## 9<sup>th</sup> Yazd International Congress and Student Award on Reproductive Medicine with 4<sup>th</sup> Congress of Reproductive Genetics

## **Poster Presentations**

## P-13

The role of HLA-G in recurrent pregnancy loss: A case-control study

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**Background:** Human leukocyte antigen (HLA)-G is the main molecule for maternal acceptance of the semi-allogenic fetus by adjusting the maternal immune system in the pregnancy.

**Objective:** The aim of this study was to determine the role of sHLA-G in recurrent pregnancy loss (RPL) in North of Iran.

**Materials and Methods:** This case-control study was done on two different groups including 40 women with

recurrent miscarriage, and 40 non-pregnant healthy women. Soluble HLA-G (sHLA-G) levels were measured using a BioVendor sHLA-G ELISA kit.

**Results:** Findings show that women with recurrent abortion had significantly higher sHLA-G concentrations than fertile women (mean  $\pm$  SD: 220.62  $\pm$  223.48 u/ml and 87.77  $\pm$  91.65 u/ml, respectively p < 0.0001, Mann-Whitney test).

Conclusion: There is many argumentation about the role of HLA-G in the pregnancy and RPL. Therefore document in this context remains obscure. So it can be concluded that sHLA-G may not act in the implantation of the embryo, but its role in the preservation of maternal tolerance to fetus, because serum sHLA-G level increased in the after abortion and postpartum in both women who had recurrent spontaneous abortion and normal vaginal delivery.

**Key words:** HLA-G, Recurrent pregnancy loss, Early pregnancy, Reproduction.

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