Subtle progesterone rise in the single-dose gonadotropin-releasing hormone antagonist (cetrorelix) stimulation protocol in patients undergoing in vitro fertilization or intracytoplasmic sperm injection cycles.

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摘要

Abstract

A subtle rise in serum progesterone during the late follicular phase in patients undergoing in vitro fertilization (IVF) or intracytoplasmic sperm injection (ICSI) cycles is a frequent event that can decrease implantation and pregnancy rates in controlled ovarian hyperstimulation (COH) protocols that use a gonadotropin-releasing hormone (GnRH) antagonist. The aim of the present study was to evaluate the prevalence and effect of the subtle progesterone rise during COH with single-dose GnRH antagonist in combination with clomiphene citrate (CC) and human menopausal gonadotropins (hMG) in IVF or ICSI cycles. Ninety-five women undergoing COH with CC, hMG and a single 2.5 mg dose of the GnRH antagonist, cetrorelix, were enrolled in the study. Patients were grouped according to serum progesterone level on the day of human chorionic gonadotropin (hCG) administration (P < 1.2 ng/ml) or P > = 1.2 ng/ml). The incidence of a subtle progesterone rise was 54.7% (52/95). The group with P > = 1.2 ng/ml had significantly higher serum levels of luteinizing hormone (p = 0.002) and estradiol (p < 0.001) on the day of hCG injection than the group with P < 1.2 ng/ml, and more oocytes were retrieved (p = 0.001). However, there was no significant difference in fertilization, clinical pregnancy or implantation rate between the two groups. In conclusion, a subtle progesterone rise during the late follicular phase is common but not associated with pregnancy outcome.