

9th Yazd International Congress and Student Award on Reproductive Medicine with 4th Congress of Reproductive Genetics

Key Lectures

K-81

Personalized ovarian stimulation for assisted reproductive technology

Nasr-Esfahani MH^{1, 2}.

1. Department of Reproductive Biotechnology, Reproductive Biomedicine Research Center, Royan Institute for Biotechnology, ACECR, Isfahan, Iran.

2. Isfahan Fertility and Infertility Center, Isfahan, Iran.

Email: Mh_nasr@med.mui.ac.ir, Nasr.royan@gmail.com

When one talks about personalized medicine in the field of assisted reproduction technology, the main focus is mainly on achieving the optimal number of oocytes in successful ovarian stimulation at the same time considering the safety, success, and potential of individuals to respond. Considering that more oocytes mean higher clinical live birth rate but one single

protocol for stimulation does not fit all. Considering every individual has different egg reserve which can be assessed based on anti mullerian hormone or antral follicular count, therefore, amount of Follicle-stimulating hormone given for induction of stimulation should be related to one of these two parameters at the same time considering safety which here means avoiding ovarian hyperstimulation syndrome. Literature shows that around 15 oocytes are the optimal number of oocytes for achieving a live birth and avoiding ovarian hyperstimulation syndrome. Achieving this number of oocytes may not be possible in one single cycle and multiple cycles are required and a standard dose of FSH is not justified and a tailoring Follicle-stimulating hormone dose should be defined based on the individuals age, antral follicular count and previous cycle performance.