Serum progesterone levels and pregnancy rates in ovarian stimulation cycles for intrauterine insemination.

Most studies have evaluated the association between serum progesterone level and clinical outcome in IVF cycles and advocated that progesterone elevation on the day of HCG administration brings to adversely clinical outcome. Our study evaluated serum progesterone levels in cycle of intrauterine insemination.

Objective: The aim of the study was to evaluate the relationship between serum progesterone levels on the day of human chorionic gonadothropin (hCG) administration and the ongoing pregnancy rates in patients undergoing intrauterine insemination (IUI) after ovarian stimulation with gonadotropins.

Methods: The present study is a retrospective, observational, single-centre cohort study. We conducted the study among 350 women aged 25-40 years. On the day of hCG administration, serum progesterone evaluation was performed. Different factors potentially influencing the reproductive outcome were analysed.

Results: It was hypothesized that too high progesterone serum levels could cause asynchrony between the endometrial and oocyte maturation, and reduce the pregnancy rates.

Conclusion: There is an ongoing debate about the clinical significance of elevated progesterone concentrations in the late follicular phase of cycles after ovarian stimulation. Our study suggests that Progesterone plays an important role in the process of endometrial development.