesion.

301

Perinatal outcome in very low birth weight infants according to the mode of delivery

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Introduction: The purpose was to evaluate the perinatal outcome – mortality rate in very low birth weight newborns according to the mode of delivery.

Methods: We reviewed the medical records of 8212 deliveries from the period of two years at the University Clinic for obstetrics and gynecology, and analyzed 896 preterm births from which 126 were very low birth weight (VLBW) infants (under 1500 g). These were divided in two groups – vaginally delivered vs. caesarean section and compared the mortality rate. The infants were admitted to the neonatal intensive care unit (NICU).

Results: 14,06% (126/896) of the preterm deliveries were very low birth weight infants. The cesarean section rate was 65,08%. The overall mortality rate was 30,16% (38/126). The mortality rate for vaginally delivered infants was 50% (22/44) vs. 19,51% (16/82) for caesarean section. The mean birth weight in the group of vaginally delivered lethal outcomes was 1066,36g vs. 1128,75g in the group of caesarean deliveries.

Discussion: Caesarean delivery was associated with significantly higher survival rate. There were no significant differences between the mean birth weight in the two groups. From the analyzed group, a great number of mothers had low socioeconomic status, did not control the pregnancy and had delivery immediately after the hospitalization. Prevention of the births of very premature infants should be more emphasize to decrease neonatal mortality rates

303

Reliability of AmniSure® rapid immunoassay to detect doubtful rupture of membranes

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Introduction: The diagnosis of rupture of membranes (ROM) is still a diagnostic dilemma in obstetrical practice.

The AmniSure® immunoassay (AT) is highly sensitive in detecting the Placental Alpha-Microglobulin-1 in cervico-vaginal discharge and consequently ROM. Previous studies suggested a higher sensitivity and specificity for this assay compared to conventional clinical assessment (Cousins et al., 2005; Lee et al., 2007). The aim of our prospective study was to evaluate the AT as a bedside test for ROM in an European collective.

Methods: This prospective observational study was performed in 185 patients between 21.-42. weeks of gestation, with doubtful signs or symptoms of ROM in 2 centers from June 2005 to May 2007. Initial evaluation included the medical history as well as a conventional clinical assessment (leaking fluid from the cervix, nitrazine test and measurement of the amniotic fluid index by ultrasound) and AT. ROM was diagnosed definitively on review of the medical records after delivery and then compared with our results.

Results: Mean gestational age was 36 ± 5.6 weeks. After delivery, ROM was confirmed in 52 of 185 cases (28%). ROM was diagnosed in 28% ($n=52/185$) using the AT and in 23% ($n=42/185$) using clinical assessment (overall sensitivity 94.2% versus 75%). There were 3 false positive and 3 false negative cases tested by AT. Clinical assessment in parallel led to 3 false positive and 13 false negative results (specificity 97.7% for both). One case was false negative concordantly in both tests.

Discussion: AT was more sensitive at equal specificity compared to clinical assessment in patients with a suspected ROM. These data extend and confirm the high sensitivity and specificity of AT reported previously. Noteworthy both tests seem to support each other in the diagnosis of ROM. Furthermore, the high sensitivity and specificity of AT will help to improve neonatal and maternal outcome.

304

Pregnancy outcomes in the extreme teenage years (12-15 years) - are we doing enough?

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Background: United Kingdom has the highest rate of teenage pregnancy in Europe. Studies suggest that teenage pregnancies have poorer obstetric and fetal outcomes compared to mothers who are older, although teenage mothers themselves comprise a diverse heterogeneous group.

Objective: The aim of the study was to determine demographics and to compare pregnancy outcomes in extreme teenage mothers under 15 years of age as opposed to those between 16-19 years.

Methods: This is a retrospective case-control study. The study population consisted of teenage mothers under the age of 15 years, while mothers between the ages of 16-19

years matched for ethnicity and parity served as the control group.

Results: Data from 33 teenage mothers were collected in each group. The mean age in the younger teenage group was significantly lower than the control group (14.7 ± 0.6 vs 17.7 ± 0.8 years, $p < 0.05$). Teenage mothers under 15 years were twice as likely to have experienced childhood sexual or physical abuse compared to those over 16 years (62.5% vs 31.5% , $p < 0.05$) and they were more likely to come from single parent families (65.6% vs 47.3% , $p < 0.05$). Teenage mothers under 15 years booked significantly later (20.1 ± 7.8 vs 13.1 ± 5.0 weeks, $p < 0.05$) and also attended less antenatal visits compared to older teenagers ($p < 0.05$). As well as having lower booking haemoglobin levels (11.5 ± 1.1 g/dl vs 12.3 ± 0.8 g/dl, $p < 0.05$), teenage mothers under 15 years were three times more likely to undergo emergency caesarean section (18.1% CS vs 6.0% CS, $p < 0.05$) and had a higher rate of third and second degree perineal trauma (42.3% vs 21.0% , $p < 0.05$) compared to matched controls over 16 years. Both groups delivered at similar gestations (38.6 ± 4.0 vs 39.1 ± 2.2 weeks) and had comparable birthweights (3160.3 ± 513.9 vs 3116.9 ± 736.3 g, both $p > 0.05$) and Apgar scores.

Discussion: Pregnancy in the extreme teen years appears to be associated with socioeconomic deprivation and have more adverse pregnancy outcomes compared to those over the age of 16 years. Efforts should be directed towards the education so that they will access health services early in pregnancy. Determine long-term outcomes of very young teenage pregnancies.

310

Fetal death: institutional case review 2003 - 2006

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Introduction: Stillbirth remains an important contributor to perinatal mortality, occurring ten times more often than sudden infant death. Although there are several known risk factors, its causes remain incompletely understood.

Objectives: To assess fetal, maternal and pregnancy-related determinants of fetal death, regarding strategies for its prevention.

Methods: We performed a retrospective study of stillbirth cases, occurred at our Institution, during a time period of 4 years. We included only fetal death occurring after the 24th week of gestational age and used the modified-Wigglesworth classification to group the cases according to the cause of death.

Results: During the established period there were 37 cases of stillbirths, 33 from simple and 4 from multiple gestations. Ninety-five percent of the cases had medical follow-up and preterm delivery occurred in 65%. After fetal and

placenta anatomopathological examination (autopsy was performed in 81% of cases) and using the modified-Wiglesworth classification, most cases were included in the group of death before onset of labour (the majority without abruptio placenta), followed by fetal growth restriction syndrome, perinatal infection and congenital anomalies. There was one case of unexplained stillbirth. The risk factors most frequently associated were diabetes, hypertensive condition (including chronic hypertension, preeclampsia and eclampsia) and thrombophilias. Other conditions found in our cases were obesity, smoking habits, cervicovaginal infections, urinary tract infections during pregnancy and preterm premature rupture of membranes.

Conclusions: Fetal and placenta investigation is crucial to the correct evaluation of these cases, regarding the identification of its causes. Although stillbirth prevention is limited, the patient's risk must be asserted. Knowing that preconception counselling can have a significant impact on the outcome, special attention should be given to some maternal underlying conditions and lifestyle, as to assure close surveillance, optimize treatment strategies (and/or habits modification) and ensure fetal well-being.

311

Induced abortion on woman's request: what therapeutic options?

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Introduction: In Portugal abortion as an option, or on woman's request, was legalized up to the 10th week of gestation, according to Law 16/2007 of April 17th. The first induced abortions were realized from July onwards, with therapeutic regimens being realized according to gestational age, clinical situation and technical resources of the performing institution. The authors propose to analyse the first medical abortions realized in a tertiary referral hospital, and to compare them with another therapeutic regimen used from October onwards in the same institution.

Methods: A retrospective study will be realized with analysis of the data of the medical abortions, on woman's request, performed at our institution from July 2007 to February 2008.

Results: Preliminary results show that, during the first three months, 124 women were submitted to medical treatment in our institution, in order to proceed with abortion on request. During this period, therapeutic regimen consisted in mifepristone 200 mg orally, followed after 48 hours by 800 µg misoprostol vaginally (or 400 µg misoprostol vaginally, if gestational age was under 7 weeks). Follow-up consultation was performed after two weeks associated to transvaginal ultrasound. One hundred

and fifteen women (92%) had a successful medical abortion, while 6 women (5%) required further treatment with uterine aspiration for persistence of products of conception. Three (2%) viable pregnancies were found on follow-up echography, which were also solved surgically.

Discussion: The best therapeutic medical regimen for early induced abortion is still under discussion. Due to a high percentage of treatment failure (2%) in our initial procedures in comparison to literature (less than 1%), an increase in the dose of mifepristone was decided, namely from 200 to 600 mg. Further results with the new therapeutic regimen will be analysed and compared, in order to determine the ideal dose of mifepristone.

312

Does computerised Cardiotocography predict fetal compromise?

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Introduction: CTG is a commonly employed method to monitor fetal wellbeing. However there are inaccuracies in identifying compromised fetus because of difficulty in interpretation. Using computer to interpret the CTG would minimise the human errors in interpretation but would it accurately identify the compromised fetuses or those needing delivery?

Materials & Methods: Retrospective review of 100 case notes between November 2003 and January 2003. To determine if the local protocol was adhered and to correlate if short variability identified accurately the fetal compromise

Results: 46 women having Computerised CTG's were between 36-42 weeks while 12 were 30-32 weeks and 19 were below 30 weeks of gestation. 71 women were referred from the Antenatal clinic and 16 self referred. Reduced fetal movement (41) formed a major part of indication, the next being GDM followed by preeclampsia (12), SGA (11) and cholestasis (10). CTGs were done on an average 4 times and the criteria were met 97/105 whereas the average time taken to meet was 26 minutes. Short term Variability was reduced in a 36 week fetus that had growth restriction and reduced liquor volume, but was delivered by an emergency caesarean section. The cord pH was low following delivery.

Discussion: Hospital Protocol was adhered to in all the cases. When Dawn Redman's criterion is met foetal wellbeing is reassured. Although short term variability was reduced in only one case in this study, this was associated with a low cord pH. Further studies in large numbers are needed to correlate between low short term variability and fetal compromise.

313

Nonimmune Hydrops Fetalis – a case report

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Hydrops fetalis is defined as the presence of two or more of the following fetal findings: skin oedema, pleural effusion, pericardial effusion, ascites, polyhydramnios. It may be caused by immune or nonimmune mediated processes. It has an estimated mortality of about 40-90%. The causes of nonimmune hydrops (NHF) are heterogeneous and include anatomic, metabolic, hematologic, and infectious aetiologies. The prenatal diagnosis of hydrops is established by ultrasound examination. The incidence of NHF ranges from 1/1500 to 1/3800 births. The prognosis depends upon the aetiology, the gestational age at onset, and the presence of pleural effusions.

We report a case of a 35-yr-old caucasian woman on her second gestation. She worked as a teacher and had no pathologic or familial relevant background. She had an A positive blood type. Pregnancy underwent within normality during the first trimester.

Her first trimester ultrasound was normal, except for a reverse flow on the ductus venosus and a nuchal translucency above percentile 90. She was submitted to amniocentesis, with a normal karyotype (46, XY).

The second trimester ultrasound detected ascites, nuchal oedema (8,6mm), skin oedema and a small pericardial effusion, as well as a large placenta. An echocardiogram was performed and no other abnormalities were found besides a minor pericardial effusion. Her blood was tested for the TORCH group and revealed infection for parvovirus B19.

The ultrasound was repeated soon after these results and revealed a foetus without heart activity and generalised oedema.

At 26w2d of gestation she delivered a dead foetus weighing 1185g. The placenta was abnormally large.

Parvovirus B19 is the most common infectious aetiology of hydrops, accounting for 14.5 percent of cases. The risk of recurrence NHF depends upon the underlying aetiology; therefore, every effort should be made to determine the cause of hydrops. Correct diagnosis of these cases enables adequate genetic counselling and the possibility of a specific prenatal diagnosis in future pregnancies.

317

Prenatal exclusion of zap-70 deficiency

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Introduction: Zap-70 deficiency is an autosomal recessive form of combined immunodeficiency characterized by the selective absence of CD8+ T cells and by abundant CD4+ T cells in the peripheral blood that are unresponsive to T-cell receptor-mediated stimuli *in vitro*. It is an extremely rare disease, whose manifestations occur early in life with severe pulmonary infections (often by opportunistic pathogens), chronic diarrhea, failure to thrive and persistent candidiasis.

The authors describe a case of prenatal diagnosis for this type of mutation in a pregnant woman whose previous child had been diagnosed with the condition.

Case report: A 37 year-old woman, G3P2, came to the prenatal diagnosis centre at 13 weeks gestation wondering about the possibility of doing prenatal diagnosis for the disease diagnosed in her second child. That child had pulmonary tuberculosis soon after birth, following usual BCG vaccination. After thorough investigation, an unusual severe combined immunodeficiency was diagnosed (Zap-70 deficiency) and some months after the child was submitted to a successful transplantation of stem cells from the blood cord.

Now, the couple wanted some answers about the possibility of the future baby have the same disease. The disease is inherited as a fully penetrant, autosomal recessive trait; consequently, the risk for parents of having another child affected is 1:4, regardless of sex of the fetus.

The routine ultrasound scan at 12 weeks was normal, with a normal nuchal translucency, nasal bones visualized, normal *ductus venosus* flow and no tricuspid regurgitation; first and second trimester serum screening revealed a low-risk pregnancy. As so, after previous contact with our histocompatibility centre, a cordocentesis was performed to determine karyotype and the functionality of fetal lymphocyte subpopulations.

The karyotype results were normal (46, XY). Flux cytometry revealed normal Zap-70 expression in T cells (CD4+ and CD8+) and in natural killer (NK) cells. Functionally, both T lymphocyte subpopulations seemed to be normal.

Conclusion: Zap-70 is an extremely rare disease that is ultimately fatal unless patients undergo bone marrow or fetal blood cord transplantation. Although no cases have been diagnosed before birth, antenatal diagnosis can be carried out by molecular analysis of chorionic villous DNA (if the mutation is known), or, like our case, by fetal blood sampling and analysis of lymphocyte subpopulations. The exclusion of this diagnosis prenatally is important to diminish the fear of what can be a dreadful diagnosis, or to prepare a future bone marrow or cord transplantation to save the child's life.

318

Pregnancy after gastric banding for morbid obesity

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Obesity is increasing rapidly around the world. Gastric banding for morbid obesity is considered an appropriate intervention when other weight-loss measures have proven unsuccessful. Weight loss often brings improvement in overall health by lessening the effects of obesity-related comorbidities, however, the nutrition and metabolic challenges brought about by gastric banding may have a profound impact on maternal health and pregnancy outcome.

Objective: discussion of the main complications and specific features of follow-up during pregnancy, after gastric banding.

The authors report a clinical case of a 27 year-old, caucasian, pregnant woman, with a past history of morbid obesity (IMC: 57,7) treated with a gastric band in September of 2005. Twenty-four months after the procedure she had a body mass index of 30,2. She spontaneously got pregnant in February 2007. During the first twenty weeks of pregnancy she was admitted in the urgency room several times because of severe vomiting, dehydration, and denutrition that was first attributed to hyperemesis gravidarum. She was submitted to several blood tests evaluations, that revealed increasingly severe metabolic alterations (renal, hepatic, and hydro-electrolytic). The bariatric surgery team also evaluated the patient and considered that it wasn't a gastric band complication, nevertheless at 22 weeks and 2 days, because of profound metabolic alterations, it was decided to completely decompress the gastric band. After a few hours of the procedure, the patient stopped feeling fetal movements and a stillbirth was diagnosed. Finally, the denutrition and metabolic alterations were considered as gastric band-related complications. After gastric band decompression the patient nutrition and metabolic state begin to improve.

Conclusion: Close supervision by multidisciplinary teams, before, during, and after pregnancy and nutrient supplementation following bariatric surgery can help prevent nutrition-related complications and improve maternal and fetal health. Hyperemesis gravidarum can mask gastric band complications, as happened in this case. Information regarding the effects of gastric band on pregnancies is limited and requires further investigations.

319

Vasa Previa – the importance of prenatal diagnosis

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Introduction: Vasa Previa refers to fetal vessels running through the membranes over the cervix and under the fetal presenting part, unprotected by placenta or umbilical cord. It is a rare condition with an estimated incidence of 1:2500 deliveries, in which the rupture of membranes may result in fetal haemorrhage (Benckiser's haemorrhage). We present three different cases of Vasa Previa, with different outcomes.

Case report: First case: a 36 year-old woman, G2P1 with a 40 weeks gestation and presenting a premature rupture of membranes (PROM). She had been followed in a primary centre since the first trimester without complications. All prenatal studies were normal and ultrasound performed at 13, 24 and 33 weeks gestation were normal, demonstrating a normal fetus with a high placenta. At admission (2 hours after PROM), loss of yellow amniotic fluid was confirmed and vaginal examination revealed an almost effaced cervix with 3cm dilatation; there were no uterine contractions and the abdomen was soft. One hour after admission (3 hours after PROM), moderate uterine bleeding commenced and cardiotocography revealed a non-reassuring fetal status. An emergency caesarean section was performed, delivering a stillbirth. Postpartum examination of the placenta revealed a velamentous insertion of the cord.

Second case: a 31 year-old woman, G2P1, with 39 weeks gestation complained with loss of amniotic fluid 1 hour before. She had a normal antenatal course followed in a secondary institution, whose routine ultrasound scans revealed a normal fetus with a high placenta. On admission, the loss of moderate amount of light amniotic fluid was confirmed (PROM), there were no uterine contractions and vaginal examination showed a non-effaced cervix with 2cm dilatation. Two hours after PROM (1 hour after admission), the cardiotocography revealed a sinusoidal pattern and a bloodstained amniotic fluid was noticed. As so, an emergency caesarean section was performed, with the delivery of an apparently dead fetus, who was resuscitated (Apgar score of 0/3/3/5); unfortunately the baby died 18 h after with an irreversible cardiac arrest. Postpartum examination of the placenta revealed velamentous insertion of the cord.

Third Case: a 43 year-old woman, G1P0, was followed in a tertiary institution with a regular antenatal course including routine normal ultrasound scans at weeks 13 and 21. At 28 weeks the ultrasound revealed an appropriately grown singleton live fetus, with normal amniotic fluid volume and a low-lying placenta. Careful ultrasound examination demonstrated great calibre vessels running through the membranes and near the cervix leading to vasa previa suspicion. Ultrasound was repeated at 35 weeks and the diagnosis of vasa previa was confirmed. An elective caesarean section was performed at 35 weeks with the delivery of a 2120 g live child, who was discharged home 4 days after. The examination of the placenta confirmed the diagnosis.

Conclusion: According to the literature, when the diagnosis of vasa previa is not made antenatally, fetus mortality reaches 50%. Our three cases demonstrate the importance of prenatal suspicion or diagnosis of vasa previa, as a good outcome depends primarily on prenatal diagnosis by ultrasound and elective delivery before the membranes

325

Outcome of pregnancy in patients with Systemic Lupus Erythematosus - experience of a single perinatal centre

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Introduction: Systemic lupus erythematosus (SLE) is one of the most common autoimmune disorders that affect women during their childbearing years. SLE increases the risk of spontaneous abortion, intrauterine fetal death, preeclampsia (PEC), intrauterine growth restriction (IUGR) and preterm birth. The aim of this study was to analyse the course of maternal disease and fetal outcome in pregnant patients with SLE.

Methods: A retrospective study was carried out with a total of 30 singleton pregnancies in women with SLE attended at a tertiary perinatal centre, during a 5,5 year period, from January, 2002 to June, 2007.

Results: The mean age of patients was 29,77±5,62 years and the mean previous duration of SLE was 7,52±6,68 years. SLE was diagnosed during pregnancy in two cases (6,7%) and the disease was active at conception in 4 cases (13,3%); at that time 16 patients (53,3%) were taking steroids. Antiphospholipid antibodies were positive in 4 patients (13,3%), resulting in one normal pregnancy, one first trimester miscarriage, one preterm premature rupture of membranes (PPROM) and one IUGR with PEC. There were 3 pregnancies (10%), of the 30, in patients with prior renal disease. There were 2 first-trimester miscarriages (6,7%) and 2 pregnancies (6,7%) are still ongoing with no complications. Obstetric complications in the remaining 26 pregnancies included: preterm delivery in 7 cases (26,9%), IUGR in 2 cases (7,7%), hypertension in 3 cases (11,5%), one of them (3,8%) fulfilling the criteria of PEC, PPRM in 3 cases (11,5%). There were 4 (15,4%) lupus flares. There was no maternal mortality. 8 of the 26 live births (30,8%) were delivered by caesarean section. The mean gestational age at delivery was 37,8 weeks (range 32-41) and the mean birth weight was 2965g (range 1215-4590). Mean APGAR scores were 8,6 and 9,8 at 1 and 5 minutes, respectively. There were no cases of neonatal lupus or congenital heart block. There was one neonatal death in a preterm baby (33 weeks) due to a severe sepsis. Child development was normal in other 25 cases.

Discussion: According to our study, pregnancy is relatively safe in women with SLE in remission, but should be considered as a high-risk pregnancy. Co-existing antiphospholipid syndrome is associated with a poorer prognosis for pregnancy outcome.

326

Gallbladder disease and use of endoscopic retrograde cholangiopancreatography during pregnancy - a case report

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Gallbladder disease is a highly prevalent disease in western countries as a consequence of several genetic, biochemical and environmental factors. Females are a highrisk group and pregnancy increases this risk considerably. Acute cholecystitis during pregnancy is usually associated with gallstones or biliary sludge. Surgical and interventional techniques are changing the management of disease during pregnancy.

The authors report a case of acute cholecystitis diagnosed in the first trimester of pregnancy with use of endoscopic retrograde cholangiopancreatography (ERCP).

327

Transformation of mono chorionic biamniotic pregnancy on monoamniotic: a complication of lasertherapy for twin- to-twin transfusion syndrome – a case report

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Introduction: Twin-to-Twin Transfusion Syndrome (TTTS) is one of the most severe complications in mono chorionic placentation, occurring in 5 - 20% of that gestations; it is responsible for about 15% of total perinatal mortality among twins. The physiopathological mechanism consists in the presence of profound and unidirectional anastomotic A-V vessels allowing communication between two fetal circulations; indeed, it tends to exist an unequal distribution in shared placenta by both fetuses.

Case Report: We describe a case of a 31 year old pregnant woman, gravidal para0, with history of primary infertility and presently with a spontaneous gestation. First trimester ultrasound revealed a mono chorionic/biamniotic gestation, with normality of the remainder routinely evaluated parameters. At 18 weeks (wks) of gestational age the obstetric ultrasound revealed first fetus with hydramnios and normal biometric parameters while second fetus presented oligoamnios, biometric parameters for a 16 wks gestation and reduced corporal movements. Karyotype study was normal. At 19 wks a fetoscopic laser with 12 anastomosis ablation/coagulation and amniotransfusion were performed. Ultrasound control 12 hours later showed donor fetus death with normal fluxometric parameters of the receptor fetus. The surviving fetus presented

amniotic fluid index, fluxometric values and growing pattern within normal range until the 28th week. At that time he presented a growing pattern inferior to the 10th percentile and umbilical artery resistance index with null/no diastole; non stress test showed prolonged decelerations with slow recovery. In face of that, an emergency c-section was performed, with delivery of a female newborn with an Apgar score 4/8 and weighting 740g. During surgery it was seen an umbilical cord interlacing with a knot of the first fetus umbilical cord upon the second one. The newborn was admitted to the Neonatal Intensive Care Unit with discharge at 72th day; presently she is 6^{1/2} months old and shows adequate psychomotor development.

Discussion: This case demonstrates that laser fetoscopic ablation of vascular anastomosis, although the most efficient treatment option in severe TTTS, has known complications as were fetal death and membranes rupture with conversion to a monoamniotic gestation allowing the umbilical cords to interlace, leading to fetal distress and extreme prematurity.

328

Follow up and evaluation of first and second trimester combined screening programme for Down Syndrome and trisomy 18 - a Portuguese experience

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Objective: To examine the effectiveness of first-trimester fetal trisomy 21 and trisomy 18 screening using a combination of maternal age, nuchal translucency thickness (NT) and maternal serum free beta-human chorionic gonadotropin (beta-hCG) and pregnancy-associated plasma protein-A (PAPP-A) levels in a predominantly Portuguese population in Oporto.

Methods: This was a prospective study over a 1 year period of 1178 women who underwent combined screening for trisomy 18 and 21 between 11+ 0 and 21+6 weeks of gestation and in a fetal medicine unit. NT was measured according to the criteria set by The Fetal Medicine Foundation (FMF), maternal serum free beta-hCG and PAPP-A levels were measured, and the risk of trisomy 18 and 21 was calculated using The FMF's algorithm. Fetal karyotyping was advised when the risk was 1:260 or above for trisomy 21 and 1:150 for trisomy 18. All subjects were followed up for pregnancy and fetal outcome.

Results: Of the 1177 women who underwent the screening program, 964 had pregnancies between 11+ 0 and 13+ 6 weeks of gestation (first trimester) and 214 had pregnancies between 14+ 0 and 21+ 6 weeks of gestation (second trimester). There were, among all, 16 twin, giving a total of

1194 fetuses. Of those women who underwent first trimester screening, 10,0% were 35 years old or above and for the second trimester screening, 14,5% were in the same age group. In first trimester, 6 (0,6%) fetuses were screen-positive for trisomy 21 and 5 (0,5%) fetuses were screen-positive for trisomy 18; of those none was affected by chromosomal abnormalities. In the second trimester, 25 (11,5%) fetuses were screen-positive for trisomy 21 and 3 (1,4%) fetuses were screen-positive for trisomy 18, including 1 case of trisomy 21 and no cases of trisomy 18. Among the 1157 screen-negative fetuses, only 14 (1,2%) cases had an unknown fetal outcome. There were no cases in which trisomy 21 was missed and the infant was liveborn. There was 1 case of trisomy 21 and 2 cases of trisomy 18 that were screen-negative, all of them in the first-trimester screening.

Conclusion: First trimester screening using maternal age, NT, free beta-hCG and PAPP-A is highly effective for the detection of trisomy 21 and 18 among Portuguese population, despite the few cases of false-negative results.

329

Alport Syndrome and pregnancy – a case report

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Introduction: Alport Syndrome (AS) is a progressive form of glomerular disease, characterized by hematuria and progressive renal failure. This is a rare disease with an estimated prevalence of 1 in 50000 live births. In approximately 80% of patients, the disorder is inherited as an X-linked trait, arising from mutations in the COL4A5 gene on the X chromosome. This mode of inheritance makes Alport Syndrome even rarer in females. Little is known about the effect of this Syndrome on pregnancy outcome.

Case: We report the case of a 33-years-old primigest patient with Alport Syndrome, who was followed in our centre since eleven weeks of gestational age. At this time, she was normotensive and had chronic renal disease with moderate impairment of renal function (serum creatinine of 1,8mg/dl) and proteinuria of 2,6g/24H. She developed a progressive polyhydramnios at 20 weeks of gestational age. During pregnancy, there was a rapidly progressive deterioration of renal function without improvement with conservative management, making it necessary to start haemodialysis at 25 weeks. At 26 weeks and 3 days, she started labour in pelvic presentation and a caesarean section was performed. In the post-partum period, the

patient developed severe preeclampsia with hypertensive encephalopathy and retinal detachment. Hypertension was controlled with medical treatment, but there was no improvement of renal function and the patient was kept on haemodialysis. One month after delivery, there was partial recover of renal function and we were able to stop dialysis. Presently, the patient has a stable chronic disease with serum creatinine around 3 mg/dl without dialysis. The infant, 2 months-old, is still in the Neonatal Intensive Care Unit in a stable clinical situation. She had complications resulting from extreme prematurity: respiratory distress syndrome, sepsis, necrotizing enterocolitis and patent ductus arteriosus.

Discussion: Alport Syndrome is an infrequent disorder in women and little is known about the impact of the disease in pregnancy. The few cases reported in the literature suggest that Alport Syndrome has the potential for disease acceleration with rapid parallel progression of vasculopathy in the placental and renal circulations. These women should be cautious about getting pregnant and be previously referred for expert medical advise.

331

Therapeutic efficacy of Humalog Mix50 evaluated in pregnant women affected by Diabetes Mellitus

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Introduction: The aim of our study is to obtain a glyco-metabolic compensation in pregnant women with gestational diabetes by means of the administration of Humalog and Humalog Mix50 (Humalog Mix50 at breakfast and dinner, Humalog at lunch), and by diet-therapy.

To optimize the pre-existing insulin therapy in pregnant women with type I diabetes and to obtain a significant reduction of HbA1c with respect to base-line values.

Materials and methods: The sample included: -15 patients at the 14th ± 6 week of pregnancy, 70% affected by gestational diabetes, 30% affected by type I diabetes. -Mean age: 30 ± 5 years. -Gestational age 14 ± 6 weeks. -BMI: 30 ± 8. -Values of HbA1c at base line: 8 ± 4. -Values of glicemia basale ≥ 135 mg/dl. -Pre-existing risk factors (previous gestational diabetes, fetal macrosomia, polyabortivity, endouterin death, fetal malformations; hereditary diabetes; BMI > 25)

Results: In all patients, we found: -Optimized values of HbA1c: 6±1. -Optimized glycemic values: 110±20 mg/dl. -Reduction of hypoglycemic episodes. -Personalization and optimization of insulin needs. -Containment of weight

gain: kg.12±3. -Good result of pregnancy both for mother and baby

Conclusions: The treatment of diabetes in pregnancy must have as its aim the reduction of glycemic values to those of the norm to prevent all the typical alterations of pre-pregnancy diabetes.

337

Impact of a computer-derived "normal" alert on the duration of antepartum cardiotocograms

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Introduction: Omniview-SisPorto® 3.5 (Speculum, Portugal) is the latest version of a central monitoring system that provides visual and sound alerts, based on computerised cardiotocogram analysis. A "normality criteria met" alert was recently introduced in the system, occurring in the first 20-60 minutes of the tracing, when all the following criteria are met: a baseline between 105-160 bpm., two or more accelerations present, less than 10% of points with long-term variability under 5 bpm (in last 30 minutes or in 10 consecutive minutes), no decelerations in first 20 minutes or a maximum of one mild deceleration in last 50 minutes.

Objective: To evaluate weather the introduction of the "normality criteria met" alert reduced the length of tracings acquired routinely in normal term pregnancies, in an obstetrics outpatient clinic. In this setting the visual alert was displayed but the sound alert was not selected.

Methods: Review of one hundred consecutive tracings recorded in normal term pregnancies immediately before the introduction of the alert into clinical practice, and the same number of consecutive cardiotocograms recorded afterwards.

Results: There was a statistically significant reduction in tracing length after the introduction of the alert (p=0,019) with a median tracing duration of 27.5 minutes (min.19; max.72) before and 24.0 minutes (min.18; max.156) afterwards.

Conclusions: The introduction of a "normality criteria met" alert alarm was associated with a significant reduction in duration of antepartum tracings acquired routinely in normal term-pregnancies. This difference could be further enhanced by the adoption of the sound alert.

344

Maternal serum Adiponectin and Insulin resistance during the third trimester in women with Gestational Diabetes and normal controls

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Purpose: To investigate the relationship between maternal serum adiponectin levels and insulin resistance measured by the homeostatic model assessment (HOMA-IR) during pregnancy.

Methods: Twenty-two normal pregnant women were compared to 22 women diagnosed with gestational diabetes (GDM). Serum adiponectin levels were measured at the time of glucose challenge test as well as in the immediate postpartum period and correlation of adiponectin to HOMA-IR were performed.

Results: Adiponectin levels were significantly lower in pregnant women with GDM as compared to controls (5381 vs 8449 ng/dl, $P=0.004$) as well as postpartum, (3278 vs 6958 ng/ml, $P=0.002$). A significant reduction in adiponectin (3278 vs 5381 ng/ml, $P=0.002$) was observed postpartum in GDM women but not in controls. Using a lower cut-off value of 5253 ng/ml, maternal adiponectin could exclude GDM with a sensitivity of 86,4% and specificity of 59,1% ($EUG=0.752$, $SE=0.77$, $95\%CI: 0.601-0.903$, $P=0.004$). Adiponectin levels during pregnancy were negatively correlated to HOMA-IR ($r=-.375$, $P=0.012$).

Conclusion: GDM is associated with decreased adiponectin serum levels both in pregnancy as well as postpartum. Adiponectin is negatively correlated to HOMA-IR. A reduction in maternal adiponectin after delivery indicates a significant placental contribution in adiponectin's production.

347

Factors associated with miscarriage in Maltese women presenting with bleeding in the first trimester

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Background: Women presenting with threatened miscarriage are concerned about the outcome of their pregnancy and obstetricians can offer little help to these women

beyond conservative management. In St Luke's Hospital, Malta, a need was felt to try to identify any possible factors that could aggravate or improve the risk of these women to proceed to complete miscarriage.

Aim: The objective was to identify any factors that could increase or decrease the risk of a threatened miscarriage proceeding to a complete miscarriage.

Patients: All 202 women who presented to the Gynaecology Admission Room at St Luke's Hospital, Malta with threatened miscarriage between January and June 2004. Women with multiple pregnancies or cervical incompetence were excluded.

Methods: After ethical approval of this observational study, the medical notes of these women were traced and retrospective follow up ascertained whether these women proceeded to a miscarriage or a livebirth. A proforma including a number of parameters that could influence the outcome of these pregnancies in any way was designed and data on these parameters in each of the women was collected. Statistical analyses were carried out using SPSS 15.

Results: Sixty two percent of the women with threatened miscarriage subsequently had a miscarriage. Pain and the amount of blood loss at the time of presentation were significantly associated with a worse prognosis ($p<0.001$). Menstrual cycle history or smoking status did not have any significant association with the outcome of these women. Treatment of patients with progesterone (dydrogesterone) decreased the risk of subsequent miscarriage ($p=0.001$). Although aspirin did not have an effect, folate tended to decrease the miscarriage rate ($p=0.08$). Only 63% of those who miscarried were on folate, as compared to 76% of those who proceeded to livebirth. In addition, the miscarriage group had a highly significantly higher number of previous miscarriages than those who had a live birth ($p=0.006$).

Conclusion: Pain and moderate to severe bleeding and a history of previous miscarriages are the factors related to an adverse outcome in threatened miscarriage patients. Dydrogesterone appears to have a significant protective effect in these pregnancies while aspirin did not improve the outcome. The effect of folate should be investigated further with a larger cohort.

348

Clinical experience of five fetal ovarian cysts - diagnosis and follow-up

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Background: ovarian cysts are the most frequent type of abdominal tumor, in female newborns. The most of the

cases resolve spontaneously having no clinical significance. However, ovarian cysts often present complications such as torsion.

Case: the authors reviewed the pre- and postnatal records and ultrasonograms of five fetuses, which were diagnosed with ovarian cysts. No complication was observed prenatally. However, one infant two months after birth required surgical intervention because of cyst torsion. The cysts of the other four infants showed complete resolution in a time interval from three to nine months.

Conclusion: An ovarian cyst is not a life-threatening condition, so they could be just closely monitored pre- and postnatally until spontaneous resolution. When torsion of the cyst is suspected, surgical intervention is necessary.

351

Raised Maternal Serum Alfa Fetoprotein (MSAFP) and its relation to Post partum Hemorrhage (PPH)

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Introduction: Raised Amniotic fluid & maternal serum Alfafetoprotein (AFAFP & MSAFP) have been recognized to indicate a need for further assessment for neural tube and abdominal wall defects. Raised MSAFP has also been associated with intrauterine growth retardation (IUGR), preterm labor and perinatal loss. Alfa fetoprotein is produced in the yolk sac and placenta and changes in its levels may be reflected in changes in placental function. This may result in increase in intrapartum interventions and PPH.

Methods: 111 patients with singleton pregnancies and raised MSAFP between Jan 2002 and Dec 2005 were studied with respect to outcomes especially mode of delivery and association with post partum hemorrhage if any. The results were compared to patients with normal MSAFP and with national UK values.

Results and discussion: Of the 111 patients with raised MSAFP 9 (8.1%) had babies with IUGR compared to national average of 4-5%. 3 pregnancies were terminated, 2 for gross fetal abnormalities and 1 for chromosomal abnormality in addition. There were 4 mid-trimester miscarriages including one foetus with abnormalities). Two fetuses died in utero and 2 died in the neonatal period, figures which are higher than comparable for mothers with normal MSAFP values in the local population and nationally.

Most patients (90) had normal vaginal deliveries (NVD) though 9 (8.1%) had Cesarean Sections (LSCS). 13.5% of patients with normal deliveries had PPH and 3.6% needed manual removal of placenta. Though only 9 patients needed LSCS, 5 of the 9 (55.6%) had PPH. This suggests the possibility of an increased incidence of PPH in mothers with raised MSAFP.

Conclusions: Raised MSAFP is associated with fetal anomalies, IUGR, preterm labor and fetal morbidity. This

was reflected in our study too. In addition, mothers with raised MSAFP had a higher incidence of PPH irrespective of their mode of delivery. This finding will need to be concurred in larger studies. However, this may improve vigilance in such patients thereby facilitating active management of the third stage and decreasing the incidence and morbidity of PPH in these women.

352

A rare complication of heterotopic cervical pregnancy – a case report

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Although heterotopic pregnancy is still a rare event, it is being increasingly diagnosed since assisted reproductive techniques (ART) became more frequent. Its orientation is a matter of great discussion because of the complications it may bring about, as well as for the repercussions on a simultaneous viable pregnancy. We present a 40-year-old 1G0P with a history of sterility, which presented to our unit at 10 weeks gestational age (GA) with a severe vaginal blood loss. The pregnancy was the result of in-vitro fertilization using donated oocytes / embryo transfer. At 6 weeks GA, a gestational sac with a viable embryo was patent inside the uterine cavity and a smaller sac without embryo was visible in the isthmus. Four weeks later, our patient presented with an intense genital blood loss. At careful inspection, we noticed that the haemorrhage derived from an exophytic mass protruding from the cervical canal. On ultrasound, a hyperechoic, highly vascularized formation originating in the isthmus / cervix with 3x2,5cm was evident, along with a normal evolutive pregnancy inside the uterine cavity; MRI confirmed ultrasound findings. After failure of attempts to obtain haemostasis, the patient was taken to the operating room and excision and partial destruction of the formation was carried out with local instillation of methotrexate, haemostasis being achieved with trachelorrhaphy and vaginal tamponing.

The histological study confirmed the hypothesis of retained conceptus. The intrauterine pregnancy was monitored closely and a spontaneous preterm vaginal delivery took place at 31 weeks with the birth of a boy of 1540g without intercurrents. Among the descriptions of heterotopic pregnancies, we found none reporting this complication. The role of ultrasound and the importance of close follow up of early pregnancies following ART are highlighted since the prompt diagnosis and effective treatment of heterotopic pregnancy results in similar perinatal outcome as singleton pregnancies.

354

Thrombophilia in women with unexplained pregnancy losses

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Background: After extensive study, 40% of all fetal losses still remain unexplained. Thrombophilia has recently been reported to have an important role in pregnancy losses.

Objective: To investigate the prevalence of inherited and acquired thrombophilia in women with unexplained fetal losses.

Material and Methods: We studied 157 women with recurrent miscarriage, late fetal death or severe intrauterine growth restriction, who attended our preconceptional clinic in a three year period (2003 - 2006). Obstetrical, personal and family history were assessed. All women were tested, before or after pregnancy, for mutations of Factor V Leyden, Methylene tetrahydrofolate reductase (MTHFR) C677T and Prothrombin G20210A; deficiencies of antithrombin III, proteins C and S; factor VIII activity and antifosfolipid antibodies. Women with other factors related to pregnancy loss (anatomic, infectious, genetic or autoimmune) were excluded.

Results: Eighty four (53,5%) of the 157 patients had at least one positive thrombophilic marker and 13 (8,3%) had multiple thrombophilia. This prevalence was higher in third trimester losses (65,4 % and 19,2 % respectively). Factor V Leyden (n=15) and MTHFR C677T (n=46) were the most frequently found inherited thrombophilias. Women with thrombophilia had a higher number of pregnancy losses (M=2,85 vs M=2,49) (p<0.05). Multiple thrombophilia correlated with second and third trimester losses (p<0.05).

Conclusions: Thrombophilia has a high prevalence in the population studied. Our results emphasize the importance of the inclusion of thrombophilia in the protocol study of women with unexplained fetal losses.

362

Epidermolysis bullosa with pyloric atresia: a case report and literature review.

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Epidermolysis bullosa (EB) comprises a group of genetically determined skin fragility disorders characterized by blistering of the skin and mucous membranes. EB has traditionally been divided into three main categories: simplex, dystrophic and junctional considering the level of

separation between basal cell junction and basement membrane.

Case Report: A 30 year-old pregnant woman, nullipara, with a negative personal and family history for congenital or genetic abnormalities, was referred to our hospital with polyhydramnios and fetal gastric dilatation, detected at 30 weeks of gestation. In the first and second trimester she had normal ultrasound examinations. During hospitalization a progressive increase of amniotic fluid index (AFI) occurred reaching a maximum of 410 mm (32nd week of gestation). At this time a cesarian section was performed due to premature rupture of the membranes, onset of labour and transverse situation of the fetus. At birth, clinical examination showed cutaneous blisters in the forehead's skin, dorsal region and oral mucous membrane of the newborn. In the 2nd day of life an exploratory laparotomy was performed after developing an upper intestinal occlusion syndrome, which revealed a pyloric atresia. Histologic examination and immunofluorescence analysis of skin biopsies had findings typical of JEB.

Discussion: Junctional EB with pyloric atresia (JEB-PA) is a rare inherited autosomal recessive disease with life threatening complications and significant mortality. In this clinical sub-type, blistering is usually generalized and begins in the neonatal period. In addition, pyloric atresia or pyloric stenosis is also present. In JEB-PA mutations occur within the genes encoding either alpha 6 or beta 4 integrin, which leads to a marked reduction of these components of the hemidesmosome, found both in skin and the stomach, explaining the failure of formation of the pylorus and blistering of the skin. JEB-PA is often lethal in the newborn period (infection, dehydration, electrolyte imbalance).

This case report illustrates the difficulty in diagnosing this rare condition owing to the non-specific ultrasound findings and negative family history. Prenatal testing with appropriate counseling assumes, therefore an important role for couples at risk of JEB in the next pregnancy.

365

Conservative management of interstitial pregnancy – a case report

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Introduction: Interstitial pregnancy complicates between 1% and 6% of all ectopic pregnancies. Surgical approach may result in cornual resection or hysterectomy at the time of procedure, which has an immediate impact on patient morbidity and subsequent fecundity. In the haemodynamically stable patient, the conservative management should be employed whenever possible and the early diagnosis of interstitial pregnancy with ultrasound scan is essential. Systemic methotrexate is a safe and highly effective treatment for interstitial pregnancy (estimated

success rate of 83%), and surgical treatment should be reserved for those patients presenting with a ruptured interstitial pregnancy and haemodynamic compromise.

Case report: Authors reports a case of interstitial pregnancy treated successfully with a single-dose intramuscular methotrexate. She was a 27-year-old woman, gravida 4, para 0, who had an interstitial pregnancy following in vitro fertilization diagnosed at 7 weeks by ultrasound. The patient had previously been submitted to bilateral salpingectomies for two ectopic pregnancies. The serum human chorionic gonadotropin level was undetectable 47 days after the single-dose intramuscular methotrexate.

Conclusion: Systemic methotrexate is a safe and effective means of managing an unruptured interstitial pregnancy to preserve the entirety of the uterus.

366

Postpartum venous sinus thrombosis in a patient with pre-eclampsia

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Introduction: Hypertensive disorders of pregnancy are a leading cause of maternal & perinatal morbidity and mortality. These adverse outcomes have been significantly reduced with increased awareness, vigilance and timely effective action. The postpartum period, however, may see a decreased vigilance and increasing management by junior medical personnel. Here, there is an urgent need for clear guidelines and supervision along with improvement in awareness & lateral thinking. An unusual but deadly cause for a common clinical presentation is discussed here.

Clinical Scenario: A 26 year old asymptomatic primigravida was induced at 38 weeks due to severe pre-eclampsia. She was commenced on the magnesium sulfate protocol & required an emergency caesarean section under spinal anaesthesia following failure to progress in the first stage of labor. She improved postnatally and was discharged on day 3 post-section on labetalol.

She was readmitted on day 6 with raised BP, headache, nausea & vomiting. Her clinical signs & reflexes were normal. Her labetalol was increased & regular paracetamol and ibuprofen were commenced. The headaches & BP improved & she was discharged.

The subsequent day she was readmitted with a history of loss of consciousness, amnesia, and a slight frontal headache. Examination was unremarkable once again and the BP was raised. A CT scan of the head (& subsequent MR angiogram) performed revealed a Sagittal sinus thrombosis.

The patient recovered well with conservative management and multidisciplinary input.

Conclusions: Pre-Eclampsia requires vigilance and good follow up even in the post partum period to detect problems early and manage patients appropriately.

378

Hematemesis from oesophageal varices complicating pregnancy with Systemic Lupus Erythematosus

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Introduction: Haemorrhage from oesophageal varices during pregnancy is rare but may be threatening. Otherwise, systemic lupus erythematosus (SLE) is a chronic autoimmune systemic disease that pose a significant fetomaterial risk, nevertheless, most can be safe.

Case Report: 21-year-old nullipara with antecedents of portal cavernoma diagnosed at 10-year-old, with portal hypertension and portocaval shunt 2 years later. She also had SLE, and heterozygous MTHFR mutation and PAI-1 polymorphism diagnosed at 1st trimester, in treatment with prednisolone 20mg/d PO and enoxaparine 40mg/d SC. SLE was at remission for more than 6 months and stable during pregnancy.

At 24 weeks gestation presented with hematemesis, being conscious, with hypotension and palpitations. Immediately were administered intravenous fluids, blood transfusion and octreotide. An upper digestive endoscopy was unsuccessful because active bleeding, and a Sengstaken-Blackmore tube was introduced. Fetal well-being was assured and she underwent an intensive care unit for 9 days. A 2nd upper digestive endoscopy revealed 4 fundal esophageal varices (grade II/III – Baveno Classification). A close surveillance was done and the pregnancy course without any more complications under hypocoagulation and corticotherapy.

A cesarean section was performed at 35 weeks gestation after premature rupture of membranes, and an infant delivered with 2230g and Apgar Score 8/9/10.

Discussion: The main differential diagnosis of hematemesis during pregnancy include Mallory-Weiss syndrome, peptic or stress ulcer and oesophageal varices.

This woman had oesophageal varices by previous portal hypertension, but there are pregnancy physiological changes that predispose to it and augment the risk of upper gastrointestinal bleeding.

Besides SLE was stable, without history of thrombotic events and tests for anticardiolipin, lupus anticoagulant and antiphospholipid antibody syndrome were negative, the association of SLE with thrombophilia contribute to a very high risk of thrombosis, much higher than a 2nd episode of hemorrhage, favoring anticoagulant therapy.

380

Incidence of Cytomegalovirus (CMV) and Toxoplasma Gondii (TG) among pregnant women in Latvia

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Introduction: Incidences of TORCH infections CMV and TG, possible causes of pregnancy miscarriages, pre-term deliveries, stillbirth or congenital infections, have not been studied in Latvia.

The goal, material and methods: The main goal of the study is to assess actuality of CMV and TG infections in the perinatal care of Latvia. 150 women were checked at admission for delivery in the Riga Maternity hospital. They completed survey, and were tested by ELISA method for the following immunoglobulins: CMV IgG, CMV IgM, TG IgG and TG IgM. Patients signed informed consent; the Ethics Committee of the Riga Stradins University accepted study.

Results: CMV IgG was positive in high rate (more than 80%) of delivery patients and the incidence increased with advanced age of pregnant women. TG IgG was positive in more than 40% of pregnant women.

Conclusions: CMV and TG infections are quite commonly seen in pregnant women in Latvia. Risk factors have to be evaluated to improve the antenatal care.

384

Dermatofibrosarcoma Protuberans (DFSP) and pregnancy: a rare and challenging entity

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Introduction: Dermatofibrosarcoma protuberans is a slow-growing malignant tumour of the dermis layer of the skin. It is an unusual neoplasm, mainly in young and middle age individuals, rarely during childhood and at male/female ratio 4:1. The genetic research has shown chromosomal translocations (17q22 and 22q13-"ring chromosomes"). It is associated with burning or surgical scars, arsenic exposure and acanthosis nigricans. A rapid growth during pregnancy has been reported.

Methods: We present the case of a 40 years old female with a palpable nodule below the umbilicus, since 10 years, round, well circumscribed. The nodule was resected under local anaesthesia (3 cm incision). After the excision, a pregnancy was diagnosed. The histopathology revealed a dermatofibrosarcoma protuberans.

Results: The woman had an uneventful pregnancy and a normal delivery. After puerperium, the CT scan reported an adrenal tumour and the woman underwent a wide local (3 cm) excision and removal of the adrenal tumour. The histopathology reported negative for malignancy with clear margins and the adrenal tumour as a pheochromocytoma. More than 15 months now the woman is asymptomatic, with no recurrence.

Discussion: The treatment of choice for DFSP is wide local excision with subsequent microscopic evaluation of the excision margins. There is low risk for distant metastasis but a recurrence rate of almost 5%. Recently, imatinib (PDGF inhibitor-Gleevec) is being used in cases with unresectable tumour, recurrence or metastasis with very good results. Because late recurrences (even distant metastases) may occur, long term follow up is needed.

389

Recurrent Hydatiform Mole - a clinical report

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Complete hydatidiform molar pregnancies occur in approximately 1 of 1,000 conceptions. After uterine evacuation of the trophoblastic tissue, women are followed up with serial serum human chorionic gonadotropin (hCG) measurements. Patients are considered to have attained remission when their hCG level spontaneously declines to an undetectable level and remains there during a 6-month follow-up period.

We report a case of a patient with two consecutive complete hydatidiform moles. A 35-year-old nulliparous woman was referred to our hospital with a diagnosis of mole in June 2006. She had one molar pregnancy in 2003 diagnosed during an episode of first trimester bleeding. The two molar pregnancies were evacuated by aspirator / curettage and the patient was followed by serial beta-hCG levels. Moles were histologically confirmed as complete moles. In the first molar event no additional treatment after evacuation was required, but in the last event, beta-hCG levels increased after uterine evacuation. Complementary exams ruled out an invasive mole and choriocarcinoma. A new aspiration was done since it was assumed by ecographic images to be mole remanents. Beta-hCG levels declined but stabilized in a plateau. Chemotherapy with methotrexate was instituted. Beta-hCG levels after a 12 month follow-up period remains undetectable.

390

Partial Placenta Increta and Methotrexate therapy - three case reports

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Introduction: The term placenta accreta is used to describe any placental implantation in which there is abnormally firm adherence to uterine wall. Complicates 1/2500 deliveries and is rising in incidence. Abnormal placentation is associated with increased maternal morbidity and mortality from severe hemorrhage, uterine perforation, infection and loss of fertility. The reported experience of methotrexate treatment in the conservative management of placenta accreta is scant.

Case Reports: The authors describe three cases of partial placenta increta managed with methotrexate. The patients were assessed with clinical surveillance, serum β human chorionic gonadotrophin (β -hCG) and imaging (ultrasonography and magnetic resonance in one case). In all cases the conservative management with methotrexate resulted in undetectable serum β -hCG, a decrease in the size of partial placenta retained, and undetectable vascularization.

Discussion: Although methotrexate causes a rapid involution of the placenta, there is not enough evidence to suggest its routine administration in all cases of placenta accreta. It should be reserved for cases of placenta percreta or when there is continuing active vascularity associated with persistent levels of β -hCG. The authors conclude that unless a life threatening hemorrhage occurs, a conservative approach is recommended even in women who do not want to preserve their fertility, considering the morbidity associated with cesarean hysterectomy. The utility of methotrexate treatment in conservative management of placenta accreta requires further evaluation and there is need for a standardized protocol

396

Viable abdominal pregnancy- a case report

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Introduction: Abdominal pregnancy is a rare event (1:33000 life births) that is associated with a high maternal (0,5-20%) and perinatal (95%) mortality due to trophoblastic invasion of surrounding structures and placental hemorrhage

Methods: Findings and management of this case are reported

Results: M.L.M.R., G4P3, a 45 year old overweight women, was admitted at 19 weeks of gestation for suspicion of preterm ruptured membranes and oligohydramnios. The patient didn't have any vaginal hemorrhage or abdominal pain during pregnancy and was submitted to an amniocentesis at 16 weeks due to increased risk of chromosomal defects which revealed a normal fetal karyotype. At 25 weeks' gestation, termination of pregnancy by C-section was decided due to suspicion of ruptured membranes with associated chorioamnionitis, and per-operatively a slightly enlarged uterus and an ectopic gestational sac at the right adnexal area which contained a live fetus (620g; Apgar 5/7/9) was detected. The placenta was implanted above the uterus, bladder, large bowel and pré-sacred vessels. We performed hysterectomy and partial removal of placenta to stop massive hemorrhage. The patient after 16 days of hospitalization was discharged in an excellent condition but premature newborn died due to cardiorespiratory failure in the third day of life

Discussion: The diagnosis of abdominal pregnancy is difficult and requires a high index of suspicion. Clinical history, physical examination, laboratory and ultrasonographic features are all non-specific. Diagnosis is mostly done by laparoscopy or laparotomy, because ultrasound often fails to reveal the implantation site and symptoms may be absent. The management of the placenta in an abdominal pregnancy is still a matter of controversy. Partial removal of the placenta may result in massive uncontrolled hemorrhage and shock if the placental implantation has occurred in vascular areas. However, if placenta is left *in situ* and we use methotrexate to hasten placental involution and accelerate placental destruction, may increase the risk of accumulation of necrotic tissue, infection and abscess formation

400

Polyhydramnios and perinatal outcome

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Objective: To evaluate the perinatal outcomes of pregnancies complicated by polyhydramnios.

Methods: Data were collected retrospectively for 34 pregnant women with diagnosis of polyhydramnios in our institution between January 2004 and December 2006. We also compared the outcomes of 26 pregnancies with isolated polyhydramnios to those of 26 normal pregnancies without polyhydramnios.

Results: Average age at time of diagnosis of polyhydramnios was 30,95 years +/- 5,24 (20-43). Average weeks gestation at time of diagnosis of polyhydramnios was 30,85 weeks +/- 4,36 (22-41). No association with maternal disease was found in 65%; regarding ultrasonography, normal prenatal ultrasonography was found in 64%, gastrointestinal tract anomalies were present in 13%, twin-

to-twin transfusion in 10%, intrauterine growth restriction in 5% and other anomalies in 8%. Regarding assessment of the treatment, induction of labor/labor was achieved in 21% with an average weeks gestation at time of delivery of 38,14 weeks +/- 2,54 (33-41), amnioreduction was accomplished in 18%, treatment with indomethacin in 9% and laser coagulation of the placental vascular anastomoses in twin-twin transfusion cases in 3%. Cesarean delivery was accomplished in 67%. Regarding perinatal outcome, we found 15 cases of admission in neonatal intensive care unit, 5 cases of small infants for their stated gestational age, 4 cases of perinatal death and 3 case of intrauterine death. We also compared the outcomes of 26 pregnancies with isolated polyhydramnios to those of 26 normal pregnancies without polyhydramnios and statistically significant differences were found between the two groups concerning cesarian section rate, perinatal morbidity and mortality.

Conclusions: Polyhydramnios is associated with adverse perinatal outcomes, such as prematurity, low birth weight, and perinatal death and in our study even idiopathic polyhydramnios is associated with higher rates of these traditional measures of poor outcome.

403

Diabetes during pregnancy - what are women concerned about?

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Introduction: Being pregnant can be difficult. When pregnancy is associated with diabetes, it is natural to feel more stressed, worried or concerned. When women have knowledge about the risks related to this association, it is easier for them to accept a tight pregnancy surveillance and preconception care.

Objective The aim of our study was understanding pregnant women's major concerns when they have either one of the three types of diabetes: DM1, DM2, and gestational diabetes. In addition, we have also analyzed the information about preconception care among women with either DM 1 or DM 2.

Material and methods. We have made an anonymous self-answered questionnaire to all women sent to our diabetes clinic during a 6 months period. This inquiry included questions about patient's major worries when they suffer from diabetes and about preconception care when they have either type 1 or type 2 diabetes.

Results: We have found that in the gestational diabetes group more than 50% of women expressed as a major concern the possibility of their baby being born with diabetes. Other important worries referred by these women were fear of complications during pregnancy and of miscarriage. In the pregestational diabetes group we

have observed a similar pattern of answers among women with DM1 and DM2. With regard to preconception care, only half of these women had a preconception visit and tried to obtain a good glycemic control before pregnancy. Their main concern was the difficulty of achieving glycemic control during pregnancy. The other major concerns listed by these patients were: baby with diabetes at birth, higher risk of malformations, fear of miscarriage and more complications during pregnancy.

Conclusions: This work shows that the proportion of women with previous diabetes who attend preconception care is still low. This analysis makes clear that health professionals should have the knowledge of

405

Ductus Venosus Agenesis without other severe congenital malformations: prenatal sonographic diagnosis

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Introduction: Congenital absence of the ductus venosus (ADV) is a rare vascular anomaly often associated with fetal cardiac and extra-cardiac anomalies, aneuploidies, hydrops, absence of the portal vein, heart failure and adverse outcome. The prognosis depends on the patterns of abnormal venous circulation, on the associated malformations and on chromosomal aberrations.

Method: We present a case of isolated absence of the ductus venosus with liver bypass and a direct connection to the right atrium without other fetal malformations and normal karyotype.

Result: The fetus didn't develop hydrops. When a prenatal diagnosis of absence of ductus venosus is made, a careful search for associated anomalies and echocardiography are necessary; fetal karyotyping should be offered and serial ultrasound examinations are recommended. Fetuses with connection of the umbilical vein to the portal circulation may have a better outcome; in cases in which the umbilical vein is connected to either the inferior vein cava or to the right atrium, adverse outcomes may occur such as heart failure. In the presence of heart failure, anticipation of delivery should be considered.

Discussion: On the basis of our observations we review the literature in order to meliorate our knowledge about the outcome of the fetuses showing the absence of the ductus venosus. We conclude that isolated absence of the ductus venosus may be compatible with normal fetal development without relevant disturbance of circulation and oxygenation independently from type of abnormal venous circulation.

407

Post partum HELLP syndrome and eclampsia without antepartum pre-eclampsia

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Introduction: HELLP syndrome is a severe hypertensive pregnancy complication that generally occurs before delivery but it can occur also in the post partum period. Eclampsia is the new onset of convulsions during pregnancy or post partum in a woman with pre-eclampsia. The association HELLP syndrome/eclampsia frequently leads to neurological consequences such as Posterior reversible encephalopathy syndrome (PRES).

Methods: We report a case of HELLP syndrome/eclampsia association; a 22-year-old primigravida was admitted to our Unit for intra-uterine growth retardation (IUGR) and preterm rupture of membrane at 36 gestation's weeks. In the first day of puerperium she had a Platelet (PLT) count of 94000/ μ L, hypertension, proteinuria, increased transaminases values. The woman had a generalized grand mal seizure, which terminated spontaneously, without any predicting symptoms.

Results: MRI evidenced a Posterior reversible encephalopathy syndrome and PLT count < 30000/ μ L. Magnesium sulphate, Phenobarbital, Dexamethasone and Plasma exchange were utilized. The patient had a complete resolution of the syndromes after 20 days.

Conclusions: In spite of the rarity of postpartum HELLP syndrome and eclampsia, our review of literature regarding this severe complications was made. case suggests the importance of monitoring blood sample and pressure in puerperium of women with IUGR complicated pregnancy, even if the patient is asymptomatic or didn't present any signs of pre-eclampsia.

408

3D-4D ultrasound imaging of Nonne-Milroy Lymphedema

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Introduction: The ultrasound techniques have added a definitive value to the prenatal diagnosis improving the knowledge about the congenital malformations in the most

early stages, in order to make possible to explain to the parents all about of the abnormalities detected.

Despite these advances, the 2D ultrasound imaging recognition is still a problem for the parents that difficults the understanding the diseases. However, the 3D-4D ultrasound imaging has supposed a new perspective for the patients improving the understanding of the external malformations, like the congenital lymphedema characteristic of the Nonne-Milroy's syndrome.

Results: We report two cases of this disease diagnosed and understood using 3D-4D ultrasound techniques at our center and also a literature review of the few cases described in the literature analyzing the imaging features of this syndrome.

Discussion: 3D-4D ultrasound value is higher in order to make easier to understand the Nonne-Milroy's syndrome by doctors and patients. It is a powerful tool to compare prenatal and postnatal exams of its external abnormalities (like edema, hydrops, pleural effusion at the beginning to finalize into a simple subcutaneous and anesthetic edema, in the most of the cases with a normal adult life course) In our experience, 3D-4D ultrasound made possible that case one fetal features could be related with family same ones and second case parents could recognised and understand the Noone-Milroy's syndrome .

409

2D power Doppler-3D ultrasound diagnosis of a cesarean section dehiscence. Pathologic correlation

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Introduction: The uterine fistulae is a known and uncommon entity as a possible result of gynaecological surgery. An imaging diagnosis after an iterative cesarean delivery is reviewed demonstrating a good ultrasound-pathologic correlation.

Methods: An uteroperitoneal fistula was depicted using 2D-power Doppler (video) - 3D ultrasound exams and demonstrating a fine pathologic correlation.

Results: 2D-3D transvaginal ultrasound scan were performed showing a 5.3 cm³ blood collection upon the caesarean section scar and all covered by bladder peritoneum without bladder wall involving (Figure 1). The size of the defect at the level lower uterine segment was 9x12mm. An anechoic track seemed to communicate the collection with the endometrial cavity (Figure 2). Afterwards the power Doppler examination demonstrated the presence of an active blood flowing across the myometrium (Video). Finally, the treatment performed was an abdominal hysterectomy and the pathology analysis confirmed the process as an ischemic origin (Figure 3A-3B).

Discussion: The lower segment type of caesarean section has increased the prevalence of these uterine fistulous processes, which accounts for 83% of the cases (1,2). Transvaginal ultrasound and hysterosonography has been successfully used in many cases to allow direct visualization of the uterine fistulae. Magnetic resonance imaging with heavily T2-weighted images may show a bright fluid-filled tract, and computerized tomography likewise can be diagnostic as non invasive procedures. (1,2,5). Conservative management may be attempted, especially for patients with minimal symptoms, as the tract may spontaneously close (5) but fertility potential is considered poor even after repair with a rate of term deliveries 25%. A new delivery after dehiscence repair should be performed by repeating a caesarean section since the risk of recurrence of the dehiscence (2).

412

Obesity and gestational hypertensive disorders - a two year experience

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Introduction: It is widely known that prepregnancy obesity and excessive weight gain during pregnancy are important risk factors for gestational hypertension and preeclampsia. However, most cases of hypertensive disorders during pregnancy occur in women with a normal body mass index (BMI).

Objectives: The aim of our work was to analyze prepregnancy BMI, gestational weight gain and risk factors in two groups of hypertensive women – obese (group A) and non-obese (group B) – and to compare their pregnancy outcomes.

Material and methods: We have made a prospective study including all pregnant women who had hypertensive disease and were surveilled in our hypertension clinic throughout 2005 and 2006. We have checked all women for prepregnancy weight and gestational weight gain, and analyzed other risk factors associated with obese hypertensive women, such as gestational diabetes. Our initial sample included 137 hypertensive women, from which we obtained one study group (A) of 53 obese hypertensive women and one control group (B) of 84 non-obese hypertensive women. Obesity was defined as BMI above 30.

Results: Among our hypertensive women, we have observed a prevalence of 38.7% of obese women. In group A, gestational diabetes occurred in 26.4% of the cases compared to 14.3% in group B. Preeclampsia occurred in 3.8% of women from our study group and 15.5% in the control group. Of the obese women 28.3% had pregnancy-aggravated hypertension, which was reported

in only 15.5% of non-obese women. We have obtained similar numbers of preterm labour in both groups, either spontaneous (4%) or iatrogenic (17%). With regard to birth weight, 13.2 % of newborns from obese women were macrosomic compared to 3.6% in non-obese women.

Conclusions: According to the literature, there is a strong link between obesity and hypertensive disorders during pregnancy. This work confirms this association, considering the high percentage (38.7%) of obese hypertensive women. Furthermore, as it would be predictable for our study group, gestational diabetes is another risk factor reported in significant numbers and can be associated with the higher prevalence of macrosomia in obese women.

413

Increased NT with normal karyotype: fetal and neonatal outcome

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Introduction: The aim of our study was to analyze pregnancy complications and neonatal outcome of fetuses with sonographic diagnosis of Nuchal Translucency (NT) above the 95th centile for the gestational age in the population of the CDPNHGO influence area.

Methods: We proceeded a retrospective analysis from clinical files of 89 pregnant and newborn, with first trimester exam in which the fetus presented NT>95th centile carried through between January 1999 and May 2006. Results were compared with control group.

Results: Of the 89 pregnant (age 16-42, average 29,6) diagnosed increased NT (average 3.2mm):

- 31 had carried through maternal serum testing: 10 presented low risk for chromosomal abnormalities (5 had carried through fetal karyotyping that was normal in all cases), and 21 high risk (19 had carried through fetal karyotyping with detection of 1 case of T21).
- 56 had carried through fetal karyotyping with detection of 5 chromosomal abnormalities (4 T21 and 1 T13).

Pregnancy termination was requested in the 6 cases of chromosomal abnormalities. In the remaining 83 cases, we diagnosed in the continuation of pregnancy 7 cases of fetal abnormalities (2 major cardiac defects, 1 ventricular septal defect with neonatal diagnosis of hypertrophic cardiomyopathy and neonatal death, 1 polycystic kidney, 1 dysplastic kidney with neonatal death, 1 unilateral hydronephrosis, 1 agenesis of the corpus callosum and 1 fetus with hooped foot with neonatal diagnosis of severe neuropathy and neonatal death). We also verify 2 unexplained fetal deaths (23 and 40 weeks), 3 IUGRs and 3

preterm labour before 32 weeks with 1 neonatal death resulting from prematurity. In 9 pregnant Gestational Diabetes was detected. In 59 cases pregnancy complications had not been verified.

Discussion: Also in our study, increased NT was associated with a worse fetal and neonatal outcome.

415

Umbilical cord stricture: a rare cause of fetal death

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Introduction: Umbilical cord stricture is a rare prenatal event and in the vast majority of cases associated with fetal death. The authors describe a case of fetal death due to umbilical cord stricture.

Case report: A healthy, 26 years old, gravida III para II, with an uneventful pregnancy until 27 weeks, reported to the emergency service due to absence of fetal movements perception. Fetal death was diagnosed by ultrasonography. The evaluation protocol of our department was applied. The autopsy revealed a female fetus, with maturity and growth corresponding to 27 weeks, without any development abnormalities but with signs of hypoxia and anoxia. The umbilical cord, with 39,5 cm long, presented a stressed diameter constriction at 3 cm from the placenta insertion. The proximal segment presented vein dilatation, degenerative changes and recent mural thrombosis. The distal segment presented degenerative changes on the three vessels walls. There was vein dilatation with segmental wall narrowing, and there was recent mural thrombosis in an umbilical artery. The placenta weighed 220 g, and had chronic lymphohistiocytic villitis of moderate intensity and multifocal distribution. The analytic complimentary study was normal.

Conclusion: The umbilical cord constriction remains associated with etiological and risk factors still ill defined. It is believed that excessive fetal movements, as well as deficiency/absence of Warthon's jelly may be associated with this adverse fetal outcome. Unlike the usual location of the cord stricture near the fetal insertion, in our case it occurred near the placenta

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Objectives: Epidemiological, clinical and pathological analysis of fetal deaths

Material and methods: Retrospective study between 1/1/2003 and 30/6/2007 in a tertiary referral hospital. We analysed the cases of fetal death occurring from 24 weeks of gestation onwards. Demographic, medical and obstetrical characteristics were evaluated, as well as the application of the protocol of fetal death. Fetal deaths were classified according to an adapted Wigglesworth's classification (by DGS).

Results: During this period a total of 73 fetal deaths were recorded, with a mortality rate of 6,0 per 1000 births. The median maternal age was 30 years (range: 16 to 45 years). Two (2,8%) women were less than 19 years old and 14 (19,2%) had more than 35 years old. There were two women (3,2%) with less than four completed years of education, and 15 (21,7%) with more than 12 years of education. Maternal pathology was identified in 15 cases (20,5%). There were eight pregnant women (11,4%) with no prenatal care, and eight (11,4%) with late initiation of care. Thirty-six women (50,0%) were primipara. A previous fetal death occurred in two cases (5,6% of women with a previous pregnancy). Three pregnancies (4,1%) were obtained after assisted reproduction techniques (ART). The median gestational age was 34 weeks (range 24-40 weeks), with 32 cases at 35 weeks or after. The median body weight was 1800 g (range: 250 – 3850 g). Multiple births accounted for eight cases (11,0%) of fetal deaths. Forty-three cases were male (58,9%). Autopsy was performed in 64 cases (87,7%). After the evaluation of all clinical and pathological data we classified 42 cases (57,5%) as group 1, 22 cases (30,1%) as group 5, five cases (6,8%) as group 2, and four cases (5,5%) as group 4.

Discussion: Fetal death remains an unsolved problem for clinicians and families. The thorough investigation protocol of this complication of pregnancy is still under debate, and the putative causes remain undetermined in about 15-30% of cases. In the present study, the proportion of pregnant women with 35 years or more, of women without prenatal care, of pregnancies after ART, and of multiple pregnancies are more prevalent than in the total births occurring in Portugal. After evaluation of our cases we were still not able to identify a cause for fetal death in 10 situations (13,7%)

417

Analysis Of 73 Cases Of Stillbirth In A Tertiary Referral Hospital: Need To Redefine A Protocol?

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423

Prenatal Diagnosis of Beta-Thalassemia Major: Report of a case

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Background: Thalassemia is a quantitative disorder of globin synthesis, endemic on Mediterranean region, named and classified by the type of chain that is inadequately produced. α -thalassemia is an autosomal recessive disorder characterised for underproduction of α -globulin chains. In homozygous α -thalassemia, α chains production is unimpaired and the highly instable chains accumulate and precipitate, resulting in a markedly ineffective erythropoiesis and haemolysis – a condition called thalassemia major or Cooley anaemia. In fetal life, the production of fetal haemoglobin protects the foetus from severe disease. This protection rapidly disappears after birth, with anaemia beginning in the first 6 months of life. Those babies live dependent on blood transfusions and usually have precocious death due to the severity of the disease and the complications associated to frequent blood transfusions.

Case Report: We describe a case of a 30 year-old woman, primigravida, who came for her first prenatal visit at 6 weeks gestation. She had diabetes mellitus type I and autoimmune thyroid disease, and her husband had a chronic anaemia, which aetiology had never been investigated. A microcytic anaemia was found at the first analytic control of pregnancy: haemoglobin (Hgb - 10,5g/dl); hematocrit (Htc – 35%); mean corpuscular volume (MCV – 68 μ m³); mean corpuscular haemoglobin concentration (MCHC – 22g/dl). The Hgb electrophoresis of both parents was performed and confirmed the suspicion – both were carriers of α -thalassemia minor, hence the couple was orientated for prenatal diagnosis. An amniocentesis was performed and the fetal DNA study revealed presence of two mutations, α -IVSI-6(T-C) and α -IVSI-110(G-A), on globulin gene, without polymorphism XmnI on the promoter region of the α -globulin gene. The parents were informed of the bad prognosis of this gestation and decided for the termination of pregnancy. This woman is now pregnant again, she was submitted to a precocious amniocentesis and the foetus is normal, so the gestation proceeds.

Comments: α -thalassemia minor is not a contra-indication for pregnancy. There is a risk of a major form to be inherited if both parents are affected and transmit the mutational gene, hence it is an indication for prenatal diagnosis.

430

Screening of hemoglobinopathies in the post-partum – The Hospital Garcia de Orta experience

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Haemoglobinopathies (Hb) constitutes an important health problem. The Portuguese Program for Control of Hb (NPCH), was created in 1986. Inhabitants of Beja, Évora, Faro, Leiria, Lisboa, Santarém, Setúbal and immigrants from Africa,

Sub-continental India, East Timor, Brazil, Eastern Europe and Asia, represent the risk population.

Objective: Epidemiological characterization of the population; Quantification of pre-natal screening; Evaluation of the prevalence of Hb; Follow-up of the risk couples.

Methodology: Prospective study, composed by 125 puerperal women's, inpatient in Hospital Garcia de Orta, from June 1 to July 31, 2006.

Results: The overall prevalence of Hb was 16%, with predominance in African (67%) women's. We discovered Beta-thalassemia minor in 37%; HbAS in 32%; 21% had Alpha-thalassemia and 11% had Delta-thalassemia. All partners were studied; one case of HbAS was detected. This study led to the early identification of a new-born, carrier of Beta-thalasso-drepanocytosis. The screening of Hb during pregnancy has been requested in 17% of the sample (70% required in hospital appointment), all of them had family screening.

Comments: In order to prevent the expression of serious forms of Hb, the risk couples should be adequately screened and referred to genetic counselling and early intervention. The health professionals must be reminded to put in practice our government norm regarding the NPCH.

433

Fetal Death – 5 Years at the Obstetrics Department of the Dr. Daniel de Matos Maternity Hospital

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Introduction: Stillbirths are the largest contributor to perinatal mortality and remain a significant and understudied problem. Determining the cause of fetal death can influence clinical practice as it may lead to changes in pregnancy management, prenatal diagnostic procedures, neonatal management and pre-conceptional counselling.

Purpose: The authors present, in poster-form, a 5 year analysis of the associated factors and conditions leading to fetal death at the Obstetrics Department, Doutor Daniel de Matos Maternity – Coimbra (2002-2005).

Methods: An epidemiological descriptive study was made, composed of 102 cases of fetal loss (\geq 24 weeks) in the period from January 1, 2002 to December 31, 2006. The variables studied included: the number of prior gestations, the maternal age, the occurrence of fetal death in relation to delivery, the gestational age at delivery and the possible cause of fetal death using the Wigglesworth Classification Scheme (antepartum unexplained fetal death - Category 1, congenital anomalies - Category 2, intrapartum asphyxia - Category 3, other causes - Category 4).

Results: Of the population studied, 42 women were pregnant for the first time (primigravida), 60 had already

been pregnant 2 to 5 times before, but only 52 of the 102 women were nulliparous. The most frequent gestational age period encountered, of the stillborn delivered, was from 24 to 28 weeks gestation, followed by the period between 37 to 40 weeks. Fetal loss occurred during the ante-partum period in 92 of the 102 dead fetuses. The most frequently documented conditions leading to fetal death were: hypertensive syndrome in 11 cases, fetal anomaly in 11 cases, and abruptio placentae in 10 cases. Nevertheless, there was no clear etiology in 57 cases of fetal death.

Discussion: Stillbirth was frequently observed among primigravids (41.2%), in the preterm period (73,5%), and in the ante-partum period (90,2%). Among fetal death causes, the most frequent were maternal hypertension (10,8%) and abruptio placentae (9,8%), and in 55,9% of the cases, fetal death could not be explained.

Ongoing research will elucidate further causes for previously unexplained fetal death and focus efforts on effective prevention.

435

Fetal akinesia deformation sequence- a clinical case

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Introduction: Increased fetal nuchal translucency (NT) thickness at 11-13⁺⁶ weeks of gestation is a common phenotypic expression of fetal chromosomal defects, structural abnormalities and genetic syndromes.

The etiology of the fetal akinesia deformation sequence (FADS) is heterogeneous and can be caused by extrinsic mechanisms (teratogen exposure) or by intrinsic mechanisms (neurogenic and myopathic disorders or restrictive dermopathy). The prognosis is generally poor.

Clinical case: The authors report a clinical case of a possible diagnosis of FADS. A 26th-year-old healthy primigest woman was referred to prenatal diagnosis consultation at 12 weeks. First trimester ultrasound evidenced a nuchal translucency thickness of 3,1 mm (NT > P₉₅). Amniocentesis revealed a normal karyotype 46, XX. Maternal infection screening performed was negative. At the 18th-week the ultrasound examination disclosed abnormal fetal movement profile, fetal hydrops, abnormal position of fetal limbs and of the hands with a fixed flexion of the arms and a fixed extension of the legs, vertebral kyphosis and lordosis and micrognathia. The bad prognosis of an early fetal akinesia sequence was explained to the parents and they decided to terminate the pregnancy. The anatomo-pathologist confirmed the ultrasonographic findings suggesting arthrogriposis. It was also found low implanted ears, large neck, bilateral clubfoot, arthrogriposis of the knee and abnormal position on the fingers in both hands. It was also performed neuropathological, muscular,

enzymatic and cytochemical studies, all of them with negative results.

Conclusions: This case demonstrated the role of increased NT in the early diagnosis of FADS, even in cases without previous history of an affected child or without the presence of any risk factors. However, the diagnostic workup of FADS is difficult. More workup of the underlying FADS etiology and pathogenesis is needed so that appropriate counselling of next pregnancies can be offered to these parents.

437

Annular pancreas in chromosomally normal fetus with increased nuchal translucency: is it related?

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Introduction: Increased fetal nuchal translucency (NT) thickness at 11-13⁺⁶ weeks of gestation is a common phenotypic expression of fetal chromosomal defects, structural abnormalities and genetic syndromes. The outcome of fetuses with a NT thickness above percentile (P) 95 and a normal karyotype is poorer than the general population.

Clinical case: This clinical case reports a structural abnormality in a chromosomally normal pregnancy with increased fetal NT thickness. A primiparous woman was referred to our institution because of a NT thickness of 3,3mm at 11 weeks of gestation (>P₉₅). Amniocentesis was performed for cytogenetic study. Fetal karyotype was normal, 46, XX. Maternal serology showed negative results. This patient was rescanned at the 19th week. Fetal ultrasonography and fetal echocardiography were normal. The ultrasonographic reevaluation at the 29th week showed fetal biometry with DBP=7,0cm (P₁₀), CF=5,0cm (P₅) and Pab=21,1cm (<P_{2,5}), polyhydramnios (AFI=25) and a double bubble signal in the abdominal area of the fetus which could be compatible with duodenal atresia/stenosis. This pregnancy was also complicated with pre-eclampsia, at the 29 week, and required hospitalization. Serial doppler evaluation of umbilical artery demonstrated increased resistance indexes and in two weeks signs of centralization. A cesarean section was decided at 31 weeks for fetal condition. The newborn was submitted to surgery on the 2nd day of life because of an intestinal obstruction. It was diagnosed an annular pancreas intra-operatorily, and a duodeno-duodenostomy was successfully performed.

Conclusions: Relevant literature indicates a more pronounced NT thickness to be associated with a higher incidence of structural anomalies and, as a result, a worse fetal outcome. In the majority of the cases of increased NT antenatal studies including fetal karyotype, detailed ultrasonographic scans and infectious screening, completed by the second trimester would distinguish

between the pregnancies that can result in an adverse outcome and those resulting in the delivery of an infant without a major defect. In the clinical case presented it was only in the 3rd trimester ultrasound that a structural anomaly was found. It was successfully treated after birth. In this case the iatrogenic prematurity was related to hypertension induced by pregnancy.

443

Meaning of psychological intervention in women with previous pregnancy loss

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Introduction: This study's main goal was to evaluate the importance of psychological intervention in women with previous pregnancy loss; to assess the maternal adjustment and maternal attitudes of women with pregnancy loss towards subsequent pregnancies, comparing those which had psychological support at the time of the loss with those who hadn't.

Methods: The sample is made up of 40 pregnant women between the 16th and 22nd weeks of gestation, all with history of previous pregnancy loss. From the 40 women, 20 of them had psychological support at the time of the loss, and the remaining 20 had no specialized support at all. The sample was collected at the Obstetric Consultation of the Prenatal Diagnosis Center.

MAMA (Maternal Adjustment and Maternal Attitudes – Portuguese version) and HADS (Hospital Anxiety and Depression Scale - Portuguese version), were used.

Results: Results suggest that pregnant women who received psychological support at the time of the previous loss, have more positive attitudes towards the pregnancy and the baby, showing better adjustment and less depression and anxiety symptoms when compared to pregnant women with no support at the time of the loss. However, results also demonstrate that both clinical groups have a higher prevalence of depression and anxiety symptoms when compared to pregnant women with no previous history of pregnancy loss.

Discussion: Studies show that pregnant women that have less positive attitudes towards the pregnancy and baby are the ones that show higher rates of depression symptoms. Psychological intervention was potentially beneficial, once it improves the adjustment and attitudes towards the new pregnancy, preventing miscarriage, preterm birth and postnatal depression.

447

Puerperal infection in a level 3 delivery center- a retrospective study

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Introduction: Puerperal infections are among the leading causes of preventable maternal morbidity and mortality. Although the absolute number of maternal deaths due to puerperal infections is low, it is usually reported as the fourth leading cause of maternal death. Puerperal infection is largely preventable and treatable, and as such, reducing its incidence and severity is a reasonable and achievable goal. This study was designed to evaluate puerperal infection in our maternal-fetal department, which is considered one of the parameters of quality of the medical care during labour and puerperium.

Methods: Retrospective study of all cases of puerperal infections requiring hospital internment in our department during 2006. The data of all the prolonged internments (more than 2 days for vaginal deliver and 4 days for caesarean section deliver) and readmitted women was collected. Women without the diagnosis of infection and those whose birth didn't take place at our birth ward or in 2006 were excluded. We calculate puerperal infection's rate, its etiology and location, and the medium of internment. We also included some demographic variables such as age, race, body mass index and parity. Variables related with labour and risk for puerperal infections were also studied.

Results: Of the 3898 births during 2006, data of 133 women was selected, 113 for prolonged internments and 20 for readmissions. Ninety six women were excluded for not having a clear diagnosis of infection and 4 other for not having delivered at our labour ward or in 2006. The rate of puerperal infection was 0, 84%. Infections were found in 20 of 113 prolonged hospitalizations (17, 7%). The most common infections were the urinary tract ones (29, 7%), endometritis (21, 6%), wound infections\ dehiscence (10, 1%) and mastitis (8, 1%). No deaths were found in this group. The medium prolongation of internment was 8, 9 days and the medium duration of the readmissions was 4,1 days.

Discussion: In our department puerperal infection rate in 2006 was 0, 81%, which was similar to our previous years' result but lower than the usually 2-8% described in the literature. High quality maternity care, both by nurses and doctors and protocols applied for prevention of the puerperal infections might help explain these results.

450

Obstetric ultrasound quality assessment in a reference center

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Introduction: Screening for fetal anomalies is the mainstay of a Prenatal Diagnosis Center. This study was designed to evaluate the quality of the prenatal ultrasonographic detection of malformations in our center using data between 2004 and 2005.

Methods: Retrospective study of 3573 women who were submitted to morphologic or cardiologic ultrasonographic exams during pregnancy. Anomalies detected following 1st or 2nd trimester combined screening or routine amniocentesis were excluded from analysis. Ultrasonographic data were retrieved from computerized reports and compared with pathology and neonatal studies. Prevalence, sensitivity, specificity, positive and predictive value (PPV and NPV), positive and negative likelihood ratio (LR+ and LR-) and positive and negative post test probability (PPT+ and PPT-) were calculated.

Results: 193 fetus were diagnosed as having malformations: 3 polimalformative, 42 central nervous system, 61 genitourinary, 33 heart and vessels, 16 bone articulations, 18 gastrointestinal, 10 neck, 10 face. Thirty five of these fetus were excluded from analysis, 14 for transient anomalies and 21 for lost of follow up. The prevalence of fetal anomalies was 4,45%. After comparing with pathology and neonatal data we found that 10 fetus (6,5%) diagnosed as having ultrasonographic anomalies (false positive) had no identifiable malformations, while 15 (0,44%) of the ultrasonographic normal fetus had pathology (false negative). Sensitivity was 90,6%, specificity 99,7%, PPV 93,5%, NPV 99,6%, LR+ 309,2 and LR- 0,09.

Discussion: In our Prenatal Diagnosis Center we had a 4,45% prevalence of anomalies identified at birth. In our population, having an ultrasonographic suspected anomaly increased the probability of delivering an affected fetus from 4,45% to 93,5%, while having a normal exam decreases this probability to 0,44%. On the other hand 6,74% of ultrasonographic affected fetus had transient anomalies. Overall we believe the quality of our center is in line with other prenatal diagnosis' centers.

451

Cardiac anomalies- a review of normal embryology and ultrasonographic detectable pathology

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Introduction: According to population screening studies congenital heart disease occurs in 5/1000 to 8/1000 newborns, half of them causing major disease with symptomatic newborns shortly after birth. Congenital heart disease is thought to be related with one third of deaths between 20 weeks gestation and 1 year of life. Most cases of cardiac anomalies occur in low risk populations and the sensitivity to detect these anomalies seldom goes beyond 85% even with detailed fetal echocardiography. We pretend to review normal embryology of the heart and present some examples of ultrasonographic detectable anomalies.

Methods: The review of cardiac embryology shall be done using schematic diagrams summarizing the formation and differentiation of the fetal heart throughout pregnancy. Following this several images from our database record will be shown, representative of different kind of detectable cardiopathies: complex cardiopathy including Fallot tetralogy, transposition of the great vessels, anomaly of the pulmonary artery and ductus arteriosus, septal defects (auriculo-ventricular and interventricular), cardiac tumors and pericardic pathology.

Discussion: Detailed fetal echocardiography is one of the most sensitive techniques for routine detection of cardiac anomalies. However the high degree of differentiation required to perform this exam doesn't allow all the ultrasonographic centers to have such a specialized technician. Moreover we believe that to improve the acuity to detect this kind of anomalies it is important to understand how the normal development of the heart occurs. Understanding each of its steps will help looking for some keypoints where anomalies can be found. It is also important to visualize pictures or small movies with different anomalies in order to help the ultrasonographer to recognize patterns related to fetal pathology.

Nevertheless more studies are needed to amplify our conclusions.

453

Subcapsular liver hematoma in pregnancy – a case report

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Introduction: The subcapsular liver hematoma is a rare but severe complication of pregnancy and usually associated with preeclampsia and HELLP-syndrome. The causes of this condition are not definitely known. The incidence of subcapsular hepatic hematoma is approximately 1/45 000 deliveries.

Case report: A 25-year-old woman, primipara, who had a normal course of pregnancy until 33 weeks, when hypertension was diagnosed and Alphamethildopa was started. At 36 weeks of gestation the patient was admitted

for preeclampsia. Labor was induced and vaginal delivery occurred 48 hours after admission. Laboratorial evaluation at six hours post partum showed platelet count drop to 103,000/ μ l, AST increase to 165 U/L and LDH to 723 U/L. The patient referred right upper quadrant and epigastric pain, recording now that it had begun before admission. Transabdominal ultrasound (TAUS) revealed a subcapsular hematoma of the left liver lobe with intact capsule (10x11 cm) and small bilateral pleural effusions. Close monitoring of clinical and laboratorial parameters (capillary glycemia, coagulation tests, liver enzymes) was performed. Repeated TAUS showed no size progression of hematoma. The patient was discharged 2 weeks post partum in stable condition with follow-up protocol of surveillance.

Conclusion: The diagnosis of subcapsular liver hematoma in pregnancy requires high degree of suspicion for prompt recognition and appropriate medical support. Unruptured liver hematoma may be treated conservatively with close monitoring of possible complications.

455

Rhabdomyoma and tuberous sclerosis: parental implications - clinical case

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Introduction: The tuberous sclerosis is a genetic autosomal dominant disease, caused by mutation in one of two known genes (TSC1, TSC2) and characterized pathologically by the presence of different types of tumours in multiple organic systems. The rhabdomyomas are the benign heart tumours more frequent in the fetus and newborn. They are frequently associated with tuberous sclerosis.

Clinical case: We report a case of 37 year old primigravida, without relevant personal or family antecedents. The spouse is 46 years old man, healthy, who had 11 year old son (from a previous relationship), with psychomotor retardation and epilepsy. Pregnancy was followed-up without accidents until 21 weeks, time at which fetal heart tumour of great dimensions was diagnosed, involving the left ventricle without other anomalies in the morphologic ultrasonography study. Echocardiogram confirmed presence of voluminous intramyocardial tumour of the left ventricle and presumptive diagnosis of rhabdomyoma was established. Because of bad prognostic of the lesion, the couple requested medical interruption of gestation, which was accepted. The anatomic-pathological study confirmed the presence of heart rhabdomyoma of great dimensions. The progenitors were studied: the ophthalmologic and dermatologic evaluation was normal in both, the craniocerebral nuclear magnetic resonance was normal in the female progenitor, however disclosed an undeveloped form of sclerosis tuberous in

the male progenitor. Result of molecular study is awaited.

Comments: Despite of the autosomal dominant transmission of tuberous sclerosis, the penetration of the disease is elevated and its expressiveness is very variable. The genetic counseling is difficult but very important not only because of the eventuality of making a prenatal diagnosis in subsequent pregnancy, but also because of the bad neurological prognostic which the disease determines.

462

Late preterm birth in Maternidade Bissaya-Barreto

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Introduction: The late preterm births represent a significant portion of preterm deliveries. The increase in preterm births can be attributed to the increasing rates of late preterm births.

Objective: The purpose of the present work is to describe the women who delivered and the neonates born at MBB between 34 and 36 weeks gestation.

Methods: Retrospective analysis of the clinical records of women who delivered between 34 and 36 weeks gestation from January 2004 till December 2006 in MBB.

Results: The percentages of preterm birth and late preterm birth were 9,14%(239 births) and 6,68% (204 births) in 2004; 7,84%(279 births) and 5,41%(165 births) in 2005 and 7,84%(236 births) and 5,47% (166 births)in 2006, respectively. 70,8% of the preterm deliveries were late preterm deliveries in that period of time. In 76% of the late preterm occurring spontaneously there was at least one risk factor for premature delivery. In the 145 gestations study 43,4% occurred spontaneously and 53,1% were iatrogenic. Approximately 27% of the neonates born between 34 and 36 weeks gestation needed initial support in the UCIN. 23% needed resuscitation maneuvers. It was necessary ventilator support in 19,7%.

Conclusions: It is important to educate both the pregnant and the health care personnel that late preterm infants are physiologically immature, and therefore this group is at high risk for perinatal morbidity and mortality.

463

Fragile X syndrome – case report

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Introduction: Fragile X syndrome, also termed Martin-Bell syndrome or Marker X syndrome, is caused by a chan-

ge in a single familial mental retardation (FMR)-1 gene, which is found at Xq 27.3. Fragile X permutation (FRAXA) may occur sporadically. Approximately 10-20% of those women that carry the permutation gene experience premature ovarian failure (POF) with poor response to assisted reproductive treatments.

Case report: The authors describe the case of a 29 years old woman with hypergonadotropic amenorrhea, who desired to get pregnant. Screening for FRAXA permutations was performed and the patient started assisted reproductive treatment.

Conclusions: The mechanism of the association between FRAXA permutation and POF remains unknown. The authors emphasize the importance of the recognition of the association between POF and the risk of transmitting fragile X syndrome because this may be the only way of preventing this form of inherited male mental retardation.

464

Volume measurements of the gestational sac in the first trimester: how to assess the prognosis of the pregnancy in the early gestational age

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Introduction: The aim of the study was to measure the volume of the gestational sac during the first trimester of pregnancy and find any relation between growth abnormalities of the gestational sac and severe complications of pregnancy in the sense of loss of pregnancy or preterm delivery.

Methods: The volume was measured using 3D ultrasound and VOCAL Technique. We measured 335 chorionic cavities and 224 amniotic cavities in 335 singleton pregnancies between the 5th and 14th week of gestation. Adverse pregnancy outcome occurred in 34 cases. All measurements were done by two independent investigators. Wisser dating was used.

Results: We found a relation between gestational age and gestational sac volume: $\ln(V_{CD})=24,443+6,5571 \cdot \lg(t)$ in pregnancies with normal outcome, $\ln(V_{CD}) = -1,262+1,4082 \cdot \ln(t)$ in the cases of pregnancy loss. The regression analysis difference is statistically significant (F-test, $P < 0.00001$). The measurements of two independent investigators were in strong correlation (0,97), there was an acceptable inter-observer variability. Simultaneously there was found a relation between gestational age and shape of the chorionic cavity. There is strong concordance in dating of gestation using Wisser and Hadlock until the 90th day of gestation; both manners of dating become divergent after 90th day of gestation.

Discussion: Volume measurements of the gestational sac, especially of the chorionic cavity in the first trimester could

be one of the first methods that could assess the development and prognosis of pregnancy. There is a difference in growth of the chorionic cavity in normal and abnormal-ending pregnancies, but that difference was not found in the case of amniotic cavity. In the previous part of this study we found a strong positive linear correlation between CRL and gestational sac volume in normal singleton pregnancies. There were suggested in previous studies that the growth of the gestational sac is abnormal in cases of miscarriage.

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466

Klippel-Tranaunay-Weber Syndrome (KTWS) and pregnancy: successful obstetrical management

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Introduction: KTWS is a rare congenital disease with variable expression, characterized by extreme varicose veins, bone and soft tissue hypertrophy and pigmentary skin changes in the affected limbs. Pregnancy in patients with KTWS is reported only in few cases. This syndrome is known to be associated with increased maternal and fetal morbidity: adverse pregnancy outcomes may include haemorrhage, deep or superficial thrombosis, pain in the affected limb, disseminated intravascular coagulation, Kasabach-Merrit syndrome and placental abnormalities. Intrauterine growth restriction and preterm birth may occur. The mode of delivery should be considered carefully in an attempt to minimize the risk of possible haemorrhage for vascular changes in the cervix and lower uterine segment.

Methods: A primigravida with the Klippel-Tranaunay syndrome was referred to our unit at 14 weeks' gestation. Careful physical examination, including colposcopic study, serial coagulation evaluations, consulting with hematologists, radiologists, vascular surgeons and anesthesiologists were made.

Results: Successful delivery of a healthy infant was achieved. No complications occurred.

Conclusions: The maternal and fetal morbidity during pregnancy in women with KTWS is proportional to the severity of disease, which can be exacerbated by pregnancy. Multidisciplinary management is required for the successful of pregnancy. A systematic antepartum care, a careful choice of delivery plan and flexibility are keys for successful maternal and fetal outcomes.

467

Achalasia presenting during pregnancy

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Persistence of vomiting during late pregnancy is unusual and may suggest an organic etiology. The authors report on a 36 year-old primigravida who presented with persistent vomiting, nausea and dysphagia. At first, she was mistakenly treated for hyperemesis gravidarum. Due to the persistence of symptoms during the second trimester of pregnancy and severe weight loss, she was submitted to an upper gastrointestinal tract endoscopy. Endoscopy findings suggested achalasia, and diagnosis was confirmed after esophageal manometry. Pneumatic dilation was necessary at the 23rd, 25th and 32nd weeks of pregnancy, to allow oral food intake. Fetal growth was closely monitored and remained within normal values. A healthy baby was born by vaginal delivery at the 39th week of pregnancy. Surgical treatment of achalasia was deferred until after delivery.

Achalasia is a rare disorder of the esophageal smooth muscle that may mimic nausea and vomiting of pregnancy and that has been linked to malnutrition during pregnancy. Treatment with pneumatic dilation during pregnancy may prevent severe malnutrition and improve good fetal outcome, postponing other forms of treatment until after delivery.

469

Monochorionic twin pregnancies - association between discordant growth and adverse perinatal outcome

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Objective – This study was performed to evaluate whether discordant growth in monochorionic twins is associated with adverse perinatal outcome.

Material and Methods – A retrospective assessment was performed comprising 80 monochorionic twin pregnancies, managed at our department and delivered after 24 weeks of gestation. Those pregnancies were separated in two groups, according to the presence of weight discordance (defined as an intertwin birth weight difference $\geq 20\%$) – Group A, which were compared with other monochorionic twin pregnancies without this complication – Group B (control group). Between 'discordant' and 'concordant' pairs we evaluated: maternal age; parity; mode of conception; pregnancy associated intercurrents; preterm delivery rate; causes of pregnancy termination; C-section rate; Apgar

score at five minute and admission to neonatal intensive care unit. After this global evaluation we performed an other comparative study between the elements of the discordant group, according to the presence or absence of IUGR in one foetus.

Results – Among the pregnancies evaluated 29 were included in the weight discordance group and 51 in the concordant group (control group). Mean maternal age was 29.6 years (group A) versus 28.1 years (group B). In group A 86.2% of pregnancies were spontaneous versus 98% in group B.

Discordant twins had higher preterm delivery rate (89.7% vs. 82.4%), lower mean gestational age at delivery (33.6 versus 33.9 week), higher C-section rate (65.5% versus 39.2%), higher incidence of Apgar score < 7 at 5 minute (6.9% versus 3.9) and needed more frequently admission to neonatal intensive care unit (62% versus 31.3%).

Pregnancy related complications like TTTS, hypertensive disorders or fluxometric alterations were more frequent in discordant twins.

Conclusion – The discordant group seems to be in greater risk of adverse perinatal outcome, especially if IUGR is present.

473

Mortality rate among preterm delivered newborns

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Introduction: An increasing number of infants are born prematurely. Although survival rates and outcomes for premature infants have dramatically improved in recent decades, morbidity and mortality are still significant. The purpose of the work was to evaluate the perinatal outcome – mortality rate in preterm delivered newborns – newborns weighting under 2500g.

Methods: We reviewed the medical records of 8212 deliveries from the period of two years at the University Clinic for obstetrics and gynecology, and analyzed 896 preterm births from which 634 were under 2500g birth weight. These were divided in two groups – group of infants admitted to the neonatal intensive care unit (NICU) and those suited with mothers - rooming in program.

Results: 7,72% (634/8212) from the total number of deliveries were newborns under 2500g. 6,31% (40/634) were suited with their mothers and the other 93,69% (594/634) were admitted to the neonatal intensive care unit (NICU). The overall mortality rate was 7,25% (46/634) and 7,74% (46/594) in the group of infants admitted in NICU. The greatest number of lethal outcomes was in the group

of very low birth weight infants – 82,61% (38/46) and only 8 were in the group with birth weight between 1500 and 2500g.

Discussion: In the cohort of very low birth weight infants, mortality was still high, especially among extremely low birth weight infants. We did, however, observe a decreasing trend in mortality rates for the participating neonatal units over the 24 studied months, but the important note is that from the analyzed group, a great number of mothers had low socioeconomic status, did not control the pregnancy and had delivery immediately after the hospitalization.

479

Endocarditis: an unusual cause of postpartum fever

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Puerperal infection is one of the leading causes of preventable maternal morbidity and mortality. Most of them occur after hospital discharge. Endocarditis in puerperium has a low incidence, especially if not associated with a prior history of rheumatic or congenital heart disease.

The authors report a clinical case of a 25 year-old apparently healthy woman, admitted in the emergency room 4 weeks after an uncomplicated vaginal delivery, complaining of fever during the last 3 weeks.

On admission, she presented with fever (38°C) and tachycardia (120 bpm). Gynaecologic examination and pelvic ultrasound were normal. WBC was 8700 cells/mm³ with 86,6% neutrophils and a C-reactive protein of 18,6mmol/L. The urine culture from the day of admission grew *Streptococcus agalactiae*.

The patient was started on iv antibiotics, with clinical improvement after 24 h, afebrile but maintaining a sinus tachycardia of 130 bpm and a gallop rhythm.

She was transferred to a central hospital based on the suspicion of infective endocarditis. Transthoracic echocardiography revealed a large mitral valve vegetation and mitral valve prolapse. Blood cultures were negative.

Clinical status was complicated by acute pulmonary edema, requiring emergency valve replacement. After surgery the patient became clinically stable and asymptomatic. During the hospital course, the patient developed a pneumonia.

The authors highlight the importance of a careful investigation in the differential diagnosis of post partum fever, without overlooking extra genital causes, so that unusual complications may be recognized.

480

Aneurysm of the Vein of Galen: revisiting a case

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Introduction: Aneurysm of the vein of Galen is a complex arteriovenous malformation consisting of multiple communications between the system of the vein of Galen and the cerebral arteries. It is a rare condition, accounting for less than 1% of all intracranial vascular malformations, but in the pediatric population it may represent 30% of these malformations.

Case report: A 29 year-old woman, gravida 2 para 1 was referred to our hospital at 32 weeks of gestation with the suspicion of third ventricle dilatation. In the emergency unit ultrasound a midline supratentorial anechoic structure of 14x17mm was identified. This structure extended posterior giving a “keyhole” appearance to the lesion. Pulsed and color Doppler revealed a turbulent vascular flow. Fetal biometries were within normal range but there were signs of circulatory redistribution and cardiac insufficiency – absent flow in the umbilical artery, pulsatile flow in the umbilical vein, reversed A wave in the DV and tricuspid regurgitation. A fetal MRI was performed to confirm the diagnosis, better definition of anatomic details and exclusion of parenchymal alterations.

The pregnant woman was referred to a center with neonatal neuroradiological and neurosurgical facilities. The baby was delivered at term by elective cesarean section. At birth he presented signs of severe cardiac insufficiency and died at the fourth day of life after two embolization procedures.

Discussion: Aneurysm of the vein of Galen is a rare condition and has a high mortality rate. The fetuses with secondary cardiac failure have the worst prognosis. Prenatal diagnosis is of extreme importance because it allows the timely organization of a multidisciplinary team to assist the newborn. Alternatively the pregnant woman can be transferred to a centre of reference to initiate early medical and/or surgical treatment.

483

Post-molar gestational trophoblastic disease - a case report

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Introduction: Partial Hidatidiform Mole (PHM), is a form of Gestational Trophoblastic Disease (GTD), accounting for a 5% risk of post-molar GTD (persistent or malignant GTD), 10-30% of which are choriocarcinomas.

Case: The authors report a case of a 35 years old patient with a background of PHM in November 2003 that evolved into persistent GTD having done chemotherapy with methotrexate until October 2004. This patient was kept under close surveillance until July 2005, reporting values of HCG within normal range for 6 months. She was followed monthly and kept on oral contraception. In October 2006, referring metrorrhagias for a month, the pelvic examination revealed an enlarged uterus. A transvaginal ultrasound showed a large uterine intracavitary mass. At that time the hCG value was 128.261 mIU/mL. A suction-curettage was done revealing histological evidence of choriocarcinoma. During the staging period the patient was admitted in the emergency room with abdominal tenderness which led to an urgent exploratory laparotomy revealing a hemoperitoneum associated with a theca lutein cyst rupture. It was performed a total hysterectomy and left ovary cystectomy. Histologically it was diagnosed a choriocarcinoma with myometrial invasion. The patient started chemotherapy with an EMA/CO regimen (Etoposide, Methotrexate, Actinomycin D, Cyclophosphamide, Vincristine) during 8 courses, until May 2007. The hCG became within normal values since February 2007, after 4 months of treatment.

Discussion: As a rare case of post-molar GTD, it serves as an alert to the potential risk of this pathology recurring as a malignant disease. Pregnancy must be avoided for at least one year while maintaining hCG normal values, which allows us to expect a normal reproductive outcome for these women. However, there is a risk of recurrence of molar pregnancy ranging from 1-2%. A careful follow-up is mandatory, especially during a future pregnancy.

485

Mode of delivery and neonatal outcome in severe preeclampsia and HELLP Syndrome

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Introduction: The aim of our study was to analyse the association between mode of delivery and neonatal complications in pregnancies complicated by severe preeclampsia and HELLP syndrome.

Methods: Retrospective study of 81 cases between 2003-2004 analyzing gestational age, mode of delivery, birth weight, Intra-uterine growth restriction (IUGR), Apgar score, respiratory distress syndrome (RDS), intraventricular haemorrhage (IVH), necrotizing enterocolitis and neonatal death.

Results: Group I (<28weeks, n=10): 6 elective caesareans and 4 caesareans during labour. Neonatal complications were similar in both groups.

Group II (28-34 weeks, n=25): 20 caesareans (11 elective and 9 during labour) and 5 vaginal induced deliveries, Apgar score was better in vaginal deliveries and worst in the caesareans during labour group. There were less RDS in the vaginal group (40 % vs 72% in the elective caesareans and 77% in the during labour caesareans). An IVH (during labour caesarean) and neonatal death (elective caesarean) had occurred.

Group III (>34 weeks, n=56): 22 caesareans (7 electives and 15 during labour) and 34 vaginal deliveries (25 induced). Only in this gestational age we verified in the elective caesareans subgroup a lower birth weight and a higher IUGR rate. Apgar score and neonatal complications were similar in all the groups.

Discussion: There were no neonatal benefits from caesarean delivery. In the 28-34 weeks group, for a similar birth weight and IUGR rate, vaginal delivery was associated with lower probability of respiratory distress syndrome.

487

Ultrasonographic diagnosis of fetal ovarian cysts - five cases in five years

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Introduction: Ovarian cysts are the most frequent type of abdominal tumors in female newborns. Although frequently asymptomatic, they can bring serious complications, such as torsion, rupture, hemorrhage or compression on other viscera. Its diagnosis can be made by prenatal ultrasound examination, usually in the third trimester of pregnancy.

Methods: Prenatal and postnatal records and ultrasonographic data of the five cases detected from 1st January 2002 to 31st December 2006 in our institution were retrospectively analyzed: maternal age and pathology, gestational age at diagnosis, cyst complications, follow up after delivery.

Results: During the five years studied, five cases of fetal ovarian cysts were prenatally diagnosed. The mean gestational age at diagnosis was 31,6 weeks. One of the patients had type II diabetes, and one other had chronic hypertension and developed pre-eclampsia. The mean cyst diameter at diagnosis was 38,3 mm, ranging from 29 mm to 60 mm. At diagnosis, 4 of the 5 cysts appeared as anechoic, uniloculated cysts, and two of them became complicated, i.e., hemorrhagic, in uterus. There was also a septated cyst at diagnosis that became hemorrhagic during pregnancy. In the postnatal period the septated cyst suffered spontaneous remission, along with the two uncomplicated cysts. The remaining two cases, corresponding to hemorrhagic cysts, were surgically removed after birth.

Discussion: There has been great controversy regarding the best clinical attitude when a fetal ovarian cyst is diagnosed. Some authors suggest that in uterus aspi-

ration of the cysts can avoid some of the complications, such as torsion or compression, but some argue that this invasive approach is of limited value. In this small series, none of the cysts were aspirated in uterus, and 60% regressed spontaneously, including one that had suffered in uterus hemorrhage and massive enlargement. Once a fetal ovarian cyst is diagnosed, ultrasonographic monitoring should be offered in the prenatal and postnatal period, in order to promptly identify complications and to define the best therapeutic approach.

491

Triplet pregnancy: risk factors for preterm delivery

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Background: Triplet pregnancies are associated with a high risk of early preterm birth which is an independent risk factor for death and handicap baby. Until recently, these pregnancies were an infrequent occurrence but with the development of assisted reproductive technology, the triplet birth had a substantial increase.

Objective: The aim of this study was to identify risk factors for preterm delivery in triplet pregnancies.

Methods: We analyzed fetal, maternal and demographic data of triplet pregnancies followed in Multiple Pregnancy Clinic of Maternity Dr. Alfredo da Costa, in the years of 1994-2006. We compared two groups: one with delivery before 32 weeks (n=14)- Study Group and another one after 32 weeks (n=45)-Control Group

Results: The mean gestational age at birth in the first group was 29 weeks and in the Control Group was 34 weeks. There weren't significant differences in maternal age (32.4 vs. 32.5); BMI in the beginning of the pregnancy (23.98 vs. 24.45) and weight gain at the same gestational age. Also, there were equals results in the analysis of hypertension (14.3% vs. 15.6%) and fetal malformations (7.1% vs. 8.9%) In the Study Group the rates of multiparous women (more than 2 previous deliveries) were higher than in the Control Group (14,3% vs. 6,7%)

Conclusions: More than 2 previous deliveries before the triplets was the only risk factor found for preterm birth in our population of triplet pregnancies.

492

Preterm labor in an unicornuate uterus with rudimentary horn

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Uterine malformations can cause severe fertility problems, ranging from infertility and recurrent abortions

to prematurity and malpresentation, which increase the perinatal morbidity and mortality rate. Uterine anomalies in the obstetric population have been reported to occur in 0.1-3.2% of patients, and the unicornuate uterus constitutes only 1-2% of these anomalies.

The authors report a case of a preterm premature ruptures of the membranes at 30 weeks gestation in an undiagnosed unicornuate uterus with a rudimentary horn.

A 28-year-old primigravida, at 30 weeks of gestation was referred to the obstetric clinic of our hospital with the diagnosis of a preterm premature ruptures of the membranes.

After careful counselling, a plan was made for caesarean section in the event of labour ensuing. Intraoperative examination revealed a right hemiuterus and a left rudimentary horn connected to the right hemiuterus. Endovaginal ultrasound performed 9 months after caesarean section raised suspicions on the uterine anomaly previously described.

Obstetric results in patients with uterine malformations confirm the view that these patients have high rates of complications that increase the incidence of obstetric intervention and perinatal mortality. In this case, uterine malformation has contributed to breech presentation and preterm delivery.

494

Failure of prostaglandin induction in a misdiagnosed Müllerian abnormality

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Müllerian duct anomalies are congenital anatomic abnormalities of the female genital tract that arise from nondevelopment or nonfusion of the mullerian ducts or failed resorption of the uterine septum, with a reported incidence of 0,5 – 5%. The authors report a case of failure of prostaglandin labour induction in a misdiagnosed uterine anomaly. A 25-year-old, grávida 2, para 1 with a history of an ultrasound diagnosis of uterus didelphys, was referred to our hospital at 21 weeks of gestation with a dead foetus. After 24h of vaginal prostaglandins, the patient showed no change in cervical condition and no uterine contractions. On bimanual and speculum examination, the patient was noted to have a single cervix. A transvaginal scan showed two separated uterine horns and a single cervical canal in continuity with the right uterine horn. Foetus was in the left uterine horn. The patient underwent a pelvic MRI which showed two non communicant uterine hemicavities with a foetus in the left hemicavity and ipsilateral renal agenesis. Laparotomy was undertaken and left uterine horn and fallopian tube were removed. Correct diagnosis of a uterine anomaly is not always straightforward and one must conjugate clinical and imaging findings.

498

Analysis of the complications during pregnancy in women with serological features of acute toxoplasmosis and acute parvovirus

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Toxoplasma gondii and parvovirus B19 (PVB19) infections in healthy adult are usually asymptomatic. Congenital toxoplasmosis is the cause of hydrocephalus, chorioretinitis and intracranial calcifications. Hydrops is the the most common complication during the fetal PVB infection. The aim of the study was to analyze the complications during pregnancy in women with serological features of acute toxoplasmosis or acute parvovirus.

In our study we used the data of 1800 pregnant women hospitalized in Department of Fetal-Maternal Medicine and Gynecology Research Institute Polish Mother's Memorial Hospital (RIPMMH) in Łódź, (Poland) between 2000-2007.

Anti-*T.gondii* antibodies were tested by ELISA Vidas Toxo IgG, ELISA Vidas IgM (BioMerieux) and Platelia Toxo-A (Bio-Rad). Anti-PVB19 antibodies were detected by NovaLisa Parvovirus B19 Recombinant IgG-ELISA and IgM-ELISA (NOVATEC)

Prevalence of IgG anti-PVB19 among pregnant women was 35% (n=633). IgG anti-*T.gondii* was noticed in 55,5% (n=910) of women. Serological features of acute parvovirus were demonstrated in 13,5% (n=243) of the patients and 14,2% (n=256) of women suffered from acute toxoplasmosis. Fetal hydrocephalus or ventriculomegaly was diagnosed in 19,5% (n=64) of the pregnancies with IgM anti-PVB19 and in 7,3% (n=19) women with serological features of acute toxoplasmosis. In 8,5% (n=28) of the patients with IgM anti-PVB19 and 9% (n=5) of the pregnant women with IgM and/or IgA anti-*T.gondii*, fetal hydrops was detected. Intrauterine death was diagnosed in 4,5% (n=15) of the cases with acute PVB19 infection and in 2,3% (n=6) of the patients with acute toxoplasmosis. Amniotic fluid disorders were noticed more often in women with acute parvovirus (polyhydramnion 15,5%, n=51; oligohydramnion 8,5%, n=28; ahydramnion 6,3%, n=21) than with active toxoplasmosis (polihydramnion 3,4%, n=9; oligohydramnion 3,4%, n=9; ahydramnion 0%). We have examined also an influence of *T.gondii* and PVB19 infections on an intrauterine growth restriction, preterm delivery and spontaneous abortions.

In conclusion, infections of *T.gondii* and PVB19 are very common cause of complications in pregnancy. Because of high prevalence rate of IgG antibodies in Poland it is necessary to consider routine serological testing in pregnancy.

499

Hypertension during pregnancy: who is at risk?

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Background: Hypertensive disorders are the most common medical complications of pregnancy. Understanding the disease process and the impact of hypertensive disorders on pregnancy is of the utmost importance since they are associated with increased maternal and perinatal morbidity and mortality.

Objective: To identify risk factors for hypertension in pregnancy among women receiving care in *Maternity Dr. Alfredo da Costa* (Lisbon).

Methods: We made a population-based retrospective analysis using *Maternity Dr Alfredo da Costa's* data collection from 2002-2006, which involves 76 normotensive pregnant women and 3 groups of pregnant women with hypertension (221 pre-existing hypertension, 29 preeclampsia, eclampsia or HELLP, and 28 gestational hypertension). We compared and identified socio and clinical risk factors associated to the different types of hypertension in pregnancy, using non parametric statistics. The risk factors we analyzed are age, nulliparity, race, obesity, and smoking.

Results: Age (chi-square = 22.795, DF = 3, p < 0.001) and obesity (chi-square = 19.909, DF = 3, p < 0.001) were found to be associate with risk for hypertensive disorders in pregnancy. Comparing nulliparity (chi-square= 4.229, DF = 3, p = 0.238), race (chi-square = 0.175, DF = 3, p = 0.982) and smoking (chi-square = 0.190, DF = 3, p = 0.979) among normotensive women and pregnant women with hypertension, the differences weren't statistically significant.

Conclusions: Although first pregnancy, obesity, advanced maternal age and black race are known risk factors for hypertensive disorders in pregnancy, we just found statistically significant differences between age and obesity among our women's work group. Smoking has been associated with a reduced risk of hypertension during pregnancy but that wasn't confirmed in our analysis.

503

The influence of BMI in the prognosis of twin pregnancy

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Background: Numerous epidemiologic studies show that socioeconomic deprivation, smoking, low body mass index

(BMI < 19) before pregnancy and young maternal age are associated with preterm delivery.

Objective: The aim of this study was to identify the influence of maternal BMI in the evolution of twins pregnancies.

Methods: We analyzed fetal, maternal and demographic data of 632 twins pregnancies followed in Multiple Pregnancy Clinic of Maternity Dr. Alfredo da Costa, in the years of 1994-2006. We compared four groups: Group A – BMI > 30 (n=55); Group B – BMI 25-30 (n=141); Group C – BMI 20-25 (n=351); and Group D – BMI < 20 (n= 85)

Results: There weren't significant differences in maternal age (31.2 vs. 31.1 vs. 30.4 vs. 29.4); Multiparous were higher in Group A and B (29.1 and 21.3) vs. (11.1 and 11.8) Group A and B have the higher levels of Hypertension (23.6 and 20 vs. 14.8; and 14.1) and also of Diabetes (14.54 and 10 vs. 3.4 and 4.7). However, Group A had the lower level of preterm labor (16.4 vs. 31.2; 38.2; 41.2). The mean gestational age was similar in all the groups but Group A and B had heavier twins. Groups A, B and C had a similar rate of caesarean section (67.3; 68.8 and 60.4) but Group D had a lower one (54.1). Group B had the higher rate of puerperal complications (7.1 vs. 1.8; 2.6 and 2.4). Group A and B had the higher rate of scar infection (1.8 and 0.7 vs. 0.3 and 0).

Conclusions: In our population of mothers of twins, BMI didn't influence in a significant way the prognosis of twin gestations probably because heavier women had less premature labor but more iatrogenic deliveries because of medical problems.

507

Predicting macrosomia in gestacional diabetes

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Objective: to identify risk factors for fetal macrosomia in gestacional diabetes (GD).

Patients and methods: GDM was diagnosed according to Coustan and Carpenter criteria; 501 single pregnancies were prospective followed between January 2003 and December 2006. The parameters studied were: age, family history of diabetes, previous body mass index (BMI), previous history of GD and macrosomic fetus, weight gain, insulin therapy, time and type of delivery, newborn gender and weight, prevalence of large gestacional babies (> 90th percentile according Kramer MS).

Results: Mean age was 33 years, mean BMI 26,4 and 53,7% of these women were over-weight or obese. Mean weight gain in pregnancy was 11,3 Kg. 48% of the patients referred family history of diabetes mellitus, in the multiparous group 15% had previous GD and 12% a macrosomic baby. GD was diagnosed at 29 weeks (SD 6 Weeks), and 25% required insulin therapy. Caesarean

section was performed in 46% women. Mean fetal birth weight at term deliveries was 3325g and 7,6% newborn were classified as large to gestacional age.

The fetal birth weight was a weak positive correlation with maternal BMI (Pearson's R= 0,25), mean fetal birth weight as higher in mothers with BMI e" 30 (3280 vs 3495 g, T-Test, p <0,001) and most of the large infants were born from over-weight or obese mothers (75% vs 24%, Chi-Square p=0,009). Fetal macrosomia was not associated with insulin therapy, maternal weight gain in pregnancy or previous GD.

Conclusions: In Gestacional Diabetes the most important risk factor for fetal macrosomia is the previous maternal BMI.

509

Levels of extracellular DNA in pregnancies with placenta associated disorders

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Objectives: To assess whether there are elevated levels of extracellular DNA in plasma samples from pregnancies complicated by placenta associated disorders (PD) compared to physiological pregnancies.

Methods: 13 pregnancies with PD were included in the study (A group), 7 suffering from preeclampsia, 4 preeclampsia and IUGR and 2 IUGR only. Gestational age ranged from 26 to 41 weeks. Plasma samples were also collected from 3 physiological pregnancies at 36th week of gestation with abnormal biochemical screening from the 1st or 2nd trimester with normal US scans (B group) and from 6 physiological pregnancies at 36th week of gestation with normal biochemical screening in the 1st and 2nd trimester and normal US scans (C group). Plasma samples were analyzed by real time PCR and total cell free (tcf) DNA (GADPH, GLO assays) and fetal cell free (fcf) DNA (SRY assay) were quantified. In this study QIAamp DNA Blood Mini kit was used to isolate extracellular DNA from maternal plasma samples.

Results: Mean values of tcf DNA in the GLO assay in the A group were 6327.3 genome equivalents (GE)/ml in the B group 1734.9 GE/ml and in the C group 910.6 GE/ml. Mean values of the tcf DNA in the GADPH assay in the A group were 7332.1, in the B group 2357.2 GE/ml and in the C group 1280.1 GE/ml. Mean values of the fcf DNA in the SRY assay in the A group were 326.9 GE/ml, in the B group 63.1 GE/ml and in the C group 31.6 GE/ml.

Conclusion: The amount of both tcf DNA and fcf DNA was significantly higher in pregnancies with placenta associated disorders compared to controls in all performed assays.

We intend to perform further studies to assess whether quantification of extracellular DNA could be used as a non-invasive screening test for placenta associated disorders earlier in pregnancy.

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510

Risks associated with extremely large babies

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Background. There is increased risk of complications for mother and child at the birth of a macrosomic infant, in particular very large babies (birthweight \geq 5000 g) Birthweight in Iceland is among the highest in Europe.

Methods. A retrospective case-control study including all births of very large babies in the years 1996-2005 in Iceland, with two matched normal weight controls for each case. Descriptive statistics and multiple regression were used to estimate the risk of complications.

Results. There were 343 births of very large babies or 0.9% of all singleton livebirths. There was a significantly increased risk of shoulder dystocia (OR 26.9, CI95% 11.1-65.1), but also of emergency cesarean section (OR 5.2, CI 95% 3.4-8.0) and failed induction of labour (OR 4.3, CI95% 1.7-11.0), but elective section was not more frequent (OR 1,1, CI95% 0.6-2.0). There was increased risk of congenital malformation (OR 2.1, CI95% 1.2-3.7), birth injury (OR 3.7, CI95% 2.1-6.8) and postdelivery metabolic disturbance (OR 2.5, CI95% 1.1-6.2) among the very large babies.

Conclusions. There is considerable danger of shoulder dystocia attached to the delivery of very large babies along with increased risk of various complications for these neonates and their mothers. Better clinical assessment methods to detect these babies and to protect them and their mothers are needed

512

Experience of a ante-natal clinical centre with HIV positive pregnant women for the last 14 years

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Introduction: One of the most rewarding stories of the management of the HIV infection is the success of the

prevention of vertical transmission of the virus using anti-retroviral treatment. Our aim was to make a review of the pregnant HIV women observed in our antenatal clinic and analyse the outcome of their children

Methods: The authors made a retrospective observational analysis of 115 pregnancies of women seropositive for HIV who had at least one prenatal observation and delivery at Hospital de S. Joao from June 1993 to August 2007. One of the outcomes studied was prevalence of infected newborns. Secondary outcomes concern the type and scheme anti-retroviral therapy, HIV viral load and CD4+ count at delivery and mother and newborn morbidity.

Results: The authors found only three cases (2,6%) of infected newborns. All cases were prior to the systematic use of anti-retroviral therapy and application of peripartum care measures. The immunological state or the viral load of the mother didn't interfere with the outcome of the babies born of mothers on anti-retroviral treatment, even though some treatments began late in pregnancy.

Conclusion: As in other series, the anti-retroviral treatment was successful in the prevention of vertical transmission of HIV, despite of time and type of treatment and immunological and viral load state of the mother.

520

Late-onset and isolated ventriculomegaly

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Introduction: The authors present a case of late-onset and isolated ventriculomegaly, diagnosed at 29 weeks, whose rapid evolution prompted a request for termination of pregnancy.

Case report: A 37 years old, obese, gravid had a routine and adequate surveillance, including ultrasound scans and amniocentesis which revealed a normal fetal karyotype. The first ultrasound scans demonstrated normal fetal morphology, but at 29 weeks bilateral ventriculomegaly was apparent in a routine exam. Magnetic resonance imaging (MRI) revealed asymmetric ventriculomegaly with a slight predominance on the right side (atrial diameters: 24.7 and 17.6) and an image suggestive of sanguineous sedimentation on the left occipital horn. Images suggestive of ventricular hypertension were also present. At 30 weeks, a repeat ultrasound revealed rapidly progressive ventriculomegaly and confirmed the presence of peri-ventricular haemorrhage at the left posterior horn. The request for termination of pregnancy was accepted due to the fact that the rapid evolution of the cerebral lesions were considered not compatible with life. (indicative of poor survival).

Conclusion: Even though surveillance may be adequate and fetal ultrasound scans normal at 18-22 weeks, fetal anomalies of serious consequence may present themselves later on in gestation. In this case, an example of late-onset, isolated ventriculomegaly was depicted. The

presence of intra-ventricular haemorrhage and the rapid evolution to hydrocephalus with reduction of cerebral parenchyma compromised survival of the fetus and permitted a medical interruption of pregnancy within the legal limits. Other situations of severe, but not fatal, prognosis not considered in the legal time frame, established for medical interruption of pregnancy, may warrant reflection in the sense of changing current legislation to suit more adequately the desires of concerned parents and to accompany more adequately the clinical history of some fetal anomalies

521

Prune-Belly Syndrome – a case report

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Introduction: Prune-Belly Syndrome is a rare congenital disorder of unknown etiology characterized by a classical triad: congenital abdominal musculature deficiency, bilateral cryptorchidism and urinary tract defects. Diagnosis is usually made in utero using ultrasound (US) scanning and it is suspected when US imaging reveals a characteristically enlarged bladder, dilated ureters, and an abnormal abdominal wall.

Purpose: The authors present a case of this rare pathology diagnosed at 16 weeks of gestation.

Case report: A 20 years old primigravid consulted the Obstetric Department of the Dr. Daniel de Matos Maternity Clinic with a supposed 12 weeks of amenorrhea. The ultrasound scan, at that time, revealed a 16 weeks gestation in which the fetus presented a large abdominal, midline, liquid mass suggestive of an enlarged bladder, thin abdominal walls and associated oligohydramnios; these findings were compatible with the diagnosis of Prune-Belly Syndrome. The pregnant woman was admitted 4 days afterward, requiring medical interruption of pregnancy. Cardiocentesis was done to collect a blood sample for fetal karyotyping. A dead male fetus was delivered, weighting 400gr and presenting a large distended abdomen. Autopsy confirmed the diagnosis.

Conclusion: Ultrasonographic surveillance allowed the identification of this serious fetal anomaly and helped to orient medical interruption of pregnancy, whereby, minimizing the risks of these procedures at later gestational ages.

522

Use of antenatal Dexamethasone in late pregnancy and its effect on incidence of neonatal respiratory distress after elective caesarean sections

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Background: The rate of elective caesarean sections has increased over the past few years as a result of changing practice. Delivery by elective caesarean section at term has been associated with higher incidence of neonatal respiratory distress compared to normal vaginal delivery. A previous multicentre randomised study showed that antenatal betamethasone and delaying delivery until 39 weeks both reduce admissions to Special Care Baby Units with respiratory distress after elective caesarean section at term.

Aim: To assess whether steroids reduce respiratory distress in babies born by elective caesarean section at term.

Method: A prospective study, carried out in the Obstetrics and Gynaecology Department, Mater Dei Hospital, Malta, which unit is made up of seven clinical firms. Women who are planned to deliver by elective caesarean section after 37 or more completed weeks of gestation, were sequentially recruited over an 18 month period and treated according to the individual firm's decision whether to give dexamethasone to such women or not. Two out of seven firms opted to give dexamethasone. Treatment includes two intramuscular doses of 12mgs dexamethasone given 12 hours apart, with delivery occurring at least 48 hours after the first dose of dexamethasone.

Outcome variables: The primary outcome variable was admission to the special care baby unit with respiratory distress. Other variables assessed include gestational age, maternal age, parity, weight of baby, apgar scores and type of anaesthesia.

525

Evaluation of the efficacy of *Coriolus Versicolor* in the treatment of HPV lesions (LSIL)

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Objectives: With the aim of evaluating the therapeutical effects in patients with cervix lesions (LSIL) by HPV, a group of 43 LSIL patients (confirmed by cytology, colposcopy and biopsy) was at randomly divided into 2 sub-groups:

The first group received treatment with *Coriolus versicolor* (biomass) for 1 year (6 tablets/day (3 g) : 3 tablets at breakfast and 3 tablets at dinner). Control group did not receive any treatment. In neither group was any therapeutic procedure performed (cryotherapy, electrocoagulation or laser vaporization).

Material and Methods: All patients were confirmed by cytology (Pap smear test) to be LSIL carriers. There were three consultations conducted over the period of one year: **In the first consultation** conducted at the Institute of Oncology in Coimbra, patients underwent both cytology and biopsy to confirm the LSIL diagnosis. In the same consultation HPV typing was screened. With the confirmation of LSIL diagnosis a randomization of the group was undertaken.

In the second consultation (4 months after the first consultation), cytology (Pap smear test) was essayed to assess the LSIL status of the patient and a questionnaire on side-effects was performed.

In the third consultation, (1 year after the first consultation), the patients underwent cytology, colposcopy and HPV typing. This also marked the conclusion of *Coriolus* supplementation.

Results: Of the 43 patients who started the experiment, 39 completed the trial. Of the four (4) who did not complete the trial, 1 patient left the country and 3 discontinued supplementation due to side-effects (nausea, epigastric distress and diarrhoea).

Of the 39 who completed the trial, 22 were virally typed as HPV+ High Risk at the start of the trial. 18 (of the 39) underwent *Coriolus* supplementation over one year. The remaining 21 had no supplementation (control group). Of the 22 patients with initial HPV+ High Risk typification, 10 underwent *Coriolus* supplementation and 12 did not undergo *Coriolus* supplementation (control group). In LSIL patients submitted to *Coriolus versicolor* dietary supplementation, there was a regression in lesions in 72,5% of the cases (confirmed by cytology and colposcopy) versus 47,5% in the control group. In relation to the evolution of HPV+ High Risk, in the group that underwent treatment with *Coriolus* there was a negative typification for HPV in 90% of the cases (after one year) versus 8,5% in the control group.

526

Can we realize any changing of kidney volume in EPH-gestosis by 3-dimensional ultrasound?

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Background: Very important investigation the urogenital tract screening during the pregnancy. The pathological kidney parameters refers to pathological renal function and development. Screened pregnancies were chronically hypoxic (i.e. pregnancy-associated hypertension and/or proteinuria).

Materials and methods: The object of this study was to investigate the fetal kidney volume in normal and hyperechogenic kidneys during the third trimester of gestation.

Depending on the renal manifestation of the intrauterine chronic hypoxia, the cases were broken downs into two study groups. Group I was composed of fetuses with pregnancy-associated hypertension and/or proteinuria and hyperechogenic renal medullae. Group II consisted of fetuses with pregnancy-associated hypertension and/or proteinuria and normal echoic kidney. Both study groups included pregnant women from the third trimester.

Results: Fetal renal hyperechogenicity is an indicator of fetal renal perfusion depression, correlated with pathological growth in the fetal kidney development. The fetal kidney volume was significantly higher in hyperechogenic cases, than normal range. This may also be an in utero indication of subsequent intrauterine and neonatal complications.

Conclusions: Detailed ultrasound examinations of renal parenchyma and volume appears to be an useful method in the prenatal diagnosis of reduced renal perfusion and of intrauterine hypoxia so as to detect possible pathological fetal conditions in utero.

UROGYNAECOLOGY

34

Urethral diverticulum in women: diverse presentation resulting in management dilemma

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Background: The incidence of female urethral diverticulum is relatively uncommon in the general population, with an incidence of approximately 3%. However, in patients with persistent lower urinary tract symptoms, the incidence is as high as 40%. Urethral diverticulum in women can present with a variety of symptoms and signs. Common

presenting complaints include urinary urgency and frequency, dyspareunia, pain, post-void dribbling, recurrent urinary tract infections, or incontinence. However, the symptoms can range from complete absence of symptoms to severe incapacitating pain. High Index of suspicion is necessary in women with chronic irritative symptoms, not responding to conventional treatments. It is characterised by varied clinical presentations constituting a management dilemma.

Objective: We evaluated the urethral diverticulae presented in our unit in 2006-07.

Material and methods: We reviewed 6 cases of urethral Diverticulum presented to us in 2006-2007. Demographic details, symptoms at presentation, duration of symptoms before diagnosis, investigations, operative details,

postoperative complications and symptoms at follow-up were considered. Patient demographics, History, clinical evaluation, diagnostic modalities and management plans were reviewed.

Results: Mean patient age was 45.6yrs (range 34-73). The symptoms included recurrent urinary infections (50%), urgency and frequency (33%). The Diverticulum was an incidental finding on vaginal examination in 3 cases (50%). MRI identified the Diverticulum in all cases while voiding cystourethrography confirmed the diagnosis in 33%. Transvaginal diverticulectomy was done in 2 cases who were symptomatic (33%). The women who underwent diverticulectomy had shown significant improvement with regards to the irritative urinary symptoms. One patient was unsure of surgery, whilst conservative approach was opted for 3 asymptomatic patients.

Conclusion: Management modalities are based on symptoms. The use of MR imaging allows for accurate diagnosis and improved surgical planning. Transvaginal diverticulectomy is effective for treatment of female urethral diverticula. Asymptomatic patients are followed conservatively.

110

Study on safety and efficacy of TVT-O (obturator approach) for stress urinary incontinence

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Background: Urinary incontinence is defined as the complaint of any involuntary leakage of urine. Urinary incontinence affects women of all ages and may seriously influence physical, psychological and social well being. The overall rates of urinary incontinence is 10-52% in adult women. Mid urethral sling procedures (TVT-O) are recommended for urinary incontinence when conservative measures have failed.

Aim: • To evaluate the safety and efficacy of the TVT-O procedure. • To assess women's views regarding quality of life following TVT-O (based on KHQ). • To check if Urodynamics had been performed prior to surgery and if physiotherapy was tried prior to surgery (NICE guidelines)

Methodology: Retrospective review of 55 case notes over a period of April 2004 – November 2006

Questionnaires despatched to patient population: 55% responded to questionnaires.

Results: 70% women were postmenopausal. 43% had more than 2 children. 45% had pure stress incontinence with history a previous surgery for incontinence in 10% of women. 98% had urodynamics prior to surgery and 94% had urodynamic stress incontinence. 67% tried physiotherapy prior to surgery, with some improvement in symptoms in 25%. There were no intra operative complications, but 9% had voiding problems. 2 women had thigh

pain. One lady had no improvement in her symptoms of stress leakage of urine, but she did have previous failed incontinence surgery. 91% were dry with no incontinence, another 7% had an improvement in their symptoms with an improvement rate of 98%. Most women did have improvement in the quality of life following surgical treatment.

Conclusion: Thus TVT-O (mid urethral sling procedure) is a safe procedure with a shorter operating time and less risk of bladder injury and voiding problems compared to the TVT. There was a subjective improvement rate of 98% and a cure rate of 91% in our study.

125

Results of using polypropylene mesh for vaginal repair of anterior vaginal wall prolapse

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Objective: to evaluate the ongoing results of the repair of anterior vaginal wall prolapse reinforced with polypropylene mesh.

Material and method: 54 women with anterior vaginal wall prolapse who underwent a transvaginal procedure using polypropylene mesh from 2004 to 2006 participated in our study. The mean age of our patients was 64.7 (+_ 13.2 years). Before operation all of women underwent physical examination in order to stage the prolapse using the international pelvic organ prolapse staging system. Eleven (20.3%) women had stage 2, 36 had stage 3 (66, 6%) and 7 (13.03%) had stage 4. Women were followed for 12 to 24 months. We defined "cure" as satisfactory (stage 1) or optimal (stage 0) outcome for point Ba in the staging system.

Results: 52 women (96.2%) returned to the follow up. 49 patients (90.7%) were cured. 2 women (3, 8%) had asymptomatic stage 2 anterior vaginal wall prolapse, and one patient (1.92%) had a recurrent stage 3. There were no postoperative infections.

There were a total of 5 (9.6%) vaginal erosions of the mesh. Three of them necessitated partial excision of the mesh.

Conclusion: vaginal repair of anterior vaginal wall prolapse reinforced with polypropylene mesh is effective and relatively safe. Vaginal erosion occurred in 9.6% of the study population but it was easily manageable, with no other complications.

149

Is colpocleisis a good option for management of pelvic organ prolapse in selected elderly patients?

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Introduction: Colpocleisis is an operation to obliterate the lumen of the vagina. It is used in severe pelvic organ prolapse in older women who are definitely and permanently sexually inactive. This study was done to analyse the efficacy of Colpocleisis in the treatment of pelvic organ prolapse in selected elderly females with or without stress incontinence

Method: We performed a retrospective review of 37 patients who underwent Colpocleisis between 2005 to 2007 at Birmingham City Hospital. These patients were elderly females (63yrs-94yrs) with symptoms and signs of advanced pelvic organ prolapse and had no wish for future coitus. Patients were evaluated pre operatively and at 3 to 6 month follow up visit. Data was collected and analysed on Microsoft Excel spreadsheet. Of the 37 patients, 15 had concomitant urinary stress incontinence confirmed by preoperative urodynamic studies and clinical examination.

Result: Of the 37 patients 29.79% had hysterectomy in past and 10 % had some kind of pelvic surgery for prolapse in the past. 32% underwent Total Colpocleisis, 9% had Partial and 59% had Le Fort Colpocleisis, 57% of the procedures were done under General Anaesthesia and 43% under Local Anaesthesia due to various factors. 4 patients had some additional procedures done for treatment of stress incontinence. No perioperative complications were reported. Post operatively, 1 patient developed pyrexia & disorientation after 1 month and 2 patient died. The cause of these were not related to Colpocleisis procedure. Among the 40.5% patients who had urinary stress incontinence 71.4% showed improvement, reporting no urinary incontinence. There was 1 case in which colpocleisis failed and prolapsed recurred due to breaking down of sutures after 1 month hence Pelvic organ prolapse was cured in 97% of the patients with 3% failure rate. There was no recurrence of prolapse and very low complication rate at 6 month follow up in patients who had the procedure done successfully.

Conclusion: Colpocleisis is an effective and safe method for treatment of advanced pelvic organ prolapse in high risk elderly females.

160

Assessment of therapeutic benefits of different incontinence surgery techniques - King's health questionnaire or objective stress test?

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Introduction: The purpose of this study was to evaluate the therapeutic benefits of urinary incontinence surgery through a quality of life questionnaire, King's Health Questionnaire (KHQ) strict criteria, and compare them with stress test.

Methods: We performed a prospective analysis of 97 women with stress or mixed urinary incontinence submitted to corrective surgery with either TVT (n=26) or TVT-O (n=71) alone or in association with pelvic organ prolapse surgery in our Unit, from Jan 2004 to October 2006. Patients filled the KHQ before surgery and 1 year afterwards. They were considered cured when the total score was less than 30, without response to treatment when it decreased less than 8 points, and improved when an intermediate score was obtained. We also submitted the patients to a stress test 1 year after surgery (when it was negative they were considered cured).

Results: The mean age was 59.3 years. In 40 of them pelvic organ prolapse surgery was also performed. Forty-eight women presented with stress incontinence and 49 with mixed incontinence. According to KHQ 69.1% women were cured, 16.1% improved and 14.8% had no response to treatment. When using the stress test we found that 95.6% had a negative test and 4.4% a positive one. Results by subgroups are as follows:

		Stress UI	Mixed UI	TVT	TVT-O
KHQ	Cured	81.6%	56.8%	74.1%	66.1%
	Improved	2.7%	27.3%	14.4%	16.4%
	No response	15.7%	15.9%	11.5%	17.5%
Stress test	Negative	93.5%	97.9%	96.1%	95.6%
	Positive	6.5%	2.1%	3.9%	4.4%

Discussion: According to the KHQ score criteria we used, only 68.3% were cured and 15.8% had no benefits from surgery. These numbers are lower than those seen with stress test (cure rate of 96%). KHQ is a good tool to access improvement in quality of life but it gives a lower cure rate after a surgery than a clinical standard test.

187

Abdominal sacrocolpopexy for correction of vaginal vault prolapse - a follow-up study of 40 patients

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Introduction: The occurrence of a vaginal vault prolapse after hysterectomy is a rare event. Although defects in the support structures of pelvic organs have been thought to be the cause of pelvic organ prolapse, the increase in surgical procedures suggests that other factors exist, including problems with surgical technique or improvements

in diagnosis of pelvic organ prolapse. Abdominal sacrocolpopexy is considered the most durable technique for repairing vaginal vault prolapsed. The aim of the study was to evaluate follow up abdominal sacralcolpopexy results in 40 patients. Surgery technique will be explained.

Methods: Retrospective study including 40 patients submitted to sacrocolpopexy between 2000 and 2006. Parameters analyzed: age, parity, body mass index, menopause state, time between hysterectomy and vaginal vault prolapse symptoms, motive of hysterectomy, symptoms referred, surgical technique, complications and results.

Results: 40 patients were included in the study. The patients mean age was 63,5 years. The mean parity was 4,7 child. The mean BMI was 28,0 Kg/m². 95 % of the patients were already in menopause. The mean time between previous hysterectomy and the symptoms of prolapse was inferior to five years in 60 % of cases. 60 % of prolapses occurred after vaginal hysterectomy. The major indication for hysterectomy was pelvic organ prolapse. There were no serious complications during the procedure. No cases of blood transfusion per or postoperation. Four patients de novo stress urinary incontinence and one de novo urgency urinary incontinence developed after surgery. The mean surgery duration was 110 +/- 30 minutes and hospitalization mean was 5,85 days. Until now there were no recurrences of vaginal vault prolapse. The medium follow-up time was 42 months.

Conclusion: The risk factors to vaginal vault prolapse were concordant with those present in the literature. Sacrocolpopexy of vaginal vault prolapse is a efficacious and safe procedure that can be used in sexually active women. Well trained team can assure low morbidity indexes.

203

Persistent and “de novo urge symptoms” after transobturator approach surgical techniques for urinary incontinence

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Background: Surgical measures, such as TVT-O and TOT, undertaken to target alleviation of the stress urinary incontinence, can also resolve urge symptoms, by restoration of bladder support, or originate de novo urge symptoms, secondary to obstructive or irritative phenomena created by sling presence.

Objective: The aim of this study was to determine the proportion of de novo urge symptoms and the cure rates of preoperative overactive bladder symptoms and urge incontinence after transobturator approach surgical techniques for urinary incontinence.

Material / Methods: The present study included 359 patients, who underwent TVT-O or TOT at our institution, between January 2004 and May 2007. These were divided

in three groups: A – 148 patients exclusively with stress incontinence; B – 64 patients with stress incontinence and overactive bladder symptoms such as urgency, frequency and nocturia, without urge incontinence; C – 147 patients with stress and urge incontinence. Preoperative and postoperative urinary incontinence symptoms were assessed by a patient’s questionnaire. Average time of follow-up was 8 months (range 1 to 40).

Results: After transobturator sling placement, in group A, de novo overactive bladder symptoms developed in 10.1%, de novo urge incontinence developed in 2.7%, and 2.7% started taking anticholinergics. Postoperatively the urge component showed cure or improvement in 87.5% of those in group B, and the treatment with anticholinergics decreased from 12.5% to 4.7%. In group C, after TVT-O or TOT procedures, 62.6% had no or less urge incontinence, 35.4% were equally, and only 2.0% were more bothered by urge incontinence. Fifty-six percent (56%) of those who used anticholinergics preoperatively, no longer needed to do so.

Conclusions: Our results suggested that TOT and TVT-O offers excellent cure rates of the urge component in patients with preoperative overactive bladder symptoms with or without urge incontinence, while causing a low proportion of de novo urge symptoms.

231

A case of TOT removing

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Objective: to describe a “transurethral” TOT explantation by endoscopic approach.

Materials and methods: a women affected by urgency/frequency syndrome, dysuria and chronic pain after a TOT implantation, was treated by urethrolisis and cystoscopy explantation of suburethral tape because its “transurethral positioning”. ISD following was approached with two jaluronic acid dextranomer periurethral injection (Zuidex system) after six and seven month after the explantation.

Results: absence of symptoms after the explantation was followed by ISD as we have supposed. Urethral bulking has been considered first approach with excellent objective and subjective results.

Conclusion: suburethral sling to treat SUI can be detrimental if not performed by an expert “perineologous”. Urethral bulking is the first line technique to treat complex case like this

233

Surgical treatment of pelvic organ prolapse using Mesh Prolift and Avaulta

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Our goal was to report the results of transvaginal mesh repair of anterior vaginal prolapse using the Prolift-Gynecare system and Avaulta-Pelvitex. Our prospective study includes 24 patients treated since October 2004 and June 2007.

All patients had a stage 3 (at the hymen) or stage 4 (beyond the hymen) prolapse. Isolated anterior mesh in 12 patients (50%) and additional procedure for SUI required a concomitant mid-urethral tape by trans-obturator approach in twelve patients (50%). At 1 month we report: vaginal erosion occurs in one patient (4.2%) treated by Avaulta-Pelvitex requiring a surgical management, cured after partial excision of the mesh, and one haematoma by Prolift requiring drainage (4.2%). At 6 months we report one patient (4.2%) with urge incontinence de novo and one recurring cystitis. At 1 year all patients were available for follow-up. Recurrent anterior prolapse even asymptomatic and low grade (I grade of Baden and Walker classification) was 33.3% (eight patients) but it can't consider a failure, moreover, 2 cases (9.4%) of dysuria treated by medical approach (Solifenacin). SUI was successfully treated in 100% of our patients. The 2 years follow-up failure rate is 95.8%. According to the perioperative and post-operative results, Prolift and Avaulta repair seems to be two safe meshes for the same technique to correct pelvic organ prolapse. The satisfactory anatomical and excellent functional results must be assessed with a long-term follow-up to confirm the effectiveness and safety of the procedure.

277

Synthetic meshes for transvaginal surgical treatment of vaginal vault prolapse – 2 years experience

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Introduction: In an effort to improve clinical outcomes for the correction of pelvic organ prolapse various new surgical techniques have been proposed and use of synthetic graft has been advocated. Synthetic material have the advantage of being readily available, cost-effective, and consist in quality, but may present with significant complications.

Objectives: Analyse our current experience with the use of grafts materials for transvaginal surgical treatment of posthysterectomy vaginal vault prolapse.

Materials and Methods: Retrospective study of 31 cases of posthysterectomy vaginal vault prolapse submitted to transvaginal surgical treatment with meshes, from Setember 2005 to October 2007.

Results: We study 31 women submitted to transvaginal surgical treatment of vaginal vault prolapse with synthetic meshes. The mean age at operation was 65,7 years old (range from 50-83). The median age for menopause was 46,76 years old (39-56). The median number of vaginal delivery was 3 (0-10). 35% (n=11) suffered from arterial hypertension. Abdominal hysterectomy had been performed on 51,6% (n=16) and vaginal hysterectomy on 48,4% (n=15). The median number of years to vault prolapse repair after hysterectomy was 11,6 (0.8-50). 12,9% (n=4) had been submitted to previous abdominal sacrocolpopexy. None intraoperative complications. The median stay in the hospital was 3,5 days (1-6). Follow up time ranged from 2-22 months. Two referred urinary incontinence after surgery. Complications of operation included one case of erosion of the vaginal wall. One case of recurrent vaginal vault prolapse.

Discussion: Transvaginal surgery with synthectic meshes can effectively treat posthysterectomy vaginal vault prolapsed. As a new surgical technique with limited use to selected patient population, the series are not expected to be high except in multicentric studies. The authors think that transvaginal surgical treatment of vaginal vault prolapsed being a minimal invasive surgery with low morbidity is an option for patients otherwise excluded. Certainly the vaginal vault prolapsed and it's recurrence is one of the indications for the use of synthectic meshes. Continuous evaluation is necessary to study replacement synthectic materials which should reduce the risk of complications.

297

Infection following trans-obturator sub-urethral tape – a case report

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Introduction: The Trans-Obturator Tape (TOT) is a minimally invasive surgical procedure in the treatment of stress urinary incontinence. The TOT procedure is generally considered to be a procedure with high efficacy and reduced complication rates. The authors report a case of tape infection, thigh abscess and fistula following the insertion of a transobturator tape (Obtape®)

Methods: The clinical history, operative details, postoperative symptoms, findings and management of this case are reported.

Results: A 37-years-old woman underwent trans-obturator tape insertion for stress urinary incontinence in December

2004. In December 2006, a left suburethral tape erosion was diagnosed. Due to suspect of tape infection, the patient underwent partial removal of the tape. Two weeks later the patient presented a right thigh abscess, which required incision, drainage and debridement of necrotic areas of adductor muscles. Four weeks later, due to a right thigh fistula the patient underwent fistulectomy with removal of tape remaining fragment.

Discussion: Risks and complications are rare, however this procedure includes the same risks associated with any tension-free mesh sling, including, infection. When an infection is proven or suspected the removal of the tape is recommended to prevent extreme complications. Short term results following trans-obturator tape insertion report excellent efficacy rates, however there is a lack of long term data on safety and efficacy.

308

Treatment of female stress urinary incontinence with transobturator tape and its relationship with urge urinary incontinence

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Introduction: Suburethral sling inserted by transobturator route is considered a minimally invasive, safe and effective procedure to treat female stress urinary incontinence (SUI). Due to unexplained mechanisms some cases of urge urinary incontinence (UUI) are also solved by this procedure. However, UUI is an independent risk factor for persistent urinary incontinence after transobturator tape (TOT), such as an occurring complication afterwards, appearing as *de novo* urgency. The authors sought to identify the existing relationship between UUI and TOT.

Methods: A retrospective study was performed with chart review of the 260 patients with urinary incontinence, who were submitted to TOT in our institution from March 2004 to December 2006. Before surgery all patients were assessed by clinical gynaecological examination and an urodynamic work-up.

Results: Mean age of the studied population was 52 years (29-83). Nine patients (3.5%) had been previously submitted to other incontinence surgeries. Forty-five patients (17.3%) had mixed urinary incontinence. Sixteen women (6.2%) were operated for their genital prolapse concomitantly with TOT. No intraoperative complications were recorded. After surgery 255 patients (98.1%) were cured for their SUI, and 29 of the patients with mixed urinary incontinence (64.4%) were also cured for their UUI. When pre- and postmenopausal women were compared, we found a cure rate of 90% of UUI with TOT in pre-menopausal women vs. 42% in postmenopausal women. No patient felt that their situation had deteriorated. Mean follow-up was 11 months

(1-24), and during this period, 4 cases (1.5%) of *de novo* urgency were identified.

Discussion: Our results confirm that urge urinary incontinence is related to TOT, with many cases being completely cured, concomitantly with SUI, after this procedure, preferably in pre-menopausal women. We had a low rate of complications, with fewer cases of *de novo* urgency than usually described in literature. A longer follow-up period is nevertheless needed to validate our results.

333

A rare case of congenital mega-bladder: the Prune-Belly syndrome

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Introduction: Prune-Belly syndrome is a rare syndrome that occurs with a frequency of 1:30000-40000 live births. It is characterized by three symptoms: distension of the abdominal wall; mega-bladder, and bilateral cryptorchidism. We report here a case of Prune-Belly syndrome, diagnosed in the Pregnancy Risk Department of the hospital Santo Bambino of Catania, in one fetus of 17 weeks gestational age.

Case report: A 40-year-old woman came to our unit for prenatal routine ultrasound diagnosis. In October 2006, the patient underwent a normal ultrasound examination at the 17th week of amenorrhoea. From the ultra-sound examination, a malformation was seen characterized by a mega-bladder (vesicle diameter 69 mm) with anidramnios. At a gestational age of 17 weeks + 4 days, the patient underwent an induced abortion followed by instrumental discharge of the afterbirth. The fetus was of undetermined sex and weighed 230 gr. At the autopic examination the fetus presented retained testicles; atrophy of the muscles of the abdominal wall; large cystic mass that occupied all the abdomen descending to the scrotum, with a length of about 10 cm, width about 7 cm; dilatation of the renal pelvis with a notable reduction of the number of calyces. The right foot was twisted.

Discussion: Prune-Belly syndrome is a rare pathology characterized by anomalies of the urinary tract, lack or weakness of muscles of the abdominal wall with cryptorchidism. Moreover, an obstruction at the urethral level causes the enlargement of the bladder, with a prevalently vertical development, which occupies most of the abdomen. All this leads to a more or less marked degree of oligohydramnios, with consequent renal involvement.

The etiology of this rare congenital syndrome is still unknown. What has allowed our group to diagnose this rare syndrome, has been accurate ultrasound examinations; thanks to these, we have focused our attention on the shape and dimensions of the bladder, the fetal

urethras, the fetal abdomen, and the notable degree of oligohydramnios. All these factors inked end in a therapeutic abortion.

336

McCall culdoplasty- did it work?

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Background: In 1957 Milton McCall described a technique to manage the cul-de-sac at the time of vaginal hysterectomy in order to prevent vault prolapse. The benefits of this culdoplasty include: creation of a corrected positioned midline vaginal axis, preservation of vaginal length, reduced nerve injury and restored continuity of the paracervical ring.

Methods: Retrospective analysis of clinical data of 286 women submitted to McCall culdoplasty at our institution from January 2001 to February 2007. We evaluated age, number of vaginal deliveries, Body Mass Index (BMI), pelvic organ prolapse defects, surgical complications.

Results: Mean age was 61years (40-85y), 84% (n=238) were post-menopause, 23% were obese (BMI30) and 46% overweight. Nulliparity were found in 4% (n=10) and 13% (n= 36) had 4 or more vaginal deliveries. No relation was found between severity of pelvic organ prolapse and number of vaginal deliveries. In women with grade 2 or worse medium compartment defect there was a trend toward developing vault prolapse (OR 6,67 [0,91-137,28]: p=0,05). Although menopausal status was not linked with severity of pelvic organ prolapse (p=0,56), menopausal women where more prone to have surgical failure (8,6% vs. 0,04%) and the greater the degree of the defect, the greatest failure rate (8,6% vs. 0%, p=0,01). 28 cases were lost for follow-up. Overall 17/258 (6,5%) were found to have vault prolapse (stage I – 4; stage II – 10; stage III – 3) of which needed reintervention (3,1%). Ureteral complications occurred in two patients (0,7%).

Conclusions: In our experience, McCall culdoplasty proved to be a simple, safe and reliable method for preventing vault prolapse at the time of vaginal hysterectomy.

343

Inflammatory markers in Collagen vs. Polypropylene Tapes for urinary incontinence - a randomized study

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Introduction: In the last years the use of vaginal slings for treatment of female urinary incontinence (UI) has evolved searching for new materials for tapes. The recent collagen

tape seems to be promising, as animal studies show that this material reduces local inflammatory response of host, declining complications usually associated to polypropylene tapes, as fibrosis or erosion. The aim of this study was to evaluate immediate systemic inflammatory response to polypropylene macroporous monofilament vs. porcine acellular collagen cross-linked trans-obturador tapes.

Methods: Forty-two patients with stress UI were blindly randomized for surgical treatment with polypropylene (PT) or porcine collagen (CT) trans-obturador tape. All patients had blood samples for C Reactive Protein (CRP) and white blood count (WBC) in the previous day to surgery and 24 hours after surgery. Paired Mann-Whitney test was used to compare changes in inflammatory markers between groups.

Results: No differences were found in age between groups. Median CRP levels previous to surgery were higher in collagen group (0.3mg/dL vs. 0.4mg/dL, p=0.01). After surgery no differences were seen between median CRP levels (1.4mg/dL vs. 1.5mg/dL, p=0.64). Median CRP rise was 1.2mg/dL in CT group vs. 0.8mg/dL in PT group (p=0.26). WBC previous to surgery was non significantly higher in CT group ($6.88 \times 10^3/\text{iL}$ vs. $7.86 \times 10^3/\text{iL}$, p=009). Median increase in WBC was $0.84 \times 10^3/\text{iL}$ in collagen group and $-0.06 \times 10^3/\text{iL}$ in polypropylene group (p=0.06).

Discussion: Levels of systemic inflammatory markers were higher in PT group before surgery. No significant change was observed in CRP levels, and a trend to higher rise in WBC was found in CT. Systemic inflammatory response was similar in both groups.

Studies to also evaluate local inflammatory response and tissue changes to these materials are necessary to understand tape behaviour and its long term implications.

345

Impact of two urethral support systems for surgical treatment of urinary incontinence in technical execution and surgical complications

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Introduction: New urethral support systems have appeared in the last years, in order to improve quality of materials, reduce procedure time and number of surgical complications. Not only hooks and introducer needles are changing, but also tape materials.

The aim of this study was to evaluate the impact of two different trans-obturador systems (polypropylene macroporous monofilament vs. porcine acellular collagen cross-linked) in technical execution, procedure time and intra-operative complications.

Methods: Forty-two patients with stress urinary incontinence were blindly randomized for surgical treatment

with a) polypropylene or b) collagen trans-obturator tape. All surgeries were performed by the same surgeon. Procedure time was registered in minutes and all intra-operative complications were registered. Technical execution was graded by the surgeon in 1) *easy*, 2) *intermediate* and 3) *hard*.

Results: No age differences were found between groups. Median procedure time for collagen tapes (CT) was 10 minutes vs. 14 minutes for polypropylene tapes (PT) ($p=0.89$). Intra-operative complications were registered in 2 cases (9.5%) in CT in opposition to 5 cases (23.8%) in PT ($p=0.41$), mostly vaginal bleeding or vaginal wall laceration. Collagen tape was considered *easy* in 66.7% ($n=14$) cases, none being *hard*. Although in most cases (57.1%, $n=12$) technical execution for polypropylene tape was also considered *easy*, one case (4.8%) was classified as *hard* ($p=0.45$).

Discussion: Polypropylene system revealed to be a slightly more time consuming procedure, with a harder technical execution, associated to more intra-operative complications when compared to porcine collagen system. These differences are probably not explained by the tape material but by the different introducer needles these systems present with.

367

Evaluation of results of transvaginal surgery with mesh (Prolift™ technique) for genital prolapse

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Retrospective study of the first 32 patients submitted to transvaginal mesh repair of genital prolapse using the Prolift™ technique, by 2 surgeons at the department of the authors. These patients had been operated since two years, with a mean follow-up of 11 months (min 3, max 24). All the cases had a stage 2, 3 or 4 of the POP-Q prolapse classification (at or beyond the hymen). Total mesh (anterior and posterior) was used in 16 patients, an isolated anterior mesh in 14, and an isolated posterior one in 2. Twelve patients (37.5%) had also stress urinary incontinence, overt or occult, so we performed also an incontinence surgery with tension-free transobturator tape (TVT-O™ technique). In another 9 patients (28.1%) we combined others procedures for correction of prolapse vaginally: vaginal hysterectomy with McCall sutures in 2 cases, posterior colpoperineorrhaphy in 3 cases and repair of enterocele in 4 cases. When we used the total mesh we conserved the uterus in all except one case, because of coexistence of uterine pathology.

Seven women (21.9%) had previous hysterectomy, and five (15.6%) had a prolapse correction before. The group mean age was 66.5 years (min 55, max 78), with 43.8 % of them being sexual active ($n=14$).

We had no intra operative complications. In the post operative course we had two cases of retro-vesical haematomas both treated expectantly (6.3%), one of them requiring blood transfusion. Minor complications had occurred in another six women (18.8%), namely bladder retention ($n=2$), genitourinary infection ($n=3$), and temporarily bothersome groin pain ($n=1$). Mesh exposure of the anterior Prolift™ occurred in 3 patients at the first one month visit, and were treated medically within 3 months. In three cases (9.4%) was diagnosed stress urinary incontinence post operatively, two of them managed with surgery.

Failure rate was considered a recurrent prolapse or another symptomatic prolapse, and had occurred in three cases (9.4%): one case was a relapse of grade 4 anterior prolapse, and the other two were “de novo” posterior compartment defects.

Long-term follow-up are needed to confirm the effectiveness and safety of our preliminary results with the Prolift™ system.

371

TVT-O for female stress urinary incontinence - a three year experience

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Introduction: Transobturator vaginal tape inside-out (TVT-O) is a surgical technique used in the treatment of female stress urinary incontinence (SUI) performed in our institution since 2004. The purpose of this work was to evaluate the outcome of this technique as well as the degree of satisfaction of the patients.

Methods: Retrospective study of 75 patients submitted to this surgery in our service from May 2004 to December 2006. We reviewed the following parameters: risk factors, clinical evaluation, urodynamic studies, intra and post-operative complications, rate of success and degree of satisfaction.

Results: Mean age of the patients was 60 years old and all women had vaginal deliveries. Clinical evaluation provided objective evidence of stress urinary incontinence in all patients and more than 60 % had urodynamic confirmation of SUI.

The technique was performed quickly, most cases in less than 30 minutes. The complications reported were unilateral passage of the mesh through the vagina in one case, transitory bladder atony in another and one patient with unilateral pain. The rate of cure was over 80 % and around 70 % of the women were very satisfied with the outcome. One patient needed further surgery for correction of stress urinary incontinence.

Discussion: Management of stress urinary incontinence with TVT-O is encouraging with high rate of success and low incidence of peri and post-operative complications. Studies with long-term outcome are required.

404

Tension-free transobturator tape (outside-inside) in patients with or without associated procedures – are there any differences?

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Introduction: The transobturator tape (TOT) procedure is a minimally invasive midurethral sling developed to correct the stress urinary incontinence (SUI). Since its first description by Delorme in 2001, the transobturator outside-inside approach has been increasingly used for correction of SUI. In the population of stress urinary incontinent women some require concomitant surgical procedures for benign gynaecology disorders.

Aim of study: Evaluate the safety and efficacy of TOT procedure in patients who underwent surgery for SUI and in patients who underwent surgery for SUI and for other gynaecology disorders.

Materials/Methods: Retrospective analysis of 88 patients who had undergone a TOT procedure, from 2004 to 2006. Patients were divided in two groups: patients who underwent TOT as an isolated procedure (n=42) and patients who underwent TOT associated with other surgical procedures (n=46). Cure was defined as the absence of any episodes of stress urinary incontinence and a negative stress test; improvement was defined as the absence of any episodes of stress urinary incontinence and a positive stress test or reduction on the episodes of stress urinary incontinence and a negative stress test. The characteristics of the patients, several parameters related to the surgery, intra and postoperative complications and cure rates were analysed in both groups. We performed data analysis with the programme Statistical Package for the Social Sciences (SPSS) version 15. The chi-square and T student tests were used, when appropriate. A value of $p < 0.05$ was considered significant.

Results: Except for age, no significant differences in demographic characteristics were found between the two groups. The mean length of surgery and hospitalization was higher in the group who underwent multiple procedures. Intraoperative complications were similar in both groups. Postoperative bladder retention was less frequent in the group who underwent isolated TOT ($p < 0.05$). At the 3-month and 12-month follow-up, vaginal erosion and cure rates were similar in both groups (p ns).

Conclusion: The transobturator tape procedure is a feasible, safe and efficient surgical technique for correction of SUI. There were no differences on the safety and efficacy when TOT was performed as an isolated procedure and when associated to other surgeries.

482

Mid-urethral slings in female stress urinary incontinence: comparison of tension-free vaginal tape (TVT) and trans-obturator vaginal tape (TOT)

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Introduction: Surgery is the primary treatment option for stress urinary incontinence (SUI) in female. Minimally invasive slings have become a well-accepted method of therapy for patients with SUI. The TVT and TOT procedures, both minimally invasive, mid-urethral sling techniques, seem to be safe, easy-to-perform and effective in treating female SUI. The aim of the study was to compare two different techniques of mid-urethral tension free vaginal sling procedures: TVT versus TOT.

Methods: Retrospective study including 239 patients with urodynamically proven SUI, who had TVT and TOT procedures from October 2001 to December 2006.

Parameters analyzed: age, parity, body mass index, menopause state, perioperative and post-operative complications, operation time, recovery time, prior gynecological and obstetrics surgery and clinical efficacy.

Results: 239 patients were included in the study. One group with 148 patients underwent the TOT procedure and 91 in second group underwent the TVT procedure. There were no significant differences in patient parity, body mass index, number of newly born infants weighing over 4000 g, menopausal status and prior gynaecologic and obstetrics surgery. The mean patients age in TVT group was superior than in the TOT group (56 ± 9 vs 53 ± 11 , $p < 0,05$). Mean operation time in TOT group (25 ± 6 min) was significantly shorter than TVT group (46 ± 14 min). The mean days of hospitalization was $5,4 \pm 3,8$ days in TVT group and $3,7 \pm$ in TOT group. In case of bladder perforation, TVT group (3 cases) was higher than TOT group (no cases). The immediate postoperative period was marked by transient urinary retention (without spontaneous voiding to the third day after surgery) that was 13% in TVT group vs 6% in TOT group. We need to realize section of the tape in two cases of TVT group, with all patients maintaining continence. The subjective cure rate was superior to 90% in both groups.

Discussion: Similar to what is described in the literature these results show that TVT and TOT procedures are effective for the treatment of SUI. However, the TOT procedure presents faster execution, less time of hospitalization and lower incidence of peri and post operative complications.

511

A prospective study to evaluate the anatomical outcome and complications of Prolift Repair Systems

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Introduction: Prolift Repair Systems are a relatively new procedure to surgically correct symptomatic urogenital prolapse using polypropylene mesh and a needle insertion kit.

Methods: The Prolift system was considered the treatment of choice for all patients presenting with symptomatic e"grade 2 prolapse. The POP-Q score was the primary outcome measure. A chart analysis was performed to assess complications in all patients.

Results: N=93 The mean follow-up to assess the anatomical outcome was 8 months. Nine patients (9.7%) developed erosions of whom four required a surgical revision

	All patients		Prolift Anterior		Prolift Posterior		Total Prolift	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Aa	-1	-2.6	+1.4	-2.7	-2.4	-2.5	+2.4	-2.7
C	-4.1	-7.1	-4.7	-7.3	-4.1	-7.8	-2.5	-7.3
Bp	-1.4	-2.8	-2.2	-2.2	+1.2	-3	-0.3	-2.9

(8.8 % in Prolift Anterior ; 7.1 % in the Prolift Posterior and 13.3 % in the Total Prolift group). During the follow-up period five patients (5.3%) required re-intervention because of recurrent or persistent prolapse. There was statistically significant improvement for all relevant POP-Q parameters postoperatively, the table below summarizes the results at the latest follow up. In 19% (13/68) of Prolift Anterior, in 12% (2/17) Prolift Posterior and in 36% (5/14) of Total Prolift patients de novo USI was diagnosed. Only 6 of these 20 pts required a midurethral tape during the follow-up time.

Discussion: The anatomical outcome after short term (8m) follow up is promising. Five percent of patients required a re-intervention for persistent or de novo prolapse in this series. Mesherosion constitutes the major postoperative complication, encountered in 10% of patients. Six percent of patients required surgery for de novo USI.

Simpósios Satélite

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The importance of HPV types 16, 18 and 45 in cervical cancer and beyond F. Xavier Bosch, MD, PhD, MPH

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HPV infections are the commonest of the sexually transmitted infections. Among women with normal cytology within the age ranges typical included in screening programs, the average HPV DNA prevalence has been estimated at 10% with significant geographical variation. Among women with normal cytology and cervical HPV infections, one can often find multiple HPV types, a great variability in the HPV type distribution including a significant presence of low risk types. In contrast as cervical lesions develop, the global HPV DNA prevalence increases to 75-85% in LSIL and to 85-100% in HSIL and invasive carcinomas, with HPV 16 being the dominant type in most studies. In cervical cancer cases, the number of types is restricted to 12-15 types, the vast majority of cases harbour only one

Squamous cell carcinoma		Adenocarcinoma	
HPV type	%	HPV type	%
16	62.14	16	49.07
18	7.91	18	31.02
45	5.00	45	12.04

type and a clear type distribution pattern is found. On worldwide estimates, HPV 16 is consistently the most common type, accounting for some 50% of all cases followed by HPV 18 and 45. Some variability in the ranking thereafter has been described.

For the subgroup of cervical adenocarcinomas, which are generally more difficult to detect, HPV 16 and 18 are found in similar proportions followed by HPV 45. The three HPV types combined account for close to 75 % of the squamous cell carcinomas and close to 90% of the adenocarcinomas.

In other cancers of the ano-genital tract in women, HPV has been implicated in variable proportions. It accounts for some 15 % of the vulvar cancer, 80 % of cancers of the vagina and 80 % of cancer of the anus. Among HPV positive cases HPV 16 is the dominant type accounting again for 50-53 % of the types. HPV 18 and 45 are the next most common HPV types although the relative role of the remaining HPV types is still being determined.