

DOUBLE STIMULATION TO MAXIMIZE CYCLE POTENTIAL IN ONCOFERTILITY PATIENTS

Topic: Oocyte and embryo freezing

5th World Congress November 16-18, 2017 Vienna, Austria

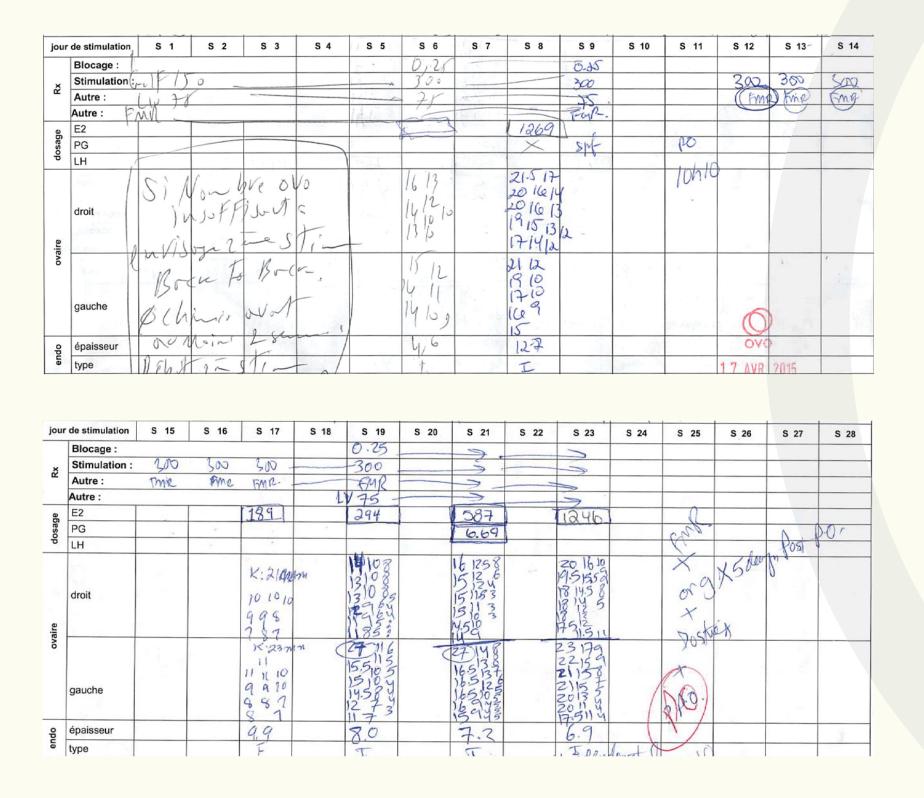
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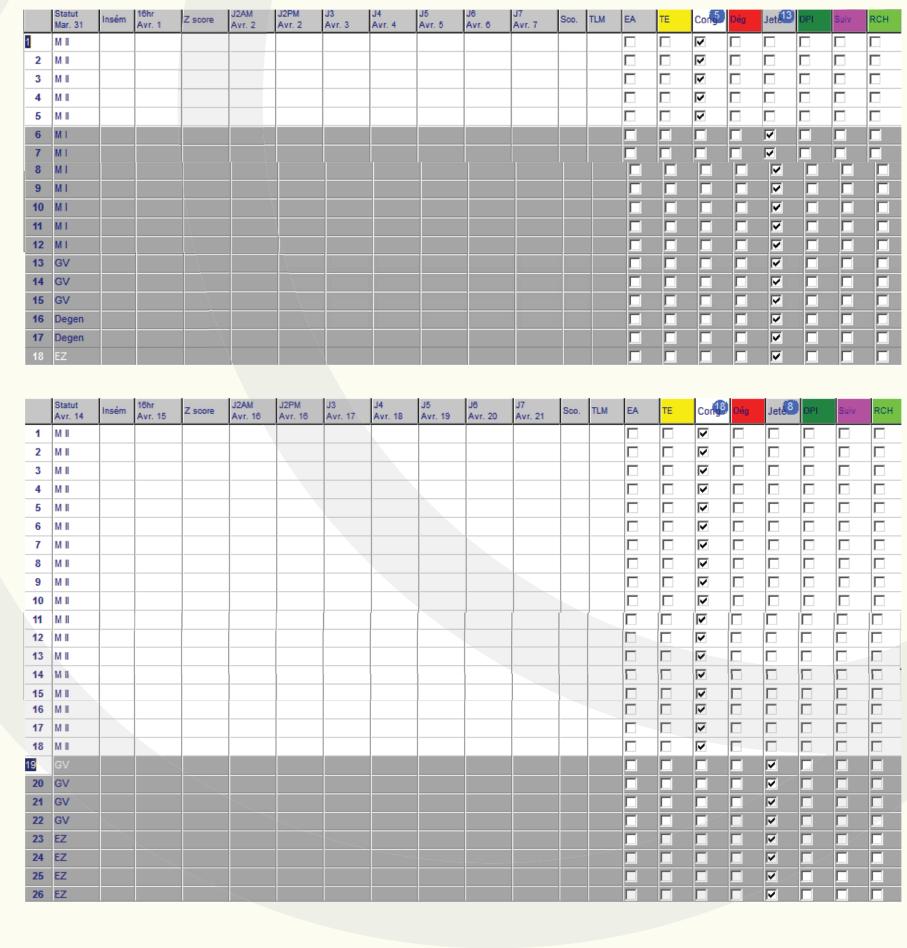


A 23 year-old patient was addressed to clinique ovo for fertility preservation after surgery for breast cancer and prior to starting chemotherapy. She came at the end of her menstrual cycle and transvaginal ultrasound revealed polycystic ovaries. We began stimulation on day 1 of her next cycle with Gonal F 150 IU, Luveris 75 IU and Letrozole 5mg daily using an antagonist protocol, needing to increase the dose of Gonal F to 300 IU after a few days of stimulation due to lower than expected response. Ovulation was triggered once 3 follicles reached 18-19mm in diameter on cycle day 9 with 0.5mg of a GnRH agonist, and 18 eggs were retrieved 36 hours later, of which only 5 were mature. After discussion with the patient, and because she did not yet have an appointment with an oncologist to plan her chemotherapy, it was decided to re-stimulate during the luteal phase of the cycle. Two days post-egg retrieval she re-started stimulating with Gonal F 300 IU and Letrozole 5mg daily. On cycle day 23 ovulation was triggered with 1mg of GnRH agonist as well 2500 IU of hCG. Thirty-six hours later we retrieved 23 eggs of which 18 were mature, for a total of 23 mature eggs collected. As is well-illustrated in this case, a double stimulation protocol can prove useful by maximizing the potential of a woman's menstrual cycle utilizing multiple waves of folliculogenesis. This is especially true in the oncofertility patient population as the menstrual cycle the patient presents with may be the only cycle that gives a chance of future pregnancy, and if time allows for it. Double stimulation can also be a useful tool for poor responders in the general IVF population.

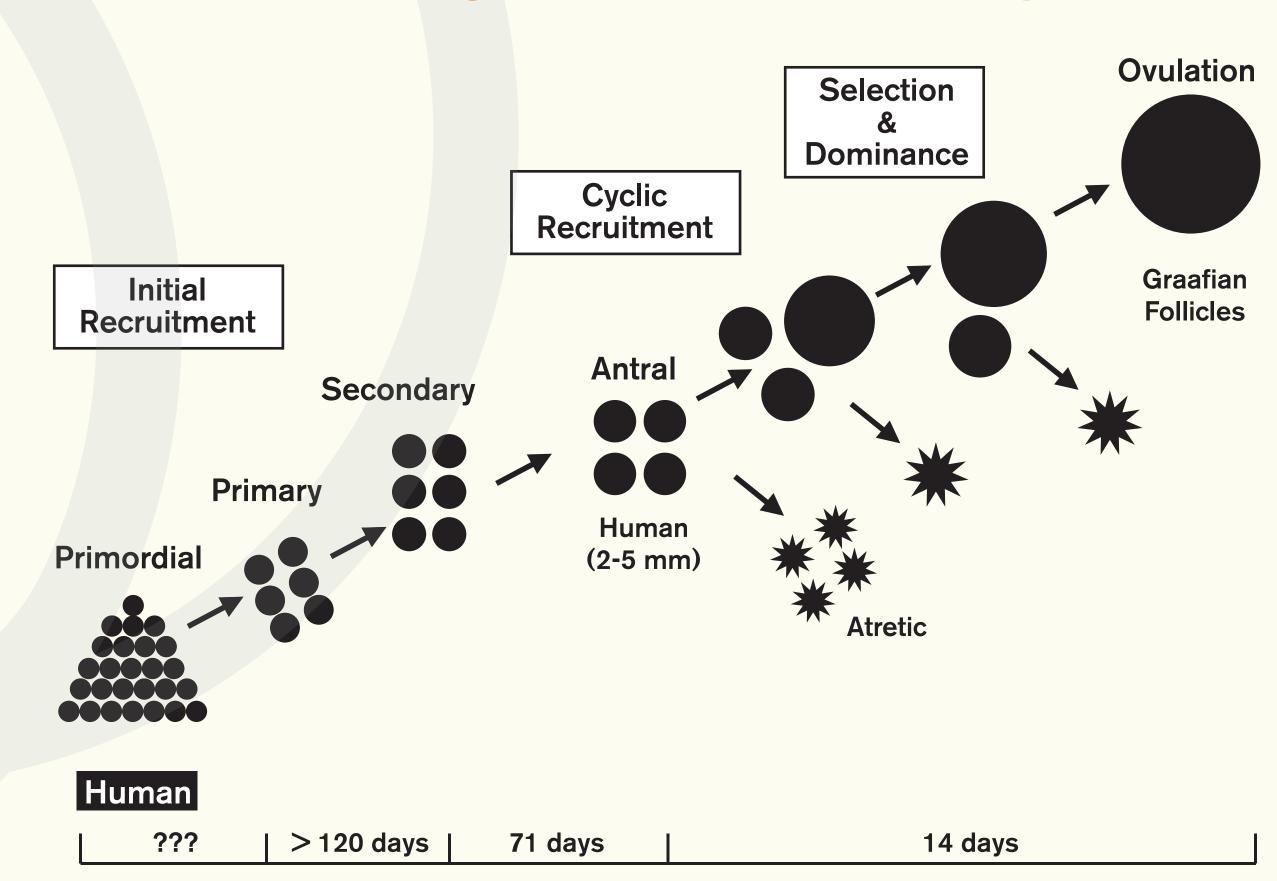
Folliculogram



Outcome of double stimulation

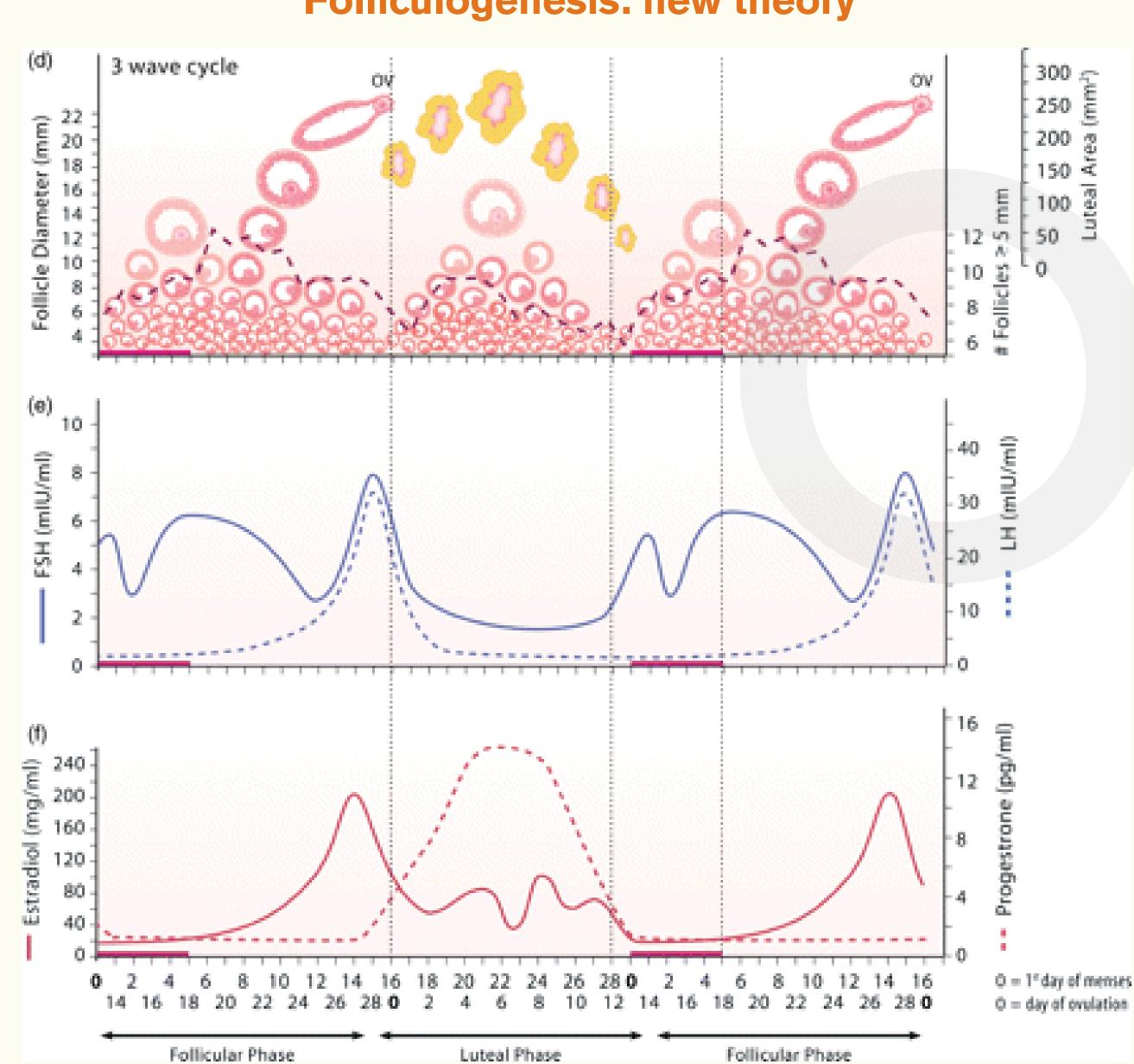


Folliculogenesis: traditional theory

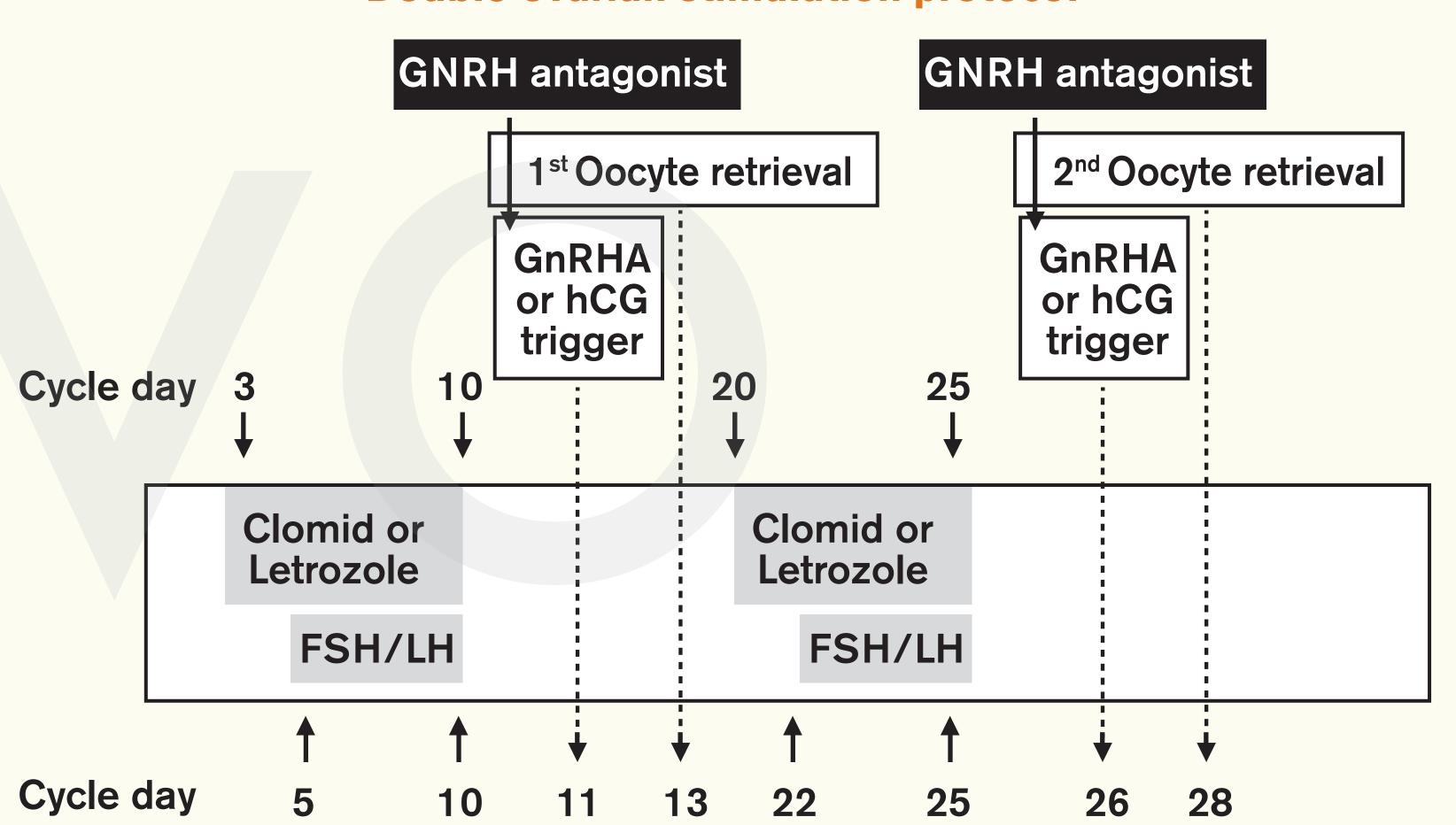


Follicle recruitment, selection & astresia. From McGee & Hsueh, 2000

Folliculogenesis: new theory



Double ovarian stimulation protocol



Luteal phase ovarian stimulation following oocyte retrieval: is it helpful for poor responders? Reproductive Biology and Endocrinology 2015, John Zhang

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