

## Relation between third day LH level and ovarian response in IVF cycles

Hossein Rashidi B. (M.D.)<sup>1</sup>, Aghaghazvini L. (M.D.)<sup>2</sup>, Moghimi R. (M.D.)<sup>1</sup>.

1-Assistant Professor, Reproductive Health Research Center, Vali-e- Asar Hospital, Imam Khomeini Hospital, Tehran Medical Sciences University, Tehran, Iran.

2-Intern, Reproductive Health Research Center, Vali-e- Asar Hospital, Imam Khomeini Hospital, Tehran Medical Sciences University, Tehran, Iran.

### Abstract

Infertility treatment has reached to prominent improvements in recent years and new methods of ART have important role in these improvements. Several factors are considered for patient's evaluation in these methods. For this purpose, we decided to evaluate the relation between third day LH with ovarian response in IVF cycles. This is a prospective study and 78 IVF candidates were chosen base on study requirements and were divided into two groups according to third day LH level. First group was consisted of 14 women with  $LH < 3 \text{ mIU/ml}$ , and second group was consisted of 64 women with  $LH > 3$ . Patients had gone under treatment cycle base on long treatment plan with agonist gonadotropins and human gonadotropins. Then two groups were compared for number of follicle, number of retrieved oocyte, duration of ovarian stimulation, number of used gonadotropin ampules, number of resulted embryos, cancellation rate of cycles and finally pregnancy rate. Base on results and considering  $P \text{ value} < 0.05$ , significant differences were not observed between the two groups in third day LH, patient age, kind of infertility, cause of infertility and duration of infertility. In other hand, two groups did not show any significance difference in ovarian response, number of follicle and retrieved oocyte, stimulation duration, number of used ampules, cancellation rate of cycles and pregnancy rate. This reveals third day LH level is not associated with success rate in IVF cycles.

**Keywords:** Luteinizing Hormone (LH), Ovarian response, Ovarian stimulation, IVF and Infertility.

**Corresponding address:** Dr. Hossein Rashidi B., Reproductive Health Research Center, Vali-e-Asar Hospital, Imam Khomeini Hospital, Tehran, Iran.

**Email:** brh17@hotmail.com