Urinary organs damage in obstetrics

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Objective: The purpose of the study is to analyze the causes and types of injuries to the urinary organs related to past deliveries.

Material and methods: There were 36,671 deliveries at the Obstetric-Gynecological Ward, Regional Specialist Hospital in Radom between 1998 and 2017. Medical records of 12 patients with injuries to the urinary organs related to past delivery were retrospectively studied.

Results: The following injuries were found:- ligation of the left ureter: 1 case,- injury to the urinary bladder: 11 cases,- vesicovaginal fistula (VVF): 1 case (following injury to the urinary bladder at hysterectomy in the postpartum period). In 10 patients, the detected injuries were managed during hospitalization for labor, in 3 cases the injuries were diagnosed during the postpartum period; one patient was treated in the General Surgery Ward on 5th day following natural delivery. Another patient suffered injury to the urinary bladder during hysterectomy in the postpartum period. It was sutured up. VVF was diagnosed on 10th day after the surgery, and was successfully managed at the Urology Department. The injuries to the urinary organs were most frequently related to hysterectomies in the peripartum and postpartum period (50.0%)

Conclusions
1. Both peripartum and postpartum hysterectomy pose a high risk of urological complications, 14.0% in the group of discussed patients.2. Patients at high risk of complications necessitating peripartum hysterectomy should be duly transferred to reference wards to provide multi-specialist medical care.

Biography
Dobrosława L. Sikora-Szczęśniak graduated from the Faculty of Medicine at the Medical University in Lublin in 1994. In 2002, under the direction of prof. Jan Kotarski she defended her PhD thesis. In 2005 she obtained the title of specialist in the field of gynecology and obstetrics. She works in the Gynecology and Obstetrics Department of Radom Specialist Hospital. The main field of her interest is urogynecology.

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Is the anti-D necessary for the Chinese people?

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Summary: The RhD-negative phenotype is widely distributed in different ethnic groups. The rate of RhD-negative people in China is less than 0.5%. Herein, the aim of this study was to determine the necessity to carry out routine antenatal and postpartum anti-D prophylaxis (RAADP) in Chinese women.

Study design and methods: A retrospective study that concentrated on the effectiveness of anti-D prophylaxis was performed in a multicenter in southwest China between January 1st, 2010 to December 31st, 2017. The RhD-negative multi gravid women were selected as the research subject. The women whether had injection of anti-D immunoglobulin (anti-D Ig) in the previous pregnancy was the basis for the grouping, namely the observation group and the control group. We compared the differences between the two groups in the outcome of the subsequent pregnancy.

Results: D antibodies were detected in 17 of 104 D-pregnancies, in 3 cases (5.88%, 95% CI 2.02%, 15.92%) of the observation group and 14 cases (26.42%, 95% CI 16.44%, 39.58%) of the control group. The odds ratio (OR) value was 5.74 (95% CI 1.54, 21.43). In 17 cases, there are 13 cases of newborn babies in neonatal intensive care unit (NICU), and the occupancy rate of 76.47% (95% CI 52.74%, 90.44%); 5 cases of newborns for premature babies, and the preterm rate was 29.41% (95% CI 13.28%, 53.13%); and 2 cases of neonatal need exchange transfusion rate of 11.76% (95% 3.29%, 34.34%). Therefore, the production of anti-D antibodies increased the possibilities for the newborns to preterm and be admitted to the NICU.

Conclusions: Nowadays, the anti-D prophylaxis has not been applicable for Chinese people. The full opening of “a couple can have two children”, the improvement of economic level coupled with the popularity of online sales and procurement service made in possible for the application of Rh immunoglobulin (Rh IG). It is recommended that routine red blood cell (RBC) antibody screening and prophylactic Rh IG administration should as part of standard of ante- and postnatal care for women at risk for D antibody formation.

Biography
Xie Xiaohui, a 34-year-old, doctor, has been working in the first people's hospital of Neijiang since 2010. Member of European society of human reproduction and embryology, youth member of Sichuan provincial family planning commission, and member of Sichuan provincial rehabilitation medical association’s obstetrics and gynecology branch, skilled in the diagnosis and treatment of common and frequently occurring gynecology and obstetrics, skilled in the diagnosis and treatment of reproductive endocrine and infertility diseases.
A breast pump with a compression component is the breast pump of the future

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Breastfeeding, due to its nutritional and immunological aspects, is the best source of food for the newborn. In situation where is not possible to breastfeeding her baby, for example, where the mother has returned to work, or is otherwise temporarily separated from her baby, it is necessary for her to express breast milk for storage period of separation. To achieve lactation success before a baby’s suckling can ensure the effective extraction of milk, breast pumps must meet specific mechanical requirements. In particular, breast pumps must effectively stimulate the mechanoreceptors in areola to promote maternal secretion and milk-ejection reflex. Breast pumps must effectively remove milk from the breast. Pumping shouldn't be painful or cause damage to the nipples and areola.

In Russia there are currently two types of breast pumps that are used in medical practice. The first type applies only vacuum stimuli, while the second type of pumps applies on the areola and the nipple with both vacuum and compression stimuli similar to removal of milk by an infant. When applying vacuum on the areola, it expands the areola and stimulates the stretch cutaneous receptors. On the contrary, compression of the areola stimulates the tactile mechanoreceptors. This simultaneous activation of areolar mechanoreceptors is likely to establish lactation in the most efficient way. Besides, compression of the main milk ducts, which lie under the areola, ensures more successful milk ejection. As the clinical research and breastfeeding practice show, this type of breast pumps promotes more efficient milk ejection compared to the vacuum-type breast pumps.

Biography
Alekseev N. P is a professor Departments of General Physiology, Faculty of Biology, Saint Petersburg State University. He has published more than 200 research articles, 2 book in physiology lactation field. He has published more than 40 papers in reputed journals.

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The risks of delaying fatherhood

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A variety of disorders can predispose to infertility in males; however, a large proportion of infertile males are diagnosed as idiopathic. Many studies have connected the alteration of semen quality with advancing of male age. Others were documented the association of aging process in men with the problem of infertility and even fetal malformations. The present study was an attempt to explore the molecular changes in seminal fluid that might be happened with man aging.

Eighty-four semen samples of male partner of infertile couples attended the infertility clinic at Princess Al-Jawhara Centre -in the Kingdom of Bahrain- were analyzed for semen conventional parameters. Cell cycle for sperm chromatin condensation and aneuploidy rate measurements, apoptotic markers were performed. A colorimetric assay was also done for the assessment of the total antioxidant capacity of seminal plasma.

Around (63.1%) of the patients were in the age group (26-35 years). The age range was 21 to 49 years, with age mean of years (33.35 years±6.35). The mean semen volume declined with advanced age. Additionally, a significant correlation was also noted between sperm motility and patients’ age. Another significant correlation was established between sperm morphology and patients age. Seminal antioxidant capacity was negatively correlated with patients’ age. However, the age of the patients had no effect on the sperm chromatin or the level of apoptotic markers. Men choosing to delay fatherhood may have a lower likelihood of a successful pregnancy free of early loss and gene defects.

Biography

Huda Omran is a medical geneticist who works as the research assistant in the Vice Dean for Graduates and research office at the College of Medicine and Medical Sciences, Arabian Gulf University. She did her doctoral research in molecular medicine at Arabian Gulf University. Her main research direction is in the field of fertility and genetic diagnosis. She has published a book and several publications in reputed journals.

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Introduction of non-invasive prenatal diagnosis methods in Azerbaijan

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Background: Prenatal diagnosis are aspects of prenatal care that focus on detecting problems with the pregnancy as early as possible. Screening can detect problems such as neural tube defects, chromosome abnormalities, and gene mutations that would lead to genetic disorders and birth defects. First trimester screening tests can begin as early as 10 weeks. These usually involve a blood tests and an ultrasound. Second trimester screening tests occur between 14 and 18 weeks. They can involve a blood test, which tests whether a mother is at risk for having a child with chromosomal abnormalities or neural tube defects, as well as an ultrasound. A special ultrasound called a nuchal translucency ultrasound is performed between the 11th and 14th weeks of pregnancy. When there's more fluid than normal, this means there's a higher risk of chromosomal abnormalities.

Materials and methods: 1562 pregnant women were examined at dual (PAPP-A, β hCG) and triple (AFP, hCG and free E 3) marker tests. Analysis is performed on an enzyme immunoassay; serum is used for analysis.

Results: 873 pregnant women were examined for dual test at the Scientific and Research Institute of Obstetrics and Gynecology in 2017, 88 patients (10%) were at the risk group. 689 patients were examined for triple test, 50 patients (7,3%) were at the risk group.

Conclusion: Complete survey pregnant on the chromosomal abnormalities allows to advance diagnose pathology 60% of cases.

Biography
Gurbanova J.F. was born in 1972 in Baku. She graduated from Azerbaijan Medical University in 1995. After postgraduate studies in Obstetrics and Gynecology Department of Azerbaijan Medical University, Obstetrics and Gynecology Department of Moscow Medical Academy she got PhD and MD degrees. In 2004-2013 years she worked as co-director of Scientific Research Institute of Obstetrics and Gynecology, and from 2013 till present time, she is the director of the same institute. At the same time, she is the president of Azerbaijan Association “Supporting the development of gynecology and perinatology”.

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High proportion of abnormal semen characteristics among Saudi infertile couples

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Background: Infertility is a public health issue in worldwide and in the kingdom of Saudi Arabia. However, there is a lack of national population-based statistics in Saudi Arabia. The aim of this study was to provide the proportion of abnormal semen characteristics as the clinical diagnosis for male infertility amongst Saudi infertile couples.

Methods: This was a retrospective study on infertile couples carried out in the Assisted Reproductive Technology unit at the International Medical Centre in Jeddah, Saudi Arabia between 2008 and 2014. A total of 2317 infertile couples were included in the study. Male infertility is diagnosed in the laboratory according to the criteria of the World Health Organization (WHO) for semen analysis.

Results: Male infertility (as manifested by abnormal semen analysis) was found in 1521 (65.6%) couples and female infertility was found in 210 (9%) couples (p<0.01). One hundred and forty-two (6%) couples had a combination of both male and female infertility, while the cause of infertility in the remaining 444 (19%) couples was unexplained. Our results reveal that the contribution of abnormal semen characteristics to infertility is high comparing to other infertility causes.

Biography
Wardah Alasmari is a Head of anatomy department Faculty of Medicine, Umm al Qura University. His principal research interests lie in the field of medical Embryology and human Reproduction which was gained from my PhD studies at the Medical school/University of Dundee and IVF experience in embryology laboratory at Assisted Conception Unit, Ninewells Hospital. He has published more than 15 papers in international journals in Embryology and Anatomy since I got PhD degree from Medical school/University of Dundee in 2013.

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Comparison of umbilical artery doppler and non-stress test in assessment of fetal well-being in gestational diabetes mellitus: A prospective cohort study

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**Background:** Gestational diabetes mellitus (GDM) is one of the most common medical complications of pregnancy and is related to poor perinatal outcomes. Reduction of neonatal complications of GDM is feasible by assessment of fetal well-being. Both fetal Doppler and NST are used for the screening of high-risk pregnancies.

**Objective:** We aimed to compare the non-stress test (NST) and umbilical artery (UA) Doppler assessments for evaluation of the adverse perinatal outcomes in GDM.

**Methods:** We conducted a prospective cohort study on 50 pregnant women with GDM in Jame Zanan Hospital, Tehran, Iran, from Oct 2014 to Sep 2015. Adverse perinatal outcomes were defined as Apgar scores at 1-min and 5-min <7, hypoglycemia, neonatal acidosis, hypocalcemia admission to the NICU for more than 24 hours, and perinatal death.

**Results:** Totally, 22% and 12% of women had an abnormal UA Doppler and a non-reactive NST respectively. Poor outcomes were detected in 13 women. The most frequent poor outcomes were hypoglycemia (n=9), Apgar 1-min <7 (n=8), neonate admitted in NICU (n=6), and respiratory distress syndrome (n=6). Poor outcome was more prevalent in women with non-reactive NST (p<0.001), abnormal UA Doppler (p=0.033), and those with infant birth weight >4000 gram (p=0.033). Sensitivity and specificity of the NST in predicting different poor outcomes were 76.9% and 97.3% respectively. Sensitivity and specificity of UA Doppler in predicting different poor outcomes were 30.8% and 94.6% respectively.

**Conclusion:** NST is a better predictor of adverse perinatal outcomes in GDM patients.

**Keywords:** Diabetes, Gestational, Umbilical arteries, Ultrasonography, Prenatal diagnosis.

**Biography**
Mitra Eftekhariyazdi is a Perinatologist and assistant professor in Department of Obstetrics & Gynecology of Faculty of Medicine, Sabzevar University of Medical Sciences, Sabzevar, Iran. She did her postdoctoral research at Tehran University. She has published more than 9 research articles, and edited two books in Perinatology field. She is Deputy Head of Education.

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Assessment of prevalence of asymptomatic bacteriuria and antibiotic susceptibility and its risk factors in pregnant women living in Sabzevar City from 2014 to 2015

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Introduction: symptomatic bacteriuria is a common problem during pregnancy. Delayed diagnosis and treatment may end up in harmful events for both mother and fetus. Physiological changes of urinary system during pregnancy facilitate the growth of microorganisms and cause this infection. This study was performed with aim to evaluate the prevalence of asymptomatic bacteriuria and determine the antibiotic susceptibility and its risk factors in pregnant women.

Methods: This cross-sectional study was performed on 220 pregnant women referred to Shahidan Mobini Hospital in Sabzevar in 2014-2015. Sterile urine sample of pregnant women was analyzed in terms of full urine test and culture. Antibiogram of isolated bacteria was done with colony count greater than 100000 by Bauer-Kirby Disk Diffusion. Individual characteristics of the subjects were recorded in the checklist.

Results: In this study which was performed on 220 pregnant women, 7% of pregnant women had asymptomatic bacteriuria. Significant relationship was found between asymptomatic bacteriuria and education level (p<0.001), socioeconomic status (p=0.002), regional living area (p=0.004), history of previous urinary tract infection (p<0.001), and history of renal complications (p=0.028). However, no significant relationship was observed between asymptomatic bacteriuria and mode of last delivery, number of pregnancies and systemic underlying diseases (P>0.05). Most common isolated organisms were Escherichia coli and staphylococcus ureus. Antibiogram results showed that cotrimoxasol, nitroforantoin, ciproflouxasin and nalidixic acide are appropriate antibiotics for treatment of patients.

Conclusion: Asymptomatic bacteriuria has favorable prevalence in Sabzevar city. In the screening of this situation, considering individual and social characteristics seems to be necessary.

Biography
Mitra Eftekhariyazdi is a Perinatologist and Assistant professor in Department of Obstetrics & Gynecology of Faculty of Medicine, Sabzevar University of Medical Sciences, Sabzevar, Iran. She did her postdoctoral research at Tehran University. She has published more than 9 research articles, and edited two books in Perinatology field. She is Deputy Head of Education.

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Relationship between nut consumption and depressive symptoms in the first trimester

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Nut consumption and its associated influence on depressive symptoms have been a growing focus in the current literature. However, this relationship during pregnancy remains poorly understood. This study aimed to explore the relationship between nut consumption and depressive symptoms in the first trimester. Data was drawn from the Chinese Pregnant Women Cohort Study (CPWCS). The frequency of nut consumption was self-reported and women with unclear about nut consumption were excluded. Depression symptom was assessed using the Edinburgh Postnatal Depression Scale (EPDS). EPDS score, ranging from 0 to 30, with ≥10 used as the cut-off to define depression. Chi-square test and logistic regression were conducted to evaluate the relationship between nut consumption and pregnancy depression in the first trimester. Among 8306 participants, the rate of depressive symptoms was 46.6%(n=3872). There was a statistical difference in the rate of depression among pregnant women of different ages, education levels, working status, census register types, annual family income and nut consumption. After controlling confounding factors, the odds ratios (95% confidence interval) of having depression by increasing frequency of nut consumption were 1.00 for <once per week, 0.883(0.772, 1.011) for 1-3 times per week, 0.635(0.552, 0.730) for ≥4 times per week, and this was attenuated. This study suggested that depressive symptoms was related to nut consumption in the first trimester. Further studies are needed to confirm the causality of nut consumption in pregnancy depression.

Biography
Wu Sansan is a postgraduate student in School of Public Health in Peking Union Medical College. Her major is Public Health. Currently, she participates in the Chinese Pregnant Women Cohort study, a multicentre, prospective cohort study to investigate maternal risk factors and their impact on pregnancy outcomes across China.

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Physical activity and depression in the first trimester in Beijing: A cross-sectional study

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Studies have shown that increased physical activity (PA) may play a positive role in reducing depression, but few studies have examined this issue in different domains of PA. The aim of this study was to assess the association between domain-specific PA and depression of pregnant woman in the first trimester. This study included 1,066 women from the Chinese Pregnant Women Cohort Study- Biological Cohort (CPWCS-BC). Pregnancy Physical Activity Questionnaire (PPAQ) was used to investigate the energy expenditure of household/caregiving, occupational, sports/exercise and transportation. Depression were evaluated using Edinburgh Postnatal Depression Scale (EPDS). Logistic regression was conducted to assess the relationship between PA and depression.

A total of 366 (34.3%) pregnant women were at depression, and only 151 (14.2%) met the PA guidelines. After controlling probable confounders, moderate level of household/caregiving and high level of transportation were associated with increased depression than those with low level (OR=1.41, 95%CI:1.03-1.93; OR=1.83, 95%CI:1.33-2.51). Women with moderate level of sports/exercise had lower odds rate of having depression (OR=0.68, 95%CI:0.47-0.98) than women did none sports/exercise. There was no significant association between depression and occupational activities or meeting PA guidelines. In addition, pregnant women with high level of sedentary activities or moderate-vigorous PA (MVPA) had higher rates of depression (OR=1.47, 95%CI:1.07-2.02; OR=1.52, 95%CI:1.11-2.09). It is probable that MVPA mainly practiced by household/caregiving and transportation, but seldom by sports/exercise.

Biography
Feng Yahui is a postgraduate student at School of Public Health in Peking Union Medical College, majored epidemiology and health statistics. Maternal health-related behaviours and adverse pregnancy outcomes are the interested areas of her. She is participating in the Chinese Pregnant Women Cohort Study and working on publishing related papers now. She is eager to learn about the latest progress in the field of maternal exchange by attending this meeting.

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