

2001 to December 2001. Patients with >40 years of FSH >12 mIU/ml were excluded. The patients were divided into 3 groups according to basal FSH/LH ratio: ratio < 1.0 (group 1), ratio  $1.0 \geq$  and  $\leq 2.0$  (group 2), ratio > 2.0 (group 3). Cycles stimulated with combination of luteal suppression and prue FSH were included.

**Results:** Total 154 cycles were included on this study (43 cycles in group 1, 83 cycles in group 2, 28 cycles in group 3). Age, day of hCG, number of good embryos, implantation rate, clinical pregnancy rate and miscarriage rate were not different in 3 groups. Basal FSH was significantly higher in group 3 (basal FSH/LH ratio > 2). Basal LH level, total oocytes and good oocytes retrieved, fertilization rate, number of embryos transferred and cryopreserved were significantly lower in group 3.

**Conclusions:** Basal FSH/LH ratio with normal FSH have a significant relationship with ovarian response and fertilization rate. So we suggest elevated basal FSH/LH ratio can predict poor ovarian response but further evaluation is needed.

## P-16 Major Factors Affecting the Outcome of in vitro Fertilization in Infertile Women Over 37 Years of Age

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**Objectives:** The purpose of this study was to evaluate what factors are major factors affecting the outcome of IVF treatment in infertile women over 37 years of age.

**Materials & Methods:** A retrospective study was performed in 204 patients (360 cycles) whose age was 37 years or more and undergo IVF-ET at Asan Medical Center from January, 1996 to June, 2002. The study population was divided in two groups according to IVF-ET outcome (pregnancy and non pregnancy). We evaluated data including patient age, husband age, etiology of infertility, previous conception history, prestimulation FSH level, endometrial thickness on HCG day, number of received ovum, number of fertilized ovum, cumulative embryo scores (CES), number of transferred embryo, clinical pregnancy rate, miscarriage rate.

**Results:** There were statistically significant difference in patient age ( $38 \pm 1.2$  vs  $39.5 \pm 2.5$  years), husband age ( $38.4 \pm 3.84$  vs  $42.6 \pm 5.4$  years), mean cumulative embryo scores ( $145 \pm 84.1$  vs  $85.9 \pm 59.3$ ), number of embryo transferred ( $4.3 \pm 1.7$  vs  $3.33 \pm 1.7$ ), number of received ovum ( $9.5 \pm 5.0$  vs  $17 \pm 5.6$ ), number of fertilized ovum ( $4.6 \pm 2.0$  vs  $3.5 \pm 2.3$ ,  $p < 0.05$ ). There were no statically significant difference in serum FSH level, etiology of infertility, previous conception history, endometrial thickness on HCG day. Using logistic regression, CES ( $p < 0.05$ , OR 1.014, 95% C.I.) and patient's age ( $p < 0.05$ , OR 0.695, 95% C.I.) were the only variables that affected pregnancy rates in patients over 37 years of age.

**Conclusions:** CES after adjustment of age affect the outcome of IVF-ET in patients over 37 years of age.