

**P122. Comparison of Serum and Uterine Flushing Concentrations of Glycodelin on Days 21-23 of Reproductive Cycle among Women with In Vitro Fertilization Failure versus Normal Fertile Women**

R TAHERIPANAH (IR) [1], m zamnian (IR) [2], s akhoondzadeh (IR) [3], A taheripanah (IR) [4]

**Objectives:** Glycodelin is a factor which regulates immunological activity, and is required in implantation window. The present study was conducted to compare glycodelin concentrations in blood and uterine flushing samples from women with IVF failure and fertile controls.

**Materials and Methods:** This was a prospective descriptive clinical trial including 20 women with IVF failure and 19 fertile participants. Both groups initially filled a special questionnaire including their demographic profile and prior failed IVF attempts, then samples of uterine flushing and blood samples were taken to measure glycodeclin concentrations.

Results: There were significant differences between mean glycodelin concentrations in the case and control groups, both in serum glycodelin ( $30.1 \pm 5.30$  vs.  $44.5 \pm 11.85$ ,  $P < 0.001$ ), and uterine flushing glycodelin concentrations ( $310.0 \pm 67.51$  vs.  $498.3 \pm 119.01$ ,  $P < 0.001$ ). The mean total glycodelin concentration in uterine flushing was higher than serum in both groups ( $399.4 \pm 133.95$  vs.  $36.9 \pm 11.52$ ,  $P < 0.001$ ).

Conclusion: We found a significant decrease in glycodelin concentrations among patients with IVF failure. Since glycodelin has a role in immune system during endometrial receptivity, therefore, it may be required for prevention of IVF failures.

**Keywords :** Endometrium, Embryo Implantation, Fertilization in Vitro, Glycodelin Protein, Infertility

[1] IRHRC, tehran, [2] 2Department of Obstetrics and Gynecology, Infertility Center, Mazandaran University of Medical Sciences, [3] IRHRC, Tehran, [4] 3Department of Molecular and Cellular Sciences, Faculty of Advanced Sciences and Technology Pharmaceutical Sciences Branch, Islamic Azad University, Tehran