POSTERS WITH DISCUSSION

(in numeric order)

REPRODUCTIVE MEDICINE/MENOPAUSE

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Impact of improved funding on waiting period and success rate in Assisted Reproduction in NHS treated couples

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Introduction: Research has shown that success rate of assisted reproduction treatment is better with younger age of the female partner and shorter duration of infertility. Due to limited funds, couples receiving free NHS treatment in UK may have to wait two years or more for their treatment. This can dramatically influence the success rate. We have seen improved funding in the last 3 yrs. To evaluate its impact on waiting period and success rate, we compared 50 cases treated in the calendar year 2003 and 2006.
Methods: Retrospective analysis of cases who had free IVF or ICSI treatment in the year 2003 (Group A) and 2006 (Group B)
Results: The results for Group A and B cohorts were as follows. The median age at GP referral was 30.13yrs (22.91-34.5yrs) and 29.9yrs (20-37.3yrs) respectively. The median age at listing for free treatment was 30.75 yrs (23.08-34.75) and 30.7 yrs (20.3 – 38.3) respectively. The median age at treatment was 34.58 yrs (26.83 - 38.67yrs) and 32.00 yrs (24.58 -38.58yrs) and median duration of time spent on waiting list was 43 months (15-51mnths) and 8 months (3-51months) respectively. The duration of infertility at treatment was 76 months (39-150) and 42 months (20-139) respectively. Group A spent 34 months longer on the waiting list and therefore the duration of infertility was proportionately longer. There were three singleton live births in Group A. In the Group B, there were five singletons and three twin deliveries. Analysis of results by age showed that 76% of cases in Group A and 96% in Group B received treatment before their 37th birthday.
Discussion: The two groups were comparable as the age distribution and duration at attempted conception was similar. Due to improved funding the second group was treated sooner and younger. The average reduction in waiting list period was by 76%. The associated live birth rate trebled from 12 to 32%. Age and duration of fertility adversely affect the outcome of assisted conception therapy. Publicly funded patient's have to undergo longer waiting periods to have the treatment at a stage when it is less effective. Improved funding has shown reduced waiting times, treatment at a younger age and an associated better live birth rate. This study demonstrates that there is a case for funding authorities in the UK to provide this funding sooner than later.

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The Rose Study: Placebo-controlled Randomized Withdrawal Trial Of Flibanserin For Hypoactive Sexual Desire Disorder In Premenopausal Women

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Introduction Hypoactive Sexual Desire Disorder (HSDD) is a common problem. This is the first randomized treatment withdrawal trial in premenopausal women with HSDD. It is assessing the efficacy and safety of a centrally acting non-hormonal agent, flibanserin.
Methods Premenopausal women with generalized, acquired HSDD for >6 months were entered if they were in a stable, monogamous, heterosexual relationship for >1 year, successfully completed the e-Diary for HSDD Trials© daily during 4 weeks of screening, and had no interfering medical problems. After a 24 week open-label flexible dosing phase, those subjects meeting enrichment criteria, were randomized to double-blind, placebo-controlled treatment for another 24 weeks. Co-primary endpoints were change in desire score and monthly satisfying sexual events.
Results Of 1156 women screened, 738 were treated; 67.1% completed the open-label period.
Conclusion Randomization has been completed for the Rose study, a placebo-controlled randomized withdrawal trial of a centrally acting non-hormonal agent, flibanserin, for generalized, acquired HSDD in premenopausal women.
Financial Support: The study was funded by Boehringer Ingelheim

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Values of hysterosalpingography, ultrasound,hysteroscopy and laparascopy in assesing diagnosis of congenital uterine malformations in infertil women

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Congenital uterine malformations have been recognized as the possible cause of infertility and obstetrics complications.They could be the reason of recurrent pregnancy loss,preterm delivery,fetal malposition and infertility.They are result of Mullerian ducts anomalies and they are the most common malformations of reproductive tract.
Aim of study: The aim was to asses the diagnostic values of usefullnes of hysterosalpingography (HSG), transvaginal sonography (TVS), hysteroscopy and laparascopy.
Study design: From January 2005 to January 2007 in prospective study we have been collect 91 patinents.All of zhem had undergone HSG,TVS, and hysteroscopy and laparascopy.All methods were compared and results were analysed to their sensitivity and speceifity.
Results : The best methods with 100% specifity and sensitivity is hysteroscopy plus laparascopy.
Conclusions: Method of HSG,TVS, hysteroscopy and laparascopy are good but it is the best to use other all three methods or to use laparascopy and hysteroscopy together because their specifity and sensitivity is 100%.

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Endometriosis And Reproductive Future

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Introduction: Endometriosis is an estrogen-dependent disorder that can result in substantial morbidity and is an important cause of infertility. Although recent findings, the orientation of the patients continues to be source of controversy. Management plans must be individualized contingent upon the disease stage, the age of the patient and the duration of infertility. The aim of this work was to review the cases of infertile couples in which endometriosis was one of the causes of their infertility.
Methods: Retrospective study including 67 patients submitted to surgery due to endometriosis between 2000 and 2006 by our Medicine Reproductive Unit.
Parameters analyzed: age, type and duration of infertility, performed surgery, stage of endometriosis, other infertility factors associated, post-operative medication, ART orientation of each case and the fertility results.
Results: Endometriosis isolated or associated to other infertility factors was responsible for 8 % of cases submitted to ART in the years mentioned. The patients mean age was 30 years. 83,3 % had primary infertility with the mean duration of 3 years. 67 % of patients had grade III or IV of endometriosis classified by The American Fertility Society. 63,6 % had other infertility factors associated. 36,4 % of patients made GnRH agonists for at least three months after surgery. The mean time between surgery and ART technics was 9,1 months. In the follow-up after surgery we found: 27,3 % of spontaneous pregnancies; 61,4 % were submitted to ART with success in 34,2 % of cases.
Conclusion: Surgery continues to play a roll in the treatment of infertile women with endometriosis. Well trained team can assure a good quality of surgery and fertility results.

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HRT is associated with higher lung function among menopausal women but more respiratory symptoms among pre-menopausal women

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Background: The literature about HRT and respiratory health is apparently inconsistent: Women using HRT have more respiratory symptoms but also higher lung function.
Methods: 4262 women from 21 centres (ECRHS II, 2002) responded to a questionnaire concerning women's health. Women 45-56 years (n=1686) were included in

present analysis, 23% (n=388) currently used HRT. Lung function (n=1475), FSH, LH and estradiol measurements (n=981) were available. Logistic and linear regressions were adjusted for BMI, age, education, smoking, center and height.
Results: Among women using HRT, median estradiol levels were higher and median FSH levels lower than among women not using HRT. Among women not menstruating for the last six months or longer, those using HRT had significantly higher FEV_1 (adj. diff. 70 ml [95%CI=4 to 136]) but no increase in respiratory symptoms (OR=1.00 [95%CI= 0.68 to 1.48]) as compared to women not using HRT. Among women still menstruating, those using HRT had indicated more asthma symptoms (OR=1.65 [95%CI=0.86 to 3.18]) and indicated lower FVC (adj. diff. -103 ml [95%CI=-223 to 16]) than those not using HRT.
Discussion: Menopausal status appeared to determine HRT effects on the airways: Among menopausal women, those using HRT had higher lung function than those not using HRT; among women still menstruating, those using HRT appeared to have more respiratory symptoms and lower lung function than those not using HRT. This may explain the contradictory findings in the literature.

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Endometriomas Treated Surgically at Reproductive Age: The Experience of a Tertiary Care Centre

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Introduction: Endometriosis has been traditionally included among the most important causes of chronic pelvic pain, affecting 10% of women of reproductive age. Ovarian endometriomas do not respond well to medical treatment. Therefore, surgery remains the main treatment modality. The aim of this study was to review our experience regarding surgical treatment of ovarian endometriomas at reproductive age.
Methods: A retrospective review of the records of all patients with endometriomas presented at reproductive age, which were treated surgically in a tertiary Hospital, during a 7 year period, from January, 2000 to December, 2006.
Results: 77 women were identified. The mean age was 30,65±6,24 years. The majority of endometriomas was unilateral and mean serum CA-125 was 52,27 (range 5,7-196). 63 (81,8%) were managed laparoscopically and 14 (18,2%) by laparotomy. The mean size of tumours managed laparoscopically was 5,91±2,08 and by laparotomy 8,37±4,42cm. Mean operating time was 72,1±27,7 and 67,5±15,5 min, respectively and time of hospitalization was 2,63±0,85 and 3,93±0,73 days, respectively. Nine laparoscopies were converted to laparotomy (14,3%), because of technical reasons such as severe adhesions, bleeding or tumour size. Fifteen (19,5%) patients suffered recurrence with a mean interval time of 1,71±1,05 years. Nineteen (24,7%) women presented with a pregnancy-wish and more than one year infertility. In this group of patients, we obtained 6 pregnancies (31,6%), with a mean post-surgical time of 17,8±11,44 months and 5 pregnancies (26,3%) issued with a delivery.
Discussion: Laparoscopy is the first line surgical procedure to treat endometriomas, particularly in the group of patients at reproductive age. Criteria for laparotomy include suspicion of malignancy and large tumours that make too difficult the laparoscopic approach. In our experience, we could manage laparoscopically 81,8% of endometriomas. We had 19,5% of global recurrence rate. In a context of more than one year infertility related to endometrioma, we obtained a 31,6% pregnancy rate within a 17,8 months post-surgical mean time.

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Fix or flexible introduction of GnRH antagonists in controlled ovarian stimulation: which is the best protocol?

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Introduction: Controlled ovarian stimulation (COS) increases the success of *in vitro* fertilization. GnRH antagonists (GnRH ant) prevent LH surge, like GnRH agonists, without their side-effects and their long desensitization period. Introduction of GnRH ant can be made in a fix or flexible way, without consensus about the better choice.
Objective: To compare pregnancy rates between a fix protocol (introduction of GnRH at day 6) and a flexible protocol (introduction of GnRH according to follicular dimension e" 14mm).
Material and methods: Prospective study, between May 2004 and August 2007 (40 months). 348 couples submitted to 530 cycles of COS, divided in 2 groups, according to introduction of GnRH: PROTOCOL 1 – flexible regimen (n-) and PROTOCOL 2 – fix regimen (n-). Both groups where compared to age, infertility factors, stimulation days, amount of GnRH ant, number of oocytes and embryos obtained, endometrial thickness at transfer day, and number of embryos transferred. Statistical analysis was made with SPSS® 12, with $p<0,05$.
Results: From 530 cycles of COS that has been initiated, 79 has been cancelled because poor ovarian response

or ovarian hyperstimulation syndrome risk (OHSS-2), which corresponds to 15% of all cycles. From those 451 cycles continued, 236 belongs to protocol 1 (flexible regimen) and 215 to protocol 2 (fix regimen).

In flexible regimen, and after 11,9±2,3 days of stimulation, 13,1±4,3 ampoules of 150UI FSH and 5,18±1,6 days of GnRH ant, it was observed mean values of 1107 pg/mL of E_2 and 4,85±3,3 follicles e"16mm in hCG day. There were no oocytes collection in 5 from 236 cycles submitted to follicular punction, and 24 didn't present normal fecundation or fecundation. Two embryos were transferred in more than 50% of 207 cycles with transfer, to an endometrium with 10±2 mm thick. From the above transfers made, 48 (23%) result in clinical pregnancy.

In fix regimen, and after 11,24±2,2 days of stimulation, 11,8±3,6 ampoules of 150UI FSH and 5,3±1,7 days of GnRH ant, it was observed mean values of 1023 pg/mL of E_2 and 4,61±2,97 follicles e"16mm in hCG day. There were no oocytes collection in 6 from 215 cycles submitted to follicular punction, and 20 didn't present normal fecundation or fecundation. Two embryos were transferred in more than 50% of 189 cycles with transfer, to an endometrium with 10±2 mm thick. From the above transfers made, 41 (21%) result in clinical pregnancy.

The mean days of stimulation and the amount of FSH were the only variables that have statistically difference, with the fix regimen associated with lower consumption of FSH and fewer days of stimulation. We didn't found any statistical significant difference between two protocols in the other variables studied.

Conclusions: Taking into account the primary end-point of this work, and because the result between two protocols wasn't statistically significant, we can say that two protocols were equivalent in achieving clinical pregnancy. However fix regimen is associated with lower consumption of FSH and fewer days of stimulation.

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The effects of pregnancy and lactation on bone mineral density

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Aim and Methods: We performed a prospective study of bone mineral density (BMD) in 38 women during their first full term pregnancy until 12 months postpartum. BMD measurements at lumbar spine (L_2-L_4 [LS]) and forearm (distal 33% [RD] and ultra-distal [RUD] region of the radius) were made within 3 months before conception, after delivery, 6 and 12 months postpartum. In mid pregnancy the DXA examination was carried out only at the forearm. Patients were grouped according to duration of lactation as Group I, II, III (0-1; 1-6; 6-12 months).

Results: During pregnancy, there was a significant difference between baseline and delivery ($p < 0.001$) in the LS, RUD and RD BMD values. In Group I, there was no statistically significant difference in LS BMD between visits following pregnancy. The RUD BMD loss was recovered by 6 months postpartum (PP6). Group II showed continuous bone loss from delivery until PP6 at LS and RUD. In Group III, the LS BMD loss continued throughout the lactation period. The RUD BMD dropped (4.9%) till 6 months postpartum then increased by 3.0% as measured at 12 months postpartum (PP12). There was no significant change in RD BMD in any of three groups during lactation. At LS bone loss between delivery and PP12 correlated well with the duration of lactation ($r = -0.727$; $p<0.001$).

Conclusion: We suggest that calcium needed for fetal skeletal growth during pregnancy was gained from maternal trabecular and cortical sites and that needed for infant growth during lactation was drawn mainly from the maternal trabecular skeleton in our patients. The effect of pregnancy and lactation on maternal bone mass was spontaneously compensated post weaning**.**

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Predictive value of ultrasound and serum marker in 181 peri- and postmenopausal asymptomatic ovarian cysts

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Aim: Asymptomatic cysts have 11-16% incidence in the menopause, and even higher in the perimenopause. The management of these cystic structures is still uncertain. In this study we aimed to correlate the gray-scale ultrasound and hystological, serum CA-125 characteristics of the asymptomatic peri- and postmenopausal cysts.

Methods: Ultrasound descriptions, hystological reports and serum CA-125 levels of 181 patients over 40 of age and with surgically removed asymptomatic cysts were analysed. Perimenopausal (PEM) and postmenopausal (POM) patients were distinguished according to the menstrual status. Using transvaginal scanning (5.9 Mhz, ATL HDI-3000, Bothell, Washington) uniliocular anechoic cyst without papillarization were considered simplex cyst, otherwise complex cyst were described.

Results: In the PEM group (N=101, mean age 46.0, range 40-54) 44 simplex (Ø <5 cm N=19, Ø eˆ5 cm N=25) and 57 complex cysts (Ø <5 cm N=15, Ø eˆ5 cm, N=42) were described with ultrasound. Among the POM patients (N-=80, mean age 59.0, range 41-78) 27 simplex (Ø <5 cm N=4, Ø eˆ5 cm N=23) and 53 complex cysts (Ø <5 cm N=7, Ø eˆ5 cm N=46) were found. One cyst was malignant in the PEM group (granulosa cell tumor, age

42, Ø=52 mm). Both the the simplex and the complex POM cysts Ø < 5 were benign, as well as the simplex POM cysts Ø eˆ 5 cm. However, hystology reported malignancy in three komplex POM cysts Ø eˆ5 cm (6.5%, NS). Serum CA-125 was measured in 106 cases preoperatively (normal reference <35 kIU/L), but none of the 17 patients with elevated serum level proved to have ovarian malignancy.

Conclusion: The malignant potential of the asymptomatic perimenopausal ovarian cysts are very low irrespective to the size, especially if ultrasound describes simplex structure. Due to the considerable increased risk of malignancy, postmenopausal komplex cysts larger than 5 cm shoud be removed. Sinve malignancy in postmenopausal simplex cysts were not found, we recommend ultrasound follow-up instead of surgery. The predictive value of CA-125 was not experienced. Ultrasound feature using strict criteria to distinguish simple and complex cysts is found to be superior to size in predicting malignancy. Neither the ultrasound size, nor the serum CA-125 proved to have additive value to the ultrasound feature in the management of peri- and postmenopausal cyst.

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Evaluation of semen quality in men with malignant diseases before therapy

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Aim: Sperm cryobanking is a standard method of choice to preserve fertility of men undergoing oncologic treatment. Chemotherapy, radiation or their combination results in a significant reduction of sperm quality. However, it is also suggested that the disease itself influences spermatogenesis. The aims of this study were to investigate (1) the effect of the malignant disease on spermatogenesis in patients with testicular cancer and Hodgkin's disease and (2) the correlation between sperm parameters and hystotype of testicular cancer.

Methods: We studied 105 patients with testicular cancer (TC group, N=68) or Hodgkin's disease (HD group, N=37) who cryobanked sperm before chemo- or radiotherapy in our Reproductive Andrology Laboratory from 1993 to 2007. All TC patients were evaluated within 1 month after orchidectomy. Sperm parameters (ejaculate volume, sperm concentration, total sperm count, forward motility) were evaluated according to WHO.

Results: The mean age and sperm concentration was 27 years (range 16-42.), 21,69 M/mL (±SD 20.5) in the TC group and 25 years (range 16-34), 27.6 M/mL (±SD 23.9) in the HD group. In the 68 TC patients 38 (55,9%) olygozoospermic and 9 (13,2%) azoospermic individuals were detected. Only 28 (41.2%) of them had more than 40 million total sperm count/ejaculate. The average forward motility was 26,7% (±SD 5,4). The sperm concentration was significantly higher in seminoma patients (N=19, 62 M/ml ±SD 20,5) than in non-seminoma TC patients. Nine TC patients and four HD patients were azoospermic. Among the 37 HD patients 14 (37.8%) were olygozoospermic, 4 (10.8%) were azoospermic and only 17 (45.9) had higher total sperm count than 40 million. The average forward motility was 25,9% (± SD 5.56).

Conclusion: Spermatogenesis is defected in the majority of testicular cancer and Hodgkin disease patients, normal sperm count can be expected in less than half of them. The decreased progressive motility suggests that with the reduced sperm concentration the sperm function is also affected, suggesting decreased fertilizing potential. Functional testing, chromatin assays and chromosomal analysis of samples would improve the assessment of the fertility prognosis of these patients before cryopreservation.

OBSTETRICS 1

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Vaginal birth after caesarean section (VBAC) - A re- audit

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Aims:
To determine success rate of VBAC
To determine proportion of women who had epidural analgesia for labour
To determine proportion of women who had continuous CTG monitoring and limitation of second stage.
To compare clinical performance since the last audit.

Methods:
Period of study: 1/07/06-31/12/06
Previous audit -2000
Design-Retrospective
Inclusion: Pregnant women with a previous CS
Exclusion: Contraindications to vaginal delivery in index pregnancy

Results:
Study population: 95 Cases.
Successful VBAC Rate: 77.1%
Epidural analgesia was used in 21% of cases. Continuous CTG was obtained in 90%. Comparative analysis with previous audit showed greater consultant involvement in decision-making, slightly higher rate of limitation of the second stage, (69% vs. 65%) and a marginal increase in successful VBAC (77.1% vs. 74%).

Conclusions:
VBAC success rate is comparable to national average (72-76%).
Recommendations:
Modify second stage management, Liberal use of epidural, Update Protocol, Re-audit.

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Can Caesarean Section Improve Postnatal Quality of Life? Introducing Childbirth-Related Quality of Life Scale

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Introduction: Caesarean section deliveries might increase the incidence of surgical interventions. Statistics indicate that elective caesarean section has been increasing at alarming rate in Iran. This study was aimed at designing 'Childbirth-Related Quality of Life scale' (CR-QoLS), a subjective measurement of postnatal quality of life to assess and compare the postnatal quality of life in women with normal and caesarean section deliveries.
Methods: The CR-QOL was tested using Edinburgh Postnatal Depression Scale and Short Form- 36. A sample of 50 mothers with normal delivery and 50 mothers with caesarean section from five health care centers in Esfahan were entered into the study. Postnatal Quality of life was measured at two points in time (Time 1: 6 to 8 weeks after delivery; Time 2: 12 to 14 weeks after delivery).
Results: Comparing the mean scores between the two groups the results showed that in general the normal delivery group had better quality of life for almost all subscales of CR-QoLS in both assessment times. The difference was significant for "feeling to herself" (mean score 23.38 vs. 21.66) in the first assessment (P=0.005); and for "physical health" (mean score 31.5 vs. 29.9), "economical status related to delivery" (mean score 4.78 vs. 4.32) and "satisfaction from delivery" (mean score 4.24 vs. 3.84) in second assessment (P=0.009, 0.01 and 0.05 respectively).
Discussion: In general the findings suggest that normal delivery lead to a better postnatal quality of life especially resulting in a superior physical and mental health and therefore it is better to be considered as the first priority in elective termination of pregnancy.

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Post-term Delivery Of Obese Women: Maternal Or Foetal Cause?

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Introduction: The prevalence of obesity has increased among pregnant women in developed countries and is associated to numerous complications, including post-term delivery (PTD, delivery after 41 weeks of gestation) and foetal macrosomia. This study aimed at assessing the relationship between maternal obesity, foetal macrosomia and PTD.
Methods: In this retrospective monocentric study all electronic charts of women who delivered at the Lons-le-Saunier's hospital (Jura, France) between 01/01/2003 and 12/31/2006 were reviewed. Multiple pregnancies were excluded. Women were classified into four BMI categories (Table 1). Logistic regression was performed with SAS software. Results are odds ratio (OR, adjusted for neonatal weight, weight gain during pregnancy, age and parity, with their 95% CI) for PTDcompared to women with normal BMI.
Results: We included 4595 patients in this analysis. We found that both preconception overweight and obesity was an independent risk factor for PTD (see table). Foetal macrosomia, (neonatal weight above 4000g) was also an independent risk factor for PTD. Weight gain during pregnancy and parity had simulation. Age was not an independent factor for PTD.

Table 1	Post-term nb (%)	Odds Ratio (CI 95%)
Body Mass Index (kg/m²)	149 (13.7)	0.78 (0.64-0.94)
Underweight <20	389 (17.0)	1
Normal 20 to 24,99	167 (21.5)	1.29 (1.06-1.56)
Overweight 25 to 29,99	121 (27.8)	**1.83 (1.43-2.33)**
Obese >= 3		
Infant weight (g) <2500	2 (2)	0.12 (0.04-0.39)
2500	788 (18.4)	1
3999	136 (41.5)	**3.29 (2.59-4.18)**
>=4000		

Conclusion: This study shows that preconception obesity is an independent risk factor PTD, which may be related touterine hypocontractility already suggested in obese women (*BJOG. 2007,11: 343-8).* Further studies are needed to assess those factors, in order to improve our knowledge of delivery either pre-or postterm.

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Risk Factors, Maternal and Neonatal Outcomes Associated with Umblical Cord Prolapse

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Introduction: Our goal was to identify incidence and risk factors associated with umbilical cord prolapse and review the perinatal outcome of infants born with that.
Methodes: During nine years, 103 cord prolapses were found in the caesarian sections done in the four hospitals of Tehran University of Medical Sciences. Association between cord prolapse, Potential risk factors and neonatal and maternal outcomes were evaluated by means of the odds ratio, in a case – control study.
Results: The incidence of cord prolapse was found to be 0.2% in our study. The majority of patients were of gestational age 38-41 weeks (75.7%), (22.3%) were preterm <37w, and (1.9%) were post term (>42 weeks) and as compared with control group there was a relationship between postterm pregnancy and umblical cord prolapse (P<0.043). Case mothers were 1.4 times more likely to be in active phase of delivary (P<0.001).The umbilical cord prolapse occurred in association with fetal presentation (P<0.002). Transverse and cord presentation occurred 3 times more in the cases. Case mothers were four times more likely to be multiparas as compared with the control group (P<0.001). Apgar score was less than 7 in (26.5%) of the babies at one minute , which showed that neonates with umbilical cord prolapse had less apgar score at one minute compared with the control group (P<0.001).Case mothers had vaginal bleeding before delivery four times more than the control group (P<0.001). Oligohydramnios and polyhydramnios occurred five times more in the case group (P<0.001).
Discussion: General condition of the control neonates was much better than the case groups at the discharge time.

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Fetal Macrosomia In Gestational Mild Hyperglycemia: The Impact Of Lower Glycemic Levels

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Introduction: This study aims at assessing the influence of lower cutoff points on 100-g glucose tolerance test (100gGTT) and glycemic profile test (GPT), used either isolately or combined, for the identification of pregnant women at risk of fetal macrosomia.
Methods: 701 pregnant women with positive screening for gestational diabetes melitus were classified into 2 categories: I (control group; CG)–normal 100gGTT (NDDG, 1979)+normal 6-point PG; II (study group, SG)–normal 100g-GTT+abnormal GP. All subjects were reclassified according to lower cutoff points: mean, mean+SD, mean+2SD (m; m+s; m+2s) for 100g-GTT; and mean and mean+SD (m; m+s) for GP. Values were considered isolately and combined into new six criteria as follows: a) 100g-GTT=m, PG=m, b) 100g-GTT=m+s, PG=m; c) 100g-GTT=m+2s, PG=m; d) 100g-GTT, PG=m+s); e) 100g-GTT=m+s, PG=m+s); f) 100g-GTT=m+2s, PG=m+s. Macrosomia and infants large for gestational age (LGA) together were considered the response variable. Odds ratios and their confidence intervals and p-values (significance at 95%) were estimated. To determine 100g-GTT and GPT specificity and sensitivity for macrosomia were calculated.
Results: Of the 701 women studied, 184 (26,25%) produced macrosomic babies (CG=, 24.7%; SG=29.5%). There were seven intrauterine deaths (CG=4; SG=3), and perinatal mortality rate was 8.4‰ in CG, and 13.2‰ in SG. Odds ratio estimators for the occurrence of macrosomia/LGA, using alteration in one of the tests (GTT or GP) as predicitive variable, showed that the criteria alone did not have enough power to predict the chance of macrosomia occurrence. However, the reclassification of the GTT/GP combination shows that criteria I, II and IV are good estimators and enhance the chance to identify macrosomia/LGA in 50, 54 e 64.5%, respectively. Sensitivity testing results were similar. However, criteria IV specificity was higher than that of criteria I.
Discussion: a) lower cutoff points for the isolate use of the tests was not helpful in identifying macrosomia; b) criteria I and IV were the most sensitive and specific for macrosomia detection; c) criteria I, II and IV showed a statistically significant predictive power (OR>1), indicating that lower cutoff points allow a more precise detection of the possibility of macrosomia in babies born to women with mild hyperglycemia.

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Mild Hyperglycemia As A Risk Factor For Metabolic Syndrome In Pregnancy And Its Impact On Perinatal Outcome

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Introduction: Mild hyperglycemia is a risk factor for perinatatal death. However, whether mild hyperglycemia is also associated with MS during pregnancy remains unclear. This study aimed at evaluating MS prevalence and its clinical and physical components in a cohort of pregnant women with different degrees of glucose tolerance; determining the pre-gestational risk factors for MS during pregnancy; and assessing whether MS predicts adverse perinatal outcomes (APO).
Methods: 136 women with positive GD screening underwent glycemic profile (GPT) and 100g-glucose tolerance testing (OGTT), and were assigned into one of 4 groups: normoglycemia: normal responses to both tests; mild hyperglycemia:abnormal GPT and normal GTT; gestational diabetes:abnormal OGTT and normal GPT; overt diabetes: abnormal responses to both tests. Insulin resistance markers; body mass index; waist circumference; waist-hip ratio; systolic/diastolic arterial pressure; cholesterol, triglyceride and insulin levels; HOMA-IR and HOMA-Â were measured at 24-28 and 36 weeks of gestation and 6 weeks after delivery. Birthweight, Apgar index at 1 and 5 min., number of days at the nursery and respiratory distress syndrome (RDS) were also assessed.
Results: MS prevalence was 0% ;20%; 23.52% and 36.36% in normoglycemia, mild hyperglycemia, GD and overt diabetes, respectively. History of previous GD, BMI eˆ 25, arterial hypertension, family history of diabetes, history of prematurity, previous RSD and polydramnios were significant pre-gestational predictors of MS. The presence of MS during pregnancy increased the occurrence of APO (p=0.01). The pregnant women with mild hyperglycemia showed characteristics of insulin resistance (IR) which remained up to 6 weeks postpartum whereas gestational IR disappeared after delivery in normal pregnant women. Women with gestational diabetes showed IR and hypoinsulinemia.
Discussion: Worse glucose tolerance was associated with MS prevalence. An abnormal glucose profile pointed to a major metabolic abnormality, which characterizes MS during gestation and persists after delivery. MS associated with mild hyperglycemia during pregnancy correlated with the occurrence of APO even when OGTT was normal.

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Severe preeclampsia before 28 weeks: maternal and perinatal outcome

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Introduction: Severe preeclampsia before 28 weeks is an uncommon but severe condition, with still limited data on maternal and perinatal outcome. The aim of this study was to characterize severe preeclampsia delivered at our centre before 28 weeks, with disease features, maternal and perinatal outcome.
Methods: We analysed retrospectively pregnancies with severe preeclampisa delivered before 28 weeks from March 1992 to April 2007. Results: Adequate data was available in 36 pregnancies. Ten women had chronic hypertension (28%) and 5 had previous thrombotic events (14%). Most were primigravid (55.6%). At admission, mean maternal age was 28 years (range 17-38), mean gestational age was 26 2/7 weeks (range 19-28), 31 women presented with severe preeclampsia (86%), 17 with HELLP syndrome (47,2%) and 2 (5,6%) with *in utero* fetal death. Except for 2 pregnancies, mean length from admission to delivery was 1,2 days. While on ward, there were no cases of fetal demise. Corticoids were administered to most of patients in order to achieve fetal lung maturity as well as magnesium sulphate to prevent eclampsia. Abruptio placentae occured in 5 women (14%). Cesarean section was performed in 29 mothers/cases. There were neither eclamptic seizures nor maternal deaths. The average birthweight was 682g with 21 cases of fetal growth restriction (58%). Twenty eight neonates (77,8%) were admitted to neonatal intensive care unit because of prematurity. There were 5 neonatal deaths (14%) and 3 (8,3%) postneonatal deaths. Three of the survivors (13%) were known to have neurological impairment at long term follow-up. Thirty one mothers were tested, at least 10 weeks post partum, for the presence of thrombophilic markers (5 had antiphospholipid syndrome and 4 had inherited thrombophilia) and renal disease (3 cases of renal failure).
Conclusions: Early onset severe preeclampsia is a severe condition associated with high rates of maternal and fetal morbimortality. In our series, recognition of preeclampsia/HELLP with prompt intervention, associated with intensive neonatal care, resulted in good maternal and fetal outcomes with no long term complications for the majority of fetuses and no maternal deaths. All mothers should be screened post-partum for trombophilias and renal disease.

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Maternity Blues – A Risk Factor Of Postnatal Depression

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Introduction: Maternity blues is a well documented risk factor of postnatal depression.
The objective of the study was to analyze the frequency of maternity blues occurrence during the first week of puerperium in order to isolate all the patients at risk of postnatal depression. It was also aimed at determining the influence of socio-demographic, psychological and obstetric factors on the prevalence of maternity blues.
Material and methods: The study was performed at the 1st Department of Obstetrics and Gynecology, Medical University of Warsaw, between January and July 2007r.

350 women between 3rd and 5th day of puerperium were asked to fill in a specially designed questionnaire. It included 10 items from the Edinburgh Postnatal Depression Scale (EPDS), questions regarding demographic and socioeconomic data, course of pregnancy, delivery and breastfeeding, obstetric and psychiatric history. 344 of questionnaires were filled in properly.
Results: 132 mothers (38.4%) had an EPDS score of ≥10. It was found that low educational level, lack of family support, pregnancy complications and past history of depression correlate with mood depression in the early postpartum period. However, parity, cesarean delivery, place of residence, occupation, marital status, socioeconomic level, preterm delivery and breastfeeding showed no relationship with the patients' score obtained in the questionnaire. There were no differences in newborns' Apgar score.
Conclusions: Every third mother is at risk of developing maternity blues. Implementation of screening for early postpartum affective disorders (postnatal blues) seems to play crucial role in identifying patients at risk of postnatal depression. Special attention should be paid to ensure that additional medical care for those women is provided during the first year after delivery.

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Selective Termination of Anomalous Fetus in Twin Pregnancy

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Introduction: The incidence of multiple gestations has dramatically increased over the past 3 decades, mainly because of improvements in assisted reproductive technologies. Furthermore, an excess of structural anomalies is observed in twins compared to singletons. The reduction to a single fetus is appropriate in multifetal pregnancies with structural defects, Mendelian disorders or chromossomal malformations, in order to improve the prognosis of the normal fetuses. Approximately 1-2% of twin gestations may face the dilemma of expectant versus selective feticide following diagnosis of anomaly concerning only one fetus. The chorionicity is a crucial element to determine the technique to achieve the feticide.
Methods: Selective termination of anomalous fetus was performed in 6 dichorionic twin gestations at our Institution.

Results:

Case	GA at procedure	Indication of procedure	Complication	GA at delivery	Outcome
1	32	Arnold-Chiari II		38	A/W
2	32	Bilalteral renal displasy		36	A/W
3	16	Anencephaly		39	A/W
4	25	Trisomy 21	PPROM	27	NND
5	18	Trisomy 21		37	A/W
6	22	Trisomy 21	PPROM	23	IUD

A/W: Alive and well; NND: Neonatal death; IUD: Intrauterine death

The procedure involves a transabdominal injection of KCL into the fetal heart, under ultrasonographic control.
Discussion: The selective feticide for bichorionic abnormal twins is safe and effective. The optimum GA at which to perform the termination is still unresolved.

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Pregnancy outcome of first generation Turkish women living in the United Kingdom: A case control study

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Introduction: The issues related to safety of induction of labor in women with previous cesarean section remain controversial. Where do we stand?
Objectives: To compare pregnancy outcomes in women with one prior low transverse caesarean delivery after induction of labor with pregnancy outcomes after spontaneous labor, assessing the efficacy and safety of labor induction.
Study Design: This was a 3-years retrospective study (2004-2006) of women with one previous caesarean delivery who attempting a trial of labor (TOL). We compared women with spontaneous labor with those whose labor was induced and in the two groups, we evaluated the rate of vaginal deliveries, major and minor maternal complications, neonatal morbidities and prognostic factors of success and failed TOL.
Results: Four hundred and twenty patients underwent a TOL: 260 spontaneous and 160 induced. The rate of vaginal deliveries was higher in those with spontaneous labor versus induced (67.2% vs 54.4%). In either group, more operative vaginal delivery was realized and when there was a failed trial of labor, the most prevalent indication of caesarean was cephalopelvic disproportion. There were 3 cases of uterine rupture (0.7%), all them with spontaneous labor and the 2 cases of haemorrhage requiring transfusion (0.4%) were also documented in the above-mentioned group, although neither difference achieved statistical significance. No perinatal deaths occurred in either group. 3 neonates had an APGAR score at 5 minutes <7 (2 with spontaneous and 1 with induced labor). In both group, women with previous vaginal birth, previous indication not being a dystocia, or birth weight<4000g had a higher success rate compared with women without these history.
Conclusion: These results suggest that induced labor is associated with an increased rate of unsuccessful VBAC, but demonstrated that there was no significant difference between groups regarding perinatal and maternal morbiditie. Indeed, on the contrary to literatury, there wasn´t more risk of uterine rupture with induction. The authors confirmed that there were common factors of successful in all women attempted a TOL.
According to our study, induction of labor may be a reasonable, safe and an attractive choice among women with a previous cesarean section.

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Once a cesarean…is the induction of labor a safe option?

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Introduction: The issues related to safety of induction of labor in women with previous cesarean section remain controversial. Where do we stand?
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According to our study, induction of labor may be a reasonable, safe and an attractive choice among women with a previous cesarean section.

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Pregnancies with placental insuffuciency: Hemodynamic effects after steroid therapy for fetal lung maturation

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Objective: The use of steroids in order to improve pulmonary maturation in pre-term fetus is now largely accepted to reduce infant mortality and morbidity rate. A betamethasone course is not associated with any significant adverse effect on mothers and foetus. Effects on fetal-placental hemodynamic have been theorized in recent past years, with no unanimous interpretation of results. We intend to verify if steroids can affect feto-placental hemodynamics.
Methods: The study was conducted by Department of High Risk Pregnancy (Catholic University Rome), on 38 pregnant women, at risk of premature birth, subjected to a therapy of 12 mg betamethasone in two doses. The group was subdivided into 22 cases and 16 controls. The cases were selected for the presence of bilateral increase in uterine resistances (both occurring with RI > 90° percentile in our reference curves) in "basic" Doppler exam made 24 hours before the treatment. Every patient was subjected to Doppler exam 24 and 48 hours after the first betamethasone administration, in which umbilical artery and middle cerebral artery were assessed.
Results: A temporary not sensible improvement in umbilical pulsatility index (PI) was registered in the cases group 24 hours after the first betamethasone dose, returning to base values at the third projection. No umbilical PI variation was noticed in controls 24 hours nor 48 hours later. The middle cerebral artery PI variation registered, not statistically relevant.
Conclusions: This result might be interpreted as "improvement" of fetal metabolic and oxygenative state. The steroids could artificially reproduce the physiological cerebral vasodilatation that happens at term delivery

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Increased perinatal mortality in monochorionic versus dichorionic twin pregnancies: clinical implications of a large Dutch cohort study.

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Introduction: Monochorionic (MC) twins are at increased risk for perinatal mortality and morbidity compared with dichorionic (DC) twins. Compared with a cohort of twin pregnancies in the early 1900s, when fetal surveillance and intervention options were limited, perinatal mortality at term has decreased considerably in DC pregnancies but not in MC twins. Apperently, modern surveillance and the possibility of early intervention are effective in most DC twins but not in MC twins. There is controversy in literature about intrauterine death (IUD) rates after 32 weeks of gestation and optimal timing of delivery in case of otherwise uncomplicated MC twins. We therefore studied a large cohort of twin pregnancies to assess perinatal mortality. To the best of our knowledge, this is the largest cohort of twin pregnancies that has ever been studied accoring to chorionicity.
Methods: A total of 1407 twin pregnancies were studied. Pregnancy outcomes were documented according to chorionicity. Doppler findings of the umbilical artery were studied in 67 MC twin pregnancies.
Results : Perinatal mortality (eˆ20 weeks and/or eˆ500 gram) was 11.6% in MC twin pregnancies and 5.0% in DC twin pregnancies. After 32 weeks, the risk of IUD was significantly higher in MC twins (HR 8.8, 95% CI 2.7-28.9) and this was mainly due to an increased IUD rate eˆ37 weeks of gestation. In none of these cases signs of impaired fetal condition had been present antenatally, but acute TTTS around the time of labour was the most likely cause of death in most cases. Doppler velocimetry of the umbilical artery did not identify these cases.
Discussion: MC twins are at increased risk for fetal death, even at term. Current antenatal surveillance is insufficient to identify the cases at risk for adverse outcome. We recommend planned delivery around 36 weeks of gestation.

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Maternal and perinatal outcomes associated with low birth weight in Brazil

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Objective: To identify maternal and perinatal outcomes associated with the occurrence of low birth weight.
Methods: A retrospective cohort study in a tertiary maternity hospital in the city of Campinas, Brazil. Analysis of the database containing information on 43,499 liveborn infants delivered between 1986 and 2004 with low (n=6,477) and normal (n=37,467) birth weight. Outcomes associated with low birth weight were identified through crude and adjusted risk ratio (RR) and 95%CI with bivariate and multivariate analysis. The main outcome measures were: onset of labor, mode of delivery, indication for cesarean section; amount and characteristics of amniotic fluid, intrapartum fetal heart rate pattern, Apgar score, somatic gestational age, gender and congenital malformation.
Results: LBW infants showed more frequently signs of perinatal compromise such as abnormal amniotic fluid (especially olygohydramnios), nonreassuring patterns of fetal heart rate, malformation, lower Apgar scores and lower gestational age at birth. They were associated with a greater risk of labor induction and cesarean delivery, but lower risk of forceps. Conclusion: There was a clear association between LBW and unfavorable maternal and neonatal outcomes. This reinforces the importance of adequate prenatal care and labor surveillance in high risk pregnancies, especially women carrying growth restricted fetuses or presenting preterm labor.

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Macrosomic Fetus (>=4500g) – is vaginal delivery to be conduct

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Objective: To evaluate and to compare the obstetric outcome and neonatal morbidity between macrosomic and normosomic fetuses.
Methods: We analyzed medical records of mothers who delivered macrosomic fetuses, defined according to ACOG as birth weight >=4500g in a tertiary hospital during two years period. We compared the results with a control group of mothers who delivered fetuses with normal birth weight.
Results: There were 7469 deliveries over the study period and 76 (1, 02%) were macrosomic babies, males 67% vs.45% in controls. Mean birth weight was 4714g vs. 3156 respectively. The overall caesarean rate, including elective caesarean deliveries and failed labor, was 29%, comparing to 20,5% caesarean normosomic deliveries. Of those macrosomic undergone a trial of labor 80% delivered vaginally. The Apgar scores at 1 and 5 minutes, the umbilical postpartum blood Ph and Base excess were not significantly different in both groups. Duration of second stage of labor and incidence of maternal trauma were similar in both groups. Shoulder dystocia according to our documentation was not significantly more frequent in the study group.
Conclusions: Vaginal delivery accomplished in 80% of pregnancies with macrosomic infants (>=4500g) allows us to offer and to conduct a trial of labor as a reasonable alternative to elective caesarean delivery.

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Immediate maternal and neonatal morbility associated to sequentional instrumental delivery

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Objective: To evaluate, in term pregancies, the immediate morbility, maternal and neonatal, associated to sequential instrumental delivery (vacuum extractor plus forceps) in comparison to morbility associated with instrumental delivery using only one instrument (vacuum extractor or forceps).
Material and Methods: An observational-coort study (June 2004 to October 2007) that includes instrumental deliveries on term pregnancies, in vertex presentation in station 0 or 1. 3 groups were created – sequential instrumental delivery group (SI), forceps group (F), vacuum group (V). The groups were compared regarding delivery characteristics, immediate marternal morbility (episiotomy extention, cervical lacerations, grades 3 or 4 perineal lacerations) and immediate neonatal morbility (scalp lacerations, cephalohemorrahage, subgaleal/ subaponeurotic hemorrhage and Apgar score at 5 minute < 7). We used χ^2 and Fisher tests, multiple variance analysis and multivariate analysis with logistic regression to the statistical analysis of the study.
Results: There were analysed 278 deliveries – 64 in F group, 127 in V group and 87 in SI group. We observed 46 (16,5%) of significant maternal complications, 18 (6,4%) were considered major – grades 3 and 4 perineal lacerations and cervical lacerations- and its incidence was higher in the SI group (p< 0,001). There were registered 9 (3,2%) of significant neonatal complications, one of them a neonatal death, but with no statistics relation with the way of delivery. Parity, position and the surgeon are not associated with maternal or neonatal imediate complications.
Conclusion: The incidence of immediate maternal complications in the SI group is higher than the observed when only one instrument is used. The neonatal morbility, apparently, is not associated with the technique used.

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The Safety of Prescribing in Pregnancy: Does knowledge improve with seniority?

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Background: Drugs should be prescribed in pregnancy only if its benefit to the mother outweighs the risk to the fetus. Knowledge about the safety aspect of drugs commonly prescribed in pregnancy is imparted during training and should increase with medical experience.
Objectives: To assess knowledge of the safety aspect of prescribing in pregnancy in a group of doctors who range from trainees to specialists and to evaluate if experience in obstetrics improved this knowledge.
Methods: An anonymous questionnaire completed by doctors rating their confidence in prescribing on Visual Analogue Score and assessing their knowledge on safety aspects of commonly used drugs in pregnancy.
Results: Fifty nine medical professionals completed the questionnaire over a three months period. Overall, senior trainees were more confident than consultants who were more confident than junior trainees. When analysed by speciality, there was no difference in confidence rating between doctors specialising in obstetrics and those who were not. SpRs felt more confident at 8.17 (on a scale from 0 to 10) in O&G and 8.7 in A&E while consultants had confidence 8 in O&G and 7 in A&E. Obstetricians were correct in their knowledge in 70% of cases, while 50% of non obstetricians answered correctly (p>0.05).

While there is a noticeable improvement in knowledge from junior trainees to senior trainees, the difference between senior trainees level and consultants is not significant.
Conclusion: It is disappointing that 50% of junior obstetric trainees and 30% of senior obstetric trainees and specialists should consider improving their competence in prescribing in pregnancy and breastfeeding. It is also interesting to note that the knowledge about safety aspects in prescribing have similar trends in obstetric versus non-obstetric doctors.

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Abnormal haemostatic potential in women with history of Preeclampsia

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Introduction: Preeclampsia (PE), a hypertensive disorder of unknown aetiology, occurs in 5-7% of pregnancies and is characterized by coagulation abnormalities and different systemic manifestations; PE is a leading cause of maternal and perinatal morbidity and mortality. Many studies have already focused on the investigation of markers for coagulation, fibrinolytic

activation and endothelial injury in PE but there are no studies regarding haemostatic parameters in women with a history of PE. Some studies suggested that women with history of PE have an increased risk of cardiovascular diseases later in life, but the underling mechanisms are still unknown. This study focused on evaluation of haemostatic parameters - Plasma tissue plasminogen activator (t-PA), plasminogen activator inhibitor type 1 (PAI-1) and fibrin fragment D-Dimer several years after the terminus of pregnancy to investigate if they are altered in women with history of preeclampsia.

Methods: 65 healthy women with a history of PE and 54 matched control women with previous normal pregnancy between the ages of 27 and 47 years, who delivered between 2001 and 2005, were enrolled in this study.

t-PA, PAI-1 and fibrin fragment D-Dimer antigen levels were quantified using standards commercial ELISA methods (Technozym® PAI-1 Antigen ELISA, Technozym® D-Dimer, t-PA Antigen ELISA, respectively). Statistical analyses were performed using SPSS software (version 15.0, SPSS).

Results: Systolic and diastolic blood pressures were significantly higher in women with history of PE ($p<0.001$). The levels of t-PA and PAI-1 were similar between the two groups as well as the t-PA/PAI-1 ratio. However, a significant increase in D-Dimer levels was seen in women with history of PE group in relation to control group [90.2 (45.0-146.0) vs. 68.2 (50.4-103.2), *P*=0.041].

Discussion: D-Dimer can be used as measure of formation (via thrombin) and lyses (via plasmin) of fibrin. The increase in D-Dimer level suggests an abnormal haemostatic potential in women with history of PE namely increased intravascular coagulation. This, together with the increased blood pressure, can be seen as a tendency for an increased risk of cardiovascular/ thrombotic events.

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Perinatal outcome of preterm newborns with birth weight from 1500 to 2500g

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Introduction: Preterm birth is one of the greatest causes of neonatal morbidity and mortality. The preterm birth has been defined as delivery prior to the completion of 37 weeks' gestation. The purpose of this study was to assess the perinatal outcomes (morbidity and mortality) in the preterm newborns with birth weight between 1500g and 2500g.

Methods: 634 preterm newborns weighted from 1500 to 2500g were studied retrospectively, of the total 896 preterm deliveries and entire 8212 deliveries in the past two years (2005-2006) at the University Clinic for Gynecology and Obstetric – Skopje.

Results: From total 896 preterm deliveries, 634 weighted under 2500g (70,76%), 452 (50,44%) from 1500g to 2500g. They were between 30-34 w.g. From a review of outcomes in this infants resuscitation and intensive care has been given in 430 (67,82%) of them!

Neonatal deaths were reported only 10 (1,8%)- average weight 1766g, and average weeks of gestation 30,4. 8 (80%) of them ended with cesarean delivery. Other results from this study were: 44 (8,2%) among preterm newborns with birth weight 1500-2500g were with fetal growth restriction and 36 (81%) were delivered with cesarean section. Cesarean delivery was also solution for 308 (57%) of preterm newborns from 1500 to 2500g.

Discussion: Our data confirm that the great preponderance of mortality and serious morbidity is prior to earlier week's gestation and low birth weight. Neonatal survival rates are approximately 69,9% under 1500g., 98,2% at 1500-2000g and 99,9% neonatal survival beyond 2000g.

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Thrombophilia – getting pregnant after the diagnosis

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Background: Thrombophilias are inherited or acquired conditions that predispose to thromboembolism. Thrombophilic disorders have been associated with obstetric complications, such as unexplained pregnancy loss, intrauterine growth restriction - IUGR and preeclampsia. A multidisciplinary approach and an antithrombotic therapy have been reported as successful measures in the outcome of these pregnancies.

Objectives: We have conducted a prospective study of women with a thrombophilia diagnosis made before gestation in order to assess their pregnancy outcome.

Material and Methods: From all the women who came to our preconceptional clinic because of their previous obstetric complications (recurrent pregnancy loss, fetal death, IUGR) during three years (n=157), 84 were diagnosed with thrombophilia. Anatomical, infectious and genetic (couple cariotype) factors were excluded. Forty women (median age = 30,9 years) got pregnant again and were followed-up in our clinic. Two had a previous IUGR baby and 38 had a history of recurrent miscarriage or unexplained 3rd trimester loss. Nineteen presented a MTHFR C677T mutation, 11 a factor V Leiden mutation, 8 antiphospholipid antibodies, 4 an increased activity of factor VIII, 4 were prothrombin G200210A heterozygotic and one had a protein S deficiency. Seven (17,5%) had two thrombophilias. All

the women started thromboprophylaxis or anticoagulants (low dose AAS and/or LMWH) when pregnant. We analysed their pregnancy course and outcome, which included therapeutic measures and complications, delivery, neonatal morbidity and mortality.
Results: There were 4 pregnancy losses (2 miscarriages, 1 IUFD and 1 hydatidiform mole). A 16th week multiple pregnancy is still ongoing. Two thirds of the other 35 pregnancies had no adverse outcomes. Hypertensive disorders (2 of which severe), were the most frequent complications. Eighty five % of women had term births. Half of these resulted from C-section. All the newborns presented an Apgar score greater than 7 at the 5th minute and the median birthweight was 2988g (min.800g, max.3765g).
Conclusions: Thrombophilia has been cited recently as a cause of poor pregnancy outcome. In our thrombophilic women, thromboprophylaxis proved to be effective and safe. A careful and complete surveillance by a multidisciplinary team was also crucial for the maternal and perinatal outcomes.

GYNAECOLOGY/CANCER/BREAST /UROLOGY

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Endometrial Ossification: Unilateral Manifestation in a Septate Uterus. Case Report

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Introduction: Endometrial ossification is a rare finding. Its aetiology and pathogenesis are controversial, but theories include retained fetal bone and osseous metaplasia of endometrial tissue. However a history of previous termination of pregnancy is usually present. It has variable clinical presentations, such as secondary infertility, pelvic pain, dysmenorrhea and polymenorrhea The authors describe a case report of endometrial ossification related with pelvic pain successfully diagnosed and treated by hysteroscopy in a parcial septate uterus.
Case report: A case report of a 38 years old woman, gravida-2, para-2, and a finding of endometrial calcification, 7 years after the last pregnancy. She was taking oral hormonal contraception. An ultrasound was made because chronic pelvic pain which revealed an hyperechogenic endometrial area. Diagnostic-operative hysteroscopy was performed. During hysteroscopy, a septate uterus was diagnosed, and several coral-like bony fragments were seen unilaterally and removed. On histological examination, these fragments were found to be mature, necrotic bone.
Discussion: The etiology of endometrial ossification is multiple, including recurrent abortions and curettages (bony tissue may be caused by retained fetal tissue undergoing dystrophic calcification), endometritis, osseos metaplasia, calcium deposits in vascular tissue. In this case there was no previous history of abortion or curettages, making osseous metaplasia the most probably etiology. Hysteroscopy is valuable in both establishing the diagnosis and the removal of bony fragments, and should be the elective exam for endometrial ossification because it allows complete removal of osseous fragments and reduces the chance of residual synechia. The mean objective of hysteroscopy in endometrial ossification is the restitution of conceivement capability. After removal of bony fragments improvement of symptoms are expected.

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Successful Decrease In The Incidence Of Obstetric Anal Sphincter Rupture With An Interventional Training Program

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Introduction: Anal sphincter rupture (ASR) is a serious complication of a vaginal delivery. A considerable number of these women suffer from permanent anal incontinence after this type of injury. Incidence of anal sphincter injury has been increasing during the last decades. For example in Norway the incidence of ASR has increased from under 1% in the late 1960s to 4.3% in 2004. The same trend can be seen in Sweden and Denmark but not in Finland. Manual delivery method is different in Finland compared to Sweden and Norway. We wanted to introduce the classic manual protection of the perineum during delivery to see if the incidence of ASR can be reduced.
Methods: Intervention study. All midwifes and physicians in a birthing unit with about 2300 vaginal deliveries yearly were trained to use a classical perineal protection method to slow the delivery of the baby's head, to avoid perineal tears
Results: ASR was significantly reduced. Incidence for ASR before intervention, in the years 2002-2004 was 4.03% (7069 vaginal deliveries, 285 with ASR). In the intervention period and observation period after it, together 18 months, the incidence of ASR was 1.17% (3577 vaginal deliveries, 42 with ASR). A similar decrease was

observed for instrumental deliveries and spontaneous, midwife-conducted deliveries. Risk factors like infant birth weight and parity were similar before and after the intervention. Most of the instrumental deliveries were ventous, forceps is rarely used in our hospital. Frequency of episiotomy increased in the first months of the intervention but was reduced again in the other half of the period.
Discussion: By changing the method of delivery of the baby's head, we could see a significant reduction in the incidence of perineal tears and especially in 3rd and 4th degree tears. There was no change in the risk factors over time. This is an old method that has been used in many European countries, but its importance has been neglected. Birth attendant's manual work is important for the perineal outcome.

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Intravenous tranexamic acid and total abdominal hysterectomy: A prospective randomized study

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Introduction: Bleeding and infections remain primary complications to one of the most common surgical procedures in gynaecology, the total abdominal hysterectomy.

The aim of this study was to determine if a single intravenous preoperative dose of tranexamic acid (TXA) would benefit the outcome for patients undergoing total abdominal hysterectomy (TAH).The outcome for patients was measured as perioperative blood loss in mL and postoperative decline in haemoglobin level (HgB-level) and erythrocyte volume fraction (EVF).
Methods: In a time frame of 18 months, all the women in our department who were prepared for a TAH (of benign indication) were given careful both written and oral information before they were asked to participate in the study. The patients were then randomized to either TXA (15 mg/kg) or placebo administrated preoperative intravenously. Before the surgery HgB-level and EVF along with parameters of coagulation were measured. The perioperative bleeding was measured in mL. The HgB-level and EVF were measured day 1, 2 and 3 postoperatively.
Results: 140 patients were included in this study. 15 were later excluded mainly due to supravaginal procedure. The remaining 125 patients were randomized with 62 in the TXA-group and 63 in the placebo-group. The mean values of perioperative bleeding were 256.3 mL and 266.1 mL in the two groups. The standard deviations were 166.3 and 184.8 mL, respectively. The difference is not statistically significant. The mean values of the decline in HgB-level and EVF after 3 days also showed no significant differences. When comparing other parameters to perioperative bleeding there is a correlation between rising BMI and larger bleeding volume. Perioperative bleeding was also significantly correlated to the weight of the uterus.
Discussion: In the present study we found that a single intravenous preoperative dose of TXA has no significant effect on perioperative blood loss and decline in HgB-level and EVF in patients undergoing TAH. We found that rising BMI and increasing weight of the uterus is correlated to larger bleeding volume.

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Colpopoiesis in 170 mrkh cases using the creatsas vaginoplasty

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Aim: The Creatsas' vaginoplasty is an easily performed technique, for the creation of neovagina in patients with Mayer-Rokitansky-Kuster-Hauser syndrome (MRKH syndrome). Purpose of this study is to evaluate the results of the Creatsas vaginoplasty in MRKH patients.
Material and Methods: One hundred seventy patients with MRKH syndrome, admitted from March 1987 till November 2006, underwent surgical colpopoiesis, using the Creatsas vaginoplasty technique. During a 12 months post-treatment follow-up examination, we evaluated the postoperative result, and investigated not only for possible complications, but also for the level of satisfaction during intercourse, as stated by the patients.
Result(s): A functioning vagina of 10 to 12 cm depth and 4 to5 cm width was created in 165 of these patients (97 %). For the rest five cases, a vagina of 7 to 9 cm depth and 2 to 3 cm width was revealed during clinical examination. Four wound openings were reported (2,3%); none of the patients noticed any bleeding during the first intercourse. A satisfactory sexual life was reported from 162 patients (95,3%) and an adequate one from the rest of them.
Conclusion(s): Creatsas vaginoplasty is an effective, well-tolerated, easily performed and safe technique for the colpopoiesis in women with MRKH syndrome.

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Genital mycoplasmas as cause of vaginal discharge in non-sexually active young females

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Objective: Cases of vulvovaginitis, often remain unexplained. The prevalence of genital mycoplasmas in childhood and adolescence is not well known. Purpose of this study was to determine the probable involvement of *Mycoplasma hominis* and *Ureaplasma urealiticum* in non-sexual active young females with vaginal discharge.
Methods: Presence of *Mycoplasma hominis* and *Ureaplasma urealyticum* in 70 non-sexual active symptomatic girls, and in 50 healthy girls, between 0 and 20 years old, was examined by vaginal culture.
Results: Out of 70 symptomatic girls, *Ureaplasma urealyticum* positive cultures were detected in 38 cases (54,3%), whereas only 7 of the 50 healthy young girls (14%) where found positives. In 11 out of these 38 (28,9%), *Ureaplasma urealyticum* was the only pathogen detected. *Mycoplasma hominis* was isolated in only one symptomatic case (1,4%) and in none of the healthy cases.
Conclusions: Authors demonstrate a significant association between vaginal discharge and *Ureaplasma urealyticum*, even when sexual activity is absent. Since these results indicate the involvement of *U. urealyticum* in vulvovaginitis presented in young females, a routine examination for this pathogen based solely on cultures is suggested.

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Clinical significance of Platelet function investigation in ovarian cancer patients

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Background: Development of algorithm of analysis haemostasis state will allow decreasing risk of VTE complications.
Aim: To determine necessary range of laboratory tests for a high-grade estimation of hemostasis state in ovarian cancer patients.
Patients & Methods: 81 patient have ovarian cancer I-II stages (OvC I-II); 72 have ovarian cancer III-IV stage (OvC III-IV) all patients was operated. 56 patients have received chemotherapy.
Laboratory tests: Platelet aggregation tests with following stimulators: Adrenaline, Ristocetin and ADP in various concentrations to determine degree of their activation. Platelet activation marker test – platelet factor 4 (PF4). DIC and thrombophilia marker tests: D-dimer, TAT complexes and F1+2 prothrombin fragments.
Results: Before operative intervention the rate of subcompensated chronical DIC was 40,7% in patients with OvC I-II; in OvC III-IV – 50%.

In postoperative period the rate of subcompensated chronical DIC have been considerably increased and patients with decompensated chronical DIC also have been found: in patients with OvC I-II – 55,6%; in OvC III-IV – 75%.

During chemotherapy was detected slight reduction in levels of thrombophilia molecular markers. However it was observed damage of fibrinolytic activity due to iatrogenic effects of chemotherapy: reduction in proteins C and S levels, increase PAI concentration, platelets hyperaggregation in ristotetin presence.
Conclusions: The most informative methods of detection latent forms of thrombofilia and cronic DIC are definition of level PF4 - a marker of platelet activation, which indicate the rate of thrombocytopathy and thrombophilia and platelet aggregation test with ADP in various concentrations to define the degree of platelets hyper- and hypofunction.

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Ductal carcinoma in-situ and micropapilar subtype: clinical, radiological and histological comparison

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Objectives: Comparison of clinical, radiological and histological parameters in patients with ductal carcinoma in-situ (DCIS) and DCIS with micropapilar subtype (MP), diagnosed and treated in our department.
Material and methods: Analysis of 88 patients with histological diagnosis of DCIS.
Results: Comparing DCIS (N=61) vs. DCIS MP (N=27), mean age at diagnosis was 57 vs. 59 (p=ns), 43% vs. 44% were pre-menopausal (p=ns) and 57% vs. 56% post-menopausal (p=ns), with mean menopausal age 49 vs. 49 (p=ns). Clinical presentation: 77% vs. 67% (p=ns) imaging alterations (in the majority microcalcifications), 18% vs. 19% (p=ns) palpable lump, 3% vs. 4% (p=ns) nipple discharge and 2% vs. 4% (p=ns) Paget disease. Histology revealed, concerning tumor size, 31% vs. 26% (p=ns) measuring 0-1,9 cm, 51% vs. 44% (p=ns) 2-4,9cm and 18% vs. 30% (p=0,027) e" 5 cm. G1 tumors in 26% vs. 30 % (p=ns), G2 in 52% vs. 37% (p=ns) and G3 in 22% vs. 33% (p=ns). Necrosis was present in 27% vs. 37% (p=ns). Lesions were described as unifocal in 83% vs. 11% (p<0,005) and multifocal in 17% vs. 89% (p<0,005).
Conclusions: CDIS and CDIS MP showed similar clinical presentation. Histologically, CDIS MP showed higher dimensions and were more often multifocal lesions, reaching statistic significance.

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Is there a preferred suburethral sling procedure to treat stress urinary incontinence in women with intrinsic sphincter deficiency?

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Introduction: The majority of urogynecologists and urologists now advocate the use of minimally-invasive suburethral slings as a primary procedure to treat female stress urinary incontinence (SUI), supported by high cure and improvement rates and low risk of complications. However, there are some authors who suggest that intrinsic sphincter deficiency (ISD) is a risk factor for failure of suburethral sling procedures. The aim of this study was to determine if there is a preferred sling to treat this particular group of patients.
Methods: A retrospective and comparative study was carried out with a total of 116 women with SUI and ISD (defined as a maximum urethral closure pressure $<20cmH_2O$) who underwent a suburethral sling procedure from 2001 to 2006. Women were divided into three groups: those who underwent a tension-free vaginal tape (**TVT** group), a transobturator vaginal tape outside-inside (**TOT** group) and a transobturator vaginal tape inside-outside (**TVTO** group). Cure was defined as the absence of any episodes of stress urinary incontinence and a negative stress test. We performed data analysis with SPSS version 12,0 for Windows, using chi-square and T student tests when appropriate.
Results: We excluded 17 women, because they had concomitant vaginal surgeries. The remaining 99 patients were included in this study. Comparison between **TVT** group (19 patients), **TOT** group (20 patients) and **TVTO** group (60 patients) showed no significant differences in terms of age, menopausal status, parity, type of incontinence and maximum urethral closure pressure. The mean length of surgery was significantly higher in TVT group (58,89 versus 28,26 and 20,82 min, respectively; $p<0,005$), as well as mean length of hospitalization (2,79 versus 1,5 and 1,13 days, respectively; $p<0,001$). No significant differences in cure rates were found in follow-up at 2 months (78,9%, 68,4% and 83,3%, respectively; pNS), 12 months (60,0%, 56,3% and 66,7%, respectively; pNS) and 24 months (58,8%, 50,0% and 77,8%, respectively; pNS).
Discussion: Suburethral slings are a good option to treat stress urinary incontinence in women with intrinsic sphincter deficiency. Although TOT seems to have worse results, there were no significant differences in cure rate, at 2, 12 and 24 months follow-up, between TVT, TOT and TVTO.

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Breast Reconstruction – New Trends

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Introduction: Autologous Breast Reconstruction, has been done for several years, with the use of Myocutaneus Rectus Abdominis Muscle - TRAM or Latissimus Dorsi – LD Flaps.

These reconstructions, provide a aesthetically reasonable outcome, but they require the use of a muscle, which obviously have a specific function that will no longer be executed. Depending on the muscle that is sacrificed, the patient will have a higher incidence of abdominal weakness, with consequent hernia formation, or he will have impared function of the arm and trunk mobility. Therefore, in the past years, new microsurgical Breast Reconstruction has been performed, in order to preserve the muscles.

The new techniques are designated, Perforator Flap Breast Reconstruction. They are characterized by the raising of fascio-adipo-cutaneus tissue, vascularized by a single pedicle, the deep inferior epigastric – DIEP Flap, or the toracodorsal – TDAP Flap vessels.

The authors pretend to demonstrate the advantages of this new kind of Breast Reconstruction
Methods: The authors present the following documentation - photographs, breast measures, strength and mobility tests and inquires.
Results: The patients presented a better symmetry, with no fat necrosis, with no partial or total flap failure. There were neither abdominal weaknesses nor hernias documented.
Discussion: These type of reconstruction, provides less morbidity, with no harvest of muscles, allows better aesthetically results, increments the quality of the difficult conservative breast reconstruction 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.

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Continued efficacy of quadrivalent hpv (types 6/11/16/18) l1 vlp vaccine in preventing cervical or external genital disease: 4 years of follow-up

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Objectives: HPV16 and 18 cause approximately ~75% of cervical cancers, ~70% of vulvar and vaginal cancers,

as well as cervical, vulvar, and vaginal precancerous lesions. HPV6 and 11 cause ~90% of genital warts cases. Quadrivalent HPV6/11/16/18 vaccine (GARDASIL™/ SILGARD™, Merck & Co., Inc.) was licensed in 2006 based on prophylactic vaccine efficacy against HPV16/ 18-related cervical cancer (via surrogates). However, phase III studies continued to provide further data on the duration of vaccine efficacy. Here we present an end-of-study update (4 years of follow-up) on the efficacy of the quadrivalent HPV vaccine against HPV6/11/16/18-related CIN and EGL (VIN/VaIN/condyloma).

Methods : Combined data presented are representative of 18,150 women enrolled in 1 of 3 large clinical studies (Protocols 007, 013, and 015). In each study, subjects were randomized in a 1:1 ratio to receive quadrivalent HPV vaccine or placebo at day 1, month 2 and month 6. Procedures performed for efficacy data evaluation included detailed genital examination, Pap testing, and collection of cervicovaginal specimens. Colposcopy referral was per a Pap triage algorithm (except Protocol 007). All specimens were HPV typed and given histologic diagnoses by a gynecologic pathology panel. Follow-up for the current analysis was 4 years post-dose 1. Analyses were carried out in a per protocol population that included subjects who received all 3 vaccinations, were sero- and PCR-negative at day 1 and PCR-negative through month 7 to the appropriate vaccine HPV types. Protocols violators were not included.

Results: The efficacy of quadrivalent HPV vaccine against HPV6/11/16/18-related CIN was 96.0% (95% CI: 92.3 to 98.2). The efficacy of the vaccine against HPV6/11/16/ 18-related EGL was 99.1% (95% CI: 96.8 to 99.9%). The estimated efficacy of the vaccine against HPV6/11-related CIN and EGL was 100.0% (95% CI: 93.4 to 100.0%) and 99.0% (95% CI: 96.5 to 99.9%), respectively.

Conclusions: Vaccination with quadrivalent HPV vaccine is highly efficacious in preventing the incidence of HPV6/ 11/16/18-related CIN and EGL among 16- to 26-year old women naïve to vaccine HPV types prior to vaccination.

OBSTETRICS 3

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Oligohydramnios and perinatal outcome

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Objective: To evaluate the perinatal outcomes of pregnancies complicated by oligohydramnios without premature rupture of membranes (PROM).

Methods: Data were collected retrospectively for 40 pregnant women with diagnosis of oligohydramnios without PROM in our institution between January 2006 and December 2006. We also compared the outcomes of 24 pregnancies with isolated oligohydramnios to those of 24 normal pregnancies without oligohydramnios.

Results: Average age at time of diagnosis of oligohydramnios was 30,95 years +/- 5,24 (20-43). Average weeks gestation at time of diagnosis of oligohydramnios was 35,37 weeks +/- 5,38 (22-41). No association with maternal disease was found in 72%; regarding ultra-sonography normal prenatal ultrasonography was found in 59%, intrauterine growth restriction (IUGR) in 27%, urinary tract anomalies were present in 8% and other anomalies in 6%. Regarding assessment of the treatment, induction of labor/labor was achieved in 82% with an average weeks gestation at time of delivery of 37,5 weeks +/- 2,7 (28-41). Cesarean delivery was accomplished in 62%. Regarding perinatal outcome, we found 7 cases of small infants for their stated gestational age, 5 cases of admission in neonatal intensive care unit and 1 case of intrauterine death. We also compared the outcomes of 24 pregnancies with isolated oligohydramnios to those of 24 normal pregnancies without oligohydramnios and no statistically significant differences were found between the two groups concerning perinatal complication with the exception of induction of labor and cesarean delivery that were more frequent in the oligohydramnios group (p=0,005 and p=0,001 respectively).

Conclusions: Oligohydramnios is associated with high perinatal morbidity rate, but this association was not found with isolated oligohydramnios. However the overall rate of induction labor and cesarean deliveries were higher in the isolated oligohydramnios group than in the control group. Active induction of labor in low risk gestations with isolated oligohydramnios translated into higher labor induction, operative vaginal delivery and cesarean section rates. This led to increased maternal risk and an increase in costs with no differences in neonatal outcome.

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Medical Termination Of Pregnancy Due To Chromosomal Abnormalities: Is There A Place For Systematic Fetal Autopsy?

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Objectives: Evaluation of the impact of systematically performing the autopsy following termination of pregnancy due to chromosomal abnormalities.

Material and methods: Retrospective study between 1/1/2002 and 30/9/2007 in a tertiary referral hospital. We analyzed the cases of termination of pregnancy due to chromosomal abnormalities and performed a comparative study of the prenatal findings and postmortem examination.
Results: From the 151 elective terminations of pregnancy (TOP) performed by fetal causes 60 (39,7%) were due to chromosomal abnormalities. The median maternal age of the pregnant women was 34 years (range 26-44 years). The median gestational age at the time of the TOP was 17 weeks (range 14-32 weeks). The indications for amniocentesis included increased nuchal translucency (20), positive maternal biochemical screening (13), positive integrated screening (8), advanced maternal age (2) and abnormal sonographic findings (13). In this group there were 48 trisomies, four monosomies, five triploidies and three structural anomalies. In 45% of cases there was at least one major anomaly detected by ultrasound. The autopsy added information in 16 cases. In seven cases the diagnosis of major structural anomalies was made (cardiac defects, diaphragmatic hernia, limb defects and facial defects). In nine cases the presence of one major abnormality was not confirmed by the autopsy (cardiac defects and cystic hygroma).
Discussion: Pathological examination provides additional information to the morphological characterization of the fetus terminated due to chromosomal abnormalities. The combination of prenatal ultrasound and pathological examination can increase our knowledge of the chromosomopathies, and can contribute to the adequacy of parental counseling.

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Pregnancy After Fontan Repair – A Case Report

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The success of neonatal surgery and cardiac care has greatly increased survival allowing females with congenital heart disease to reach reproductive years. Fontan repair was introduced nearly 35 years ago and is used for the definitive palliation of cyanotic heart disease when characterized by a functional single ventricle. This operation separates the right and left circulations, allowing the single ventricle to serve the systemic circulation. There is no functional right ventricle and the right-sided circulation relies on maintaining a pressure gradient from right atrium to left atrium for perfusion of the lungs.

The number of pregnancies reported after this procedure is small. Pregnancy carries additional risk to the mother after Fontan repair due to the increased hemodynamic burden on the right atrium and the single ventricle. Maternal complications in these pregnancies include death (2%), arrhythmias (20%), systemic venous pressure increases, atrial thrombus formation (there is a risk of paradoxical embolism if the Fontan is fenestrated) and myocardial dysfunction. The fetus is at risk of abortion (40% of the cases), intrauterine growth retardation and prematurity. The particular physiology of a univentricular heart and a passive, non pulsatile blood flow through the lungs has also a significant implication for the anesthetic obstetric management of these patients. Anesthetic concerns include the avoidance of: increased pulmonary vascular resistance; hypovolaemia; and myocardial depression.

We describe a successful pregnancy of a 19-year old woman, nulipara, in functional class II (NYHA), who had previously had a fenestrated Fontan repair for a congenital univentricular heart disease. She was admitted to our maternity at 25 week's gestation at risk of preterm delivery. Tocolysis and anticoagulant treatment was started. She was submitted to a multidisciplinary care without other complications or worsening of functional class. At 32 week's gestation an elective caesarean section was performed under general anesthesia. A healthy male newborn weighing 1635g was delivered.

Furthermore we review the physiology, potential complications, anesthetic concerns and drug treatment in pregnancy after Fontan repair, as well as, the importance of multidisciplinary approach in consultation.

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Hypertension coexisitng with Gestational Diabetes Mellitus: how do they complicate pregnancy?

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Background: Pregnancy complicated by diabetes and/or hypertension is a significant medical problem not only affecting maternal health, but also risking fetal well-being. We know that hypertensive pregnancy outcomes are complicated by a pre-existing diabetes but there is no data on gestational diabetes mellitus.
Objective: The purpose of this study is to evaluate and compare the outcome of pregnancy complicated solely by hypertensive disorders or gestational diabetes mellitus (GDM) or both hypertension and GDM.
Material and Methods: We've conducted a prospective study of pregnant women who attended our hypertension and diabetes clinic during 2005 and 2006 and selected all the women with chronic hypertension and GDM. The population was then divided in 3 groups based on their

disorder: A, chronic hypertension (n=86); B, GDM (n=283); C, hypertensive women with a GDM diagnosis (n=23). Women without a diagnosis during the surveillance or with a positive oral glucose tolerance test in puerperium were excluded. We performed a statistic analysis on biometric, obstetric and perinatal parameters, which included maternal age and BMI, pregnancy-related complications, gestational age at delivery, mode of delivery, birth weight and perinatal complications.
Results: Pregnant women with both hypertension and GDM (group C) had the highest median age (35 years), presenting also the greatest median BMI (31). During pregnancy there were more hospital stays due to hypertensive disorder complications in group A. There was one in utero fetal death in hypertensive group. Twenty-three percent of deliveries occurred before 37 weeks in group A *versus* 18% in group C *versus* 12% in group B. C-section was more frequent in the group of hypertension+GDM (68% *versus* 49% in group A *versus* 41%in B). All the newborns presented an Apgar score greater than 7 at the 5th minute and the median birthweight was higher in the group of diabetic mothers (3149 g). The rate of macrosomias was higher in the group of hypertension coexisting with GDM (0,7% in group A vs 0,5% in group B vs 9% in group C).
Conclusions: Chronic hypertension and GDM can independently complicate pregnancy. The risk can be higher when both disorders coexist. Appropriate measures and a careful surveillance of these situations are mandatory in order to get better pregnancy outcomes. However attention should be drawn to the discrepancy between sample sizes.

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Sickle cell syndromes and pregnancy. Maternal and fetal outcomes

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Pregnancy in patients with sickle cell syndromes has classically been considered at high risk of adverse outcomes for mother and child. Although improvements have been made in prenatal and hematological care, there is still much concern regarding serious maternal and fetal morbidity.
Method: In order to assess pregnancy outcomes, a retrospective chart review was made in the period between 2004-2006 of all patients with homozygous sickle cell disease, S-beta thalassemia and S-hemoglobin C disease delivered at the maternity of the Universidade Estadual de Campinas, in Brazil.
Results: There were 28 patients, 21 homozygous sickle cell disease, 4 S-beta thalassemia and 3 S-hemoglobin C disease. Mean maternal age was 26,6 years (20-35 years) and mean parity was 1,3 (1-2,1). The most frequent complication was vaso-occlusive pain crisis which occurred in 33%, 60% and 100% of SS, S-beta thalassemia and SC patients respectively. Acute chest syndrome occurred only in SS patients (3 cases). There was only one case of hemolytic crisis in a SS patient. Anemia was present in 8 (38%) of the SS patients, 2 (50%) of S-beta thalassemia and in 2 of the 3 patients with S-C disease, all but one patient needed blood transfusions during pregnancy or in the immediate post-partum period. Urinary tract infection was a common complication, occurring in 6 patients (21,4%). Pree-clampsia was the commonest obstetrical complication, occuring in 3 (14,3%), 2 (50%) and 1 (33,3%) of the SS, S-beta thalassemia and SC patients respectively. Serious morbidity, represented by bacterial endocarditis and ischemic stroke occurred in a SS and a SC patients respectively and both had good outcomes There were no maternal deaths. Preterm birth rate was 10,7% (3 cases), low birth weight incidence was 25%, mean birth weight was 2565 grams (540-3990 grams) and only one newborn died due to extreme prematurity and growth restriction.
Conclusions: Pregnancy in patients with sickle cell disease is associated with a high risk of clinical and obstetrical complications. Despite high rates of blood transfusions and low birth weight, favorable maternal and neonatal outcomes are possible in tertiary care centers with a multidisciplinary approach.

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Risk factors of preterm delivery in twins

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Introduction: The etiology of higher rates of premature labor in twin gestation is unknown. Some argue that it is primarily due to overdistension of the uterus. Sociologic and epidemiologic factors are also thought to be implicated in the etiology of premature labor. 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.
Methods: With this study the authors tried to find the risk factors for preterm delivery in a population of 605 twins, followed in the Multiple Gestation Consultation of Maternity Dr. Alfredo da Costa between 1994 and 2006.
Results: From 605 twins, 208 (34.4%) delivered before 36 weeks – Study Group- and 397 delivered with more than 36 weeks – Control Group.From the Study Group, 29 (4.8%) delivered with less than 32 weeks and 5 (0.8%) delivered with less than 28 weeks.

Nuliparity (65.6% versus 47.9%); monochorionicity (13.5% versus 8.6%), previous maternal pathology

(13.5% versus 10.6%) and medical problems during pregnancy (31.3% versus 24.4%) were found to be risk factors for premature delivery.
Discussion: Preterm delivery remains the most serious complication of multiple pregnancies. Efforts should be made to reduce the risk of multiple gestation and preterm delivery in order to improve perinatal outcomes.

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Gestational Diabetes Insipidus

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Gestational Diabetes Insipidus is a rare condition. Some pregnant women develop vasopressin-resistant desmopressine sensitive polyuria without underlying Diabetes Insipidus. This possible diagnosis should be considered when pregnant women have intense polydipsia and polyuria during pregnancy. Diabetes Insipidus diagnosis, in general, can be difficult when a patient has intact thirst mechanisms and free access to water. Why Gestational Diabetes Insipidus happens is not clear, however the immediate cause is a higher than normal vasopressinases level or decreased vasopressine reserves. The polyuria is generally transient, resolving spontaneously within days or weeks after delivery. The aim of this work is to describe a case of this rare diagnosis.

This case reports a twenty seven years old woman with a previous spontaneous abortion. Since the beginning of the actual pregnancy she refers polyuria, nicturia and polydipsia. She had neither hypertension nor diabetes mellitus. By the 14th week of gestation the diagnosis of Diabetes Insipidus was established based on a diuresis of 5100 cc/day and a positive response to desmopressine (0,05 ml every 12 h) with a diuresis reduction to 2250 cc in a 24 hour period. The desmopressine dose was increased along with the time of gestation. At term she was using 0,1 ml of desmopressine every 12 hours. At 40th week was admitted in labour and submitted to a caesarean due to dystocia. At discharge, three days after delivery and without desmopressine, diuresis had reduced to 3000 cc/day.

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Is there still a place for second trimester aneuploidy risk assessment with only two serum markers?

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Introduction: Since the introduction of antenatal serum screening for Down's syndrome, several screening approaches have been utilized in routine clinical practice. Second trimester serum risk assessment has been the gold standard because of widespread availability, low cost, and vast experience with counseling and performance. First trimester risk assessment is becoming more widely available and provides increased sensitivity for Down syndrome detection with a detection rate of approximately 87% at a fixed false-positive rate of 5%.
Objective: Report our experience with second-trimester screening for Down' Syndrome using strict controlled and standardized procedures.
Methods: Second-trimester biochemical screening for Down's syndrome with alpha-fetoprotein and human chorionic gonadotropin was performed on maternal serum samples of 2130 pregnancies. Screening was performed under strict methodological criteria (laboratory assays and software). Risks of >1 in 270 was used as cutoff value for the identification of screen-positive pregnancies for Down syndrome.
Results: Screening identified 81.8 percent of the 11 cases of Down's syndrome, with a false positive rate of 15.4 percent. Among women with 35 years of age or older, screening identified 100 percent of fetuses with trisomy 21.
Discussion: Second-trimester screening for trisomies 21 on the basis of maternal age, maternal levels of free beta human chorionic and alpha-fetoprotein has good sensitivity at an acceptable false positive rate

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Pregnancy outcome after preeclampsia in hypertensive women

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Background: Preeclampsia (PE) is a potentially dangerous condition exclusive to pregnancy and the recurrence of this disorder is associated with worse fetal and maternal outcomes compared to the first episode. Chronic hypertension is known to be an independent risk factor for recurrence.
Objective: The aim of this study was to evaluate the outcome of subsequent pregnancies after PE in chronic hypertensive women and identify potential risk factors for recurrence of PE.
Methods: We've conducted a retrospective analysis of demographic, maternal and fetal data of women who attended our hypertension clinic between 2003-2006. Two groups of hypertensive women were compared: one (group 1) with PE in a previous pregnancy (n=22) and the other (group 2) without previous PE (n=55). We also analyzed epidemiologic data in both groups attempting

to identify risk factors for recurrence of PE. The statistical analysis was based on non parametric tests.
Results: Severe hypertension and recurrence of PE were higher in group 1 compared to group 2 (23% vs 3,6%, p=0,009, and 23% vs 5,5%, p=0,026). The rates of in-patient and intensive care unit (ICU) admittance were significantly higher in the first group (59% vs 18%, p<0,01, and 41% vs 5,5%, p<0,01). In addition, preterm birth was more common in group 1, with rates of delivery before 37 weeks and before 34 weeks of 18% (vs 7%) and 23% (vs 3,6%)(p=0,003), respectively. There were 2 cases of HELLP syndrome and 1 eclampsia in group 1 and none in group 2. There were no significant differences in fetal parameters such as fetal growth restriction, oligohydramnios or umbilical artery Doppler flow. Hypertension was identified as a risk factor for recurrence of PE in the index pregnancy in women with previous PE.
Conclusions: Chronic hypertension is a significant risk factor for PE. In hypertensive women, a prior PE is associated with worse outcomes, higher risk of recurrence of PE, higher incidence of maternal intensive care unit admission and preterm delivery.

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Ibuprofen and paracetamol for pain relief during medical abortion: A double-blind Randomized controlled study.

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Methods: In a prospective double-blind controlled study 120 women undergoing medical abortion with 600 mg oral mifepristone and 400 mcg oral misoprostol were randomized to receive ibuprofen or paracetamol when pain relief was necessary. The patients completed a questionnaire about side effects, pain score before and after analgesia, and were asked to return for an ultrasound follow-up examination 10-14 days after medical abortion.
Results: Ibuprofen was found significantly more effective (p<0.0001) for pain relief after medical abortion compared with paracetamol. Other parameters that significantly influenced the pain score after administration of the analgesics included the pain score before the analgesia and abortion in the past. There was no difference in the failure rate of medical abortion, and the frequency of surgical intervention was slightly higher in the group that received paracetamol (16.3% versus 8.5%).
Conclusions: Ibuprofen was found highly efficient for pain reduction during medical abortion and more effective than paracetamol. We also found that a past history of a surgical or medical abortion was predictive for high pain scores. Importantly we found that despite its anti prostaglandin effects ibuprofen use did not interfere with the action of misoprostol and was not associated with an increase in the rate of surgical interventions.

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An epidemic of obese pregnant women on A South East Kent Hospital labour ward

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Background: In the UK, the incidence of obesity in pregnant women ranges from 18.5% - 38.35%.The prevalence of obesity is currently at a rise in developed countries making pregravid overweight as one of the most common high risk obstetric situations. In our study, we assessed the incidence, ethnic association and complications of raised body mass index in pregnant women, at a busy Kent hospital.
Methods: This is a prospective cohort study, which includes all women who delivered consecutively in our unit over a 4 months period between April to July 2006. Women with multiple pregnancies were excluded from the study. During that period there were 1539 deliveries, 20 were multiple pregnancy and the body mass index (BMI) was not documented in 50 cases, these were excluded from the study. A comparison of pregnancy outcomes was made on the basis of maternal body mass index at the time of booking. A total of 1469 singleton pregnancies were studied. There were 249 (17%) normal weight (BMI 19-24.9), 713 (48.5 %) overweight (BMI 25-29.9), 315 (21.4 %) obese (BMI = 30-39.9) and 192 (13%) extremely obese (BMI > 40) .The following antenatal complications were studied. Development of pregnancy induced hypertension, gestational diabetes mellitus, intervention in labour, postpartum complications and birth outcome were examined. The data is presented as frequencies. Adjusted odds ratios looking for trend with 95% confidence interval were used.
Results: There were striking trends of antenatal, labour and postnatal complications even when adjusted for age. The following outcomes were more common 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, Apgar scores of < 8 at 5 minutes: 1.86 (1.34-2.65), baby weight >3.5 kg: 2.1 (1.9-5.1) Women of Caucasian origin were more likely to have a high BMI :2.0 (CI: 1.9 –4.62) p< 0.001 as compared to Afro-Caribbean and Asian women. There was only 1 shoulder dystocia in a woman of BMI 33.
Conclusion: This study shows that obesity has a detrimental effect by increasing antenatal and postnatal complications. The rising incidence of obesity in the Western world could explain the high caesarean section rate. Labour wards and antenatal clinics should develop a guideline for the management of obese women during pregnancy. This is particularly important in light of the recent triennial report in UK on maternal mortality showing 35% of maternal deaths were in obese women.

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Structural changes in placentas of pregnant smokers: Quantitative study

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Introduction: Tobbaco smoke and its metabolites (especially nicotine) causes fetal hypoxia and fetoplacental respiratory insuffitiency, which result in retardation of fetal wight and lenght. Due to the large importance given to this problem in the world, this research was carried out with the purpose to numericaly estimate the values of feto-maternal exchange of substances.
Material and methods: This research was performed on 90 human placentas of normally carried and normally delivered newborns, divided into three groups (placentas of heavy, moderate smokers and of non-smokers). The stereologic analysis of resorptive villi was performed on multipurpose testing sistem M42 with objective magnification of 40X.
Results: The average value of blood vessels' length density in placentas of heavy smokers was x=2178, 519±1000, 046, and in control group it was x=3839,489±790,863. Pregnant smokers (both moderate and heavy) had significantly lower length density of the blood vessels compared to the control group (t_1=-2,55, t_2=8,44; p<0,05). By comparison of the heavy smokers and moderate smokers group, we have found statisticly significant difference as well (t=5,66; p<0,05). Statisticly significant higher surface density of the blood vessels could be found in the pregnant heavy smokers compared to the control group (t=4,971; p<0,05) as well as to the pregnant moderate smokers (t=3,181 p<0,05). Significant difference existed in those values among pregnant moderate smokers and control group too (t=1,674; p<0,05). The least absolute length density of the resorptive villi's blood vessels was in the pregnant heavy smokers and it was significantly lower compared to that of pregnant moderate smokers (t=4,062; p<0,05) and control group (t=-7,042; p<0,05). The group of modrate smokers had significantly lower values of absolute length of the resorpive villi's blood vessels compared to the control group (t=-2,545; p<0,05). In the group of the pregnat heavy smokers there was statisticaly higner average absolute surface of the blood vessels compared to the group of the modrate smokers (t=-4,405; p<0,05) and the control group (t=5,345; p<0,05).
Conclusion: The intensity of smoking effects the structural changes of the placenta. Intensity of smoking during prenancy had a great impact on the proportion of the morfologic changes of the placentas.

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Differential gene expression in human placenta with and without labor using cDNA microarray

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Objective: cDNA microarray technology was used to comprehensively analyze gene expression in placenta with labor compared to without labor.
Methods: Placental tissue was obtained from patients in spontaneous labor (n=5) and those not in labor (n=5) during Cesarean section of full term pregnancy. mRNA levels were examined through cDNA microarray using Agilent GeneSpringGX 7.3 (Agilent technology, USA). SPSS version 11.0 was used to analyze results statistically.
Results: Among total 38467 genes, 2374 genes were detected to be up-regulated in labor samples, while 12 genes were down-regulated. 40 genes of them were identified significantly up-regulated in levels of expression (up-regulated e" 5.0 fold, p<0.05). According to gene ontology analysis, they are associated with variable cell biologic functions including apoptosis, signal transduction, metabolic process, immune response, transcription, etc.
Conclusion: This study suggests that our results could provide interesting clues to understand the initiation and the process of normal labor and might lead to further studies in a more targeted fashion.

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Pregnancy outcome in liver transplant recipients at the State University of Campinas, Brazil

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Introduction: Transplantation has become an available and successful treatment option for innumerous congenital and acquired hepatic disorders. Studies have shown that when the prepregnancy recipient graft function is stable and adequate, pregnancy is normally well tolerated with favorable newborn outcomes. However, there are reports of increased incidences of hypertension and preeclampsia as well as lower birth weights and prematurity. Patients administered tacrolimus-based therapies seem to have lower incidence of these complications. Transplanted patients with less risk during pregnancy are those with a period over two years between transplantation and gestation, stable and normal hepatic function, normal renal function and immunosuppressive therapy in maintenance dosage.
Methods: Retrospective analyses of medical charts of all cases of pregnancy after liver transplantation.
Results: There were four patients considered between 1999 and 2007. The four patients aged 23 to 37 years, at the time of conception were 2 to 9 years from transplantation and the main cause of liver failure was autoimmune disease (3 cases). One preterm delivery, for fetal distress, was the most important complication in these patients. One episode of acute genital herpes infection was observed and a liver hematoma in a patient anticoagulated for history of deep vein thrombosis.
Discussion Despite complications all four pregnancies were succesfull. The mean gestational age at delivery was 37,7 weeks. No structural malformations or early complications were observed in the newborns. All cases showed stable liver parameters.

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Maternal and neonatal morbidity in the delivery of macrosomic fetuses – The importance of the delivery route

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Introduction: The purpose of this study was to evaluate the prevalence of significant maternal and neonatal complications resulting from the delivery of macrosomic fetuses (>4000g), born from non diabetic pregnant women.
Methods: A retrospective study of the deliveries of macrosomic fetuses from non-diabetic mothers, occurring between 1995 and 2006, was performed. Significant maternal and neonatal complications (puerperal anemia, hemorrhage or fever, perineal or cervix laceration, uterine rupture; newborn ictericia, sepsis, respiratory distress syndrome, cefalohematoma, brachial plexus injuries, clavicular fracture, death and others) were registered. For statistical analysis the χ^2 test was used and the odds ratio with 95% confidence interval was determined.
Results: In the mentioned period, at our institution, 33677 deliveries were recorded. About 3,6% (1198) of these deliveries corresponded to macrosomic fetuses. For data analysis we excluded 94 cases of newborns from diabetic mothers and 11 cases in which data was not registered. Concerning to the delivery route, 493 deliveries were by abdominal route (162 of those were elective cesarean section) and 600 were by vaginal route (instrumental delivery in 192 cases, being the rest of them eutocic). We found 77 cases of significant maternal complications and 71 of significant neonatal complications in the women submitted to cesarean section. In the vaginal delivery group there were 105 significant maternal complications and 84 significant neonatal complications. No statistical differences between the two groups were obtained. In abdominal deliveries birthweight was not statistically related to significant maternal and neonatal complications. In fetuses weighing more than 4500g delivered vaginally there was a significant neonatal complications (p< 0,2; OR 2,52; 95% confidence interval: 1,27-4,98).
Discussion: The delivery of macrosomic fetuses is related with both maternal and neonatal morbidity. If the delivery route does not seem to influence the incidence of maternal complications, in newborns with more than 4500g vaginal delivery is associated with significant neonatal problems.

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Prenatal prediction of pulmonary hypoplasia: two and three dimensional biometric and pulmonary artery doppler velocimetry correlates

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Objective: the value of pulmonary artery Doppler velocimetry, 2D and 3D biometric indices in cases at risk for pulmonary hypoplasia: prolonged oligohydramnios (>1 week, largest vertical amniotic fluid pocket d”2 cm), with onset of premature rupture of membranes (PROM) d” 26 weeks and in cases of diaphragmatic hernia.
Methods: 6 singleton pregnancies with PROM and 2 cases of diaphragmatic hernia were enrolled; biometric and Doppler parameters were evaluated in serial scans

from the onset of PROM until 26 weeks. In cases of a diaphragmatic hernia, 3D volume assessment was additionally performed. Thoracic, abdominal and cephalic circumference were measured. Lung-to-head (LH) ratio and Doppler measurements of the arterial proximal pulmonary branches were performed. Pulsatility index (PI), peak systolic velocity (PVS, cm/s) and end diastolic velocity (EDV, cm/s) were assessed. 3D volumes were performed using VOCAL. Diagnosis of lung hypoplasia (LH) was based on clinical, radiologic or pathologic criteria.
Results: There were 2 cases of lethal lung hypoplasia in PROM group and the mean gestational age at enrolment was 21 weeks. Duration of oligohydrâmnios was > 4 weeks in 3 cases, >2 weeks in one case and >1 week in one case. Average thoracic circumference/ abdominal was of 0.80 and average LH ratio was 2.06. Average PI, PVS and EDV were 2.61, 42.7 cm/s and 10.5. Average GA at delivery was 28.5 weeks. The condition most related with letal LH was GA at the onset of PROM. The highest prediction rate for respiratory morbidity in the PROM group was duration of oligohydramnios, EDV < 0.9 cm/s and thoracic/ abdominal ratio <0.77. In both cases of diaphragmatic hernia, pulmonary hypoplasia was related to the presence of intrathoracic liver. LHR and 3D lung volume were not predictive of this condition in our small group.
Conclusion: No sonographic criteria seemed useful in assessing lethal LH in PROM. EDV may detect changes in pulmonary artery waveforms in the presence of LH. In diaphragmatic hernia, intrathoracic liver seemed to be the best prognostic parameter in prediction pulmonary hipoplasia.

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Vacuum Extractor and Forceps: A Comparative Study

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Introduction: The worldwide rate of operative vaginal delivery is between 10 and 15%. The Vacuum Extractor (VE) and Forceps (F) are help devices in vaginal delivery based on external traction and/or rotation of the foetal presentation. The aim of this study was to review operative vaginal deliveries with VE or F, their indications and maternal or foetal immediate complications.
Methods: Retrospective study of the 425 deliveries assisted with VE or F, between January 1st and December 31st 2006. Were analyzed maternal age, gestational age, anaesthesia, parity, indication of use, foetal presentation variety, maternal immediate complications, weight and APGAR score of the newborns as well as foetal complications.
Results: Out of the 1882 vaginal deliveries, 315 were assisted with VE (16.7%) and 110 with F (5.8%). There were no significant differences in maternal age, gestational age and weight of the newborns between groups. Primiparity was more frequent in F group (87.3% vs. 76.7%, p=0.02). Main indication was prolonged second stage of labour in both groups (65.2% in VE vs. 60% in F, p=0.34). The incidence of newborns with an APGAR score under 7 at 5 minutes after birth was 1.0% after VE and 0.9% after F (p=1). The rate of failure of assisted delivery with VE and subsequent use of F was 3.2%, and the need to perform a caesarean section was 0.9%. Success rate when using F was 100%. Maternal morbidity was low and limited to perineal lesions in both groups. Laceration rate was higher with F (26%) than with VE (12%, p<0.001), but incidence of cervical lacerations was the same (1,4%).
Discussion: In 2006, the rate of assisted delivery in our hospital was 13.6%, a number consistent with worldwide literature. Although the use of F is more effective than that of the VE as an aid to foetal extraction, its use rate is lower in comparison. APGAR scores at 5 minutes after birth were similar in both groups. Perineal lacerations were more frequent with the use of F, but serious laceration rates were similar in both groups. Both devices proved to be efficient help methods in assisted deliveries as well as effective in terms of maternal and foetal safety.

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HIV Infected Pregnant Women: Our Experience

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Introduction: The purpose of this study was to analyse our 6 years and 5 months experience with HIV infected pregnant women.
Methods: Retrospective study in which we reviewed the charts of 95 HIV infected pregnant women that gave birth in our institution between January 2001 and May 2007 that were being followed in our Unit. The parameters evaluated were among others: epidemiologic characteristics, HIV type, other infections, cervical cytology, HPV screening, colposcopy, biopsy, antiretroviral drug treatments, mode of delivery, vertical transmission.
Results: Mean age was 26 years (16-40). In 49 (51.6%) patients the diagnostic was made during pregnancy. 92 (96.8%) women were positive for HIV 1 and 3 (3.2%) were positive for HIV 2. Several patients had other infections namelly hepatitis C (32 patients-33.6%) and syphilis (10 patients-10.5%). 25 (26.3%) patients had abnormal cervical cytology. HPV screening for high risk

type was positive in 18 (18.9%) cases. The results from the 62 biopsies that were made were: 10 (16.1%) Normal, 27 (43.5%) HPV, 15 (24.2%) CIN1, 5 (8.1%) CIN2, 5 (8.1%) CIN3. 89 (93.7%) patients had antiretroviral drugs during pregnancy and 6 (6.3%) had no antiretroviral treatment. 90 (94.7%) patients delivered by elective caesarean section and 5 (5.3%) had vaginal delivery. HIV infection was diagnosed in 3 (3.2%) children.
Discussion: Most diagnosis were made during pregnancy. All HIV infected pregnant women should make colposcopy because de rate of detection of CIN in our institution was 26.3%. The vertical transmission is minimallized with strict pre-established protocols followed by the patients.

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Adverse pregnancy outcome and rate of preterm birth in HIV infected women

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Objective: To determine the relationship between maternal HIV infection and pregnancy related diseases like preeclampsia, IUGR (intrauterine growth retardation), gestational diabetes, or bleeding and to identify risk factors for the increased incidence of preterm birth based on the data collection from the Swiss mother and child HIV cohort study (MoCHiV).
Methods: Data collected from 200 HIV infected women and 221 offsprings from 2003 -2006 were analyzed including pregnancy follow up, delivery and rate of neonatal HIV infected children.
Results: Preeclampsia (7), IUGR (6), gestational diabetes (2) or bleeding (4) occurred in 19 (14.4%) women. We found an overall preterm birth rate of 25.7 % (39) in our study group.

All 10 women with pPROM (premature preterm rupture of membranes) delivered before 37 weeks, 6 before 34 weeks and in 9 of them HIV was first diagnosed during pregnancy. Preterm delivery and pPROM were significantly associated with higher maternal age (mean age 36.3 versus 32), with lower CD4 cell counts (i.e. <350 50% versus 32.4%; p<0.02) and longer duration of HIV infection (11.9 versus 5 years). There were no differences in antiretroviral drug regimen, co-infections, smoking, and BMI, between preterm and term deliveries.

94.8% of women were under ART and viral load was suppressed (<50 copies) in 76.6% at time of delivery. There was no vertical infection of a child reported since 2002.
Conclusion: In our study group pregnancy related maternal diseases seemed not increased in HIV infected women. However, maternal age, long duration of HIV infection and reduced immunity are risk factors of pPROM and preterm birth. Therefore a close surveillance for preterm delivery in case of HIV infection in pregnancy is needed.

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Perinatal outcome in monochorionic twin pregnancies complicated by intrauterine single fetal demise

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Objective: The aim of this study was to evaluate the maternal and perinatal outcome of monochorionic diamniotic twin pregnancies complicated by intrauterine single fetal demise (IUFD) after 14 weeks of gestation.
Material and Methods: A retrospective descriptive study was performed involving 90 monochorionic diamniotic twin pregnancies managed at our department and delivered after 24 weeks gestation, during a five years period.
Results: Among the 90 gestations evaluated we found 7 complicated by IUFD, with an incidence of 7.8%. Median gestational age of fetal demise was 26.4weeks (range 19 - 33 weeks). The reasons we found for intrauterine fetal deaths were: twin-twin transfusion syndrome (3 cases), TRAPS sequence (1 case) and 3 unexpected fetal deaths. IUGR was present in 3 of the surviving twins. One case of co-twin death occurred. The median interval from diagnosis of IUFD to delivery was 20 days (range 2-70 days). Maternal complications were rare, but not absent, hence we found 1 case of disseminated intravascular coagulopathy. All of the gestations ended prematurely: 3 before 28 weeks, 1 between 28-32 and 3 between 32-34 weeks of gestation. Mean gestational age at delivery was 29 weeks (25-34wks) with a C-section rate of 43% (3/7), always for obstetrical reasons. The neonates were always admitted to the neonatal intensive care unit, but the complications usually were rare and related to its prematurity, except in one case of neonatal death due to a sepsis. No neurological injury was found after birth by ultrasound or MRI.
Discussion: IUFD should not be an indication for preterm delivery and expectant management of these pregnancies under close surveillance of the mother and fetus may be recommended. Prognosis of the surviving twin is usually satisfactory, except in case of TTTS, which is associated to increased perinatal complications.
