CGH-analysis revealed an unbalanced rearrangement resulting in the deletion of the distal Xp and the duplication of the proximal Xp contiguous region with presence of the Y chromosome from Ypter to Yq11. Fluorescent in situ hybridization (FISH) showed that this portion of the Y was translocated to the tip of the abnormal X and that the duplicated portion of chromosome X was inverted. Altogether, the abnormal chromosome was a dicentric one with the centromere of the Y chromosome apparently inactivated.

Conclusion: The presence within the translocated Y chromosome of the SRY gene explains the development of testes although it is not clear the reason for the genitalia ambiguity.

Key words: *Ambiguous genitalia, Unbalanced rearrangement, Array-CGH, FISH.*

P-82
PGD and the effect of sperm selecting methods in ICSI

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Introduction: One of the factors that increase the fertilization rate, embryo quality and also fertilization percentage is using a right method for selecting sperm which can be done with optical instrument such as IMSI or the process might be chemical like gradient solutions. PGD (Preimplantation Genetic Diagnosis) is developed as a diagnostic procedure to determine fetal genetic diseases and sex determination.

Materials and Methods: In our study we examined the gender of microinjection method fertilized embryos by fluorescent situ hybrizidation.

Results: This study showed that sperm selecting methods can effect on the results of micro injected embryos gender as it was compared to the results of other studies in the field of fetal sex from microinjection. There was a significant increase in fetus male gender.

Conclusion: We suggest that Chemical methods can be used in couples with female reproductive problems for sex selective Results and its selectivity are by the motility of the sperm and this study requires more investigations.

Key words: *PGD, Sex determination, Gradient method.*

P-83
Effect of in vitro fertilization on expression of apoptotic specific gene in mouse embryos at blastocysts stage

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Introduction: *In vitro* fertilization (IVF) is one of the assisted reproductive technologies used to help infertility treatment. *In vitro* culture of preimplantation embryos is associated with changes in gene expression. Exposure of preimplantation embryos to a variety of cellular stresses like culture media can induce apoptosis. It is however, not known if the method of fertilization affects the pattern of gene expression. We compared gene expression of IVF-derived mouse blastocysts versus *in vivo* produced blastocysts. The purpose of this study was to investigate the effect of *in vitro* fertilization on the expression of *P53* gene which is involved in apoptosis process.

Material and Methods: IVF-derived blastocysts were considered as group 1 and *in vivo* blastocysts as group 2. Expression of *P53* gene in IVF and *in vivo* embryos were assessed with real-time PCR.

Results: Our results showed no significant changes in the expression of *P53* gene between two groups.

Conclusion: *In vitro* fertilization can be used as an efficient and feasible method for infertility treatment.

Key words: *IVF, Mouse, Blastocysts, Apoptotic specific gene.*

P-84
Oocyte cryopreservation, advantages and disadvantages

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Oocyte cryopreservation has practical and ethical advantages compared with embryo storage. It allows oocytes to be quarantined before donation, simplifies the management of a donation programme, and ensures the most efficient distribution of the few donated oocytes available. Women at risk of early ovarian failure can store oocytes so that they can retain the possibility of bearing their own genetic children. Oocyte cryopreservation is vital for women without a partner and eliminates the problems associated with withdrawal of consent when embryos are stored. More contentiously, women could store oocytes to delay childbearing without there being a medical indication. During routine assisted conception cycles, oocytes can be cryopreserved as an emergency procedure or to avoid producing supernumerary embryos. In human, vitrification is a promising approach to oocyte storage which can conserve oocyte competence Viable pregnancies have been conceived from the embryos derived from vitrified oocytes, but to date there have been too few live births to allow a realistic assessment of the efficiency of oocyte vitrification. A number of

outstanding issues regarding methodology, dramatic difference (s) in its physio-structural properties, safety of storage and the long-term health of the children born via this approach as notable topics will be resolved only as oocyte vitrification becomes more widespread designed to provide the evidence base required in modern assisted conception. It is vital that procedures do not become 'set in stone' before they are fully optimised and that protocols and outcomes, especially live births, are fully documented and published.

Key words: *Oocyte, Cryopreservation, Advantage, Disadvantage.*

P-85

Ascorbic acid improves ejaculated human semen parameters after mobile phone exposure in vitro

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Introduction: Cell phones have become an essential part of daily life but, the health risks related with their usage are often overlooked. However, possible consequences of the cellular phone usage on human sperm parameters have not been investigated adequately. This study was performed to evaluate the possible protective effect of ascorbic acid, against sperms exposed to the cell phone radiation

Materials and Methods: Semen samples were obtained from 18 fertile males. Following liquefaction, each sample was divided equally into 4 parts: One aliquot fresh semen as control, second aliquot was exposed to cellular phone radiation for 10 minutes continuously, and third aliquot exposed to cellular phone radiation for 10 minutes treated with ascorbic acid (10 µg/ml). In all groups, sperm analysis was performed for their viability, morphology and motility, evaluation of sperm movement were performed using four criteria: A) rapid progressive, B) slow progressive, C) none progressive, D) no motility. Data were analyzed by one-way ANOVA using SPSS version 16 software.

Results: In comparison with the fresh and exposed groups, there was a significant decrease in the rapid progressive, slow progressive and viability, and increased the number of sperm with none progressive and abnormal morphology. Ascorbic acid induced significant increases the percent of rapid progressive, slow progressive and viability and decreased abnormal sperm in mobile phone exposed group

Conclusion: That mobile phone exposure lead to behavioral and structural changes of human sperm, and ascorbic acid improved sperm motility, viability and morphology against toxicity of mobile phone exposure.

Key words: *Cell phones, Exposure ascorbic acid, Sperm motility, Morphology, Viability.*

P-86

Evaluation of MMP-2 gene expression in mice pre-antral follicles derived from vitrified and fresh ovarian tissue

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Introduction: Cryopreservation is a useful method for preservation of ovarian tissue of patients who are candidate for chemo and radiotherapy. It has been postulated that MMP-2 participates in the process of remodeling of ovarian extracellular matrix such as the follicle growth and ovulation. The aim of this study was to compare the expression of MMP-2 gene of preantral follicles derived from vitrified ovaries with those derived from fresh ovaries.

Materials and Methods: Ovaries of 14 to 16-days-old NMRI mice were randomly choose and evaluation of MMP-2 gene expression of preantral follicles isolated from vitrified ovarian tissue compared with fresh preantral follicles using Real time PCR. Preantral follicles with 140-160 µm in diameter were isolated from fresh and vitrified ovaries. Then, for evaluation of MMP-2 gene expression Real time PCR was used.

Results: Expression of MMP-2 gene of preantral follicles isolated room vitrified ovaries was significantly higher than fresh preantral follicles.

Conclusion: Vitrification of ovarian tissue causes increased expression of MMP-2 of preantral follicles.

Key words: *Vitrification, MMP-2, Ovary, Preantral follicle, Real time PCR.*

P-87

Effect of vitrification on expression of apoptotic specific genes, Bax and Bcl2 in IVF-derived versus in vivo embryos

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Introduction: For embryo preservation in the long-term, cryopreservation is one of the undeniable technologies in assisted reproductive technologies. Exposure to a variety of cellular stressors, like culture media and high concentrations of cryoprotectants, can induce changes in gene expression and apoptosis