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Poster Presentations

P-17

Correlation between serum TGF- β levels and recurrent implantation failure during implantation window in women undergoing IVF treatment

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Background: Frequent implantation failure is a common problem among women who underwent in vitro fertilization (IVF) procedure. Therefore, it is necessary to know the factors affecting recurrent implantation failure following IVF treatment.

Objective: The aim of present study was to investigate the relationship between serum TGF- β levels and recurrent implantation failure during the implantation window in women undergoing IVF.

Materials and Methods: This study was performed on 39 patients including 20 women with recurrent implantation failure (case group) and 19 women with

successful pregnancies in the first IVF cycle (control group). Serum TGF- β levels were measured using enzyme-linked immunosorbent assay (ELISA) method. Demographic information including age, body mass index (BMI) and number of implantation failure were recorded.

Results: The mean serum levels of TGF- β in the individuals with recurrent implantation failure was significantly lower than the control group (663.48 pg/ml vs. 1028.49 pg/ml). Moreover, the serum TGF- β levels were significantly different among case and control groups based on the age and BMI grouping. However, there was no relationship between serum TGF- β levels in the case group and age, BMI and number of implantation failures.

Conclusion: Serum TGF- β levels may play a crucial role in the physiopathology of recurrent implantation failure. Measurement of this factor in the patients with recurrent implantation failure is recommended which may reduce the incidence of recurrent implantation failure following IVF treatment. However, further randomized clinical studies are required to clarify the definite correlation.

Key words: Recurrent implantation failure, TGF- β , In vitro fertilization.