VitD3 and Glucose levels of follicular fluid are related to failure of microinjection infertility measures in patients of Motahhary Hospital of Urmia.

Materials and Methods: This study was a prospective cohort one, which 76 infertile candidates of microinjection therapy enrolled and treated with standard long protocol. Both serum and follicular fluid samples collected and checked for levels of Vit-D3 and Glucoses within 36 hours after injection of HCG whilst follicles were larger than 17mm. Subsequently, clients examined for pregnancy by transvaginal ultrasonography.

Results: Based on this studies it is revealed although Vit-D3 deficiency is a common problem, it does not affects outcomes of microinjection in cases of Motahhary Hospital of Urmia (p=0.48). Additionally, it was noticed that levels of glucoses neither in the serum nor the follicular fluid are not related to levels of Vit-D3.

Conclusion: The latter findings of this study are in concordance with former researches in the country and are in contrasts with the previously published literature worldwide.

Keywords: Vitamin D3, Glucose, Microinjection, Outcome, Infertility

O-36: Detection of Fetal Major Structural Abnormalities with US in ART Patients during One Year

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Background: The aims were to determine the diagnostic accuracy of ultrasound sonography in detecting major structural anomalies on all patients who conceived during a year of infertility treatment [assisted reproductive technology (ART) or non-ART treatments] at the Royan Institute, and to study the outcome of cases with nuchal translucency (NT) ≥ 95th centile in the first trimester of pregnancy.

Materials and Methods: This prospective study was conducted to detect congenital malformations among 703 infertile patients using ultrasound sonography during the first and second trimesters at the Royan institute between 2008 and 2009. All treated patients who had a viable pregnancy on 7th weeks of gestation were included in this study. Prenatal ultrasound determined a total of 932 fetuses, including 509 singletons and194 multiples. All cases with an increased NT (>95th percentile) were referred to amniocentesis and karyotyping, genetic counseling as well as fetal echocardiography. All infants were examined by a pediatrician at birth, and follow-up visits for any major anomalies were scheduled during one year after birth. The obtained result was taken as the gold standard .In the case of major congenital anomalies fetal autopsy finding was taken as the gold standard.

Results: According to the results of this study, the finding of first trimester sonography revealed a sensitivity of 54.7%, a specificity of 99.6 %, a positive predictive value (PPV) of 55.1% and a negative predictive value (NPV) of 99.6 %. The result of second trimester sonography showed a sensitivity of 66.2%, specificity of 99.8 %, PPV of 74.3% and a NPV of 99.7%.This study also shows no elevated risk of major malformation between infants of infertile women conceived by ART.

Conclusion: Major structural anomalies in the fetus can be reliably diagnosed by a prenatal ultrasound screening.

Keywords: Ultrasound, Major Congenital Anomaly, Assisted Conception

O-37: HOXA10 Gene Expression in The Endometrium of Women with Repeated Implantation Failure

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Background: Repeated implantation failure (RIF) defined as 3 or more failure of pregnancy proceeding assisted reproduction and embryo transfer. Homeobox A10 (HOXA10) is one of the genes which take parts in endometrial decidualization during embryo implantation. In this study, endometrial expression of HOXA10 gene was compared between RIF and normal fertile women.

Materials and Methods: Endometrial samples were taken from 7 RIF and 10 normal fertile women. After isolation and culturing endometrial cells, mRNA was extracted and cDNA was synthesized. HOXA10 gene was assayed by quantitative real time PCR and compared between 2 groups. P values <0.05 were considered statistically significant.

Results: HOXA10 expression was lower in endometrial stromal cells of RIF patients compared to normal fertile women (p value<0.05).

Conclusion: Lower expression of HOXA10 in endome-