



**Title:** Triggering ovulation with gonadotropin-releasing hormone agonist versus human chorionic gonadotropin in polycystic ovarian syndrome

**Amr Farag**  
Mohamed Nasr El-Deen  
Rasha Hassan

Ain Shams University, Cairo, Egypt

**Objectives:** To compare GnRH agonist to hCG for triggering ovulation in polycystic ovarian syndrome treated with clomiphene citrate **Study Design:** Prospective randomized study. **Materials & Methods:** Eighty five infertile women with PCOS participated in a randomized allocation concealed prospective trial and had induction of ovulation with clomiphene citrate. GnRH agonist 0.2 mg subcutaneously (group 1) or hCG 10,000 IU intramuscularly (group 2) was given to trigger ovulation. Primary outcome was mid-luteal serum progesterone, while secondary outcomes were ovulation rates and clinical pregnancy rates along 3 cycles **Results:** No difference was found between group 1 and group 2 regarding mean serum progesterone and clinical pregnancy rates in each cycle. Cumulative pregnancy rates were similar (17.14% vs 20% respectively;  $P=0.332$ ). Ovulation rates were 80% vs 68.6% ( $P=0.413$ ); 94.3% vs 90.9% ( $P=0.669$ ); 97.1% vs 93.7% ( $P=0.603$ ) in the two groups respectively. However, a significant rise in number of patients with mid-luteal serum progesterone  $> 10$  ng/mL was noted in the 3<sup>rd</sup> cycle among both groups, ( $P<0.0001$  for group 1 while  $P=0.007$  for group 2). **Conclusion:** Triggering ovulation with GnRH-a after treatment with clomiphene citrate in PCOS, in view of its known protective effect against OHSS, may be an effective physiological alternative to conventional hCG without compromising luteal function and pregnancy rates after repeated cycles of treatment.

## **Biography**

Amr Farag had Masters and MD from Ain Shams University, Egypt. He obtained MRCOG degree from UK and Award of Med Ed from Warwick University, UK. Amr is a member of Egyptian Gynecological Cancer Society, RCOG, and is RCOG Tier two Educator in Postgraduate Obstetrics and Gynecology. He is a lecturer of Obstetrics and Gynecology in Ain Shams University, Egypt and a Specialty Doctor in Warwick Hospital, UK. Amr shared in more than ten research projects as: “The role of endometrial Leukemia Inhibitory Factor gene expression in failure of implantation after Intracytoplasmic Sperm Injection” and “Intrauterine insemination timing after hCG administration in unexplained infertility. Does it matter?”. Amr has six publications in peer-reviewed journals with an interest in reproductive medicine and has three papers under review for publishing. He is a member of the editorial board of "Obstetrics and Gynecology International Journal" and a reviewer for "Journal of Fertilization: In Vitro, IVF Worldwide, Reproductive Medicine, Genetics & Stem Cell Biology".

