ISGE
GYNECOLOGICAL ENDOCRINOLOGY
THE 18TH WORLD CONGRESS
7-10 MARCH 2018 FLORENCE, ITALY

P146. Evaluation of dual trigger with combination of gonadotropin releasing hormone agonist and human chorionic gonadotropin in improving oocyte-follicle ratio in normo-responder patients

A S Gurbuz (TR) [1], F Gode (TR) [2], N Ozcimen (TR) [3], S Akarsu (TR) [4], R Deveer (TR) [5], S Koseoglu (TR) [6], A Z Isik (TR) [7]

Context: Dual trigger of final oocyte maturation with a gonadotropin-releasing hormone (GnRH) agonist and a standard dosage of human chorionic gonadotropin (hCG) in normal responders was found to improve implantation, clinical pregnancy, and live-birth rates in GnRH-antagonist in vitro fertilization/intracytoplasmic sperm injection (IVF-ICSI) cycles.
Objective: To investigate whether dual triggering of final oocyte maturation with a combination of GnRH agonist and hCG can improve mature oocyte-follicle ratio for normo-responder patients in GnRH-antagonist in IVF-ICSI cycles.
Methods: Retrospective cohort study.
Patients: Normal responders to controlled ovarian hyperstimulation who were undergoing IVF-ICSI with a GnRH antagonist protocol.
Interventions: Standard dosage of hCG trigger (10000 IU hCG) versus dual trigger (0.1 mg of triptorelin and 10000 IU hCG).
Main Outcome Measures: Oocyte-follicle ratio, mature (MII) oocytes, clinical pregnancy, and implantation rates per cycle.
Results: A total of 294 patients were included (hCG trigger/control group: n = 178; dual trigger/study group: n = 116) in the study. All follicles ?10 mm diameter were aspirated. Number of aspirated follicles, oocytes and metaphase II oocytes retrieved per aspirated follicles, implantation rate, and clinical pregnancy rate per cycle were compared between groups. There was no statistically significant differences in terms of metaphase II oocyte ratio per aspirated follicle, implantation rate and clinical pregnancy rate between the dual trigger group and hCG only group (45.7% vs. 51%; 35.4% vs.30.3% and 45%vs. 40% respectively). Oocyte/ follicle ratio was significantly higher in dual trigger group (68.2%vs 63.8% p=0,028).
Conclusions: Dual triggering in normal responders with a GnRH-agonist and a standard dosage of hCG is superior to hCG only protocol in terms of oocyte/follicle ratio but does not improve metaphase II oocyte, implantation and clinical pregnancy rates in GnRH-antagonist cycles.

[1] Private Novafertil IVF Center, Konya, [2] Izmir Medicalpark Hospital, Izmir, [3] Private Novafertil IVF Center, Konya, [4] Izmir Medicalpark Hospital, Izmir, [5] Mugla Sitki Kocman University Training and Research Hospital, Department of Obstetric and Gynecology, Mugla, [6] Mugla Sitki Kocman University Training and Research Hospital, Department of Obstetric and Gynecology, Mugla, [7] Izmir Medicalpark Hospital, Izmir