A- Oral Presentations

1- Infertility, Gynecology

O-1
Robotic assisted minimally invasive surgery

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Robotic surgery represents the state of art approach, which by using 3D resolution visualization, wristed instrumentation, and invasive movement allow GYN surgeons to perform the most precise, complete, and minimally invasive surgery for endometrial cancer. Patients' benefits are: shorter hospital stay, less pain, less risk of infection, less blood loss and transfusions, less scarring, faster recovery, quicker return to normal activities, equivalent or better oncologic outcomes and more lymph nodes harvests.
The ability to add a 3rd instrument arm for grasping and retraction put the surgeon in complete control of the surgical site. Robotic overcomes the limitations of conventional laparoscopy by enabling GYN oncologists to perform early stage GYN cancer surgery using a minimally invasive approach. Based on our experience, robotic assisted hysterectomy is a promising new technique that can overcome many of the technical limitations of conventional laparoscopy. Complex parts of the operation, such as securing the uterine arteries and cardinal ligaments, performing an accurate culdotomy and over sewing the vaginal cuff are performed with greater ease, thus providing unique advantages as compared with conventional laparoscopy.

O-2
Comparing the efficacy of combined metformin letrozole with metformin clomiphen citrate in clomiphen resistant infertile women with PCOS

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Polycystic ovary syndrome (PCOS) is a common condition in reproductive aged women with an estimated prevalence of 5-10%. Oligo-anovulation is a very common problem in PCOS. The use of clomiphen citrate, metformin and letrozole increase ovulatory response. Because of antiestrogenic effects of clomiphen, it may be associated with lower pregnancy rate. Letrozole is an aromatase inhibitor which induced ovulation without antiestrogenic effects. Adding metformin to clomiphen and letrozole in clomiphen resistance PCOS patients increases ovulatory response.
In total 100 infertile women with PCOS were randomly divided to metformin letrozole and metformin clomiphen groups. All patients received initially metformin 1500 mg/daily for 8-12 weeks and then letrozole 5 mg or clomiphen 100 mg for 5 days starting on day 3 of menstrual cycle. All patients were clomiphen resistance PCOS. The time of intercourse was advised 24-36 hours after hCG injection. The number of follicles, serum E2, endometrial thickness, miscarriage and pregnancy rate were measured in both groups. The mean age and duration of infertility in both groups were similar.
Key words: *Clomiphen citrate, Letrozole, PCO.*

O-3
CRP level and pregnancy rate in patients undergoing IVF/ICSI

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Introduction: The present study conducted to determine the possible correlation of the serum and follicular fluid CRP level and the outcome of controlled ovarian stimulation and pregnancy rate in patients undergoing IVF/ICSI.
Materials and Methods: This study was performed on 76 consecutive infertile patients who were candidate for IVF/ICSI, using standard long GnRH agonist protocol. Blood was drawn 4 times during the cycle on the first day of stimulation, the day of HCG injection, the day of ovum pick up, and the day of embryo transfer. In addition, follicular fluid sample was drawn at the of ovum pick up for study. CRP level in follicular fluid and serum was measured using competitive ELISA test.
Results: It has been shown that in 82.2 % of cases the serum CRP level in the day of HCG injection was higher than this level in the first day of stimulation. Furthermore, the CRP level in the day of ovum pick up was higher than this level in the day of HCG injection. The ratio of CRP level in

the day of transfer to the day of ovum pick up (ratio≥1.23), was significantly higher in patients who became pregnant after ICSI. All patients with less than this ratio have not been pregnant.
Conclusion: Controlled ovarian hyper stimulation and puncture of ovaries can potentiate systemic stimulation. Increasing serum CRP level in the day of embryo transfer rather than ovum pick up can predict the success in patients undergoing IVF/ICSI.
Key words: *CRP, ICSI, Pregnancy rate.*

O-4
Comparing vaginal sonography with hysteroscopy in the detection of intrauterine pathology in infertile patients with normal HSG

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Introduction: Hysteroscopy is a valuable diagnostic and therapeutic modality in the management of infertility. This study was performed to evaluate the accuracy of hysteroscopy based on a histopathological report from endometrial specimens for intrauterine disorders.
Materials and Methods: In this cross-sectional study 115 infertile women were evaluated in Mehr Infertility Institute between 2006 and 2007. Hysteroscopy and histological evaluation of endometrial biopsy was performed in all women. We compared the efficacy of hysteroscopy in the diagnosis of benign intrauterine pathology in infertile women in whom the diagnosis was confirmed by histological studies. The women had a complete evaluation with preoperative hysteroscopy, and histological analysis of uterine cavity specimens. Sensitivity, specificity, predictive and negative predictive values were calculated for hysteroscopy considering the histological study as 100%.
Results: Sensitivity and specificity of sonography in diagnosing the polyp were stated 81% and 64% respectively. Sensitivity and specificity of hysteroscopy in diagnosing the polyps revealed 85% and 84% respectively. The results indicated that sensitivity and specificity of sonography in diagnosing the myoma were 25% and 98% respectively. Sensitivity and specificity of hysteroscopy in diagnosing the myoma were 50% and 93% respectively.
Conclusion: Hysteroscopy is a safe and rapid direct visualization of the uterine cavity. We believe it should be replaced by the diagnostic hysteroscopy as a first line of infertility investigation.
Key words: *Hysteroscopy, Infertility, Uterine Pathology*

O-5
Fertility outcome and clinical and laboratory markers of clomiphen resistant PCOS patients after LOD at one year post operation

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Introdcution: LOD operation in clomiphen resistant patients is a therapeutic option before gonadotropin treatment. In this study fertility outcome and clinical and laboratory markers of these patients were investigated.
Materials and Methods: In this study 160 clomiphen resistant PCOS patients were selected. Patients with mixed factor (male, endometriosis, tubal) were excluded. All the patients were candidate for LOD operation. Before LOD operation, 24 hr after LOD and 6 months after LOD, hormonal tests were done. In the first 6 month no drug was prescribed. In second six month we prescribed clomiphen to the patients that were not pregnant.
Results: There was 40% reduction in the level of LH 24 hr after LOD operation, while this was 10% at 6 month. Regulation of menstrual cycles without clomiphen was 38% and pregnancy rate was 28% until 1 year after LOD operation.
Conclusion: LOD operation in our patients is an ideal option before gonadotropin treatment.
Key words: *LOD, PCO, Clomiphen resistant, Gonadotropin, Infertility*.

O-6
Evaluation of serum PSA after cyproterone compound treatment compared with oral contraceptives pills in hirsute polycystic ovary syndrome patients

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Introduction: The aim of this study was to evaluate the effect of oral contraceptive on the

serum free prostatic specific antigen (PSA) as a new marker in hirsute women with polycystic ovary syndrome (PCOS) compared with ciproteone compound.

Materials and Methods: In this prospective randomized study, 60 hirsute PCOS patients that referred to Imam Hossein Hospital were enrolled. Baseline Freyman Galloway score (FG), Body Mass Index (BMI), free PSA, 17-hydroxy progesterone (17OHP), free testosterone and Dehydroepiandrestandioe sulfate (DHEAS) were measured at the early follicular phase. Then patients were divided randomly into 2 groups. One group received oral contraceptive pills (OCP) and anther group recived cyproterone compound (Diane). Hormonal profile and FG scores were evaluated again after three months of treatment. Data were analyzed by SPSS 13 and p-value <0.05 was considered to be significant.

Results: The baseline FG score was 10.06±2.5 in OCP group vs. 11.5±2.3 in Diane group, these scores were reduced after 3 months to 8.06±2.5 vs. 9.2±2.3, respectively (p-value=0.000). There was no significant differences in FG score reduction after treatment between 2 groups (p-value>0.05). Serum free PSA was reduced after treatment in both groups significantly (p-value<0.03). There was no significant differences between 2 groups (p-value>0.5). Free testosterone reduction in OCP group (2.48±1.3 to 2.24±1.0, p-value=0.03) was more than this rate in Diane group (2.00±1.2 to 1.64±0.9, p-value=0.1). There was no statistical differences in 17OHP and DHEAS after treatment in both groups (p-value>0.5).

Conclusion: Serum free PSA and free testosterone and FG score were reduced after treatment with OCP or Diane but there was no preference between two groups of antiandrogen activity in OCP or Diane group.

Key words: *PSA, Hirsutism, Freyman Galloway score, Free testosterone.*

O-7
Determination of anti-tissue antibodies in sera samples of women with abortion

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Introduction: Recurrent abortion is thought to have many possible causes. Immunological factors are associated with 20-50% of recurrent spontaneous abortions. The objective of this study was detection of autoantibodies in patient sera samples of women with abortion. It is demonstrated that there are common tissue antigens between species and this heterologous antigens may be used for detection of autoimmune abnormalities in human sera.

Materials and Methods: In this study tissue antigens were taken from bovine liver, uterus and ovary. After cutting the tissues into small pieces, they were homogenized in electric homogenizer in buffer at 4°C for 3 minutes. Then the supernatant was centrifuged at 4000rpm, at 4°C for 2 hours. The supernatant was used as tissue antigens. According to the previous studies some specific anti-liver sera were produced with the injection of liver antigens to goat and with using cross absorption method with common tissue antigens. Indeed, this specification was tested by agar gel immunodiffusion (AGID) test. Sera samples of 228 women with abortion and 35 women with normal parturition were included in the present study. The sera samples were used for detection of anti-tissue antibodies that can react to liver, uterus and ovary antigens using AGID.

Results: There were at least 3 clearly definable precipitation lines between liver antigens and standard sera and one clearly definable precipitation line between uterus and ovary antigens and standard sera. Absence of any precipitation lines was recorded between patient sera and tissue antigens but there was at least one clearly precipitation line between sera samples of 21 cases and standard sera. In addition there was not any precipitation line between normal sera and antigens.

Conclusion: These findings may suggest the presence of some features of autoimmune abnormalities in the patients.

Key words: *Abortion, Autoantibody serum.*

O-8
Comparing metformin and LD OCP in improvement of sonographic findings in PCOS patients

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Introduction: Sonography may be used as a diagnosis tool for PCOS. In this paper, OCP and Metformin effects in improvement of sonographic findings after a 6 month treatment period are compared.

Materials and Methods: In total, 100 PCOS women from Shazand Hospital were studied in

2007. They were 20 to 35 years old and were divided into two equal groups. The first group was treated by LD OCP in a 6 months period, while the second group used metformin BD. After 6 months, the sonography was repeated and some improvements were detected in sonographic findings.

Results: In the first group (LD OCP), 8 patients (16%) showed improvements in sonographic findings while this improvement in the second group (metformin) was detected in 14 patients (28%).

T-test was used to compare the results and the variation was not significant (p-value<0.16). Both LD OCP and metformin are effective treatments in improving clinical signs and sonographic findings of PCOS.

Key words: *Sonography, Metformin, Ovary, LD-OCP, PCOS.*

O-9
Thyroid dysfunction in Iranian patients with premature ovarian failure

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Introduction: This study was carried out to determine the presence of thyroid dysfunction in premature ovarian failure (POF).

Materials and Methods: In a case-control study, we assessed 46 consecutive patients with POF who had no history of thyroid dysfunction and 46 normal cycling women from Taleghani Hospital, Tehran, Iran. Thyroid function tests were evaluated in both groups and results were analyzed statistically.

Result: Anti thyroid peroxidase and Anti thyroglobulin antibodies levels were significantly higher in patients with POF as compared to controls (p-value=0.02 and p-value=0.01, respectively). Thyroxine, tri-iodothyronine and thyroid stimulating hormone levels were not significantly different between patients with POF and controls.

Conclusion: Present study with demonstration of higher titers of anti-TG and anti-TPO antibodies in Iranian patients with POF supports the autoimmune basis of the disease. According to our study, POF happened in patients who were euthyroid according to clinical and laboratory data.

Key words: *Thyroid function test, POF.*

O-10
Serum transforming growth factor beta in human normal pregnancy and preeclampsia

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Introduction: There are some evidences that the same immunosuppressive cytokines contribute to successful pregnancy and transplantation. Transforming growth factor beta (TGF-ß) is a multifunctional cytokine that exhibit potent immune-regulatory and anti-inflammatory properties which might prolong graft survival.

Recent reports suggest a role for TGF-ß in the generation of T-regulatory lymphocytes. Also the role of TGF-ß in trophoblast differentiation and hypertension prompted us to evaluate the maternal serum TGF-ß1 level in normal allopregnant women and in pregnancies complicated by preeclampsia (PE).

PE is a pregnancy complication characterized by increased blood pressure, proteinuria and end organ damage.

Materials and Methods: Sixty one pregnant preeclamptic women (32 cases with severe and 29 with mild PE), 22 normotensive healthy pregnant women, and 20 non pregnant controls formed the studied groups.

The active form of TGF-ß1 in the serum from all cases was investigated by indirect ELISA technique.

Results: The results show that TGF-ß1 is highly present in all three pregnant groups compared with the non-pregnant controls. No changes in serum levels of TGF-ß1 were found in PE compared with the normal pregnancy.

Conclusion: The results suggest that: (1) TGF-ß1 could function as a regulatory factor in fetal allograft survival during pregnancy. (2) TGF-ß1 does not have a pathophysiological role in PE.

Key words: *Transforming growth factor beta, Normal pregnancy, Preeclampsia*.

O-11
Pregnancy outcomes in renal transplantation

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Introduction: In the last few years advances in surgical techniques and immune suppression have improved not only survival, but also quality of life in organ transplanted patients. Hence, the number of women of childbearing age who decide to have a child- which means resuming a normal life –has increased.
Materials and Methods: We analyzed the outcomes from 95 pregnancies in 74 kidney transplant recipients from data collected in questionnaires, hospital records, and phone interviews. Perinatal outcomes (complications, miscarriage, and therapeutic abortion) were evaluated.
Results: The mean age of pregnant women was 29.3±6.7years (range 18-38). The mean interval between renal transplantation and pregnancy was 41±9.5 months (range 22-59). The mean gestational age was 255±26 days (range 221-285). No complications occurred in 15 (15.8%) cases. Pregnancy complications in the rest included: abortion in 21 (22.1%) cases, of which 5 (23.8%) were therapeutic abortion and 16 (76.2%) were spontaneously. In 74 deliveries, 2 (2.71%) were still born and 72 (97.29%) were born alive with the following complications; 45 (62%) low birth weight babies, 3 (4.16%) intrauterine growth restriction, 6 (8.3%) small for gestational age, 21 (28.4%) premature rupture of membranes and 4 (5.4%) oligohydraminos. There were no cases of multiple pregnancies, congenital anomalies, and ectopic pregnancies. Maternal anemia was reported in 62 (65%) pregnancies. Cesarean sections were performed in 60 cases (81.1%). Preeclampsia was seen in 45 (47.36%), superimposed hypertension in 34 (35.8%), urinary tract infection in 16 (17.2%), graft rejection in 3 (3.15%), acute renal failure in 2 (2.1%) and finally irreversible rise of creatinine in 3 (3.15%) cases.
Conclusion: Pregnancy is possible and can be successful and safe after renal transplantation in recipients with normal kidney function. Post transplantation pregnancies are high risk and they should be managed in a tertiary center.
Key words: *Kidney transplantation, Neonatal outcomes, Maternal complications.*

O-12
Causes of multiple pregnancies and their relation with infertility treatment

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Introduction: Considering the high rate of multiple pregnancies (MP) attributed to infertility treatment and ART, this study intends to evaluate various causes and present some suggestions.
Materials and Methods: This cross sectional study was done on 109 MP in 3 hospitals in Tehran in ۲۰۰۶.
Results: From the total of 109 Mp, 84 (77.06%) were twins, 21 (19.26%) were triplets and 4 (3.66%) were quadruplets. 47 (43.11%) were after infertility treatment, 47 (43.11%) spontaneous and 15 (13.8%) indefinite cases. From 47 infertility treated patients, 34 (31.2%) patients had the history of infertility, and 13 cases had the request for acceleration of pregnancy. Leaving 15 indefinite cases out, 94 pregnancies were analyzed: 21 (22.34%) cases were treated with C.C. and TI (16 twins and 5 triplets), 6 (6.38%) cases were treated with HMG and TI (3 twins and 3 triplets), ART was used in 19 (20.21%) cases (9 twins, 7 triplets and 3 quadruplets), 8 (42.1%) treated with ZIFT (6 twins and 2 triplets), 10 (52.63%) UET (7 twins and 3 triplets) and only one case (5.2%) was treated with GIFT (1 triplet). 40% of twins were the result of infertility treatment. 88% of triplets associated with infertility treatment (41% ART and 47% C.C and/or HMG). 100% of quadruplets were due to ART (75% ZIFT).
Conclusion*:* Multiple pregnancies have medical, psychosocial, and economical consequences. The best method of reducing the impact of iatrogenic pregnancy is to re-define our concept of success after ART from live birth of any number of fetuses to singleton live birth per treatment.
Key words: *Multiple pregnancies, Assisted reproductive techniques.*

O-13
The tubal patency in infertile women with endometriosis is a positive index for fecundity

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Introduction: To evaluate tubal patency in the suspected cases of endometriosis.

Materials and Methods: This was a retrospective study in the Esfahan Fertility and Infertility Center. In total 59 infertile women with definite endometriosis in diagnostic laparoscopy were included in this study. The rate of tubal patency in endometriotic infertile couples was measured.
Results: After systematic approach for implantation and adhesions by anatomic location, the most lesions were in the anterior cul-de-sac, posterior cul-de-sac right/left posterior broad ligament, both uterosacrals and endometrioma. Peritubal adhesion, direct lesion at the tubal surface and spillage were studied. Our findings support tubal patency in 90% of patients.
Conclusions: Our data suggest that tubal patency is a positive index for fecundity. Expectant management and control ovarian hyperstimulation plus IUI can be a good way for different stages of pelvic endometriosis, including deep infiltrating endometriosis and rectovaginal septum involvement.
***Key words**: Tubal patency, Endometriosis, Fecundity.*

O-14
Evaluation of treatment outcomes of infertile women with primary infertility due to hypogonadotropic hypogonadism in Koasar IVF Center, Motahari Hospital, Urmieh, Iran.

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Introduction: Retardation in puberty and amenorrhea due to hypogonadotropic hypogonadism (H-H) often caused by GnRh deficiency and is a uncommon cause of infertility. The aim of this study was the evaluation of treatment outcomes of infertile women with primary infertility due to hypogonadotropic hypogonadism (Hypothalamic amenorrhea).
Materials and Methods: In this retrospective study, 61 infertile patients with the diagnosis of H-H who referred to Kowsar IVF Center (1382-1386) Motahari Hospital, Urmieh, were evaluated. Patients underwent the treatment cycles with gonadotropine ampoules (HMG+HCG) and then treatment outcomes (positive βHCG test) were analyzed on the basis of multiple factors.
Result: The age of patients was between 18-42 years. Forty-seven patients underwent the multiple treatment cycles that finally resulted in 21 pregnancies. Ten pregnancy with ICSI, 9 cases with IUI and 2 cases with timed intercourse. Twin pregnancy in 5 cases and triplets in 2 cases were observed. Fourteen patients had singleton pregnancies.
Conclusion: In regard to non responsiveness to clomiphene citrate in patients with H-H and the cost and non availability of pulsatile GnRH, treatment with gonadotropins is an alternative, safe and effective treatment for patients with the diagnosis of H-H and it is associated with a acceptable pregnancy rate.
***Key words**: Infertility, hypogonadotropic hypogonadism, IUI, ICSI.*

O-15
Ovarian response to micro doses of gonadotropin releasing hormone (GnRH) agonist during ovulation induction for in vitro fertilization

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Introduction: Despite the improvements in assisted reproduction, the ideal approach to poor responders has yet to be identified. The objective of this study was to evaluate ovarian responsiveness of four different categories of poor responders to the administration of micro doses of GnRH agonist.
Materials and Methods: This was a retrospective comparative analysis in a university based infertility center. In total 99 patients who were poor responders during ovulation induction with luteal phase GnRH-a suppression followed by gonadotropins were classified into four categories according to their age and basal FSH. Group I were 33 patients under 37 years old with FSH level of under 12, Group II were 45 patients equal or more than 37 years old with FSH level of under 12, Group III were 14 patients equal or more than 37 years old with FSH level of equal or more than 12, and finally Group IV were 7 patients under 37 years old FSH level of equal or more than 12. Micro dose GnRH protocol was administered on follicular phase beginning on 2nd day of cycle and supplemented with 375 IU exogenous gonadotropins beginning on day 3. The number of follicles equal or more than 17 mm, number of mature oocytes, number of embryos and the pregnancy rate were recorded accordingly.
Results: The mean ages of patients in groups I, II, II and IV were 31.06, 40.96, 40 and 32.71 years respectively. The percentage of cycle cancellation

in groups I, II, II and IV were 6.1%, 20%, 42.9% and 57.1% respectively because of no ovarian response. The mean number of follicles >= 17 mm were 4.82, 3.67, 2.21 and 2.86 and the mean number of retrieved oocytes were 2.94, 2.33, 1.57 and 1.29 in groups I, II, II and IV respectively. The average number of embryos was 1.8 in group I, 1.4 in group II, 0.8 in group III and 0.7 in group IV. There were no pregnancy in groups III and IV, however 4 (12%) and 3 (6.7%) clinical pregnancy achieved in group I and II respectively.

Conclusion: Ovarian response to micro doses of GnRH agonist was not significantly different between the four groups; however the pregnancy rate was higher in groups with lower FSH regardless of the age.

Key words: *Ovarian reserve, Gonadotropin releasing hormone (GnRH), Follicle stimulating hormone (FSH).*

O-16
Effect of endometrium local injury on pregnancy outcome in patients with IVF/ICSI

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Introduction: Implantation failure is the most important cause of recurrent IVF/ICSI failure. It has been suggested that endometrial injury using a biopsy catheter will results in a higher pregnancy rate in the following cycle of treatment. The local endometrial trauma increases the implantation rate through release of chemical mediators such as histamine and growth factor. Therefore we undertook this study to evaluate the influence of endometrial biopsy on increasing implantation rate in patients with multi implantation failure.

Materials and Methods: In a randomized control trial study, 48 women undergoing ART treatment cycles with at least two implantation failure were evaluated. All patients underwent induction ovulation with long protocol of gonadotropin stimulation beginning by pituitary desensitization with subcutaneous Buserelin followed by 2-3 ampoules of HMG from day 2 of cycles. Patients were divided into 2 groups randomly.

In case group a secretory phase endometrium biopsy was performed by using a Novak endometrial suction curettage in a non medicated cycle before IVF/ICSI. The implantation and clinical pregnancy rate were evaluated and compared with patients in control group.

Results: From 48 patients, 2 women in case and one woman in control group become pregnant and the differences were not significant.

Key words: *Endometrial injury, Pregnancy outcome,IVF/ICSI.*

O-17
Comparing the effect of oil progesterone with 17-α-hydroxy progesterone caproate (17-HPC) for luteal phase support in IUI cycles

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Introduction: Luteal phase support is used routinely in patients undergoing induction of ovulation (IO) and IUI cycles. The purpose of this prospective randomized study was to compare the effect of oil progesterone with 17-α-hydroxy progesterone caproate (17-HPC) for luteal phase support, in these patients.

Materials and Methods: In this prospective randomized clinical trial, a total of 162 patients undergoing IO and IUI in Montaserieh Infertility Center of Mashhad from October 2005 to October 2006 were treated randomly with either 17-HPC (250 mg I.M. weekly) or progesterone in oil (50 mg I.M. daily) until beta-HCG were evaluated. Then in patients with positive beta–HCG (biochemical pregnancy), the treatment was continued until 12th week of gestation. The data were analyzed using T-test, Chi-square X^2 Test or fisher exact test. P-values of < 0.05 were considered as the level of significance.

Results: The outcome of IUI in both study groups was compared. No difference was found in the main outcome of biochemical pregnancy (p-value=0.69), clinical pregnancy and ongoing pregnancy (p-value=1). However complication was significantly lower in 17–HPC group (p-value=0.002) while patients' consent was significantly higher in 17–HPC group (p-value=0.003).

Conclusion: The results of the study encourage us to use 17–HPC for luteal phase support in patients undergoing IO and IUI cycles, although more studies are necessary to support this replacement.

Key words: *17-α-hydroxyprogesterone caproate, Oil progesterone, IUI, Luteal phase support.*

O-18
Comparing the IVF patients with and without ovarian hyperstimulation syndrome (OHSS)

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Introduction: Ovulation stimulation is the basis of in vitro fertilization that may be accompanied with potentially fetal complications such as ovarian hyperstimulation syndrome (OHSS), which may occur in 1% of the cases.
Materials and Methods: We have compared 40 OHSS cases with 40 infertile patients who were undergone in vitro fertilization in Montaseri Infertility Center from 1999 to 2004.
Results: Mean age of the patients was 29 years. Male factor primary infertility was the most common cause of infertility. The history of regular and prolonged menstrual cycles with short menorrhage periods and several IVF cycles in the past were common in OHSS group. Clinical symptoms of polycystic ovarian (PCO) were significantly more common in OHSS cases so PCO was known as a predisposing factor for OHSS. There wasn't any relation between OHSS incidence and type of ovarian stimulation agent but OHSS was more common in higher doses. More follicles and oocytes predicted OHSS but number and grade of embryos were not different between groups and the pregnancy success rate increased significantly in OHSS cases.
Conclusion: PCO signs, irregular menstrual cycles and previous IVF cycles and high doses of ovarian stimulator agents predict OHSS incidence during IVF.
Key words: *Infertility, IVF, OHSS.*

O-19
Association of p53 polymorphism with ICSI/IVF failure and recurrent pregnancy loss

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Introduction: The p53 tumour suppressor gene is a well-known factor regulating apoptosis in a wide variety of cells and tissues. Alterations in the p53 gene are among the most common genetic changes in human cancers. In addition, recent data provide evidence that p53 plays a critical role in mediating pregnancy by regulating steroid hormone activation. Several polymorphisms of the p53 tumour suppressor gene have been associated with recurrent pregnancy loss. We evaluated the hypothesis that polymorphisms in the p53 tumour suppressor gene in women may be associated with their response to in-vitro fertilization (IVF) treatment and occurrence of repeated miscarriages.
Materials and Methods: The prevalence of a common polymorphism of the p53 tumour suppressor gene (Arg and Pro variants at codon 72) in 50 infertile women with more than two IVF failures was examined and it was compared with 50 women with recurrent pregnancy loss and 50 normal women with at least two alive children as control group. For each patient, two p53 tumour suppressor alleles (Arg and Pro) were identified by using PCR-RLFP technique and genotypes were defined as Arg/Arg, Pro/Pro, or Arg/Pro. Statistical analysis was done by SPSS software and the p-values under 0.05 were considered to be statistically significant.
Results: The results will be presented in the 14th Fertility and Infertility Congress in Yazd.
Key words: *p53 tumour suppressor gene polymorphism, IVF failure, Recurrent pregnancy loss.*

O-20
Evaluating the follicular inhibition effect of LD OCP in women at Hamedan Infertility Center

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Introduction: Many suggested methods have been created for contraception. Among them, hormonal methods are the most effective ones in terms of cost and its impact. The Mechanisms of oral contraceptive pills with low dose estrogen (LD OCP) varies, including ovulation inhibition, thickening cervical mucus and reduced receptivity of ovum implantation. The degree of follicles suppression always considered as the most questioning issue for physicians and patients. The goal of this study was to determine the degree of inhibition of ovulation in women referred to Hamedan Infertility Center with normal ovulation who take LD OCP during first month.
Materials and Methods: This cross sectional study was done on 100 infertile women without

ovulatory factor who had been referred to Hamedan Infertility Center for ART. After trans vaginal sonography in the 3rd cycle, if follicles sizes were not greater than 10mm and endometrial thickness was not lower than 5mm, LD OCP started routinely for ART cycles. 14 days later patients rescanned for starting Buserelin. Information about age, follicular sizes in each ovary and endometrial patterns and sizes were collected. Results analyzed with SPSS-10.

Results: Mean age of patients was 32.18 years. After 14 days of LD OCP use, 21% of patients had follicle sizes of more than 16mm. An interesting point was growth of multiple follicles in few patients. Only 9% of patients had endometrial thickness lower than 5mm and the rest had more. In addition 14% of them had 3 lines pattern and the others had echogen endometerium.

Conclusion: According to the previous studies which showed That LD OCP cannot inhibit LH-surge impact on follicle size above 16mm, follicular growth can be considered as impending ovulation in this study. More studies on this issue are recommended.

***Key words**: OCP, Ovulation*.

O-21
Laparascopy versus laparatomy in the treatment of ectopic pregnancy

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Introduction: Ectopic pregnancy (EP) is the most important cause of maternal mortality and morbidity in the first trimester of pregnancy. Over the past few decades with serum level of BhCG and vaginal ultrasonography early diagnosis of ectopic pregnancy before rupture has been possible and the management of EP has been revolutionized. Today medical therapy and conservative surgery with the aid of laparoscopy and laparatomy is the management of EP.

Materials and Methods: In this study 60 patients with unruptured tubal pregnancy whom hemodynamical status were stable and the size of EP were less than 4 cm were selected in Alzahara Hospital and then randomly in 20 patients laparatomy and in 40 patients laparascopy were performed. The outcome measures included; the success of each treatment modality, the need for second mode of treatment, the duration of hospital stay and the route of drug requirements.

Results: The titer of BhCG after operation has been diminished significantly in both groups. In the laparatomy group no patient did require additional treatment by methotrexate or reoperation. But in the laparatomy group one patient (2.5%) required methotrexate although from statistical point of view there was no significant differentiation. The hospitalization period and the rate of drug requirement were diminished significantly in laparoscopic group.

Conclusion: EP treatment by laparoscopy and salpingoscopy cause a successful treatment of disease. In addition this method of treatment reduce the hospitalization period, diminish convalescent period and use of narcotic drugs.

***Key words:** Ectopic pregnancy, Laparascopy, Laparatomy.*

O-22
Evaluating the diagnostic value of visual findings at laparoscopy in endometriosis

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Introduction: Endometriosis has been widely implicated as one of the causes of chronic pelvic pain, dysmenorrhea, and infertility. The purpose of our study was to define the correlation between the visual and histological diagnosis of endometriosis from peritoneal findings identified at laparoscopy in a diagnostic trial with a standardized technique; including complete excision of lesions suggestive of endometriosis and systematic biopsies of normal appearing pelvic peritoneum. This study was performed in Mahdieh Hospital and IRHRC between 1383-1384.

Materials and Methods: A diagnostic study of 30 patients (15-45yr) undergoing diagnostic laparoscopy for the evaluation of chronic pelvic pain, infertility, dysmenorrhea and dysparonia was carried out (average age was 28.6±5.14 years). All areas suggestive of endometriosis were excised and examined pathologically. Peritoneal biopsy specimens were obtained from areas of normal appearing peritoneum to rule out microscopic endometriosis. The positive predictive value, sensitivity, negative predictive value and specificity were determined for visually identified endometriosis versus the histological findings.

Result: The mean prevalence of abnormalities visually consistent with endometriosis was 63%,

with 42% confirmed histologically. The positive predictive value was 42.1%, sensitivity 88.8%, negative predictive value 90.9% and specificity 47.6%, for visual versus histological diagnosis of endometriosis.
Conclusion: Diagnosis of endometriosis should be established only after histological confirmation.
***Key words**: Endometriosis, Laparoscopy, Histopathology.*

O-23
Comparing follicular responses to controlled ovarian hyperstimulation (COH) between normal ovaries and ovaries previously treated by different laparoscopic techniques for ovarian endometrioma

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Introduction: It is important to compare follicular responses to controlled ovarian hyperstimulation (COH) between normal ovaries and ovaries previously treated by different laparoscopic techniques for ovarian endometrioma.
Materials and Methods: In 65 patients with unilateral endometrioma, laparoscopic ovarian fenestration and coagulation was performed in 24 cases (group 1) and laparoscopic ovarian cystectomy in the other 41 (group 2). In 16 patients with bilateral endometrioma (group 3), cystectomy was done in one ovary and fenestration and coagulation in the contralateral side.
Results: The results indicate that the response of ovaries to COH after laparoscopic ovarian cystectomy or fenestration and coagulation was the same and that there was no difference in response to COH between normal ovaries and those operated by the laparoscopic techniques mentioned above.

O-24
Comparing the rate of trisomy 21 in ART and non-ART neonates of women over 35 years old

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Introdcution: Nowadays, there are increasing number of women who use assisted reproductive technology (ART) to become fertile. One of the issues that all mothers and clinicians who offer ART are worry about is neonatal trisomies that include by these methods.
Materials and Methods: In order to investigate whether ART increases the number of neonatal trisomies or not, we run a historical cohort study. In this study, we selected 450 nulliparous women more than 35 years old. Half of this population received ART (mostly IVF, ICSI) and another half (225) received no ART treatment.
Results: Among women who received ART, only 4 infants with trisomy were born. In the other group that received no ART treatment 12 infants with trisomy were born. Although the incidence of trisomies did not differ significantly between two groups (p-value>0.05 chi square) but this incidence was less in ART recipient group in comparison to the other group.
Conclusion: So in conclusion in spite of the fact that ART did not reduce the incidence of trisomies in newborns, it did not increase the number of this abnormality at all.
***Key word**: Trisomy, ART, Neonate.*

O-25
Evaluating the effect of OCP on ongoing IUI cycle

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Introduction: Polycystic ovarian syndrome (PCOS) is the most common cause of infertility with ovarian factor. There are different methods for induction ovulation in these patients. Intra uterine insemination (IUI) of sperm is one of the most important methods for treatment of these patients. It seems that administration of oral contraceptive (OCP) in the cycle before IUI changes the hormonal pattern and may improve the result of IUI.
Materials and Methods: In this study, 180 IUI cycle were studied and divided in two groups with and without prior OCP administration. Number of dominant follicles, endometrial thickness, serum progesterone level, chemical and clinical pregnancy were compared in two groups.
Results: Overall, 28 cycles out of 180 cycles were cancelled because of arrest of follicle maturation. In total, 70 cycles with prior OCP administration (group A) and 82 cycles without OCP administration (group B) were enrolled in this study. The number of dominant follicle in group A

was more than this in group B (p-value<0.01). Evidence of ovulation (serum progesterone), chemical and clinical pregnancy were the same in two groups.
Conclusion: OCP administration before IUI cycle can increase the number of dominant follicle but make no difference in ongoing pregnancy.
Key words: *IUI, OCP, PCOS.*

O-26
Conservative radical operation will spare fertility in young women cervical cancer

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Introduction: Cervical cancer is one the most important cancers in women especially in pregnancy. Conservative treatments have been reported recently.
Materials and Methods: Review of articles about the incidence of cervical cancers and the new conservative treatment in young women.
Results: There will be 11,150 new cases of cervical carcinoma in USA at 2007 with 3670 Death. Invasive cervical carcinoma is reported to be 1/2000-1/10,000 in pregnancies. Combination of cervical cancer and pregnancy is about 2%-3%.
Conclusion: Conservative treatment is a good option for young women that desire to fertility.
Key words: *Cervical pregnancy, Fertility preservation.*

O-27
Ovarian masses during reproductive ages

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Introduction: During reproductive years, the most common ovarian masses are benign. Ovarian masses can be functional or neopalstic and neoplastic tumors can be benign or malignant. Functional ovarian masses include follicular and luteal cysts. The chance that primary ovarian tumor be malignant in a patient younger than 45 years of age is less than 1 in 15. The new routine application of ultrasound technology to gynecological examination has led to the more frequent detection of ovarian cysts.
Materials and Methods: The ovarian masses in 10-30 years old women who were admitted to Alzahara Hospital from 1386-1384 was studied. The mean age of the women was 22.7±4 years (range 10-30 years). Only 5% of cases were under 13 years old. 55% were married and 45% were single.
Results: The results will report the pathological findings, reason of admission, types of sugary and will compare the laparotomy with laparascopic surgery in regard of duration of hospital stay, pain scores and most important complication.
Conclusion: Ovarian masses are common in reproductive age and fertility preservation is one of the most important factors for the surgery type and treatment.
Key words: *Ovarian mass, Reproductive age.*

O-28
Fertility preservation in young patients with gynecological malignancy

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Introduction: Progress in preserving reproductive function in patients with gynecologic malignancies has been made owing to advances in surgical techniques, molecular pathology, and combined treatment modalities. These developments have allowed approach without compromising long-term outcome. Although the majority of gynecologic cancers are diagnosed in older women, 21% occur in women of reproductive age. A small but growing number of these women seek alternatives to standard treatments so as to preserve fertility. Conservative management in young patients with stage I (grade 1, 2) of epithelial ovarian tumor and sex cord-stromal tumor, patients with borderline and germ cell ovarian tumors, patients with micro invasive and early stage cervical cancer (stage IA1, IA2 and some of IB1) and endometrial cancer; grade 1 without myometrial invasion, could be performed in order to preserve fertility. Each case is unique and requires a different strategy of fertility preservation given the type of cancer, the chemotherapy regimen, patient's age, partner's status, and time frame available before onset of treatment. Patients who have time to undergo ovarian stimulation can cryopreserve embryos or oocytes.
Conclusion: Collaboration between gynecologic oncologists and reproductive endocrinologists might optimize fertility preservation for these patients.
Key words: *Fertility preservation, Young patients, Ovarian cancer, Cervical cancer, Endometrial cancer.*

2-Embryology

O-29

The effect of BMP_4 on globin genes expression in erythroid-like cells differentiated from embryonic stem cells in serum free media

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Introduction: There are many effective factors and agents that involve in differentiation of embryonic stem cells to erythroid lineage such as cytokines and growth factors like Bone Morphogenetic Protein-4 (BMP_4).
The aim of this study was to evaluate the effect of BMP_4 on differentiation of embryonic stem cell to erythroid lineage in serum free media and primitive (βH_1) and definitive globin (βmajor) genes expression
Materials and Methods: CCE embryonic stem cells were cultured in DMEM medium and the secondary passage was done in IMDM medium. The cells of two days embryoid bodies were dissociated with Trypsin-EDTA and replated into semisolid medium containing IMDM and knockout serum replacement (20%) with 20 ng/ml concentrations of BMP_4.
Expression of the βH_1, βmajor and β2m genes was evaluated by semi-quantative RT-PCR and Real time PCR.
Results: Morphologically, the colonies that formed in BMP_4 treated groups were larger than the control group. Analysis of the gene expression showed that both of βmajor and βH1 were expressed and the ratio of βH_1 gene expression was higher than βmajor ($p\text{-value}<0.05$).
Conclusion: Our results demonstrated that BMP_4 is the effective factor to improve the differentiation of embryonic stem cells to erythroid lineage in serum free media and both pattern of erythropoiesis (primitive and definitive) were seen.
Key words: *Embryonic stem cells, Erythropoiesis, BMP_4, Globin genes expression.*

O-30

Effects of low-intensity ultrasound on osteogenic differentiation of Rat bone marrow mesenchymal stem cell: an in vitro study

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Introduction: To test this hypothesis that low-intensity ultrasound (LIUS) may be effective stimulant on differentiation of rat mesenchymal stem cells (rMSCs), we study the effect of LIUS on osteogenic differentiation of rat bone-marrow derived MSCs.
Materials and Methods: Ultrasound instrument was calibrated by radiation force and the intensity ratio was calculated (I_{pk}/I_{Ave}=3.561 $W.cm^{-2}$). The cell chamber was exposed to US in the LAM of circular piston transducer (4 cm area) operating at 3MHz in continues wave. The sonication was carried out for period of 5 minutes daily up to 2 weeks at nominal intensities of $100mW.cm^{-2}$ while the control group had no US stimulation. The cells that were used in this investigation were passaged from 3 rat bone marrow-derived mesenchymal stem cells. The cultures were evaluated by alkaline phosphatase activity assay and semi quantitave RT-PCR on days 1, 3, 5, 7, 9, 11 and 14 of post-stimulation. Each experiment was replicated ten times and the mean values were statistically compared.
Results: Our results indicated that alkaline phosphatase activity in US group was significantly more than this in control group (88.6±12% versus 30.14±23%, $p\text{-value}\leq 0.005$). According to semi quantitative RT-PCR analysis, in US group, in all examined days, expression of the bone specific genes including alkaline phosphatase, osteocalcin and osteopontin were significantly higher than these in control group. These genes appeared to be expressed in US groups in early days of cultivation periods compared to that of control group. The important point was that the osteocalcin gene was never expressed in control group.
Conclusion: Taken together, it seems that US is able to induce in vitro osteogenic differentiation of the rMSCs.
Key words: *Low-Intensity Ultrasound, Last Axial Maximum (LAM), Rat Mesenchymal Stem Cells (rMSCs), Osteogenic differentiation.*

O-31
Evaluating the effects of bFGF on limbal stem cells cultured on amniotic membrane and collagen I

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Introdcution: It has been hypothesized that limbal stem cells (LSCs), a population of SCs located in the basal epithelium at the corneoscleral limbus may be maintained and controlled by intrinsic and extrinsic factors in their local microenvironment, the so-called stem cell niche. Environmental factors that may synergistically act to regulate gene expression and to maintain 'stemness' include the limbal extracellular matrix (ECM), particularly the basement membrane, cell-matrix interactions, growth factors in micro environment and cell-cell contacts. Understanding these limbal SC niche interactions is essential if the goal of developing new adult stem cell therapies is to be fully realized.
Materials and Methods: In this study we compared the effects of *bFGF* on culture of limbal stem cells in presence of epithelially denuded-human amniotic membrane and collagen type I as a limbal SC niche in vitro. Cultured cells in different groups evaluated by immunochemistry and RT-PCR for expression of proposed limbal SC markers (P63, ABCG2) and corneal specific markers (K3, Connexin 45).
Results: The size of cells cultured on AM in absence of bFGF were small and compact with the lower ratio of nucleus to cytoplasm in comparison with collagen type I. bFGF in the culture media caused increasing of cell sizes and of cytoplasm ratio. Epithelial outgrowth of limbal explants on AM and Co in absence of bFGF expressed more p63 (SC markers) and less K3 (corneal differentiation markers) in comparison with bFGF+ group (p-value<0.05). However the AM expressed high level of p63 than Co. ABCG2, a protein present in many adult stem cells, expressed in the collagen group without bFGF (25.27±5.6) (p-value<0.05). Moreover, in all groups, the cells expressed ABCG2, K3/12 and p63as shown by RT-PCR.
Conclusion: Our results showed that epithelium-denuded AM provides a superior niche for limbal SC proliferation. In addition, phenotype maintenance in vitro and the denuded human AM is a protein enriched ECM in comparison with collagen type I. bFGF increased cell survival in culture cells and play an important role in cell differentiation.
Key words: Limbal stem cell, Amniotic membrane, Collagen I, bFGF.

O-32
Effect of antioxidants on DNA damage in human and mouse germ cells and cytogenetic abnormalities in subsequent generated pre-implantation embryos

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Introduction: This study was conducted to evaluate DNA damage induced in human normal and subfertile sperms following treatment with chemotherapeutics in the presence of famotidine as an antioxidant and to compare the effects of exposure of NMRI mice with γ-rays in the absence or presence of vitamins E and C and subsequent cytogenetic damage in pre-implantation embryos generated from irradiated gametes.
Materials and Methods: Sperms of normal and subfertile men were treated with different chemotherapeutic agents in the presence and absence of famotidine. DNA damage was evaluated using alkaline comet assay. Male and female NMRI mice were whole body irradiated in the presence of vitamins E and C. Various mating schemes were designed for mating of irradiated mice. About 68 hr post coitus, 4-8-cell embryos were flushed out from oviducts and fixed on slides using standard methods in order to screen for chromosome abnormalities and micronuclei.
Results: Treatment of human sperms with chemotherapeutics led to a significant increase in DNA damage, although the amount of DNA damage was different for drugs and in sperms from sub-fertile patients. Famotidine reduced DNA damage in all treatment groups effectively. In irradiated mice, there was an increase in both abnormal metaphases and micronuclei frequency in embryos generated after parental or maternal irradiation or both. Vitamin E effectively reduced the frequency of aneuploidy in all irradiated groups and vitamin C was very effective in reducing the frequencies of micronuclei.
Conclusion: Data indicated that both radiation and chemotherapeutics are potent inducers of DNA damage in male and female germ cells. These effects may be transmitted to next generation pre-

embryos leading to implantation failure or loss. Administration of antioxidants before treatment with chemotherapeutics or irradiation effectively reduced DNA damage and the frequency of chromosomal abnormalities. The way these antioxidants reduces genotoxic effects of chemicals or radiation might be via radical scavenging mechanism.

***Key words**: DNA damage, Chromosomal abnormalities, Antioxidants, Human sperm, Mouse preimplantation embryo.*

O-33

Assessment of morphological and functional changes in the mouse testis and epididymal sperms following unilateral and bilateral cryptorchidism

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Introduction: This study was conducted to evaluate the long term effect of experimental bilateral and unilateral cryptor-chidism on sperm parameters and structure of mouse testis.

Materials and Methods: To induce bilateral and unilateral cryptorchidism model, immature mice (age under 2 months) were anesthetized and a small incision was made in the abdominal skin and peritoneum then fat pad at the upper end of testis was sutured to peritoneum. Testes were removed 2, 4, 6 and 8 weeks after surgery, weighted and processed for light microscopy study. Weight of testis, spermatogenic cell numbers, tubular ectasis (rate of tubular lumen comparing to the germ cell layer) as well as epididymal sperm parameters were measured.

Results: Spermatogenesis was arrested and the testicular weight and seminiferouse tubular diameters were significantly reduced in the bilateral undescended testis compared with unilateral undescended testis and the control mice. However complete depletion of seminiferous tubules and absence or sloughing of germ cells was not found in any of the animals. Spermatocytes and spermatids were the main type of germ cells undergoing apoptosis in all groups.

Conclusion: In general, high temperature caused a decreased in all analyzed parameters except spermatogonial cell number probably due to the apoptosis and these changes significantly increase in bilateral groups compared with unilateral groups. It is suggested that although apoptotic cell death induced by bilateral cryptorchidism might be affected by changes in systemic factor, apoptosis increase in male germ cells after unilateral cryptorchidism regulated by local testicular factors. Also this model is suitable for enrichment of spermatogonial stem cells.

***Key words**: Cryptorchidism, Testis, Spermatogonial stem cells.*

O-34

Effects of Retionoic acid (RA) on differentiation of embryonic stem cells to nervous system cells with study on neural specific gene expression

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Introduction: Embryonic stem cells are pluripotent cells that can not only be differentiated to all types of specific adult cells but also can be used for cell therapy. In this survey pluripotent and undifferentiated mouse embryonic stem cells were cultured and surveyed for differentiation into neural and glial cells upon treatment with the Retinoic Acid (RA) that is effective on neural tube development.

Materials and Methods: Mouse ES cell line CCB from strain 129 were cultured on inactivated mouse embryonic fibroblasts and the resulting Embryoid Bodies (EBs) were transplanted in two ways; on culture plates that covered by fibronectin and poly-L-lysine. The RA (1micromollar) was added to specific neural precursor cells. Otherwise we culture the stem cells in suspension for 4 days with RA. The expression levels of specific neural genes, including Nestin (marker of neuroepithlial cells), Nkx2.2 (ventral neurons in spinal cord), nurr1 (primary dopaminergic neurons), S100 (Astrocysts), Olig-2 (oligodentrocytes) were mesured by RT-PCR and densitometry. In addition, the formation of dendrites and soma in neurons was assessed through immune-cytochemistry assay on microtubule association protein (MAP2).

Results: The expression of Nestin showed RA caused neural induction and suspension culture was more effective than hanging drop assay.

Moreover we showed that differentiation of the primary dopaminergic neuron formation that express nurr1 gene was induced by RA. Some of ES cells under treatment with RA expressed S100 and were accordingly proved to be astrocystes. However the expression of Olig2 and Nkx2.2 were not demonstrated and consequently no differentiation into ventral spinal cord neurons and oligodendrocytes had happened. Immuno-cytochemistry assay of MAP-2 confirmed the formation of dendrites and neurons.

Conclusion: The present study demonstrated that multiple steps of development and differentiation of embryonic stem cells to mainly CNS cells can be analyzed in culture. Moreover, the RA signals involved in neural differentiation and *in vitro* generation of embryonic stem cells culture for therapeutic use.

***Key words**: Stem cell, Neural differentiation, Retinoic acid.*

O-35

Flow cytometric analysis of antral follicles isolated from vitrified and non vitrified ovaries in vitro

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Introduction: Vitrification is a simple and ultra rapid technique for the conservation of fertility. This study was carried out to evaluate the effect of mouse ovarian tissue vitrification on the follicular cell death during culturing.

Materials and Methods: This experimental study was carried out on 12-14 day old female mice (NMRI). Ovaries were vitrifies with a solution containing ethylene glycol. After fast warming, preantral follicles were mechanically isolated from vitrified and non vitrified ovaries and were individually cultured in α-MEM (Gibco, UK) supplemented with 5% FBS, 100 mIU/ml rFSH, 1% ITS and 20 ng/ml mrEGF nonspherically for 10 days. At the end of culturing period percentage of intact and dead cells was determined by AnnexinV-Propidium Iodide (AV-PI) staining and flowcytometric analysis in two groups of study. Chi-square test was used to analyze the data.

Results: The percentage of cells that were intact (AV^-/PI^-), early apoptotic (AV^+/PI^-), necrotic (AV^-/PI^+) and late apoptotic or necrotic (AV^+/PI^+) were 56.5±5.1, 36.4±3.9, 5.0±1.1 and 2.1±0.3 respectively in antral follicles of vitrified group, while these percentages were 68.8±3.8, 29.7±3.3, 1.4±2.2 and 4.0±0.8 respectively in non vitrified groups. There was no significant difference between the control and vitrified groups in percentage of early apoptotic cells. But in the other variables the differences were significant.

Conclusion: Ovarian vitrification using ethylene glycol has no significant impact on percentage of early apoptotic cells.

***Key words**: Vitrification, Ovary, Cell death, Flowcytometry.*

O-36

The assessment of viability and in vitro maturation (IVM) of cumulus-Germinal vesicle break down (GVBD) oocyte complexes after vitrification in mouse.

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Introduction: Vitrification is assumed to be a promising method to cryopreserve human oocytes but still needs optimizing. The aim of this study was to improve the single step and step-wise vitrification effects on maturing mouse GVBD by ethylene glycol (EG) in conventional straws.

Materials and Methods: Oocytes with compact cumulus cells were cultured for 3 hr in TCM199 supplemented with 10% fetal bovine serum (FBS) in 5% CO2 in air. GVBD oocytes were randomly allocated into three groups. (1) Control (non-vitrified group), (2) exposed to single-step vitrification (contained of EG 20% + 0.5M sucrose), and (3) exposed to step-wise vitrification (2%, 5%, 10%, 20% EG + 0.5M sucrose). Then oocytes underwent additional 21 hr maturation (in vitrification groups after thawing). Viability of oocytes and maturation to MII stage were analyzed using inverted microscope and additionally by staining of propidium iodide and Hoechst 33342.

Results: All non-vitrified oocytes were viable after 24 hr; however, viability of vitrified samples in

single-step group was significantly lower than that of the step-wise and control Groups. Also, the maturation rate in the step-wise group was significantly higher (p-value<%5) compared to single-step.

Conclusion: these results suggest that step-wise vitrification of GVBD oocytes as compared to single step vitrification was better in the rate of survival and in vitro maturation of oocytes.

Key words: *Vitrification, Viability, In vitro maturation, GVBD, Oocyte, Mouse.*

O-37

Effect of granulosa cells co-culture and retinoic acid on maturation and development of immature mouse oocytes in vitro

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Introduction: Our purpose of this study was to develop appropriate medium for in vitro maturation (IVM) of immature mouse oocytes.

Materials and Methods: Germinal vesicle of NMRI female mouse (6-8 weeks old) oocytes were collected from ovaries and cultured in maturation medium MEM-α contained: 100 IU/ml rFSH+7.5 IU/ml hCG+5% FCS (Control group) and 2 µM all-trans retinoic acid (t-RA) in the presence or absence of granulose cells. Ethanol (Sham group) 0.2% (v/v) was the vehicles. After 24 hours the matured oocytes were fertilized with spermatozoa in T6 medium and cultured for 5 days. Their development to the morula and blastocyst stages was studied.

Results: The retinoic acid supported progression and resumption of meiosis and also increased advancing the oocytes to Metaphase II, formation of morula and blastocyst compared to control group. When there were not 2 µM t-RA and granulose cells in IVM medium, a significantly lower maturation rates was observed, followed by a decrease in the percentage of embryos reaching the blastocyst stage. Whereas, when 2 µM t-RA and granulose cells monolayer were present from the IVM medium, better results in comparison with control group were obtained.

Conclusion: The results indicated that co-culture of granulose cells with 2 µM all-trance retinoic acid during in vitro maturation enhanced mouse oocytes maturation and improved embryonic development.

Key words: Granulose cells, Retinoic acid, In vitro maturation, Mouse, Oocytes.

O-38

Effects of different doses of Bone Morphogenetic Protein 4 on the viability and proliferation of CCE mouse embryonic stem cells

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Introduction: With regard to the importance of BMPs roles in the formation, development and function of various vital systems during fetal life, the aim of this study was to evaluate the effect of different doses of BMP4 on the viability and proliferation of CCE mouse embryonic stem (ES) cells.

Materials and Methods: CCE ES cells were tripsinized and cell suspension was prepared. The cells were counted and cultured in 96 well microplates. Each well of this plate containing $3X10^4$ cells in 20% FCS in DMEM media. The cells were incubated for 1 day, washed with PBS and cultured in DMEM containing different doses of BMP4 (1, 5, 25, 50 and 100ng/ml) as experimental groups. Control group was cultured in BMP4 free medium. ES cells incubated at 37°C overnight, washed with PBS, tripsinized and cell suspension was prepared separately from each well. In order to investigate the viability and proliferation rates of CCE ES cells, staining with trypan blue and counting were done. The mean number of whole cells and living cells were considered as proliferation and survival rates respectively. Data analysis was done with ANOVA test.

Results: No significant differences were found between the mean number of whole cells in the different doses (p=0.18), but the mean percentage of living cells showed that BMP4 in 5 and 100 ng/ml concentration had the best and the worst

effects on the viability of ES cells respectively (65.56% vs. 27.24%).

Conclusion: Evaluation of proliferation and viability rates using cell count and data analysis showed that addition of 5ng/ml BMP4 increased the proliferation and viability rates of CCE ES cells whereas high doses decreased these criteria. This suggests that different doses of BMP4 signaling may have different effects on ES cells behavior.

Key words: *Embryonic stem cell, CCE, BMP4, Proliferation, Viability.*

O-39

Correlation between sperm parameters with reactive oxygen species (ROS) and total antioxidant in fertile and infertile males

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Introduction: Human sperm cell plasma membrane is particularly susceptible to oxidation due to the existence of a high concentration of polyunsaturated fatty acids in these membranes. The reactive oxygen species (ROS) derived from abnormal sperms or from WBC which represents an additional powerful source of ROS in semen are responsible for the peroxidation damage that has been proposed as a major factor in male infertility. A simple tool to evaluate the effect of lipid peroxidation on the spermatozoa is the assay of sperm and seminal plasma malondialdehyde (MDA) which is a stable lipid peroxidation product. The aim of this study was to determine total antioxidant and abnormal patterns of reactive oxygen species (ROS) production in male factor infertility patients and its possible correlation with sperm parameters.

Materials and Methods: Semen was obtained from partners of 25 consecutive cases attending to the clinic for IUI treatment. Semen was collected after 3 days of abstinence. The conventional semen parameters were analyzed. Semen was centrifuged at 1200 × *g* for 5 min to separate seminal plasma. The aliquots were stored at −80 °C until analyzed. Seminal plasma and serum were resuspended in phosphate buffer saline for FRAP and MDA levels in seminal plasma by spectophotometric assays.

Results: The results are expressed as µmol/l total antioxidant and nmol/l MDA in seminal plasma and serum. In normal condition ROS level is 10^4 cpm/20×10^6 sperm. Normal, healthy donors had significantly higher (*p-value*<.0001) sperm concentration, motility, and morphology compared with all male factor infertility patients. The classical semen parameters were negatively related to lipid peroxidation in spermatozoa motility and morphology (p-vlaue < 0.05). Motility and viability were inversely correlated with semen MDA levels.

Conclusion: MDA as an index of lipid peroxidation provides a sensitive assay for diagnostic dysfunction of spermatozoa and may be a good tool for analysis of infertility in the patients. We suggest the inclusion of ROS measurement as part of idiopathic infertility evaluation. Treatment with antioxidants may be beneficial in such patients.

Key words: *Antioxidants, Human sperm, Lipid peroxidation, Oxidative stress, Reactive oxygen species, Sperm parameters.*

O-40

The long term effects of methoxsalen on ovary in the mice

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Introduction: Methoxsalen is a photoactive drug. Methoxsalen UV-A therapy is used for the treatment of cutaneous disorders (e.g. psoriasis, vitiligo). This drug inhibits the synthesis of DNA, suppresses cell division and destroys of epidermal cells. However, this study evaluated the effect of methoxsalen on ovary structure and fertility in the mice.

Materials and Methods*:* For this study, fifty immature female mice were divided to three groups of control, sham and experiment. Shams were injected by corn oil.

The methoxsalen group mice were injected with consecutive doses (30mg/kg ip), five consecutive days per week for one month. Animals were scarified 2 days after the latest methoxsalen injection. Then, the mice ovary sections were made and morphologic aspects of ovary and oogenesis processes were assessed.

Results*:* Our observations indicated that in these animals, methoxsalen significantly decrease the numbers of corpus luteal, Graafian follicle, primordial follicle compared to control group.

Also diameter of corpus luteal, granulosa layer, oocyte and graf follicle decreased.
Conclusion: Our results showed that the long term exposure of methoxsalen affect the oogenesis and can induce infertility in mice.
Key words: *Methoxsalen, Psoriasis, Granulose, Oocyte.*

O-41
Prevalence of antisperm antibody in men from infertile couples in Khorramabad city

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Introduction: The precise mechanism for antisperm antibody (ASA) mediated fertility impairment is unclear. In the male reproductive tract, ASA may have an adverse impact on sperm maturation and function or overall semen quality. In this study, the percentage of ASA-IgA was determined by the direct mixed agglutination reaction (MAR) test in men from infertile couples in Khorramabad city.
Furthermore, the semen parameters were evaluated to see if there was any correlation with the presence of ASA.
Materials and Methods: In total 85 men were tested for ASA as a part of an infertility evaluation. Patients were grouped according to the percentage of ASA of $< 10\%$ or $\geq 10\%$. Semen parameters (volume less than 2ml, concentration less than 20×10^6/ ml, and motility less than 50%) were calculated for each group. Statistical analysis was performed using Fisher's exact test.
Results: overall 20% of this population was ASA-positive. Volume less than 2ml was not associated with ASA by direct MAR (p-value=0.56). Concentration less than 20×10^6/ml was not associated with ASA by direct MAR (p-value=0.51). Motility less than 50% was significantly associated with ASA by direct MAR (p-value=0.005).
Conclusion: The incidence of ASA in men from infertile couple in Khorramabad city was 20%. Antisperm antibodies can disrupt normal sperm function by damaging sperm motility.
Therefore, it can be suggested that patients with sperm motility of less than 50% should become candidate of ASA assay.
Key words: *Antisperm antibody, Infertility, Semen parameters, Mixed antiglobulin reaction.*

O-42
Effect of Antioxidants supplementation on human sperm parameters after freezing

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Introduction: Atioxidant reduces oxidative stress and improves sperm parameters during cryopreservation. This study was aimed to find out the effects of vitamin E and vitamin C on sperm parameters after cryopreservation.
Materials and Methods: Human semen samples were obtained from the Vali-e-asr Hospital.
The samples were divided into two groups (normal and oligospermia groups) according to WHO criteria. After adding cryopreservation medium, semen was pooled in liquid nitrogen. After thawing, samples were centrifuged for 5 min and in one group vitamin E (1, 2, 5Mm) and in another group vitamin C (1, 2, 4Mm) was added to medium and then the aliquots were incubated for 45 min in CO2 incubator.
In control group no antioxidant was added to medium. Sperm parameters were analyzed according to WHO criteria. Data were analyzed by T-test and all values were given as means±SEM. Statistical significance was indicated by a p-value less than 0.05.
Results: There was a significant increase in the sperm motility, progressive motility and viability in the samples which were supplemented with 1 and 2 Mm vitamin E (p-value<0.05).
Vitamin C didn't show significant effect on sperm parameters with 1 and 2 Mm concentration and it decreased sperm parameters in 4 mM dose.
Conclusion: Supplementation of preparation media with alpha-tocopherol is beneficial for sperm motility and viability rates after cryopreservation and it could be of clinical value in assisted conception procedures.
Key words: *Alpha-tocopherol, Ascorbic acid, Sperm motility, Sperm morphology.*

O-43

Differentiation of mouse embryonic stem cells to neuron like cells after transfection with GFP+, Pur r+, and Non-Silencing shRNA vector

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Introduction: The purpose of this research was the possibility of detection, selection and knockdown of genes in mouse embryonic stem cells.
Materials and Methods: At first shRNA cassette whit human microRNA-30 (miR-30) patterns was cloned in pGIPZ shRNA vector. Then by using Arrest-In transfection reagent this vector was transfected into mouse embryonic stem cells (CCE Line) and a new modified cell line that was GFP^+, Pur^{r+}, and Non-Silencing shRNA was produced. On the other hand mESC were cultured on the feeder layer (Mouse Embryonic Fibroblast) that was provided from 13.5 day mouse embryos. After that, embrioid bodies were produced by hanging drops and using of non adhesive plates. Then according to $4^-/4^+$ protocol in the lack and present of retinoic acid, EBs matured in eight days and neural induction stage was performed.
In 8th day EBs were transferred on the gelatin coated plates. Then differentiated neuron like cells immigrated from EBs and matured in adhesion condition. For confirmation of neural characters of cells immonocytochemistry for Nestin was performed.
Result: Consequences showed that most of the cells were GFP^+. In addition immonocytochemistry for nestin showed that more than %80 of cells differentiated to neuron like cells and also these cells were GFP^+.
Conclusion: By using this cell line and differentiation of these cells we can detect them after transplantation in spinal cord-brain injuries for advanced cell therapy.
Key words: *Embryonic stem cell, GFP^+ , Neuron like cells.*

O-44

The effect of polycystic ovarian patient's serum on early developmental stages in mouse embryo

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Introduction: Polycystic ovarian syndrome (PCOS) is one of the most common endocrine disorders which cause anovulatory infertility and hyperandrogenism in young women. One of the medical management in PCOS patients emphasize in increasing the chance of fertility. There are some evidences that the biochemical factors of serum and increased androgen hormone effect on embryo in early developmental stages. The aim of this study was to investigate the effect of PCOS patients' serum on early development stages in mouse embryos from two cells to hatching blastocyst.
Materials and Methods: After superovulating and fertilizing Balb/c mouse, 219 two cells embryos were retrieved, 109 embryos were cultured in 10% PCOS patients' serum and 90% HTF medium. While 110 embryos were cultured in 10% normal serum and 90% HTF medium. The early developmental stages of embryos were studied in 2, 4, 8 cells, morula and early, late and hatching blastocyst.
Results: The laboratory findings of PCOS patients' serum show that the concentration level of testosterone, estradiol, prolactine and DHEA-S increased.
The statistical analysis confirm the rate of embryo development decreased in 2, 4, 8 cells and morula stages, while the decreasing in developmental stages were significant in early, late and hatching blastocyst in comparison between two groups.
Conclusions: Probably the decreasing in developmental stages of embryos is caused by increased androgen hormone of PCOS patients' serum.
It should be considered in treatment of infertility in PCOS patients in IVF techniques.
Key words: *PCOs, Serum, Embryo, Development.*

O-45
Endometrial maturation of blastocyst in uterine of mice received superovulatory drugs and progesterone

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Introduction: The effect of superovulatory drugs on endometrial maturation at ART cycles is debated. Since the comparison of human specimens in ovulation- induced women with those at natural cycle is almost impossible, the animal studies are unavoidable. Regarding morphological characteristics as a criterion for evaluation of endometrial maturation, the aim of the present study was comparing histological characteristics of mice endometrium in controls with those at superovulated cycle received progesterone.
Materials and Methods: In this study, 30 adult female Souri mice with average weight of 25–30 gr and 15 adult male mice were used. The female mice were divided into 3 groups as controls, gonadotropin and gonadotropin+progesterone. In experimental groups, the mice received 7.5 IU HMG as intraperitoneal injection and 48 hours later 7.5 IU HMG. Then in all groups, 2 female and one male mice were placed in a cage for mating. In the gonadotropin+ progesterone group, the mice received 1mg progesterone at 24, 48 and 72 hours after HMG injection. 96 hours after HMG injection, the mice in experimental groups together with control mice were sacrificed and their uterine were flashed for blastocyst. Uterine specimen, only from those that their uterine contained blastocyst, were fixed and prepared for light microscopic study. The sections were stained with H and E and PAS.
Results: Microscopy revealed that in control group endometrial epithelium composed of tall columnar cells containing several PAS+ granules which were mainly basally located. In gonadotropin group, the granules were found both at basal and apical portions and the cells were taller than those in control group. In gonadotropin+progesterone group the granules were found in apical and basal portions and the heights of the cells were average of previous groups. PAS staining also revealed that mucous layer at luminal surfaces of the cells and secretory mucous in the lumen of the endometrial glands in experimental groups were more abundant than the control group.
Conclusion: Evaluation of endometrial maturation according to its morphological characteristics indicates that superovulatory drugs in mice stimulate endometrial maturation but progesterone injection do not accelerate it.

O-46
The long-term effect of Hinosan on spermatogenesis in the Balb/C Mice

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Introduction: Hinosan is an organophosphate that inhibits acetylcolinesterase activity, which could be resulted in damages of genital organs. This compound has been used extensively in the agriculture, for pest control. Therefore, in the present study, we investigated the effect of Hinosan on spermatogenesis in mice.
Materials and Methods: For this study, the male mice were divided into three groups. In the experimental group, mice were injected with Hinosan consecutive doses (20mg/kg ip, five consecutive days per week for one month), sham (water injection) and control (no injection). Animals were scarified 7 days after the latest Hinosan injection. Then, the mice testis sections were made and morphologic aspects of testis and spermatogenesis processes were assessed. Data were analyzed using of one-way ANOWA. P-value<0.05 was considered significant**.**
Results: Our results showed that using Hinosan will cause a significant decrease in the number of germ cells, spermatocyt, spermatids, Leydig cells, blood vessels and also diameter of seminiferous on testes of the mice.
Conclusion: These results suggested that Hinosan is effective on spermatogenesis and seminiferous tubule structure. Therefore Hinosan can induce infertility in mice.
Key words: *Organ phosphorus, Hinosan, Testis tissue, Leydig cells, Spermatozoid.*

O-47
In-vivo effect of Diazinon treatment on testes and spermatogenesis in rat

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Introduction: Our objective was to evaluate alterations in rat testes tissue and spermatogenesis by the influences of Diazinon (DZN) organophosphates pesticide.
Materials and Methods: In this study, 3 groups of Wistar rats were included. 2 groups were interaperitonealy injected with multiple and single dose of DZN with concentrations of 0.25 and 2.5 mg/kg (5 doses were injected per week and 20 times in month totally). Then the animals were killed 55 days after treatment and the testes were removed for histomorphometric and histopathological evaluation.
The histomorphometric parameters were assessed as follow: germinal cells, primary and secondary spermatocyt and lydig cells counting and measurement of seminiferous tube diameters.
Results: In comparison with control group, all the parameters showed a significant decrease in injected groups (p-value<0.000) and also there was a dose dependent behavior decrease in all of them (p-value=0.000) and also a mild edema was detected.
Conclusion: According to the results, however, histomorphologic alterations of the testes and spermatogenesis could be induced after multiple dose treatment exposure of Diazinon with except of mild edema, no obvious other histopathological alterations were seen.
Key words: *Diazinon, Rat testes tissue, Spermatogenesis*.

O-48
Non-enzymatic antioxidant activity and lipid peroxidation in sperm and seminal plasma of asthenoteratozoospermic men and their relationships with semen parameters

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Introduction: The aim of the present study was to determine the level of lipid peroxidation as indicated by Malondialdehyde (MDA) and vitamins E and C in sperm and seminal plasma of asthenoteratozoospermic and normozoospermic men and its relationships with semen parameters.
Materials and Methods: One hundred male patients attending our infertility center: 40 men with normozoospermic and 60 infertile men with asthenoteratozoospermic semen profiles were randomly selected. Semen analysis was done according to the WHO standard. Sex hormonal profiles were measured by ELISA methods. The level of vitamins C and E and MDA were measured by HPLC and tiobarbiotic acid, respectively.
Results: MDA concentration in the spermatozoa and seminal plasma of asthenoteratozoospermic was significantly higher than this in normozoospermic males (p-value<0.001). The level of vitamins E and C in seminal plasma of normozoospermic were significantly higher than in asthenoteratozoospermic males (p-value<0.01). However, the amount of vitamin C in the spermatozoa of normozoospermic was significantly less than this in asthenoteratozoospermic males (p-value<0.01). Sensitivity, specificity, positive and negative prognostic value of MDA of seminal plasma and spermatozoa were more than vitamins C and E. The level of vitamin C of spermatozoa had more diagnostic value when compare to vitamins C and E in seminal plasma.
Conclusion: The level of MDA in seminal plsama and spermatozoa and vitamin C in spermatozoa may be a diagnostic tool for the analysis of infertility in the asthenoteratozoospermic patients.
Key words: *Asthenoteratozoospermia, MDA, Vitamin E, Vitamin C, Infertility.*

O-49
Human embryology and Quranic verses, a comparative study

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Introdcution: The Holy Quran mentions the problems of human creation, embryonic life, and its miraculous stages. It is pointed in this article that thinking of these stages of embryonic life leads us to monotheism, theology and the great

power of the creator. Along with the progress of the sciences, a tremendous movement has been found and great secrets have been detected in human embryology.
Materials and Methods: In this article, we conducted a comparative research on the relationship between embryology and the Quranic verses. The ideas of great embryologists were revised, for example the noble ideas of Dr. Keith L. Moor. Also, the ovulation and fertilization from the viewpoint of Quran and science were studied.
Results: Furthermore, the foundation and stages of the development of the embryo have been defined and the benefits and importance of embryology explained. Finally, the relation between embryology and the afterlife was also considered.
Conclusion: The research findings concluded that Quranic verses are more developed than the modern ideas of embryology.
Key words: *Embryology, Embryo, Quran, Quranic verses, Ovulation, Fertilization.*

3-Urology

O-50
Assessing sperm DNA damages on ART outcome

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Introduction: In this research, we evaluate the influence of chromatin status; including DNA fragmentation, protamin deficiency, and DNA methylation on ART. In addition, the relations between these parameters in infertile men were evaluated.
Materials and Methods: Semen samples were obtained from 92 couples referred to Isfahan Fertility and Infertility Center for ICSI and IVF treatment. The semen samples were examined for concentration, morphology and motility according to the WHO guidelines (WHO, 1999). Semen samples were processed for routine ICSI and IVF using discontinuous pure sperm gradients. After insemination of oocytes, the remaining semen samples were used for evaluation of global DNA methylation, protamine deficiency, and DNA fragmentation using immunostaining, chromomycin A3 (CMA3) and sperm chromatin dispersion (SCD) test, respectively.
Results: The percentage of CMA3 positivity and DNA fragmentation showed a significant correlation with the percentage of abnormal morphology (p-value<0.01). However, no correlation was found between sperm abnormal morphology and global DNA methylation. In addition, a significant negative correlation between the percentage of CMA3 positivity and fertilization rate was found (p-value<0.05). The percentage of DNA fragmentation showed a significant negative correlation with fertilization rate in ICSI patients (p-value=0.036). However, this parameter did not significantly affect the fertilization rate in IVF patients. The results revealed a significant negative correlation between global DNA methylation and the percentage of DNA fragmentation. Furthermore, the percentage of CMA3 positivity showed a significant positive correlation with the percentage of DNA fragmentation. During this study we analyzed the relation between protamine deficiency, global DNA methylation and DNA fragmentation with cleavage, embryo quality score and pregnancy. No significant correlation was observed between these parameters.
Conclusion: Semen samples are heterogeneous, and may contain sperm with different defects. Some of these defects are related to each other and may have confounding effect on fertilization and development. Thus sperm defects assessed during this study may affect fertilization but does not affect subsequent development and pregnancy. However, effect of these defects on future of ART children awaits further research.
Key words: *DNA methylation, Protamine deficiency, DNA fragmentation, Intra Cytoplasmic Sperm Injection (ICSI), In Vitro Fertilization (IVF).*

O-51
Relationship between in vitro fertilization rate and the level of antisperm antibody in seminal plasma measured by flow cytometry

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Introduction: The aim of this study was to investigate relationship between antisperm antibodies measured by indirect flow cytometry and fertilization rate in infertile couples undergoing IVF.
Materials and Methods: Semen samples were collected from men of 80 infertile couples undergoing IVF in Isfahan Fertility and Infertility Center. Couples were grouped according to

fertilization rate. Overall, 52 couples had high fertilization rate (>50%) and 28 couples had low fertilization rate (≤50%). Seminal plasma samples were incubated with normal motile spermatozoa from donor men.
Sperm bounded antibody was detected with FITC-labeled immunoglobulin against IgA and IgG in the flow cytometry. Procedure statistical analyses were performed using χ^2, t-test, and Pearsons correlation.
Results: There was statistically significant difference between the mean levels of antisperm antibodies in high and low fertilization rate groups (p-value<0.001). Statistically significant inverse relationship was observed between IgA antisperm antibody level and fertilization rate (r=-0.47 and p-value<0.001). Statistically not significant inverse relationship was observed between IgG antisperm antibody level and fertilization rate (r=-0.2 and p-value=0.08).
Conclusion: The results of this study clearly show that high level of IgA antisperm antibody decrease the fertilization rate. Therefore, it can be suggested that patients with high level of IgA should become candidate of ICSI.
Key words: *Antisperm antibody, In vitro fertilization, Flowcytometry, Infertility.*

O-52
The antioxidantal effect of pomegranate juice on sperm parameters and fertility potential in mice

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Introduction: The antioxidants are defenses against free radicals that can be effective in tackling the problems caused by them and help fertility. Pomegranate juice is among the fruits that has a very high antioxidant effect. This study was an attempt to explore the antioxidant effect of pomegranate juice on sperm parameters (count, morphology, motility) and fertility potential in mice.
Materials and Methods: In total 15 male mice were studied with regard to their sperm parameters and fertility potential. Sperms were categorized into three groups regarding to their motility: progressive, non-progressive, immotile.
Morphology consisted of normal and abnormal sperms. Mice were divided into control group (n=5) and experimental group (n=10). The experimental group received 20% pomegranate juice for 1 month (duration of spermatogenesis is 1 month in mice). The control group had free access to water. We took one generation from each group to study the fertility rate. After killing the animals, a sample from the tail of epididymal region was taken to test the sperm parameters by light microscope.
Results: The results showed that motility and count of sperms didn't change significantly in both groups. However, the normal morphology and the fertility potential of the experimental group improved significantly. Normal morphology in control group was 68.8±4.76%, and in experimental group was 79.1±6.26% (p-value=0.007). The rate of fertility in control group was 5.8±4.08% and in experimental group was 10±1.26% (p-value=0.004). Also the rate of progressive sperms in control group was 35.6±9.91%; while, this rate in experimental group increased to 47.5±11.10% (p-value=0.06).
Conclusion: The pomegranate juice is an effective antioxidant that is able to improve the quality of sperm parameters, especially sperm morphology, as well as fertility potential in mice. Probably, intake of this antioxidant by infertile men improves the quality of their sperm parameters.
Key words*: Pomegranate juice, Sperm, Fertility potential, Mouse.*

O-53
Sensitivity and specificity of serum FSH and testicular size in predicting sperm presence in azoospermic men

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Introduction: Introduction of a reliable marker that be able to predict the presence of spermatozoa in azoospermic men, in order to apply assisted reproductive techniques without requirement of invasive method of testicle biopsy for prediction of sperm presence, will be valuable. Therefore, there is diverse opinion about distinction value of using serum FSH level and testicle size determination as conventional markers for prediction of the presence of testicular spermatozoa in azoospermic men.
Materials and Methods: In this research, 80 azoospermic infertile men who had been referred to Urology Clinic within 2 years and their azoospermia in 2 semen analysis test were

approved have been studied. We took action to receive the condition description, physical examination and hormonal evaluation including serum FSH level measuring and scrotal sonography for testicle size determination and then bilateral biopsy of testes performed. Data statistical analysis was performed by one-way ANOVA test and serum FSH and testicle size sensitivity and specificity in affected men was calculated.

Results: Among testicle biopsy of 80 affected men, 53 were azoospermic and 27 were normal men with different levels of spermatogenesis. In testicle biopsy of 53 azoospermic men, 41 patients were azoospermic on the basis of FSH level (sensitivity=77.3%) and of 27 patients who have spermatogenesis in biopsy of testicle, 27 patients were normal on the basis of serum FSH level (specificity=85/2%). Of 53 azoospermic men in biopsy, 50 patients distinct azoospermic on the basis of testicle size (sensitivity =94/4%) and of 27 patients with rows of spermatogenesis in testicle biopsy , 17 patients were normal on the basis of testicle size (specificity=63%).

Conclusion: Serum FSH and testis size measurement have reliable sensitivity and specificity in proportion of testis biopsy as a gold standard for diagnosis of azoospermia. Of this 2 current conventional markers, testicle size has a greater sensitivity and fewer specificity in proportion of FSH level. Thus it seems that we can make profit of these two conventional markers in place of invasive method of testicular biopsy in order to predict the sperm presence in azoospermic infertile men and use these markers in order to introduce to use as assisted reproductive techniques.

Key words: *Azoospermia , Biopsy , FSH , Male infertility.*

O-54

Fertility in patients with persistent azoospermia post chemotherapy for malignant tumor, or following renal transplantation

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Introduction: The possibility of future fertility is important. A patient's fertility status after chemotherapy or renal transplantation is variable depending on the type and dose of chemotherapy agents used, and cannot be predicted. Therefore, sperm cryopreservation before chemotherapy is recommended. Nevertheless many patients still miss their sperm banking before chemotherapy. Recent advances in ART allow infertile males with non-obstructive azoospermia after chemotherapy to retrieve sperm using testicular sperm extraction (TESE) and father a child by ICSI.

Materials and Methods: Ten patients with azoospermia were studied. For all of the patients multiple testicular biopsies were done. The examinations in them showed that FSH was 21.6–59.4 mIU/mL, LH was 15–24.3 mIU/mL, testes volume were > 20 mL. Three out of five patients with testes tumor had normal focal spermatogenesis (Group 1). Three from Three patients with renal transplantation had normal focal spermatogenesis (Group 2). One of two patients with lymphoma has normal focal spermatogenesis (Group 3). All of patients with normal focal spermatogenesis undergone TESE + ICSI

Results: Group 1: In two out of three patients with fertilization ongoing pregnancy were achieved. Group 2: In two out of three patients with fertilization ongoing pregnancy were achieved. Group 3: Ongoing pregnancy was not achieved.

Conclusion: Chemotherapy impairs germ cells. These patients with persistent azoospermia after chemotherapy have traditionally been considered sterile. However, recent reports showed that it is possible to recover sperm using TESE. Thus, patients with permanent azoospermia after chemotherapy may provide viable sperm with TESE, which may enable them to father a child. However, an increased incidence of sperm chromosomal abnormalities has been reported in cancer patients during or immediately after chemotherapy.

Key words: *Chemotherapy, Male infertility, Azospermia.*

O-55

The free testosterone levels in serum of Iranian veterans suffering from sulfur mustard induced asthma: 15 years postwar time

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Introduction: The aim of this study was to assess the status of free testosterone (FT) levels among

patients suffering from sulfur mustard (SM) induced asthma and to compare this with non-exposed asthmatic population and healthy subjects, and also, to determine frequency of hypogonadism in target population.

Martial and Methods: Protocol of study was based on random selection of target population by self-report questionnaire, physician diagnosed asthma, and ratification of SM exposure. Two control groups were enrolled according to age, sex-matched as a non-exposed asthma and healthy subjects. The serum samples of FT, follicles stimulating hormone (FSH), luteinizing hormone (LH) and dehydroepianderstone (DHEA) were measured according to laboratories documentation.

Results: In total 43 male, chemical veterans were enrolled as case group with the mean age of 53.95±6.80 years. The mean serum FT levels were 15.70±10.54. Overall 32.6% of subjects had FT below the lower normal range. The means serum values of FSH, LH, and DHEA were 11.91±9.21, 10.33±7.46, and 1.31±0.71, respectively. Non-chemical asthmatic patients group were 46 patients with the mean age 52.67±6.44 years. The mean FT levels were 16.97±10.15. Overall 22.2% of asthma control group had low level FT. Healthy control group were 46 subjects. The mean FT levels were measured 22.73±8.30. The ANOVA and post hoc (Tukey, HSD) tests were carried out between groups. The significant differences were observed between case and non-exposed asthma groups with healthy control group.

Conclusion: The highly significant of the hypogonadism was notable in case and asthma control groups. One of the reasons of our results may be due to toxic effects of SM on testosterone biosynthesis after long postwar time. But further investigation should be required in the future.

Key words: *Testosterone, Hypogonadism, Glucocorticoid, Mustard gas, Asthma, Lung diseases.*

4-Midwifry

O-56
The effect of counseling on sexual satisfaction of infertile men

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Introduction: Infertility is a major factor of sexual dissatisfaction in infertile Males. They believe that their inability to conceive had serious negative effects on their lives, particularly their sexual relations. The purpose of this study was to determine the effect of counseling on infertile Male's sexual satisfaction, who referred to the Valliasr Reproductive Health Center in Tehran in 2007.

Materials and Methods: This was an interventional study. In total 100 infertile men, who had eligible criteria, were recruited in this study by convenience sampling method. Participants randomly allocated into two groups (50 men in counseling and 50 men in control groups). Study was designed in two phases of pretest before intervention and follow up 3 month later. Counseling group participated in 2 hours sessions twice a week. Data was collected by 2 questionnaire including 1/ demographic characteristics and 2/ standard sexual satisfaction questionnaire. Data were analyzed with SPSS software and χ^2, Mann Whitney and Willcoxon test (p-value<0.05).

Results: Results show that the mean sexual score in counseling group was 33.37±7.9 and in control group this was 6.52±6.63. There was a significant difference between two group 3 months after intervention (U=746/500, p-value=0.02). Also, there was a significant difference between men of counseling group before and 3 month after intervention (z=-3.051, p-value=0.002).

Conclusion: The results of this study supported that the counseling improved the sexual satisfaction of infertile men.

Key words: *Counseling, Sexual satisfaction, Infertility.*

O-57
The effects of education in preventing STDs on health beleif model in the couples

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Introduction: The purpose of this study was to determine the effects of education in preventing STDs on health belief model in the couples who come to health–treatment centers of Medical Sciences University of Tehran.

Materials and Methods: This study was a semi-experimental survey conducted in case-control

method in health centers. The couples in experimental group were educated based on health belief model, during two 30 minutes educational sessions and the control group participated in the routine counseling classes. The data of this research was gathered by a questionnaire in two stages; before and 4 month after education, then was analyzed by SPSS software.

Results: The results of this study indicated that there were no significant differences between two groups in demographic characteristics. In the experimental group, there was significant differences in perceived susceptibility (p-value<0.0001), perceived severity (p-value<0.0001), perceived benefits (p-value=0.001) and barrier (p-value<0.0001) before and after education. Comparing of these groups indicated that after education, there were significant differences between perceived susceptibility (p-value<0.0001), severity (0.0001), benefits (0.0001), barriers (p-value<0.002), and practice (p-value<0.009).

Conclusion: The results of this study showed that education through health belief model was effective in preventing STDs. Then this educational model can be applied in educating adolescents and other people for preventing STDs.

Key Words: *STDs, Family planning, Barrier methods, Infertility.*

O-58
The necessary of education of Islamic ART religious rules to Iranian midwives

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Introduction: It seems that answering the simple questions of the women who are devoted to their religious rules, can have an effective role in their psychological health. The aim of this study was to determine the knowledge of Iranian midwifery teachers about Islamic religious rules about assisted reproductive technology (ART), and the necessity of educating these rules to midwives in Iranian midwifery teachers' opinion.

Materials and Methods: In this descriptive (cross sectional) study the questionnaires were sent to all of the Iranian midwifery teachers (272 individuals) who worked in Iran universities of medical sciences. About half of the questionnaires were returned. Descriptive analysis was used for analysis of the data.

Results: The majority of Iranian midwifery teachers had low level of knowledge regarding religious rules of ART. The majority of the midwifery teachers were completely satisfied with all of the questions about the necessity education of Iranian midwives about ART religious rules. They reported that training of these rules is very important in midwifery. The majority of the subjects believed that workshop method is the most suitable method for education of Iranian midwifery teachers and the educated midwifery teachers can teach these rules to midwifery students.

Conclusion: According to the finding of this research, Islamic religious rules about ART can be taught to volunteer Iranian midwifery teachers by workshop method.

Key words: *Islamic religious rules, Assisted reproductive technology (ART), Education, Knowledge*.

O-59
Sexual problems during pregnancy in fertile women

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Introduction: Myths about intercourse during pregnancy include the fear it may cause miscarriage, premature labour, or fetal damage. Scientists found no significant increase in fetal problems in women who continued to be sexually active throughout pregnancy. They noted that 27% of these women had uterine contractions after orgasms that sometimes were painful. Those who experienced painful contractions were less likely to have sexual intercourse often, if at all.

Any examination of a couple's difficulty in conceiving must include overt and clear questioning about their sexual activity. Infertility may interact with a couple's or individual's sexuality and sexual expression in two main ways. Sexual problems may be caused or exacerbated by the diagnosis, investigation, and management of infertility (or sub fertility) or they may be a contributory factor in childlessness.

Therefore if fertile women will be pregnant, they have some sexual problems.

O-60
The effects of stress on infertility treatment

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Introduction: Stress is typically defined as a stimulus which produces mental tension or physiological arousal, such as the situation of infertility or its treatment. Distress is the term used described the suffering or anxiety as a result of the stressor. There is now evidence that distress levels influence the outcome of fertility treatment, as well as contributing to patients' decisions to continue treatment. The most common way that researchers evaluate patient distress level is by the use of self-report questionnaires. Though efficient and easy to administer, such self-assessment approaches may under-report the true level of distress since patients may pretend emotional well-being in order to appear psychologically appropriate for infertility treatment. Therefore, the gold standard in psychological assessment is a structured personal interview with a trained mental health professional, e.g. a psychiatrist or psychologist. Indeed, it has been found that many IVF patients report depressive symptoms prior to beginning their cycle, which likely reflects the cumulative effect of previously unsuccessful and less invasive forms of treatment. Mild depression symptoms is seen in over half (54%) of patients who previously started IVF cycle, and 19% of them show mild to severe symptom. In fact in many of patients that treat via IVF, usually psychological and physical stresses exist.
Materials and Methods: In this article, we assess effect of stress on patient who undergoing treatment with IVF or GIFT procedure and assess some factors like number of previous treatment cycles, number of oocytes retrieved, fertilization rates, number of embryos transferred, embryo quality, presence or absence of a confirmed pregnancy, and pregnancy outcome.
Results: Major findings from this study showed that the baseline level of stress was significantly related to numerous biologic end-points, including number of oocytes retrieved and fertilized, pregnancy, live birth rate, and birth weight. Further, the stress level on the day of the procedure was significantly related only to the number of oocytes retrieved and fertilized. At baseline, the frequency of no live birth was 93% lower in women with the least distress compared to those with the most distress. Following the failure of IVF treatment, 66% of women and 40% of men describe depression symptoms and in one third of participants in this study, depression remained until 18 month later.
Conclusion: Studies showed that psychological factors like depression, anxiety and distress could increase the heart beat and blood cortisol level. Increasing distress and anxiety level, could increase tumor necrosis factors (TNF) and natural killer cells (NK) and it can cause induction of apoptosis in ovary cells. We suggest for better outcome of IVF procedure patients should receive counseling, support and education for decrease their stress level.
***Key word:** Infertility, Stress, IVF.*

O-61
Experiences with infertility, dropping out of treatment, psychiatric mental society crisis

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Introduction: Since infertility is treated as medicine problems, psychological aspect of these problems is ignored. This study was performed as systematic review to assess psychological problems of infertile couples and their experiences in psychological and mental aspects.
Materials and Methods: At first we assessed 32 articles which entitled "assessing infertile couple's psychological, mental problems". Then we selected 10 articles through them that related with our research aims, and assessed their results.
Results: The results are classified in 5 aspects: psychological aspects, social and cultural problems, sexual issues, effects of stress on infertility treatment and psychological interactions. Studies suggested that women show higher level of depression than men. In total 11.0% of the infertile women met the criteria for a current major depressive episode, compared with 3.9% for the fertile women. In another study, infertile women's scores on measures of depression, anxiety, and hostility were significantly higher than the scores among a large normative sample. In one study on infertile women, the prevalence of a psychiatric disorder was found to be 40% in 112 infertile women. Of these, the most common diagnosis was anxiety disorder (23%), followed by major depressive disorder (17%). These findings reflect a

much higher prevalence of psychiatric disorders in this sample of infertility patients than the 10–12% seen in the primary care setting. In one study that performed by Khosravi on 50 infertile couples to assess sexual role in psychiatric health, it was reported that comparing to men, infertility has more negative meaning for women. One of the most difficult aspects that infertile women describe is the difficulty in social settings, such as dealing with feelings of jealousy and envy when learning of other women's pregnancies or being in the presence with others who have infants. It has been reported that as many as 13% of women experience passive suicidal ideation after an unsuccessful IVF attempt. In a report by the World Health Organization on the social consequences in developing countries, some childless women choose suicide over the torturous life and mental anguish caused by infertility.

Conclusion: Results showed that infertile couples have bitter experiences in their life and faced psychological, mental, and social stress.

***Key words**: Infertility, Psychiatry, IVF.*

O-62
The barrier of child adoption among infertile women in IVF center in Yazd

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Introduction: Child adoption seems as a useful way for couple that did not respond to ART. The major reasons of unwilling to adopt a child are: adoption is not a solution to the infertility, adoption is psychologically unacceptable, and fear of unknown parental background and abnormal behavior.

Materials and Methods: To determine the barrier of child adoption among infertile women we undertook a questionnaire survey of infertile women seen in IVF center in Yazd. The data were analyzed by means of simple percentages, using t-tests, chi-square tests and regression equations at the 95% confidence level. One hundred and questionnaires were analyzed**.**

Results: In total 95.3% of couples did not perform child adoption and 82.4% of them never wanted to adopt a child. Type of infertility had no influence on child adoption. In 72.3% of them the baby sex was not important.

Conclusion: In the presence of such factors, especially when the probability of treatment of infertility is small, child adoption as a treatment option should be offered early so that willing couples can initiate the processes.

***Key words:** Child adoption, Infertility.*

O-63
The factors effective on sexual dysfunction and infertility in patients with chronic renal failure (CRF)

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Introduction: Problems in sexual function are common feature of CRF. Approximately 50% of men with CRF complain of erectile dysfunction. More that 50% of CRF women have complain of disturbance in menstruation and infertility and sexual dysfunction. Both men and women experience decreased libido and decline in the frequency of intercourse. Infertility and sexual dysfunction can affect the quality of life.

Materials and Methods: This is a review article that review 40 full and abstract study about sexual dysfunction and infertility in male and female with chronic renal failure published between 1999-2007.

Results: The cause of sexual dysfunction and infertility in male and female with chronic renal failure is multifactorial and several factor such as neuropathy, autonomic insufficiency, anemia, hyperparathyroidism, peripheral vascular disease, drugs, uremia and fatigue play important role in this problem . Also anihypertensive therapy agents and antidepressants and other chronic disease such as diabetes play role in genesis of this problem. Chronic renal failure is associated with testicular function damage, impaired spermatogenesis, decrease volume of ejaculation and azoospermia. In women with CRF, disturbances in hormonal status and other agents lead to amenorrhea, disturbances in menstruation, galactorrea, repeated abortion, infertility, decrease libido, vaginal dryness, disparonia and reduction ability to reach orgasm. Some of the intervention available to decrease sexual dysfunction include the use of sildenafil, prolactin antidotes, administration of testosterone, controlling of secondary hyper-parathyroidism, and administration of erythropoietin for treatment of anemia.

Conclusion: Appropriative assessment in clinical setting and use of appropriate intervention can help to decrease sexual problem and improve quality of life in CRF patient.

Key words: *Sexual dysfunction, Infertility, Chronic renal failure.*

O-64
Evaluation of Isfahan female's opinion about ovum donation and surrogacy program for infertility treatment

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Introduction: Infertility is one of the most problems of couples today. Many of infertile couples could have baby by using new methods of ART. Two of the newest methods for infertility treatment are ovum donation and surrogacy. The aim of this study was determining females` opinion about these procedures for infertility treatment.

Materials and Methods: This is a descriptive analytic study which has been done on 200 women in 2007 in Isfahan. Cases selected as simple sampling and a questionnaire was fielded by each cases. Demographic information and general information about knowledge and cases` opinion about ovum donation and surrogacy were gathered and analyzed.

Results: Most of the cases (35%) were in two age group of (30-39) and (40-49) years old and the least cases (6%) were in age group (50-65) years old. In total 65% of cases were married, 28% had high school degree and 71% were graduated from university. Overall, 53% of cases had no information about ovum donation and surrogacy program. The results showed that 69% of cases were agree for surrogacy and 59% were agree for ovum donation. While 43% of them were disagree for them if they were infertile. Most of cases believed that having baby by using surrogacy (56%) or ovum donation (59%) are better than adoption. Many cases didn't know anything about religion roles about surrogacy (44%) or ovum donation (46%). Regarding advertisment by multimedia, 49% of them were agreeing for surrogacy procedure and 60% were agreeing for ovum donation. At the end mostly (88%) believed that psychiatric consulting is necessary for donor and recipient uterine.

Conclusion: More than half of cases had no information about surrogacy and ovum donation procedure. Also more than half of cases were agree with surrogacy and ovum donation procedures for infertile couple treatment. About Islam opinion to do these procedures for infertile couples, 45% of cases didn't know anything, so informing population for this method of infertility treatment seems to be necessary. Most of the women (82%) believed that infertility treatment by using surrogacy and ovum donation must be secret for everybody including the baby which has been born by this method.

Key words: *Infertility, Surrogacy, Ovum donation.*

O-65
The prevalence of infertility causes in patients who referred to Fatmeh Zahra Infertility Center, Babol Medical University from September 2003 to September 2006

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Introduction: Infertility is one of the greatest gynecology problems that can make psychology pressures on family and society. It consist about 10 to 15% of couples. With exact assistance we can find 85-90% of infertility causes and treat them. This study is about the prevalence of each causes of in fertility in couples refer to Fatemeh Zahra Infertility Center.

Materials and Methods: This study was a descriptive study based on existing data from infertility patients' files that refer to Fatemeh Zahra Infertility Center.

Results: From 2230 patients who refer to our center 78.5% had primary infertility and 21.5% had secondary infertility. In total 38.5% of infertile women were 17-24 year old, 46% were 25-35 year and 15.5% were more than 35 year old. The percentage of different causes of infertility were as fallows; ovulation disorder 44%, tubal 11%, uterine 8%, unknown factors 3.5% and in 4% the file information were insufficient.

Conclusion: Regarding to this study finding the prevalence of female factors were more than male factors and between female factors, ovulation problems has the most frequency.

Key words: *Infertility, Prevalence, Ovulation problems.*

O-66
Investigating the marital satisfaction of infertile women referring to Infertility Center of Imam Khomaini Hospital, Sari

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Introduction: Infertility induces crises in all aspects of infertile couples' lives. One out of six couples is infertile worldwide. Marital dissatisfaction is one of the outcomes of infertility and women show more psychological reactions than their spouses. Marital satisfaction is an important factor to fortify the basis of family. Infertile women are exposed to emotional pressures and feelings of depression, anger, anxiety, fear, misbehavior, and psychiatric deprivations. Such feelings severely affect the couple's relationship. This study was conducted on to determine the marital satisfaction of infertile women referring to Infertility Center of Imam Khomeini Hospital in Sari.
Materials and Methods: This analytic-descriptive study was carried out on 30 infertile women.
The gathering tool of information was a questionnaire designed in two sections of demographic characteristics and marital satisfaction. Descriptive statistics was used.
Results: The majority of women (85%) were in the age group of 26-30 years old. 92% were housewives. 65% had a high school diploma. 75% of women were satisfied with personality and personal habits of their spouses. 65% of women claimed that their spouses and they understood each other deeply.
28% of women stated that their spouses sometimes spoke to them contemptuously. 53% of women were satisfied with lovely speech by their spouses before sexual contacts. 15% of women had diversity of opinions in their marital life. 64% of women requested their needs easily from their spouses.
42% of women did everything to avoid engagement with their spouses.
Conclusion: Infertility as one of the bitterest experiences of life imposes several marital problems upon couples. Psychiatric consultation besides infertility treatment is recommended to infertile couples to boost marital relationship.
Key words: *Marital satisfaction, Infertile women, Infertility.*

O-67
The effect of counseling on depression and anxiety after a traumatic childbirth

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Introdcution: Adverse childbirth experiences as a trauma can evoke fear, anxiety and depression for some women. This study was conducted to investigate the effect of counseling on mood disorders after a traumatic childbirth.
Materials and methods: This research was a clinical trial and conducted at Kamaly Hospital in Karaj. In total 300 women who had experienced a traumatic childbirth were selected by simple sampling and randomized into an intervention (n=150) or a control (n=150) group. The intervention group received face-to-face counseling within 72 hours of birth. The data collection tool was questionnaire, completed via interview. Measuring variables were demographic characteristic, reproductive history, maternity social support, depression and anxiety. Data were analyzed by descriptive statistics and inferential tests (chi-square, Fisher's exact test and McNemar test) using SPSS version 13 software.
Results: At 4-6 weeks follow-up intervention group women reported less anxiety (p-value=0.005), for depression (p-value=0.203) there was no significant different between two groups. At 3-month follow-up, intervention group women in comparison with control group reported less depression (p-value=0.012) and less anxiety.
Conclusion: A midwife-led counseling was effective in reducing depression and anxiety after a distressing childbirth.
Key words: *Counseling, Traumatic childbirth, Postpartum depression, Aanxiety.*

O-68
Sexual function of infertile women referring to Infertility Center in Sari

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Introduction: Proper sexual contact is an important agent to exist and strengthen the bases of family. Sexual disappointment produces many

disorders from temporary annoyance up to depression. Infertility as the bitterest experience of life affects sexual function. In this situation sexual relationship will be disappointing and torturing. Hypoactivity in sexual desire and constant disagreement about it, frigidity and changes to achieve orgasm phase are the usual challenge and disputes of couples about sexual function. Some of infertile women believe that they are sexually disabled and unacceptable in view of their spouses. They lose their self-esteem that lasts to weakness of sexual relationship and affects family functions. This study was designed to determine the sexual function of infertile women referring to infertility center in Sari city.

Materials and Methods: This descriptive study was conducted on 26 infertile women referring to infertility center in Sari city. The gathering tool of information was a questionnaire. Descriptive statistics was used to analyses the data.

Results: In total 13.3% of women stated that they had no sexual contact with their spouses during recent month. In 61.5% of couples, men began sexual activities. Only 34.6% of women always gave positive responses to sexual requests of spouses satisfactorily. 15% of cases stated that they hadn't been stimulated with sexual stimulants at all. The majority (38.4%) stated that they sometimes achieved orgasm during sexual activities in recent month and it was difficult somehow. Also 38% didn't achieve orgasm phase so far.

Conclusion: Education and consultation of infertile couples to better sexual function seems necessary in Infertility clinics.

Kew words: *Sexual function, Infertility, Infertile women.*

O-69
Seroprevalence of cytomegalovirus in spontaneous human abortion in Ilam

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Introduction: Despite the established implications of human cytomegalovirus (HCMV) in congenital infection, there are still conflicting reports regarding the association of HCMV with spontaneous abortion. HCMV antibodies were already described in blood from abortion cases, but did not indicate HCMV pathogenical role. This study performed to access seroprevalence of viral IgG and IgM in pregnant women in abortion process, regarding to the age.

Materials and Methods: Blood samples from 42 patients in abortion process were collected, then serologic tests were performed by ELISA kits (Genessis) on all specimens.

Results: Viral IgG seropositivity (>3EU/ml) was found in 9.75% and IgM seropositivity (>10EU/ml) was determined in 26.82% of cases. Results show that IgG seropositivity was related to rising in age, but IgM was not show relationship with age in this study.

Conclusion: This seroprevalence rate is according to previous surveys in Iran. Although viral seropositivity for IgG and IgM had been found in 9.75% and in 26.82% of the cases respectively, these results do not support HCMV as a major abortion-related factor as we could not found any correlation between abortion and active HCMV. If active infection due to viral reactivation occurred during the abortion process, it cannot be accessed by IgG or IgM assays and more sensitive and specific methods (such as PCR) are needed.

Key words: *Seroprevalence, Spontaneous abortion, HCMV.*

O-70
Effect of soy on hot flashes in menopausal women

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Introduction: Hot flash is common and discomfort sign of menopause that is shown with blazing sweatiness, hotness feeling, tachycardia and agitation. Hot flashes cause disturbance in daily activity and night sleep quality. Despite the effect of hormone replacement therapy (HRT) on hot flashes, nowadays there are diversity of opinions about HRT and long consumption of it. In addition the acceptances of HRT between Iranian women are very low. Study of numerous texts are shown that isoflavone in nut soy is phytoestrogen that may be effective in control of hot flashes. We did this study to examine the change in hot flashes in response to consumption of daily 74 mg Isoflavone in 60 gr nut soy in menopausal women.

Materials and Methods: This study was clinical trial with before and after design. In total 31 menopausal women was involved in this study. All participants were assessed daily at baseline and after one, two, and there months of intervention.

Results: The data showed a decrease in times of hot flashes in baseline 5.88±2.61 to 3.45±1.82 after one month, to 2.73±1.57 after two months and to 2.16±1.48 after three months consumption of nut soy (p-value<0.001). Nut soy caused a reduction in the level of FSH, LH and estradiol after 3 months but this was not significant (p-value>0.05).
Conclusion: This study suggests that nut soy (60 gr daily) may decrease the times of hot flashes.
***Key words**: Hot flashes, Nut soy, Isoflavone, Phytoestrogen, Menopausal syndrome.*

O-71
Uterine arteries impedance changes in pregnancy prediction after intrauterine insemination by transvaginal color Doppler ultrasonography

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Introduction: Unexplained infertility is diagnosed when all of the standard elements of the infertility evaluation yield normal results.
One of methods of infertility diagnosis is transvaginal color Doppler ultrasonography. It is useful to determine pulsatility and resistance index of uterine arteries in prediction of implantation after assisted reproductive technology. The purpose of this study was to determine the uterine arteries impedance changes in pregnancy prediction after intrauterine insemination by transvaginal color Doppler ultrasonography.

Mrterials and Methods: 50 women with unexplained infertility, and the mean age 27.5 years, were evaluated for hemodynamic of uterine arteries, endometrial thickness and echogenicity on 2nd day of menstruation. After induction ovulation by clomiphene and HMG again, the same parameters was measured on HCG injection IUI was done.
Results: Mean pulsatility index (MPI) of uterine arteries was 2.12 (r=0.28) and 2.25 (r=0.67) in pregnant and 2.25 (r=0.67) in pregnant and 2.25 (r=0.24), 1.98(r=0.71) in non-pregnant, respectively on second day and HCG injection day. Mean resistance index (MRI) was 0.81 (r=0.04) in pregnant and 0.82 (r=0.05), 0.8(r=0.86) in non-pregnant respectively on second day and HCG injection day. On injection day, difference of MPI between two groups was 0.27(p=0.14). Mean endometrial thickness was 7.55 mm (r=2.83) in pregnant and 7.25 mm (r=2.89) in non-pregnant. MPI was raised with increase of endometrial thickness in non-pregnant (p=0.4) and MPI was decreased with increase of endometrial thickness in pregnant (p=0.5). 75% of pregnant, and 37.5% of non pregnant had endometrial hypoechogenicity, 25% of pregnant and 62.5% of non-pregnant had hyperechogenicity (p=0.05).
Conclusion: The results of this study suggest probably, transvaginal color Doppler ultrasonography may not be a reliable method to pregnancy prediction in women with unexplained infertility pregnancy, although further studies are needed to more evaluation.
***Keywords:** unexplained infertility, transvaginal color Doppler ultrasonography, intrauterine insemination.*

B- Poster Presentation

1-Gynaecology

P-1
Comparing the prevalence of ongoing pregnancy in couples with male factor and female factor subfertility after IUI

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Introduction: Intrauterine insemination (IUI) is a common treatment in sub fertile couples, which is offered in case of subfertility due to male factor, cervical factor, and unexplained subfertility. A reliable prediction of a successful ongoing pregnancy cannot be given for a specific case.
Materials and Methods: In a retrospective descriptive cohort study 1000 patient with simple random sampling from July 2001 to July 2005 in Shahid Beheshti Hospital Fertility and Infertility Research Center entered the study and the prevalence of ongoing pregnancy in subfertile couples with male factor and female factor after IUI compared. This prevalence compared with chi-square test.
Results: According to chi- square test, the p-value was 0.14, so the prevalence of ongoing pregnancy in two groups doesn't have statistically significant difference.
Conclusion: Male and female factors contribute in the IUI outcome, but in the prediction of ongoing pregnancy after IUI, combination of factors are important and one factor doesn't directly influence the outcome of IUI.
Key words: *Intrauterine Insemination, Male factor, Infertility, Female factor.*

P-2
Evaluation of the prognostic value of chlamydia thrachomatis antibody testing (CAT) and HSG and laparoscopy in predicting tubal factor infertility

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Introduction: Laparoscopy is considered the gold standard for the evaluation of tubal disease, but it is an invasive and costly procedure.
CAT is a simple, inexpensive, and non–invasive method. HSG is suffering from positive and negative results. The aim of this study was the comparison of these three methods in predicting of tubal factor.
Materials and Methods: Anti chlamydia thrachomatis IgG were determined in 144 infertility patients' sera by means of ELISA methods. Laparoscopy and HSG were carried out in all patients.
The positive CAT results were compared with HSG and laparoscopy with respect of their predictive value of tubal factor infertility. The results were analyzed using SPSS software. For determination of cut off point Roc curve was applied.
Results: In 16 (11.1%) out of the 144 studied patients the CAT was positive. The statistical analysis of results revealed that the sensitivity of CAT in determining tubal factory infertility was 54.1%, the specificity was 97.5% and positive likelihood and predictive value was 21 and 0.47 respectively.
The same results in HSG was 62.5%, 91.6% , 7.5 and 0.4 respectively.
Conclusion: The results indicated, not only CAT is a simple and inexpensive but also it is more likely to be abnormal in patients with tubal factor infertility comparing with HSG. It is recommended that CAT should become an integral part of fertility work-up.
Key Words: *CAT, HSG, Infertility, Laparoscopy*

P-3
The relationship between diameter and number of follicles and endometrial thickness and pregnancy success after intrauterine insemination (IUI)

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Introduction: Induction ovulation and intrauterine insemination is one of the therapeutic approaches for male infertility. Timing of intrauterine insemination based on the number and diameter of follicles and endometrial thickness is essential for

maximize pregnancy rate and minimize complications such as hyperstimulation syndrome. Therefore this study is done for evaluation of relationship between pregnancy rate and number and diameter of follicles and endometrial thickness after induction ovulation with clomiphene citrate and IUI.

Materials and Methods: In this study among patients referring to Mashhad Infertility Center, 100 Patient were randomly assigned to case (50 pregnant women) or control (50 non pregnant women) group in 2001. The number and diameter of follicles and endometrial thickness were evaluated and compared by transvaginal ultrasound in these 2 groups in the day of injection of Human Chorionic Gonadotropine. Results of study were analyzed by chi–square, T-test, ANOVA and multiple regressions.

Results: This study was revealed that there is significant differences between pregnancy rate and follicles diameter in two groups (P=0.38, X^2=5.8).

Also in two groups there is significant differences between pregnancy rate and follicles number (p-value=0.01, R=0.29). There is significant differences between pregnancy rate and endometrial thickness in two groups (p-value=0.033, R=0.29).

Conclusion: In this study pregnancy rate was correlated with number and diameter of follicles and endometrial thickness after induction of ovulation with clomiphene citrate and IUI.

Key words: *Pregnancy rate, Diameter of follicle, Number of follicle, Endometrial thickness line, Induction of ovulation, Clomiphene citrate, Intrauterine insemination.*

P-4
Bilateral pleural effusion as the main presentation of ovarian hyperstimulation syndrome

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Introduction: To report a case of ovarian hyperstimulation syndrome with bilateral pleural effusion as the main presenting clinical signs. A 31-year-old woman known to have bilateral polycystic ovaries underwent IVF.

Materials and Methods: A patient with sever ovarian hyperstimulation with bilateral pleuresis was evaluated. Plerosynthesis was done for the patient and patient was better.

Results: A total of 2000 mL of pleural fluid was drained. Complete resolution of symptoms occurred after 9 days.

Conclusion: This case described is unusual in that the patient presented with significant pleural effusions on day 7 after HCG injection and continued to be symptomatic. This is much earlier than any previously described case report of pleural effusion associated with ovarian hyperstimulation syndrome.

Key words: *Pleurocentesis, Pleural effusion, OHSS.*

P-5
Pregnancy outcome with intracytoplasmic sperm injection method in a woman with prosthetic heart valves, a case report

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Introduction: There is an increased risk of thromboembolism, anticoagulant related hemorrhage, fetal wastage and congestive cardiac failure in pregnant women with mechanical heart valves. In order to have a good outcome, the care of such patients must necessarily be multidisciplinary and in a well–equipped centre with adequate support services. One such patient who had mechanical mitral and aortic valves replacement in 2000 and was on warfarin anticoagulant therapy, were presented with a first trimester pregnancy by ICSI method in 2006. She was in stable homodynamic state and went through pregnancy without event. Delivery was done by caesarian section at 37 weeks gestation age.

Conclusion: With considering use of warfarin during pregnancy, use of stimulation protocol during ICSI and delivering of a normal neonate, could be interested.

Key words: *Pregnancy, Anticoagulant, Prosthetic heart valve, Intra cytoplasmic sperm injection.*

P-6

Assessment of fetus well being in ART mothers: color doppler or BPS?

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Introduction: This study was conducted to evaluate the role of color Doppler ultrasonography in evaluation of fetal distress.
Materials and Methods: Dopller ultrasonography and BPS were used to evaluate the fetal distress in late pregnancies near delivery and comparison was made by APGAR scores after born in 100 patients.
Results: Color doppler ultrasonography is more reliable than BPS in the evaluation of fetal in ART patients near the delivery.
Conclusion: Color doppler ultrasonography is a reliable method for evaluation of fetus.
Key words: *Color doppler, BPS, Fetal distress.*

P-7
Conservative management versus aspiration for functional ovarian cyst before ovarian stimulation for ART

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Introduction: The formation of functional ovarian cysts has been recognized as one of the side effects of GnRh agonist administration. The formation of cysts during IVF treatment may be no clinical significant or may negatively influence its outcome. The objective of this study is examined their effect on IVF outcome.
Materials and Methods: A total of 280 infertile women undergo IVF cycle with long protocol. The formation of cysts during IVF treatment is defined as a thin-wall intra ovarian sonolucent structure with a mean diameter of ≥25 mm. Women who developed ovarian cysts are randomly divided into two groups: I/ undergo cyst aspiration II/ no intervention. A blood sample was taken to measure stradiol, LH and FSH levels on the second day of cycle. Following GnRh agonist administration and transvaginal ultrasound scan was performed on the day 7 of cycle following GnRh agonist administration; in group I cyst aspiration under local anesthesia is performed in the day 7 cycle. In group II is no intervention. E2 level is measured on the day HCG administration.
Results: Will be presented in the congress.
Conclusion: Will be presented in the congress.

2-Embryology

P-8
Effects of physical parameters of semen on IVF technique in spinal cord injured men

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Introduction: One of the most important causes of infertility in men is spinal cord injury (SCI). In Iran after the war the incidence of these kinds of infertile men raised. Reduced fertility in men with SCI results from inability to ejaculate and poor semen quality. IVF – ICSI technique is one of the most effective methods for treatment of these patients. This study compares the influence of some semen parameters of healthy and SCI men on the rate of successfulness of ICSI method in both groups.
Materials and Methods: In total 71 male SCI and 44 healthy men (unexplained infertile couples) treated with ICSI methods between 1376–1380 in Kowsar Assisted Reproductive Center. Routine semen analysis was performed to evaluate semen's parameters including: volume, PH, viscosity and liquifiction in both groups.
Results: The results show that these parameters of semen don't have any influence on the rate of fertilization on both groups (p-value<0.05) except viscosity (p-value= 0.013) .
Conclusion: It seems that the best choice of assisted reproduction treatment for couples with spinal cord injured men is IVF–ICSI technique. Of course several parameters can influence infertility in these couples, so it needs more researches in this field.
Key words: *SCI, Semen parameter, ICSI.*

P-9
Differentiation between the effect of protamine deficiency and failed oocyte activation on fertilization post ICSI

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Introduction: Sperm premature chromosomal condensation (PCC) and failed oocyte activation are considered to result in failed fertilization post intracytoplasmic sperm injection (ICSI). Recent studies also suggested that sperm protamine deficiency may induce PCC. The aim of this study was to assess the effect of failed oocyte activation and protamine deficiency on failed fertilization post ICSI and to indicate whether these factors result in fertilization failure, dependently or independently of each other?
Materials and Methods: This study consisted of 56 (first group) and 86 (second group) patients undergoing ICSI. After ICSI, the remaining processed samples were used for evaluation of protamine deficiency (chromomycin A3 staining) and sperm morphology (papanicolaou staining). 16-18 hr post ICSI, oocytes were assessed for presence or absence of pronucleai in the both groups. In the second group the failed fertilized oocytes were chemically activated by ionomycin. Failed fertilized oocytes and chemically activated failed fertilized oocytes were fixed and stained (Gimsa staining) for chromatin analysis.
Results: Percentage of fertilization in the first and second groups of patients was 60.20% and 59.94%, respectively. In the second group, percentage of fertilization rise to 83.72% following chemical activation. A significant negative correlation was observed between percentages of CMA3 positivity with fertilization rate in both groups of patients. A significant negative correlation was observed between percentage of PCC and fertilization rate in the first group while a significant positive correlation was observed between percentage of PCC and CMA3 positivity in the second group. By sub grouping the patients into low and high CMA3 positivity in each group, the results reveal that fertilization rate, percentage of intact and PCC sperm were significantly different in the two subgroups in both groups of patients.
Conclusion: The results of this study reveal that after failed oocyte activation, possibly due to sperm factors, protamine deficiency may induce failed fertilization by inducing PCC. However, mouse sperm lacking P2 protamine, have been shown to activate oocyte post ICSI, further emphasizing these two factors may function independently of each other in failed fertilization.
Key words: *Failed oocyte activation, Protamine deficiency, ICSI, PCC, Ionomycin.*

P-10
The intensity of the uterine glands glycoconjugates reaction to different lectins in implantation period after treatment with different doses of PMSG in mature rat

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Introduction: The aim of this project was to study the effects of different doses of Pregnant Mare's Serum Gonadotropin (PMSG) on uterine glands glycoconjugates in implantation period.
Materials and Methods: In total 40 pregnant rats were divided to 4 experimental (8, 16, 24 and 40 I.U PMSG) and control group. In experimental groups, 48 hours after the PMSG injection each animal received an intraperitoneal injection of 10 I.U Human Chorionic Gonadotropin (HCG). Control rats injected with distilled water intraperitoneally in diestrus or proestrus and 10 I.U. HCG in estrus phase. After HCG injection, experimental and control rats mated with proven fertile male rats. The observation of vaginal plug was considered as 0.5 day of pregnancy. Rats were killed at 5.5 day of pregnancy and their uteruses were removed. After routine histological preparations, the intensity of the reactions to WGA, DBA, PNA, ConA, SBA and UEA lectins were measured. The data showed that HCG reduced some glycoconjugates of uterus especially uterine gland glycoconjugates. Uterine gland secretions are important for blastocyst receptivity and growth. Therefore it seems that HCG can reduce the rate of implantation through reduction in these glycoconjugates.
Results: In uterine glands, the less and the most effect on alteration of glycoconjugates were seen in 24 and 40 I.U. PMSG respectively.
Conclusion: The data showed that PMSG reduced some glycoconjugates of uterus especially uterine glands glycoconjugates. Uterine gland secretions are important for blastocyst receptivity and growth. Therefore it seems that PMSG can reduce the rate of implantation through reduction in these glycoconjugates.

Key words: *Glycoconjugate, PMSG, Lectin, Uterine gland.*

P-11
The effects of electromagnetic field (EMF) on development of ovary in rat, a light microscopic study

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Introduction: With the increase in modern technology, many industrial and household appliances, which we take for granted to be safe, expose the public to magnetic fields. Various studies using rodents as experimental models have attempted to elucidate the reproductive toxic effects of exposure to weak magnetic fields and the results have been found to be rather contradictory. During the last decade genicular systems have been extensively studied and their vital importance for normal function is generally accepted and established their role in their regulation for spermatogenesis and ovogenesis. The aim of this study was to evaluate the effects of electromagnetic field (EMF) on in-vitro rat postnatal ovary development.
Materials and Methods: A total of 40 male and 40 female Wistar rats (about 15 week-old) procured from animal house were used for the study. The equipment was based on Helmholtez coil which works following Fleming's right hand rule. The experimental pups were exposed to EMF till five weeks of postnatal age.
Results: Our result showed heterochromatism and condensation of oocyte cell nucleus. Depopulation of follicles was seen. The empty spaces between the granulose and theca cells appeared.
conclusion: The results suggest that EMF exposure causes profound changes in the ovary on long term exposure it could result in irreversible damage which may lead to sub fertility. It is suggested that long term exposure should be avoided.
Key words: *EMF, Sub fertility, Oocyte.*

P-12
The study of developmental capacity of vitrified mouse blastocyst in different Straw after transfer

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Introduction: Vitrification is the commonly used methods for long-term storage of pre-implantation mammalian embryos. It has an essential part of assisted reproductive technologies. The Re-expansion rate, pregnancy and birth rate of vitrified blastocysts using Cps were compared with Ops and Conventional Straw.
Materials and Methods: Female NMRI mice were injected with Gonadotrophins to superovulate. Then the mice were killed by cervical dislocation and the mouse abdomen was dissected. The uterine horns were existed and blastocysts were collected in PBS and randomly allocated to four groups of; vitrification in Cps, in Conventional Straw, in Ops and untreated Controls. The vitrification solution was EFS 40%. After storage for 1 month in liquid nitrogen, the blastocysts were thawed in 0.5 M sucrose for in vitro culture in M16 medium. After 6 hr of culture, the number of expanded blastocysts were recorded and made ready for transfer to uterus of mouse pseudopregnant.
Results: The re-expansion rate of the Cps (72.1%) group was significantly higher (p-value<0.05) than Ops (52.55%) and C (38.6%) groups. The pregnancy (70%) and birth rate (45%) of blastocysts in Cps were similar to those of fresh blastocysts (80% and 45.5%). The pregnancy (10%) and birth rate (5.1%) in Conventional group were lower than Ops (20% and 7.5%), but were not significantly different.
Conclusion: Mouse blastocysts vitrified using Cps had a better result compare with Ops and Conventional Straw.T he value of Cps for vitrification of blastocysts may also merit investigation**.**
Key words: *Vitrification, Blastocyst, EFS, Pulled Straw***.**

P-13
Mycoplasma Hominis attaches to human spermatozoa

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Introduction: *Mycoplasma Hominis* causes urogenital diseases in men and women and is presumed to be sexually transmitted. We wanted to investigate whether spermatozoa could serve as vectors for *M. Hominis* in order to cause upper genital diseases in women.
Materials and Methods: By the use of normal light microscopy, the attachment of *M. Hominis* to spermatozoa was studied. Semen was incubated *in vitro* with *M. Hominis.* Purified, motile spermatozoa were examined for attachment of *M Hominis.* Semen samples were retrieved from 30 healthy donors with a normal sperm count (>20 x 10^6 spermatozoa/ml). The semen samples were kept at room temperature, in darkness and for no longer than 3 hr before use, the spermatozoa were purified by a 'swim-up' procedure. *Mycoplasma Hominis* was cultured in 10 ml of PPLO medium and incubated at 37°C. After 48 hr growth, the medium changed color from red to orange, which indicated an exponential growth phase.
Results: *Mycoplasma Hominis* was shown to adhere to the head, midpiece and tail of the spermatozoa. The spermatozoa became immotile when many *M. Hominis* were attached. However, the motile spermatozoa were demonstrated to carry *M. Hominis* and in this case the mycoplasmas were seen to attach mostly to the midpiece. Occasionally, *M. Hominis* was seen at the head but not at the tail. A record of the number of spermatozoa with mycoplasma attached as a function of times. The curve reached a plateau after 2 hr, where only 30% of the sperm had at least one cell or a micro colony of *M. Hominis* bound.
Conclusion: *Mycoplasma Hominis* can bind to human spermatozoa and thus could be carried by motile sperm. This ability may be important in the process of causing female genital diseases and infertility.
Key words: *Adhesion, Inhibition, Mycoplasma Hominis, Spermatozoa, Microscopy.*

P-14
Effect of organic extract of syzygium aromaticum on the structure of reproductive system in male mouse

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Introduction: Over consumption of medicinal plants can cause serious side effects in most cases. One of the plants which are used in traditional medicine is syzygium aromaticum. Some researches showed that ethanolic extract of this plant significantly increased sexual behavior in male mouse. Therefore the purpose of this study was to evaluate the histological structure of different parts of reproductive organs in male mouse.
Materials and Methods: In total 40 adult BALB/c mice were randomly divided into 3 experiment and 1control groups. In experimental groups, extract with doses 250,500 and 1000 mg/kg were given orally for 48 days. In control group, the same volume of water was used. After termination of experiments, reproductive organs including testes, epididymis and seminal vesicle were removed after sacrificing the animals by deep anesthesia and stained by HandE.
Results: Histological and morphological evaluation revealed that in experimental groups the numbers of sperm in seminiferus tubules were decreased. The number of sertoli cells also decreased but no changes in leydig cell number was observed. The height of epithelium in epididyme was reduced but there was no change in the structure of seminal vesicle.
Conclusion: In conclusion, syzgium aromaticum can cause some side effects on reproductive Organs in male mouse.
Key words: *Syzgium, Reproduction.*

P-15
Effects of L-carnitine and acetyl-L-carnitine with pentoxifylline on the quality and motility on mice testicular sperm

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Introduction: The introduction of the intracytoplasmic sperm injection method (ICSI) enabled the treatment of obstructive and nonobstructive azoospermia as a result of

hypospermatogenesis. The testicular sperm are mostly immotile immediately after biopsy. The aim of this study was to assay comparative effects of L-carnitine and acetyl-L-carnitine with pentoxifylline on sperm parameters on mice testicular sperm in vitro.

Materials and Methods: Testes of 30 mice were removed, testicular tissue samples obtained by open biopsy were placed into a Falcon tube containing 2 ml of medium (Hams F10). The tissue was washed several times with Hams F10 and then centrifuged at 2000 *rpm* 10 min in order to separate the red cells. Then tissues were put in 3 ml of Hams F10 and were minced by gentle crushing between two needles and agitated for 60 seconds on a vortex to separate the different cell types. Supernatant was centrifuged for 10 min at 500 *rpm* to separate the other cells. Again the supernatant was centrifuged with 2000 *rpm* for 10 min. The pellets were divided into 4 groups. In control group sperms were treated in Hams' F10. In experimental groups, testicular sperms were treated with Hams F10 plus L-Carnitine, acetyl-L-carnitine and pentoxifylline (1.8 mM). The motility was assessed after 0, 30, 90 and180 min of incubation (25^{o}C). At the same times, for DNA assay, smears were prepared and stained with acridine orange, aniline blue and chromomycin A3.

Results: The mean volume of sperm motility was decreased after incubated in L-carnitine, acetyl-L-carnitine and pentoxifylline significantly. When compared between other groups, showed that L-carnitine and acetyl-L-carnitine increase motility and DNA quality in testicular sperm in selected time, while pentoxifylline only increased sperm motility.

Conclusion: It has been proved that L-carnitine and acetyl-L-carnitine are highly concentrated in the epididimis and play crucial role in sperm metabolism and maturity. We demonstrate they can increase motility and DNA quality in vitro too, while pentoxifylline increases motility of sperm without increases in DNA quality. Therefore L-carnitine and acetyl-L-carnitine can improve sperm quality in vitro and they can be useful for use in media for testicular sperm quality.

Key words: *Sperm motility, Protamin, L-carnitine, acetyl-L-carnitine, Pentoxifylline.*

P-16
Study of testicular germinal epithelium in adult mice treated with tyotepa and GnRH antagonist

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Introduction: Infertility problem in 20-30% of cases is due to male factors, in which spermatogenesis disorder has a prime role. One of the known causes of spermatogenesis disorder is chemotherapy in patients with cancer. The side effect of chemotherapy may last from ten years up to the end of the life. Since anti cancer drugs are mainly affect dividing cells , the aim of the present study is to investigate the spermatogenic effect of simultaneous treatment with anti cancer drug (tyotepa) and GnRH antagonist (cetrorelix) as a suppressor of spermatogonial proliferation.

Materials and Methods: In the present study 30 adult male Souri mice aging 6-8 weeks were used. The mice were divided into 3 groups; control, tyotepa and tyotepa+cetrorelix. Teyotepa were injected intraperitoneally for 5 days as 2.5 mg/kg. In the group that the effects of tyotepa were supposed to be prevented by using cetrorelix, cetrorelix injection was started one week before teyotepa treatment and continued for 3 weeks after teyotepa injection. Since spermatogenesis cycle is 35 days in mice, mice in experimental groups, as well as in control group, were sacrificed 35 days after teyotepa injection and testicular specimen were fixed in Bouein's fixative and paraffin embedded sections were stained with HandE and studied with light microscope.

Results: Microscopy revealed that in teyotepa injected mice, in comparison to control mice, most of the seminiferous tubules had lost spermatogenic cells from 50 to 100% and non of the seminiferous tubules had normal morphology. Administration of GnRH antagonist decreased spermatogenic cell loss down to 20 to 40% and some seminiferous tubules appeared normal.

Conclusion: The result of the present study indicates that administration of GnRH antagonist in mice greatly inhibits spermatogenic cell destruction by anticancer drug.

P-17
Sibling embryo blastocyst development rate is a good predictive factor for in vitro fertilization (IVF) of day 3 embryo transfer pregnancy rate

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Introduction: The purpose of this study was to evaluate pregnancy rate of IVF cycles in which sibling embryos developed to blastocyst.
Materials and Methods: This retrospective study was done in Mashhad Montaserieh Infertility Center from October 2003 to June 2005. In 182 IVF cycles which had more than 4 extra embryos [$\bar{X}$=6(4-18)] day 3 extra embryos were cultured in G2 (vitrolife) media to achieve blastocyst stage. IVF pregnancy success was documented by observing gestational sac and fetal heart in the 6th week of gestation in ultrasonography.
Results: Couples were divided into three groups according to extra embryo development to blastocyst stage. Group A; in 73 couples, none of extra embryos developed to blastocyst, the pregnancy rate (PR) was 10.9% (8/73). Group B; in 61 couples, less than 50% of extra embryos developed to blastocyst, the pregnancy rate was 26.2% (16/61). Group C; in 48 couples, more than 50% of extra embryos developed to blastocyst, pregnancy rate was 47.9% (23/48).
In statistical analysis, there was no significant difference between three groups in aspect of females' age $\bar{X}$=29 (18-38), number of oocytes retrieved $\bar{X}$=11.8 (7-28) and oocytes fertilization rate $\bar{X}$= 62% (40-100). Pregnancy rate in group C (47.9%) was more than group A and B (10.9% and 26.2% respectively) (p-value<0.001).
Conclusion: Couples, whose extra embryos develop to blastocyst stage, have more chance to achieve pregnancy however if these embryos don't develop to blastocyst stage and IVF procedure does not achieve pregnancy, lower chance of fertility in the next cycles of IVF must be predicted.
Key words: *Blastocyst development, Pregnancy rate, IVF.*

P-18
Effect of growth hormone on recovery of testicular damage induced by methotrexate in rat

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Introduction: This study was conducted to evaluate the role of human growth hormone (HGh) on testicular function recovery induced by methotrexate (MTX) in rat.
Materials and Methods: In total 24 male Wistar rats were randomly selected and divided into control (n=6) and experimental (n=18) groups. The experimental groups split into three groups of six. Each received 0.3 mg/kg HGh daily (IP), 1 mg/kg MTX weekly (IP) and 0.3 mg/kg HGh daily (IP) plus 1 mg/kg MTX weekly (IP) for 28 days, respectively; however, the control group just received vehicle (IP). In the day 28, rats were killed and sperm removed from cauda epididymis and analyzed for sperm motility, concentration and viability.
Testis tissues were also removed and prepared for histological evaluation.
Results: This study was confirmed methotrexate had destructive effects on testis germinal cells. There was a significant decrease in sperm count, viability and motility in MTX group when compared with control group (p-value<0.05). HGh had recovery effects on testis histology and improve sperm parameters (p-value<0.05) as compared with MTX group.
Conclusion: These results suggested that administration of HGh improved testicular function damaged by MTX.
Keywords: *Growth hormone, Methotrexate, Spermatogenesis, Testis, Rat.*

P-19
The effect of estrogen and progesterone hormones on the endometrial of ovariectomized mice

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Introduction: The aim of this study was to evaluate the changes in morphometrical indices of endometrial by the daily injection of estrogen and progesterone after ovariectomized mouse.

Materials and Methods: Forty adult NMRI female mice were ovariectomized and after two weeks, they were randomly divided into five groups according to the experimental design. Control group; the mice without any injection. Sham group; the mice, which were injected daily 0.1 ml of solvent oil through intra peritoneal (IP) injection for five days. Estrogen treated ovariectomized mice; which received daily dosage of 0.5 ml/mouse of hormone through IP injection for five days. Progesterone treated ovariectomized mice; which received daily dosage of 0.2 ml/mouse of progesterone hormone through IP injection for five days. Estrogen and progesterone treated mice; which received estrogen injection on the first day of treatment (0.5 ml/mouse) and four progesterone injections from the second day to the fifth day of treatment (0.2 ml/mouse). The mice were sacrificed I in every day (n=3) up to five days after treatment by cervical dislocation and the tissues were obtained from the middle 1/3 part of their uterine horns immediately and processed for morphological (HandE) staining and morpho-metrical studies.

Results: On the second day of treatment the diameter of glands was observed to be the highest in the progesterone treated group (53.75±6.32) and the number of glands (76.25±17.37) and thickness of endometrium (39.58±3.37) were observed to be the highest in the estrogen treated group (p-value=0.01).

Conclusion: Progesterone had affected on the gland whereas estrogen caused increase in height of endometrium.

Key words*: Endometrium, Morphometry, Ovariectomy, Progesterone, Estrogen.*

P-20
Evaluation of semen analysis and results of IVF and ICSI cycles in polyzoospermia

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Introduction: WHO suggested that men with sperm concentration of >250 million/ml are classified as polyzoospermia. The aim of this study was to evaluate the semen parameters in polyzoospermic ejaculates.

Materials and Methods: A total of 94 semen samples from polyzoospermic men were evaluated using WHO criteria.

Results: The mean of sperm parameters were within normal range as classified by WHO. The mean of sperm concentration (million/ml) was 312.54+75.6. The mean of fast and slow progressive motility were 15.56+15.05 and 39.67 + 15.45 respectively.

Conclusion: Patients with polyzoospermia have normal semen parameters.

Key words: *Polyzoospermia, Semen analysis, Infertility.*

P-21
Study of the impact of arachnotoxin on acrosome reaction in human sperm

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Introduction: The aim of this study was to determine and compare the effects of arachnotoxin as avenom extracted from the Chilean spider latrodectus mactans with that of progesterone which is known to induce the acrosome reaction through a transient increase of intracellular calcium and PH in capacitated human spermatozoa. It was observed that the venom induced a tonic contraction of smooth muscle in vas deferens of the rat. This effect was probably due to action of Na^+/Ca^+ exchanger.

Materials and Methods: ATX was extracted by squeezing the venom glands. After semen liquefaction (approximately 30 minutes) motile spermatozoa were harvested by swim–up and calcium and PH were also measured.

Results: The basal level of calcium was increased by ATX. Addition of ATX to spermatozoa pretreated with progesterone had a little effect on calcium suggesting that progestrone was more efficient in increasing calcium. ATX caused intracellular acidification, whereas progesterone caused dose-dependent alkalinization as was expected.

Conclusion: ATX caused an initial transient increase of calcium followed by a sustained elevation. Progesterone caused a rapid increase in calcium in spermatozoa by acting on a cell – surface nongenomic binding site. The acrosome reaction initiated by progesterone in human sperm is dependent on intracellular alkanization. ATX reduced PH in spermatozoa, suggesting that this compound can directly inhibit the Na^+/H^+ exchanger. It was found that intracellular alkanization via a Na^+/H^+ exchange mechanism leads to the initiation of human sperm motility.

The results indicated that ATX increases calcium and decreases PH in human sperm.
Key words: *Arachnotoxin, Human sperm, Intracellular calcium.*

P-22
The effects of Hinosan on fertility in the male Balb/C Mice

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Introduction: Hinosan is an organophosphate fungicide that inhibits acetylcolinesterase activity, which could be resulted in damages of reproductive organs. This compound has been used extensively in the agriculture, for blast pest control. Therefore, in the present study, we investigated the effect of Hinosan on spermatogenesis in mice.
Materials and Methods: For this study, the male mice were divided into three groups. In the experimental group, mice were injected with Hinosan consecutive doses (20mg/kg i.p, five consecutive days per week for one month), sham (corn oil injection) and control (no injection). Animals were scarified 35 days after the latest Hinosan injection. Therefore, the mice testis sections were made and morphologic aspects of testis and spermatogenesis processes were assessed. Data were analyzed using of one-way ANOWA. P-value<0.05 was considered Significant.
Results: The Hinosan showed a significant decrease in number of germ cells, spermatocyt, spermatids, Leydig cells, blood vessels and also diameter of seminiferous on testes of the mice decreased.
Conclusion: These results suggested that Hinosan is effective on spermatogenesis and seminiferous tubule structure also can exert decrease of germinal cells. Hinosan can induce infertility in mice.
Key words: *Organ phosphorus, Hinosan, Testis tissue, Leydig cells, spermatozoid.*

P-23
The effect of Diazinon on the levels of sex hormones in rats

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Introduction: Diazinon (DZN) is an organophosphate synthetic insecticide, widely used in agriculture and pest control in the environment the exposure to this pesticide could be resulted in damages of the living tissues. The present study was done to investigate the effects of Diazinon on the levels of sex hormones in the rats.
Materials and Methods: For this experiment, the female rats divided into three groupsof control (no injection), sham (corn oil injection) and DZN group (5, 10 mg/kg i.p, single dose, one day). Animals were killed 30 days (proestrus) after the injection. Blood samples were collected and estrogen, progesterone, LH and FSH levels by radioimmunoassay were assayed. Data were analyzed using of one-way ANOVA. Significance was set at p-value<0.05.
Results: The levels of estrogen and progesterone did not observe significant decreased. Also there were not significant decreased in LH and FSH levels compared with control group.
Conclusion: According to the results, it could be suggested that the single dose DZN cannot exert a significant effects on female mice. On the other hand, hormonal variations following long term DZN administration may be responsible for changes in infertility pattern in mice.
Key words: *Diazinon, DZN, Estrogen, Progesterone, LH, FSH.*

P-24
The long term effects of methoxsalen on ovary in the mice

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Introduction: Methoxsalen is a photoactive drug. Methoxsalen UV-A therapy is used for the treatment of cutaneous disorders (e.g. psoriasis, vitiligo). This drug inhibits the synthesis of DNA,

suppresses cell division and destroys of epidermal cells. However, this study evaluated the effect of methoxsalen on ovary structure and fertility in the mice.

Materials and Methods: For this study, fifty immature female mice were divided to three groups: control, sham and experiment. Sham was injected of corn oil. The methoxsalen group mice were injected with consecutive doses (30mg/kg ip, five consecutive days per week for one month). Animals were scarified 2 days after the latest methoxsalen injection. Therefore, the mice ovary sections were made and morphologic aspects of ovary and oogenesis processes were assessed.

Results: Our observations indicated that in this animal, methoxsalen significantly decreased the numbers of corpus luteal, Graafian follicle, and primordial follicle compared to control group. Also diameter of corpus luteal, granulosa layer, oocyte and graaf follicle decreased.

Conclusion: Our results showed that the long term exposure of methoxsalen is effective on oogenesis and can induce infertility in mice.

Key words: *Methoxsalen, Psoriasis, Granulose, Oocyte.*

P-25
Effect of Trigonella foenum-gracum seed extract on concenteration of testosterone and spermataogenesis in rat

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Introduction: Overpopulation is a global problem with grave implication for the future. Nowadays, large amount of plants with anti- pregnant and regulatory reproduction system potential have been found in order to minimize the problem. In the present study the effect of trigonella foenum-gracum extract on pituitary-gonad axis, that is the effect on the concentration of FSH, LH, testosterone and spermatogenesis was studied in order to assess the functioning of it in testis and in infertility in males.

Materials and Methods: Fifty rats were divided into five groups including control, sham and experimental groups. Each of the rats in experimental group was treated orally with 50, 100 and 150 mg dose of trigonella forename-grace extract for 14 days. The sham group received distillated water and the rats without administered trigonella forename-grace extract or distillated water were considered as control group. After 14 days, the blood from each rat was taken and concentration of FSH, LH and testosterone hormones was measured. Furthermore, the sample tissue of testis and epididymis from each rate were collected and histological study was carried out to achieve maximum information concerning the change of the testis and epididymis tissue between experimental and control groups. The results obtained from this study were statistically analyzed using Anova and Tukey test.

Results: The result of the study indicated that the concentration of LH and testosterone in experimental groups relatively reduced in comparison with control group (p-value≤0/05).

Conclusion: According to several reports and our findings trigonella seed extract contains saprogenic and diosgenin, which are precursor of progesterone and have anti gonadotropine and anti-androgeni character. Hence, they have the capability to reduce the concenteration of testosterone and LH hormones.

Conclusion: The results of histological studies demonstrated the morphological changes in spermatogenesis tubules and atrophy of leydig cells and epididymis.

Key words: *Trigonella Foenum, LH , FSH , Testosterone, Spermatogenesis, Rat.*

P-26
Cytogenetic and molecular evidences in two Iranian sisters with Swyer syndrome

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Introduction: XY female gonadal dysgenesis is characterized by a lack of testicular development, atrophic fallopian tubes, streak gonads, a rudimentary uterus, underdeveloped breasts and a female phenotype. XY female gonadal dysgenesis is a genetically heterogeneous disorder with autosomal, X and Y-linked forms. The Y-linked form is caused by mutations/deletions of the SRY gene. Sex reversal doesn't necessarily have to take place because of mutations or deletions in the SRY gene. In fact, only about 15% of all cases of gonadal dysgenesis occur because of mutations in SRY. In addition to these physical characteristics, many XY females are susceptible to a variety of diseases because of their sex reversal. Since the gonads in these females still exist, though as streaks of skin, the gonads could possibly form tumors that could later evolve to be cancerous. The

formation of tumors in the gonads is referred to as gonadoblastoma.

Materials and Methods: Two patients with 46XY karyotype and a female phenotype were diagnosed because of primary amenorrhea. One of them referred to our hospital because of her sterility.

Results: The chromosome analysis showed that she is a XY female individual. Also her other sterile sister was examined. She was affected with the same condition too. In each subject, cytogenetic analysis indicated a 46 XY karyotype without mosaicism. The second sister has a gonadal tumor in her medical history.

Conclusion: The result of molecular study of Yq for mutations or deletions in the SRY gene showed that there was not any deletion or mutation in the SRY gene of their Y chromosomes. Our data provide additional evidence for genetic heterogeneity in the etiology of 46XY gonadal dysgenesis.

Key words: *Gonadoblastoma, XY female syndrome, Cytogenetics, Swyer syndrome, Gonadal dysgenesis, Pseudohermaphroditism.*

P-27

Evaluation of testis tissue in second generation after interaperitoneal sperm injection in female rats

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Introduction: With sperm formation during puberty, their antigen can exert as unknown cell against immune system. So on vasectomy procedure, antigens are exposure to immune system and due to antibody antisperm. This study was done to determine the effect of antibody antisperm could by vasectomy on testis tissue of second generation rats.

Materials and Methods*:* This experimental and laboratory study was performed on 24 adult rats (250-300 gr.). Sperm of male rats were interaperitoneally injected to female rats during four stages with one week interval. Then under coupling condition male testis tissues of male children (second generation) were studied. After making tissue sections, number of seminiferous tubules, germinal cells and lydig cells were measured. Data were analyzed by SPSS and man-Whitney.

Results: Mean of germinal cells in normal samples and second generation was 9.5 and 8.2, respectively that was statistically significant. The mean number of germinal cells was 7.63 in normal group and 6.55 in second generation rats that were statistically significant. Seminiferous tubules in second generation (mean=307) was significantly higher than normal group (mean=1.62).

Conclusion: Antibody antisperm produced by vasectomy in body of female rat can cause changes such as the increase of seminiferous tubules, decrease of germinal cells and lydig cells in their children. These changes may cause disorder in fertility of second generation rats. Therefore it is suggested to be careful in blood transfusion of vasectomized patients to female patient who receive blood transfusion.

Key words: *Antibody antisperm, Testis tissue, Second generation, Rat.*

P-28

The Comparison of DNA fragmentation and sperm parameters after processing by density gradient and Swim-up methods

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Introduction: Assisted reproductive techniques (ART) have been applied extensively to alleviate the problem of infertility. Processing of semen is an integral part of all these treatments. Swim-up and density gradient techniques are the most common methods have been used to select motile spermatozoa prior to assisted fertilization. The aim of this study was to determine the efficiency of the PureSperm, All grad and Swim-up preparation techniques to recovered spermatozoa with high degree of motility, normal morphology and low level of DNA fragmentation.

Materials and Methods: A total of 35 semen samples were included in the study. Semen samples were collected and one part of the semen spread on a slide, the remainder was prepared using the Swim-up, PureSperm or All grad techniques. The recovered spermatozoa were evaluated for concentration, motility, and normal

morphology. Comet assay was carried out to assay DNA fragmentation in all samples.
Results: There were no significant differences in sperm parameters between PureSperm and All grad gradients, but both of them behaved significantly better than Swim-up. When prepared using the Swim-up technique, the spermatozoa recovered showed significantly higher level of DNA fragmentation in compare to gradients, but there were not any significant differences between PureSperm and All grad gradients.
Conclusion: The results of this study demonstrated several benefits of gradients method using PureSperm or All grade in separation of normal and motile spermatozoa with health DNA in compare to Swim-up method.
***Key words**: Sperm, Gradients, Sperm separation, Swim-up, Comet assay.*

P-29
Induction of endoderm lineages from mouse embryonic stem cells

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Introduction: The aim of this study was producing endoderm lineages from embryonic stem (ES) cells.
Materials and Methods: Mouse ES cells which produced previously in Anatomical Science Group of Ahwaz University was used. For inducing Embryoid bodies, undifferentiated ES cells transferred to low attachment culture dishes. After dividing Embryoid bodies into two experimental and control groups, they cultured in gelatin coated flasks for one week. Activin A (100ng/ml) was added to culture medium of experimental group. Gene expression of ectoderm (nestin), mesoderm (Brachyury) and endoderm (TAT, Pax4 and GATA4) was estimated by RT-PCR method. The cells of experimental and control groups was stained by PAS and Ditizone respectively.
Results: The results from RT-PCR method showed that all embryonic gene lineages were expressed in ES cell. In addition the expression of endoderm genes increased. This issue was established by PAS staining method for liver and Ditizone for pancreas tissues.
Conclusion: It can be suggested that, Activin A induces endoderm in ES cells. According to the more increased number of Ditizone stained cells of experimental group, it can be said that using this concentration of Activin A induces more differentiation of pancreatic cells from ES cells.
***Key words:** ES cells, Endoderm, Embryoid bodies, PAS, Ditizone.*

P-30
Culture of the rat mesenchymal stem cells: using peripheral blood-derived plasma as a culture medium supplement

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Introduction: In current protocol for isolation and expansion of mesenchymal stem cells (MSCs), the use of fetal calf serum (FCS) as a medium supplement is inevitable. FCS is immunogenic for human and may transfer infection in the case of transplantation. In the search for appropriate substitute for FCS, in present study, the effect of plasma prepared from peripheral blood on the growth of MSCs has been examined.
Materials and Methods: Bone marrow cells from rat's long bones were cultivated in medium containing either FCS or plasma prepared from rat's peripheral blood for three successive subcultures. In each stages of culture, colonogenic ability, population doubling, viability and the rate of cell proliferation in two groups were respectively evaluated by colony forming assay, cell count, MTT assay and drawing of growth curve. All experiments were replicated 10 times and the average values for each group were statistically compared. Furthermore, passaged-3 cells from each group were examined in terms of bone and adipogenic differentiation.
Results: The cells cultured in plasma group appeared morphologically fibroblastic, while those from FCS group were heterogeneous in which some non fibroblastic clear cells was observed in their culture. The culture of plasma groups produced more colon compared to those from FCS groups but the colons from FCS groups appeared larger than of those from the plasma groups. In general, the cells from FCS groups were significantly better than of those from plasma groups in terms of total population doubling number and MTT test but these differences were

not significant in passage 3. Moreover, growth curve drawn for each group indicated that the proliferation of the cells from plasma group is somewhat slower than of those from FCS groups. The cells from both groups were readily differentiated into osteoblastic and adipogenic cells lineages.

Conclusion: Taken together, plasma as a substitute for FCS could support MSCs proliferation and maintains their viability in vitro, although these effects were somewhat less than of FCS effects, but, instead, it could be considered as a safe substitute to FCS**.**

Key words*: Mesenchymal stem cells, Plasma, Cell proliferation, Fetal bovine serum, Differentiation.*

P-31
Study of molecular diagnosis of Y-chromosomal microdeletions in azoospermic and severe oligozoospermic men in Iranian population

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Introdcution: Genes on the long arm of Y-chromosome (Yq), particularly within interval 6, are believed to play a critical role in human spermatogenesis. It has shown that microdeletions of Yq may account for a significant proportion of men with infertility in different populations. Y-chromosome microdeletions are known as the second frequent genetic cause of spermatogenetic failure in infertile men after Klinefelter syndrome.

Materials and Methods: Over last 5 years total of 700 infertile individuals have been referred to our center for Yq microdeletions analysis. The objective of this study was to determine the proportion of men with idiopathic azoospermia or severe oligozoospermia, who carry microdeletions in Y-q. EDTA blood was taken and DNA extracted according to standard protocol. PCR were performed using different STSs multiplex reaction designed for covering three regions of Y-chromosome known as AZFa, AZFb, and AZFc.

Results: In total 4.7% azoospermic and oligozoospermic failed to amplify one or more STS. Interestingly 26 out of 33 patients had microdeletions in AZFc region that is 78.7% of all microdeletions found. These data suggest a 4.7% prevalence of Yq microdeletions in men with idiopathic azoospermia or severe oligozoospermia.

Conclusion: The physical locations of these microdeletions provide further support for the concept that a gene(s) on Y-q interval 6 plays an important role in spermatogenesis.

Key words: *Azoospermia, Genetic testing, Microdeletion, Oligozoospermia, Spermatogenesis, Y-chromosome.*

P-32
Development of an in vitro culture system capable of supporting human spermatogonia stem cell colonization

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Introduction: Since different conditions, can lead to a block of differentiation step and finally lead to maturation arrest, so isolation, proliferation and in vitro colonization of spermatogonia stem cell will allow powerful new approaches in biological basis for male reproduction and for treating selected causes of male infertility.

Materials and Methods: Biopsy of testis was obtained from patients with arrest in one of process of spermatogenesis. The samples minced mechanically into small pieces and after enzyme digestion were transported into incubator (32ºC) to separate the cells from seminiferus tubules. Mixed population of the cells was placed on lectin-coated dishes. After two days, Sertoli cells formed a confluent layer and spermatogonial cells were proliferated on top of them. Assay of the spermatogonial-cell-derived colonies was commenced after *7* days of co-culture and carried out every 3 days after the appearance of colonies during culture by an inverted microscope.

Results: The cell population obtained from the seminiferus tubules of human testes contained mostly two different cell types with different sizes and morphology. The first type was 7.5-8 µm in diameter and had an irregular outline with a granular appearance. Larger than the first one, the

second type had a diameter of 14–16μm, a spherical outline and two or three eccentrically placed nucleoli. The first type proliferated and created a monolayer of cells, whereas the other types created a colony after proliferation.
Conclusion: In this research, was found that Sertoli cells could influence human spermatogonial proliferation *in vitro*.
***Key words**: Stem cell, Spermatogenesis, Male infertility.*

P-33
Genetic counseling in carriers of reciprocal chromosomal translocations involving two autosomes

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Introduction: One of the main genetic causes involve in the pathogenesis of recurrent abortion is parental chromosomal abnormalities. The central concept in genetic counseling with such families is to estimate the probability of recurrence of unfavorable pregnancy outcomes. The main questions that consultants usually ask are: why this happened? What is the risk to be done again?
Materials and Methods: Our cases were two families with repeated miscarriage. The pedigrees were drawn, the chromosomes of couples were studied and estimation for recurrent risk was done. We tried to answer those two main questions and clear the results for them.
Results: Parental chromosome abnormalities were founded after karyotyping with GTG technique at 450 band resolution, revealing 46 chromosomes with balanced translocation of autosomes in one of the partner in both families. Recurrent risk was estimated at 1/6 for their future pregnancies in each family. Couples in which one partner is the carrier of such balanced translocation have increased risks of infertility, recurrent abortion**,** and delivery of chromosomally abnormal offspring.
Conclusion: Genetic counseling of such couples therefore presents a unique challenge and should be considered in dealing with such families.
***Key words:** Reciprocal translocation, Repeated miscarriages, Genetic counseling, Abortion, Family planning*.

3-Urology

P-34
Study of relationship between antisperm antibody and risk factors for its formation in infertile men

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Introduction: Many studies demonstrated that antisperm antibody (ASA) can interfere with fertilization. ASA can be detected in the serum or semen through numerous test. In this study, the percentage of ASA-IgG was determined by the direct mixed antiglobulin reaction (MAR) test in men from infertile couples in Khorramabad city. Furthermore, the risk factors for ASA were evaluated to see if there was any correlation with the presence of ASA.
Materials and Methods: In total 200 men were tested for ASA as a part of an infertility evaluation. Patients were grouped according to percentage of ASA of <10% or ≥10% risk factors for ASA (varicocele, hernia, and genitourinary infections) were calculated for each group. Statistical analysis was performed using Fisher's exact test.
Results: Prior varicocele was significantly associated with ASA by direct MAR (p-value<0.001). Prior hernia were not associated with ASA by direct MAR (p-value=0.52). Prior genitourinary infections were significantly associated with ASA by direct MAR (p-value< 0.001).
Conclusion: These finding suggest that manipulation of cord structures including the Vas were not associated with formation of ASA; however, varicocele and prior genitourinary infections are significant risk factors for the development of ASA .
***Key words:** Antisperm antibody, Infertility, Mixed antiglobulin reaction.*

P-35
Cigarette smoking and erectile dysfunction

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Introduction: Erectile dysfunction (ED) is a common public health problem affecting millions of men worldwide. It has a strong negative effect on interpersonal relationships and quality of life

Materials and Methods: this is a review article that review 14 full and abstract study about the current issues about effect of smoking on erectile dysfunction published between 1996 -2007.
Results: This review shows that the risk of (ED) is influence by smoking. Therefore the education for in order to be aware and informed of the effect of tobacco on erectile dysfunction seems necessary.
Conclusion: Smoking increase 50% risk of (ED) for men in their 30s and 40s. Review of study show that heavy smoking (30 cigarettes or more/day) was significantly associated with (ED). Study suggests that the prevalence of (ED) increase with number of years of smoking. Although passive exposure to cigarette smokes both at home or at work increase the incidence of (ED). Mechanism of (ED) in smoker included of abnormality low penile blood pressure, excessive venouse out flow the penis that can reduce the time of an erection is maintained, impaired the valve mechanism that traps blood in the penis result of nicotine in the blood stream, rapid contraction in penis tissue result of nicotine stimulation in the brain. Smoking of cigarette induces infertility in men by decrease sperm production, decrease testosterone, 19% reduction sperm concentration, increase abnormality in sperm motility and morphology, and reduction in sperm count and density
Key words: *Erectile dysfunction, Cigarette smoking.*

P-36
Effects of sperm parameters on success rate of intracytoplasmic sperm injection technique (ICSI) in spinal cord injured men

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Introduction: One of the most important causes of infertility in men is spinal cord injury (SCI) because of poor semen quality and inability in ejaculation. This study was about the effect of sperm parameters on the ICSI technique in spinal cord injured men.
Materials and Methods: In total 71 SCI men and 44 healthy men (unexplained infertile couples) treated with ICSI technique. Routine semen analysis was performed for both groups and then effect of each sperm parameter on rate of pregnancy in both groups was evaluated.
Results: Our results showed that most of the sperm parameters don't have any influence on the rate of pregnancy in both groups except motility, count2 and morphology of sperm.
Conclusion: We concluded that IVF-ICSI method is one of the best choices for pregnancy in infertile couples with male factor (SCI).
Key words: *Sperm parameter, SCI, ICSI, Infertility.*

P-37
Assessing of hypogonadism and free testosterone levels among sulfur mustard induced asthma in Iranian veterans: a case control study

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Introduction: Disorder of testosterone (T) biosynthesis and decline of serum level had reported in systemic inflammatory rheumatoid arthritis disease and with less frequency in chronic obstructive pulmonary disease and a few other pulmonary diseases. However, no known study has performed about sulfur mustard (SM) induced asthma in Iranian veterans. The aim of study was to assess status of hypogonadism and free serum T levels in SM induced asthma and to compare with healthy subjects.
Materials and Methods: Protocol of study based on random selection of target population among SM induced diseases by self- report questionnaire, male, physician- diagnosed asthma, and positive history of SM exposure. Healthy subjects enrolled according to age sex- matched as a control.
Results: Thirty-three chemical victims had mean age 53.39±6.69 SD years. Mean serum free T level was 15.98±10.52 SD which was in 30.6% of them below the lower normal range. Moreover, means serum values of Follicle stimulating hormone (FSH), Latinizing hormone (LH), and Dehidroepianderstone (DHEA) were 11.70±9.45 SD, 10.40±7.65 SD, and 1.32± 0.70 SD respectively. Mean free T level of 39 healthy subjects were 23.45±8.31 SD. The independent samples T test was performed between SM induced asthma and normal groups. Highly Significant differences were founded between free serum T levels among SM induced asthma and normal subjects (p-value<0.001).
Conclusion: The highly significant frequency of hypogonadisem observed in SM induced asthma group. It may be due to stress of chemical war, influence of glucocorticoid usage, and toxic effect

of SM on spermatogenesis. Further studies will suggest carrying out in future years.

Key words: *Testosterone, Hypogonadism, Asthma, Glucocorticoid, sulfur mustard gas, Steroid sex hormone, Pulmonary disease.*

P-38
Effect 0f ice massage on Hoku point for labor pain

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Introduction: One of the most important causes of anxiety in mother and families is labor pain and methods of its relief that have many effects on labor management, patient satisfaction and labor outcome. In the world, pharmacological and non-pharmacological methods are used to relief labor pain. Acupressure is one of the relief pain methods that can be used for labor pain but research on this subject is few. The purpose of this research was to determine the effect of ice massage on Hoku point for labor pain.

Materials and Methods: Participants of this clinical trial study were 60 pregnant women that have inclusive criterions. Participants were randomly divided to two groups of thirty, each. (Control=touch of Hoku point, Case=ice massage of Hoku point). This procedure did for thirty minutes. Labor pain of subjects was measured by visual analog scale before and after the procedure.

Results: There are no statistically significant differences between the groups in gestational age, parity and age. Results showed that ice massage of Hoku point reduced the pain significantly.

Conclusion: Acupressure is a noninvasive, simple and cheap method of relief pain and our study confirms its effect on reducing the labor pain. This method is useable in delivery rooms.

Key words*: Labor pain, Ice massage, Hoku point.*

P-39
Domestic violence against women during pregnancy

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Introduction: Every year 5 million women were abused by their partner. To determine the prevalence of domestic violence (DV) against women during pregnancy we performed this investigation in women in Yazd.

Materials and Methods: This cross sectional study was done in pregnant women in Yazd. We used domestic violence questionnaire including demographic information and verbal and physical and sexual abuse. Partner addiction and drug abuser was asked. Data analysis were performed with descriptive and X^2 tests.

Results: The results showed that %12.7 of husband jobless and 3.3% were drug abuser. Physical abuse was reported in 5-5.5% of the cases during the pregnancy. Fikree in USA (2006) reported that 44% of women reported lifetime marital physical abuse, 23% during the index pregnancy. Among the 132 women who were ever physically abused, all reported verbal abuse and 36% sexual coercion.

Key words: *Domestic violence , Abuse.*

P-40
Adolescent pregnancy

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Introduction: Pregnancy in adolescence has been and continues to be a problem in public health. Adolescent pregnancies are considered high risk with many obstetric complications and poor obstetric results. Adolescent parenting presents challenges to mothers and their children. Young mothers are often unprepared for the task of parenting and have relatively high rates of depression. Children of adolescent parents have in increased risk of being maltreated and experiencing behavioral and developmental problems. Studies show that adolescent primigravidas tended to have later awareness of their pregnancy, later first prenatal visits, fewer total prenatal visits, and less parental support. Adolescent also had higher rates of unintended pregnancy, prenatal morbidity, and more often the victims of physical abuse by male partners. Potentially inadequate weight gain and short duration of breast feeding were significantly more common in adolescents. In general, adolescent mothers were found to become pregnant largely due to misunderstandings about reproduction and birth control. Themes related to advantages of teen

pregnancy included enhancing connection, positive changes/benefits, and practical consideration. Themes related to disadvantages included lack of preparedness, changes/interference, and others' perception. To decrease the complications, adolescent pregnancies must be followed up as high risk pregnancies, especially in developing countries where socioeconomic factors are more pronounced.

Conclusion: Studies suggest that adolescent mothers should continue to receive developmentally appropriate services. Education about contraception is needed as well as education aimed at promoting self–esteem, interpersonal skills, and age-appropriate development of adolescent parents and children.

Key words: *Pregnancy, Adolescent.*

P-41
Evaluation of effects of frequent ultrasonography and outcome of low-risk pregnant women

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Introduction: The safety of ultrasonography in pregnancy is well documented. Ultrasound examination can diagnose in approximately 50% of major anomalies but the effect of routine sonography on perinatal outcome in low-risk pregnancies has not been established.

Materials and Methods: This study was done on 380 pregnant women who had their delivery in some of Tehran's Hospitals. The data was cumulated by a questionnaire that had been completed by the investigator. Statistical analyzing was done by SPSS.

Results: The analysis of data showed that there was no significant differences between range of sonography (>3, <3) and birth weight, head diameter, chest diameter and high APGAR in infant. This data showed that in women with >3 sonography, range of cesarean was increased.

Conclusion: The findings of this research showed that increase of range of sonography was not associated with improvements outcome of pregnancy.

Key words: *Ultrasonography, Pregnancy outcome.*

P-42
Diagnostic power of quantitative HCG of cervicovaginal washing fluid for the diagnosis of premature rupture of membranes.

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Introduction: Premature rupture of membranes (PROM) is defined as rupture of membranes before the onset of labor at any time during the gestational period. It occurs in 2-25% of pregnant women. Traditionally, the diagnosis of PROM has relied on a combination of factors, including the patient's history, identification of gross pooling of amniotic fluid in vagina, ferning pattern after microscopic examinations, and the nitrazine test. Unfortunately, these simple tests are fraught with both false positive and false negative results caused by various factors that can result in an equivocal or delayed diagnosis. The absence of a non-invasive 'gold standard' for the diagnosis of PROM has led to the search for the alternative biochemical markers. This research has been conducted to comparison the diagnostic power of qualitative and quantitative βHCG of cervicovaginal washing- fluid for the diagnosis of PROMs in Vli-e-Asr Hospital, Zanjan, Iran in 2006.

Materials and Methods: This Diagnostic experimental study was undertaken with cervicovaginal samples collected from singleton pregnancies between 14-41 weeks of gestation. Totally 86 pregnant women were enrolled in this study. Subjects were divided in two groups: confirmed PROM [amniotic fluid pooling (+), nitrazine paper test (+) and fern test (+) =43] and the control group [amniotic fluid pooling (-), nitrazine paper test (-) and fern test (-) =43]. Washing were then collected from the posterior vaginal fornix with the use of 5 ml of sterile saline irrigation and aspiration techniques. We measured HCG levels with ELISA test.

Results: The median HCG levels were 250.60 (MIU/ML) and 6.2 (MIU/ML) in PROM and control group respectively. From the receiving operating characteristic curve 22 (MIU/ML) was set as a cut off value. Sensitivity, specificity, positive predictive value, negative predictive value, and accuracy were 95.3, 97.7, 97.6, 95.5 and 96%, respectively.

Conclusion: Quantitative HCG of cervicovaginal washing- fluid was accurate tests for the diagnosis of PROMs in our study.

Key words: *Premature rupture of membranes, Cervicovaginal, HCG, Diagnosis power, ELISA.*

P-43
Infertility, its risk factors and prevention.

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Introduction: Studies suggest that about 10% of women between the age of 15 to 44 years or about 6.2 million women have impaired fertility and this may be as high as7.7 million in 2025. About 50–70% of these cases can be changed with change of lifestyle.

With the respect of high prevalent of infertility in the society, study of risk factors and prevention of them provide suitable information to the young to help them for solution of this self public problem.

Many of risk factors for both male and female infertility are the same.

P-44
Non obstetric surgery during pregnancy

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Introduction: Care of the obstetric patient undergoing nonobstetric surgery can be challenging. Approximately 1 in 500 pregnancies is complicated by a nonobstetric surgical condition. The need for anesthesia and surgery during pregnancy occurs in 1.5% to 2% of all pregnancies. The anatomic and physiologic changes of pregnancy complicate a woman's response to elective or emergency surgical intervention. Alterations related to perioperative positioning, fluid volume replacement, effects of medicinal and anesthetic agents, and maternal/ fetal assessment are discussed. Emotional and ethical/legal concerns are considered. Nonobstetric surgical emergencies may be difficult to recognize in pregnant patients whose normal physiologic state is altered by pregnancy. The diagnosis of any medical condition requiring surgical intervention in pregnancy often raises question about the safety of both surgery and anesthesia in theses patients. This controversy was primarily attributed to the lay press speculations that surgery and anesthesia in pregnancy could pose hazards to the mother and fetus. Despite recent advances in anesthetic, perinatal, and perioperative care, surgical intervention during pregnancy may still result in fetal loss either spontaneous abortion (especially in the first trimester) or premature labor (especially in the third trimester). Additionally, there is an increased risk of low birth weight infants (<2500gm), and growth- restricted babies with surgical intervention during pregnancy. Therefore, whenever possible, surgery should be deferred until after parturition in the gravid patient is occasionally necessary. Despite these concerns, the safety of nonobstetric surgery and anesthesia in pregnancy has been well established, and many pregnant woman are safely anesthetized everyday without ill effects for the mother or fetus.

Key words: *Non obstetric Surgery, Pregnancy.*

P-45
Study on sexual satisfaction of women referring to Infertility Center in Sari

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Introduction: Enhancing women health requires paying attention to their healthy requests and meeting their needs. Sexual need is one of the basic needs of human being. Sexual satisfaction has a considerable effect on psychiatric health and marital relationship. Sexual satisfaction is affected by intrapersonal characteristics, psychiatric and emotional relationship of couples, physical and environmental agents. Infertility induces psychiatric problems to women which lasts sexual dissatisfaction and decrease in sexual contacts. Sexual disappointment can worsen crisis and produces a lot of temporary annoyance and depression. This study was carried out to determine sexual satisfaction of women referring to Infertility Center in Sari city.

Materials and Methods: This descriptive study was done on 23 infertile women referring to Infertility Center in Sari city via simple random sampling. Information was gathered through a questionnaire. Descriptive statistics was used to analyses the data.

Results: In total 60.87% of respondents had satisfactory and enjoyable sexual contacts with their spouses. Overall, 39.1% of women described sexual contacts as pleasant feelings. Majority of women (69.75%) stated no failure about sexual issues. While 30.43% of respondents stated they do sexual contacts just to make happy the spouses. Finally, 30.4% of women said that sometimes sexual contacts were pleasing.
Conclusion: Members of health team have an important role to guide and educate proper solutions toward satisfactory sexual relationship.
Key words: *Sexual satisfaction, Infertility.*

P-46
Study on viewpoints of infertile women referring to Infertility Center in Sari city to adopt a child

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Introduction: Reproduction is one of the most important functions of family. At first most of couples try to reproduce by themselves. In spite of increasing health and medical achievements, many people suffer from infertility due to several failures. Infertile men and women don't have the feeling of good fortune and they feel the loss even more in their lifetime. Marital life reaches crisis point due to infertility. One of trustful ways for existence of family in such couples is to adopt a child. It means to accept a child and to grant him all legal benefits. Most of Iranian families accept a child doubtfully because of some socio-cultural, emotional and legal difficulties and also fear about the child's future.
This study was carried out to determine the viewpoints of infertile women about adoption a child.
Materials and Methods: This descriptive study was conducted on 16 infertile women referring to infertility center is Sari city. The gathering tool of information was a questionnaire designed in two sections of demographic characteristics and viewpoints of women to adopt a child. Descriptive statistics was used to analysis the data.
Results: In total 36.8% of infertile women were in the age group of 25-29 years old. 68.4% of women had common lives with their spouses after 5 years. Majority of women (47.3%) had a background of infertility more than two years ago. In 52.6% of infertile couples the problem of infertility was related to women. Infertility had affected marital relationship of 21% of women. 47.3% of women and 26.3% of spouses were agreed about adoption a child. Majority of infertile women (31.5%) who were hopeful to treatment, were disagreed on adoption. 36.8% of women stated some reasons to agree on adoption a child like to meet emotional and psychiatric needs of couples and to protect integrity of family.
Conclusion: Assessing the viewpoints and problems of infertile couples is important in planning programs and making policies on reproduction health.
Key words: *Infertile women, Infertility, Adoption.*

P-47
The survey of maternal satisfaction about labor and delivery supports in teaching hospitals of Tehran

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Introduction: Child birth is one of the most stressful situations in a woman's life. To gratify a woman for delivery she should be supported in different aspects: emotional, somatic and intellectual. This study was conducted to identify if mothers know the importance of being supported to a satisfying level in different somatic, emotional, and informational aspects during labor and delivery.
Materials and Methods: In this descriptive study 400 post partum mother selected randomly and were interviewed with questionnaire in 10 teaching hospitals in Tehran University. Data were processed in SPSS and tested with chi square and Fischer exact test.
Results: Results showed that most of mothers knew the importance of somatic, informational, and emotional supports (in decreasing order of frequency). They had received inadequate emotional supports. But most of them were satisfied with (in decreasing order) informational, emotional and somatic supports. Satisfaction with supports had not meaningful association with the importance of supports in mothers but had correlation with reception of the supports (p-value<0.05).
Conclusion: Being satisfied with supports despite their inadequacy may be due to the fact that

mothers did the time of interview just before discharge. No correlation between demographic variables and the value of importance in different supports shows that these are basic needs and all should be provided equally.

Key words: *Somatic, Emotional, and informational supports, Labor, Delivery.*

P-48
Systematic counseling and efficiency of contraception methods

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Introduction: Population increase and its consequences like environment pollution, decrease of natural resources and increase in consumption is one of the greatest problems in our community, so it is essential to promote contraception services to reach community welfare and high levels of health for all. It is obvious that high quality contraception services can increase positive attitude, knowledge and practice of users promote our community health position. So contraception counseling is an important part of our health care services. For this reason we decided to compare two ways of counseling (systematic vs. ordinary) to choose more appropriate methods of contraception counseling. The aims of this study were 1/comparing discontinuation rate of contraception methods in a year between cases received systematic counseling and those who received ordinary one, 2/ comparing the causes of discontinuation of contraceptive methods in two groups.

Materials and Methods: This was a clinical trial research that 155 cases selected randomly between 335 women who wanted to choose a contraceptive method then systematic counseling were done for them whereas 181 cases had routine counseling session. In two groups three methods were used (Ocp, Iud, Dmpa). In case group, women before choosing their method were counseled in a regular way which all the rules of counseling were considered.. They were observed for a year. Discontinuation rate and its causes were calculated in two groups.

Results: Statistical analysis of data showed that discontinuation rate (p-value<0.01) and its causes (p-value<0.01) were different in two groups. Systematic counseling causes decrease in discontinuation rate of contraceptive methods.

Key words: *Systematic counseling, Contraceptive methods*.

P-49
Evaluation of infertile couple's quality of life in Infertility Medical Centers of Tehran Medical Sciences University

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Introduction: Infertility is a phenomenon that effect on different dimensions of quality of life in couples. This survey was done to determine the quality of life in infertile couples who came to infertility centers of Medical Sciences University of Tehran.

Materials and Methods: This study was cross-sectional and sample size included 60 infertile couples in each case and control group. Sample size was selected with random method. Tool was WHOQOL questionnaire that was validated in a pilot study. Data collection was done by educated personels. The data was analyzed by SPSS software. The statistical methods used in this study were chi-square, paired T-Test and independent T-Test and Wilcoxone test.

Results: The results of this study indicated that mean score's quality of life in 4 dimensions (physical, psychological, social, sexual) of infertile couples were 12.41. The score in infertile men was 12 but in infertile women it was 11. Quality of life score in social dimension was good in 12.5%, moderate in 71.7% and poor in 15.8%. Psychological dimension was poor in 36.7% of infertile women and in 13.3% of men.

Conclusion: The score of quality of life in infertile couples was low. Quality of life in infertile women was lower than men. This survey can be applied for more attention to women especially infertile women in health planning.

Key words*: Infertility, Quality of life, Infertile couple.*

P-50
Multiple marker screening: Triple test

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Introduction: The Triple test is a blood test and non invasive procedure. For the best results, this test should be taken between the beginning of the 15th week (13 weeks from conception) and end of the 17th week (15 weeks from conception). The blood taken from the mother is tested for the levels of three (hence 'triple test') specific proteins; AFP, HCG and UE3. Details of these are described on the presentation. The levels of these markers combined with the mother's age and the ethnicity of the parents can indicate the probability of the fetus having certain genetic disorders.
Conclusion: The Triple test screening process has been refined to include testing for Down syndrome (Trisomy 21), Neural Tube Defects (Spina Bifida).
***Key words**: Congenital anomaly, Triple test.*

P-51
Incidence and risk factors of preterm birth among nurses and midwives of Tehran's Universities of Medical Sciences.

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Introduction: Preterm birth is a major public health problem and prematurity is a common cause of neonatal mortality. Due to lack of biological knowledge concerning the mechanism of labor, variable hypothesis include: demographic factors, obstetric history, life-style and occupational factors are considered as predisposing factors of preterm birth. Our purpose of this study was to evaluate the incidence and risk factors of preterm birth among nurses and midwives.
Materials and Methods: We conducted a cross-sectional study of 518 employed nurses and midwives in the hospitals of Tehran's universities of medical sciences. They experienced their last pregnancy at 2001-2006. Risk factors have been evaluated through physical activity, obstetric history and complication during last pregnancy. Physical activity was evaluated through three distinct dimensions: work activity (employment and non employment related physical activity) sports activity and leisure activity. The relation between these factors and preterm birth was analyzed with the use of Pearson x^2, T test and Manwitny U tests by SPSS software.
Results: Exposure with obstetric risk factors include previous preterm labour (p-value=0.000), LBW (p-value=0.000), hypertension (p-value=0.000) and complication during pregnancy include placenta previa, placental abruption, hypertension, were significantly higher in preterm group than term group (p-value<0.05). Physical activity include work and leisure activity didn't show significantly correlation with preterm birth (p-value>0.05). House holding relation factors include: house helper, adequate rest (day and night), emotion of fatigue, number of house member, children <2y and 5y, doesn't show significantly correlation with preterm birth (p-value>0.05).
Conclusion: According to the finding of this research, physical activity are not associated with preterm labour but obstetric history and complication during pregnancy are associated with preterm labour. Further investigation suggested.
***Key words:** Risk factor, Physical activity, Preterm birth.*

P-52
Diagnosis and treatment of premenstrual dysphoric disorder

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Introduction: Premenstrual dysphoric disorder or PMDD is a condition associated with severe emotional and physical problems. The symptoms occur regularly in the second half of the cycle and end when menstruation begins or shortly thereafter. According to a report by the Committee on Gynecologic Practice of the American College of Obstetricians and Gynecologists up to 80% of women of reproductive age have physical changes with menstruation; 20 to 40% of them have PMS, while 2 to 10% report have severe disruption of their daily activities. Since the important role of women in the family and society preformed a systematic review of PMS and PMDD to achieve new line of treatment.
Results: Currently, there is no consensus on the cause of PMDD. Biological, psychological, environmental and social factors all seem to play role in the symptoms. One theory states that women who experience PMDD may have abnormal reactions to normal hormone changes that occur with each menstrual cycle. This may include the fluctuation of estrogen and progesterone levels that normally occur. The goals of treatment in patients with PMDD are (1) symptom reduction and (2) improvement in social and occupational functioning, leading to an enhanced quality of life. Available treatment options are summarized in: lifestyle change;

nutritional supplements, non pharmacological treatments, and hormonal therapies.

Conclusion; Since 1990, many treatments have been used for premenstrual symptoms, for premenstrual syndrome (PMS), and most recently for premenstrual dysphoric disorder (PMDD). Women with PMDD find that it has a very disruptive effect on their lives.

Key words: *Premenstrual Dysphoric Disorder, Diagnosis, Treatment.*

P-53

Comparing the efficacy of two therapeutic methods: "zygote intrafallopian transfer after pronuclear scoring" and "uterine embryo transfer" in male factor infertility

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Introduction: Techniques such as GIFT and ZIFT use the tubal microenvironment as the initial point of germ cell contact after transfer. None of the studies used a systematic approach for selection of zygotes for ZIFT. Scott et al have suggested PN scoring of zygote at 16–18 hr after insemination or ICSI based on the size of pronuclei and distance between them, number and polarization of nucleolus precursor bodies (NPB) at the one-cell stage. This study was performed for determination of pregnancy and implantation rate in ZIFT by selection of high quality zygote according to Scott PN morphology and comparison with uterine embryo transfer (UET) results.

Materials and Methods: This prospective randomized clinical trial was done in Yazd, Iran in 2004. The study included 85 couples with male factor infertility and at least one patent tube, undergoing ICSI (30 in case group and 55 in control group). In case group PN morphology evaluation was performed, 24 hr after oocyte retrieval (OR) and at least 3 zygote preferably with Z1and/or Z2 pattern transferred into the one patent tube by laparoscopy. Otherwise, zygote selection was performed from Z3 and Z4 pattern. In control group 72 hr after OR, at least 3 embryos with the best quality were transferred in the uterine cavity.

Results: In ZIFT and UET, chemical PR per transferred was 23.4% and 23.6% (p-value=0.975). Clinical PR per transferred was 16.7% and 18.2% (p-value=0.136) and implantation rate (IR) was 5.6% and 6.2% (p-value=0.819). Chemical and clinical PR and IR in ZIFT was similar to UET.

Conclusion: Our study showed by zygote selection according to PN morphology and transferring into the fallopian tube, clinical pregnancy and implantation rate were not improved compared with UET. Considering advanced technology in in-vitro embryo culture, similar results of ZIFT and UET, risks and complications associated with anesthesia and laparoscopy, ZIFT procedure is not recommended .

Key words: *PN scoring, Intracytoplasmic sperm injection (ICSI), Uterine embryo transfer (UET), Male factor infertility, Zygote intrafallopian transfer (ZIFT).*

P-54

Use of drugs during pregnancy in pregnant women

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Introduction: Using drugs especially herbal medicine is so common among pregnant woman to improve both the mother and fetus's health. This research was programmed in order to study the drug usage (herbal and chemical) during pregnancy and its relation to the mother and child's health.

Materials and Methods: In this descriptive and cross-sectional study, 3587 pregnant women in all hospitals of Birjand were interviewed. The questionnaire included baby's health condition and the drugs taken by their mothers. The samples were taken randomly from volunteers. The statistic tests were X^2 and T-test.

Results: In total 28.1% of pregnant women were reported to use chemicals during pregnancy. These chemicals were of three major types: supplements (Vitamins, Iron, Folic Acid), analgesics and sedatives (Acetaminophen) and Antibiotics. Overall 36.8% of pregnant women used herbal drugs. Among 64 types of herbal drugs which were used Zingerber was the most favorite.

About 1.6% of pregnant women used herbal and chemical drugs to abort embryos. The most common usage of herbal drugs was for cold and relieving pain. In this study, 14.4% of mothers

were illiterate and 37.4% were just of elementary education. There was a fine relation between drugs usage and mothers education. In 1.1% of newborns we found abnormality and the portion of herbal use larger than chemical.

Conclusion: The widespread use of drugs during pregnancy indicates an increased need to educate mothers especially for some drugs used for abortion and some others which are fatal in high dosage, or others which lead to child's abnormality and mother's problems. It is also suggested to pay an extreme attention to the safety and normal dosage of herbal medicines which are used more than chemicals.

Key words: *Pregnancy, Pregnant woman, Herbal medicine, Side-effects.*

P- 55
Fertility and infertility information resources on the Internet

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Introduction: Fertility and infertility are familiar terms to many people. There are increasing demands to obtain more information about infertility by professionals in one side and the patients or their relatives in the other side. One of the main sources of information which is accessible to everybody is internet. This article provides information about the web sites that are related to different aspects of fertility and infertility. In each aspect, some of the most helpful Web sites that may serve as a source of infertility information are provided. In each site there will be links to other helpful Web sites. The authors are not responsible for the quality and content on any introduced sites.

http://www.fertilityneighborhood.com/ contains treatment information and a supportive community for infertility. Featuring a free ask the pharmacist service, chats with leading fertility experts, and the latest research news.

http://www.resolve.org/ is The National Infertility Association Web site in USA which answers the questions about infertility and family building options.

http://www.inciid.org/ The InterNational Council on Infertility Information Dissemination (INCIID – pronounced "inside") is a non-profit organization that helps individuals and couples explore their family-building options.

http://www.malereproduction.com/ The Center for Male Reproductive Medicine and Vasectomy Reversal is a non-sponsored websites dedicated to vasectomy reversal and Male fertility information.

http://www.asrm.org/ American Society for Reproductive Medicine (ASRM) is a voluntary, non-profit organization devoted to advancing knowledge and expertise in reproductive medicine, including infertility, menopause, contraception, and sexuality.

http://www.infertilitywebsites.com/ This Web site provides educational information to help infertility organizations develop, host, operate, and promote their infertility Web sites.

http://www.fertilityplus.org/ FertilityPlus is a non-profit website for patient information on trying to conceive. It is not professional, but rather is providing information that is written by patients for patients.

http://www.theafa.org/ The American Fertility Association (AFA) is a national, non-profit organization.

http://www.surrogacy.com/Articles/ The American Surrogacy Center which contains the latest articles about the medical, legal and psychological aspects of surrogacy.

http://cerhr.niehs.nih.gov/ The Center for the Evaluation of Risks to Human Reproduction (CERHR) web site is the resource for the latest information about potentially hazardous effects of chemicals on human reproduction and development

http://www.sart.org/ Society for Assisted Reproductive Technology (SART) is the primary organization of professionals dedicated to the practice of ART in the United States.

http://www.visembryo.com/ The Visible Embryo provides visual references for changes in fetal development throughout pregnancy and can be navigated via fetal development or maternal changes.

http://www.alphascientists.com/ Alpha Scientists Web site provides an international forum for scientists in reproductive medicine. The site provides access to professional resources such as events, images, job postings, and the embryology societies.

http://www.infertilitybooks.com/ This site contains over 320 infertility books, organized in helpful subject categories, for both consumers and professionals.

http://www.infertilityprofessionals.com/ This website provides helpful information for reproductive and infertility professionals, including physicians, embryologists, nurses, donor egg services, surrogacy services, and clinic office managers.

Conclusion: Despite the complexity of the Internet, it is surprisingly easy to search the World Wide Web for medical information. With the right skills you can save yourself a lot of time and effort making the Internet a highly effective tool for supporting your work in health and medicine.

Key words: *Infertility, Fertility, Internet.*