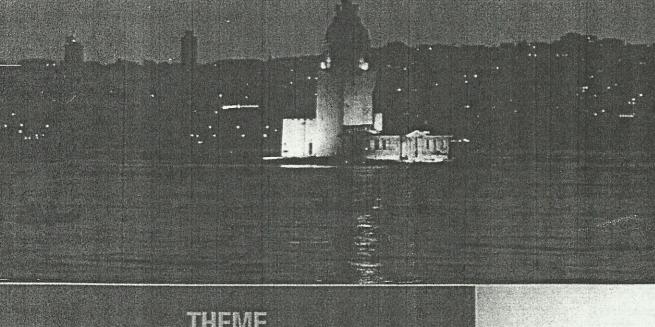
## IVF ISTANBUL 2005



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THEME

ART: IS IT ALL ABOUT HEALTHY BABIES?

ABSTRACT BOOK

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## DIAGNOSTIC HYSTEROSCOPY BEFORE IVF: WHICH WOMEN ARE CANDIDATES?

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Background and aims: Empirically, hysteroscopy before IVF has been suggested to be performed in women with repeated IVF failures. To analyse the basis for this indication, and also, to determine other possible predictors for a uterine pathology before an IVF cycle, we aimed to determine factors, which are associated with a uterine pathology in women undergoing IVF in the present study. Methods: 176 consecutively seen women, who were screened for an intrauterine pathology before the IVF cycle by using office hysteroscopy, were analysed in this retrospective analysis. Women with an endometrial pathology were compared to those without any pathology with respect to their clinical characteristics, such as age, duration and type of infertility, history of previous curettage, cause of infertility and number of previous embryo transfers. Logistic regression analysis was used for the statistical analysis. Results: In 28 (16%) of subjects, a pathology was observed; 39% of these women had endometrial polyps, 32% had endometrial adhesions, 18% had uterine septum and 11% had leiomyomas. Regression analysis revealed that number of previous IVF-ET failures was the only predictor for a uterine pathology. Women with at least one IVF-ET failure were 2.7 times more likely to have an endometrial pathology than those, who had no failures. Women with at least two IVF-ET failures were 3.2 times, and those with three or more IVF-ET failures were 4.7 times more likely to have an endometrial pathology. There was increasing trend in the odds ratios with increasing number of IVF failures. Conclusions: Women with any previous number of IVF failures are good candidates for screening for endometrial pathology before IVF. Increasing number of failures increases the risk for detecting a lesion in the cavity.

NO ASSOCIATION OF SERUM PROGESTERONE (P) LEVELS ON THE DAY OF HUMAN CHORIONIC GONADOTROPIN (HCG) INJECTION AND PREGNANCY OUTCOME FOLLOWING IN VITRO FERTILIZATION-EMBRYO TRANSFER (ET) IN STIMULATION PROTOCOLS USING GANIRELIX IN PATIENTS OF AN OLDER REPRODUCTIVE AGE

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Background and aims: Several previous studies found an association of lower pregnancy rates (PRs) with higher serum P levels at the time of hCG injection using gonadotropin releasing hormone agonist protocols when performing IVF-ET. This study determined if there is any inverse relationship found with serum P at the time of hCG in women using ganirelix in their controlled ovarian hyperstimulation (COH) protocol. Methods: Women were divided into 2 age categories (36-39 and 40-42) and pregnancy outcome evaluated according to 4 serum P ranges (<0.5, 0.6-0.9, 1.0-1.3, and 1.4-1.9ng/mL). Embryos were transferred on day 3. Results: For women age 36-39 clinical pregnancies occurred in 4 of 21 (21.1%) for P <0.5, 7 of 23 (31.8%) for P 0.6-0.9, 6 of 15 (42.9%) for P = 1-1.3, and 2 of 4 (50%) for P 1.4-1.9 ng/mL. Comparable ongoing/delivered PRs for these 4 ranges of P was 5.3%, 27.3%, 21.4%, and 50.0%. The implantation rates were 6.8%, 14.3%, 19.6%, and 16.7%, respectively. The clinical and viable rates for women age 40-42 for these P ranges were 25.0% and 12.5% (n=8), 30.0% and 20.0% (n=10), 42.9% and 28.6% (n=7) and 50% and 25% (n=4). Implantation rates were 11.5%, 9.1%, 23.5%, and 16.7%, respectively. Conclusions: There was no trend for higher PRs with low levels of serum P at time of hCG when using COH protocols with ganirelix. There appears to be no reason to withhold hCG injections or freeze all embryos with serum P levels at least up to 1.9ng/mL when using ganirelix.

THE EFFECT OF THE SERUM PROGESTERONE LEVEL AT THE TIME OF HUMAN CHORIONIC GONADOTROPIN INJECTION ON PREGNANCY OUTCOME USING OVARIAN HYPERSTIMULATION PROTOCOLS WITH GONADOTROPIN RELEASING HORMONE ANTAGONISTS ON PREGNANCY RATES FOLLOWING EMBRYO TRANSFER

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Background and aims: Some studies suggested higher pregnancy rates with very low progesterone (P) levels on the day of human chorienic gonadotropin (hCG) following embryo transfer (ET) when gonadotropin releasing hormone (GnRH) agonists were used. The aim of the study presented here was to determine if the same association may be found with GnRH antagonists. Methods: A retrospective study of all women having 2 or more embryos transferred following COH using cetrorelix as the GnRH antagonist in women aged 36-42 was performed. Pregnancy outcome was evaluated according to 4 serum P ranges (<0.5, 0.6-0.9, 1.0-1.3, and 1.4-1.9ng/mL). Embryo transfers were on day 3. All embryos were frozen with serum P >2ng/mL. Results: The clinical and ongoing/delivered PRs for the 4 serum P groups (lowest to highest) for women age 36-39 were 0.0% and 0.0% (n=2), 41.7% and 41.7% (n=12), 11.1% and 11.1% (n=9) and 66.7% and 66.7% (n=3). The respective implantation rates were 0.0%, 21.1%, 3.7° 50.0%. For women age 40-42 the clinical and ongoing PRs were 33.3 and 33.3% (n=3), 33.3% and 16.7% (n=6), 33.3% and 16.7% (n=6), and 50.0% and 25.0%. The implantation rates were 10.0%, 21.7%, 14.3%, and 23.1%. Conclusions: There was no trend for lower PRs with advancing serum P levels at the time of hCG. If lower P levels at the time of hCG offer an advantage in protocols using GnRH agonists, there does not appear to be the same association when using GnRH antagonist (at least cetrorelix).

## CORRELATION BETWEEN DOUBLE STRANDED DNA AN FERTILIZATION RATE IN INFERTILE COUPLES

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Introduction: It is reported that about half of infertility related to the male factor. The fertility potential in male is performed using semen analysis (SA). However, in some cases with normal SA are infertile with total fertilization failure (TFF), while abnormal SA may have good fertilization rate (FR). It is suggested to perform sperm function tests (SFT) in such cases. The aim of the study was to evaluate the predictive ability of DNA normality test in FR. Materials & Methods: Totally 84 infertile men were randomly selected were referred to Yazd Infertility center. After SA in each ejaculation, the evaluation was performed using Acridine orange. DNA status was evaluated under Florescenta microscope in 450-490 nm. According to the result of fertilization (FR) were categorized as group 1 (FR= >75%) group 11 (FR=1-75%) and group III (TFF 0%). Results: Our data showed that there was no significant difference between most semen parameters. Only sperm count of group I was higher than group III (P<0.05). Sperm count was 126.3 ×106, 114×106/ml and 77×106/ml in group I, II & III, respectively. Double stranded DNA in Group I was higher than other two groups (P<0.05) (63.7%, 48.6% and 51.26% in group I, II & III respectively. The regression analysis showed a correlation between double strand DNA & fertilization rate (P<0.01). Conclusion: It was not predict the fertilization rate using semen analysis. While using DNA normality tests, it could predict the result of la treatment cycles with more than 75% FR.