IVF in PCOS patients with high risk for ovarian hyperstimulation syndrome: One step closer to “safe clinic”?

Ovarian Hyperstimulation Syndrome (OHSS) is a condition occurring in 1-10% of in vitro fertilization patients. Today OHSS is considered as one of the most serious even life-threatening complication of IVF. PCOS is considered as a major risk factor for OHSS, among which patients with high levels of AMH are considered at specifically higher risk for severe OHSS. The concept of “safe clinic” has been developed and suggestions have been made in order to prevent this complication. Among them “freeze all” with elective FET, use of antagonist protocol, agonist triggering, use of low doses of gonadotropins and co-administration of Letrozole (LE) to ovarian stimulation protocol are the most commonly accepted. All these protocols demonstrated excellent cumulative live birth rates and showed usefulness in lowering the frequency of OHSS. However, the level of mild and severe cases of OHSS still remains dangerously high ranging from 1% to 2.6% of cases. Surprisingly, however, up to date there are no data regarding safety and effectiveness of combination of several protocols on the occurrence of OHSS and live birth rate in this specific high risk for OHSS patients. In our presentation, we will discuss the benefits and risks of different above mentioned protocols in IVF programs, as well as will share the results of our own study where we have used the combination of all these protocols (LE, low dose gonadotropins, GnRH-antagonist, agonist trigger, freeze with elective FET). The study group consisted of women with PCOS and specifically high levels of AMH undergoing first time IVF. The primary outcome was take home baby rate; secondary outcomes included cancellation and OHSS. We will demonstrate that the use of LE and GnRH-ant protocol combined with low dose gonadotropins, agonist trigger and freeze all protocol is a cost-effective and safer way of handling PCOS patients with specifically high risk of OHSS.

Biography
Eduard Hambartsoumian (Ambartsoumian), MD, PhD, is a Specialist in Reproductive Medicine and founding Director of Fertility Center of Yerevan in Armenia. Currently, he also holds the position of the President of Armenian Society for Reproductive Medicine. He is the author of numerous scientific works on Human Fertility, published in leading scientific journals of the world. He has research experience for 3 years in France (in Paris V University) and for 7 years in USA in Boston University and Harvard University affiliated programs. He has also 6 years of experience as an ad-hoc reviewer of the journal, Human Reproduction.

hambartsoumian@hotmail.com

Notes: