

OPTIMAL OVARIAN STIMULATION: A MILD APPROACH WITH CLOMIPHENE CITRATE

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Clomid ovarian stimulation in conjunction with human menopausal gonadotropin (clomid/hMG) is considered a mild stimulation approach in In-Vitro fertilization treatment. This protocol was first introduced in early 1980's but very quickly replaced by daily hMG injections together with luteal or follicular phase administrations of gonadotropin releasing hormone agonists (GnRHa) for better control of premature ovulation, which was a major issue in early days of IVF practice when egg retrievals were primarily performed by laparoscopy rather than by transvaginal ultrasound guided follicular aspiration. For a long time a large number of eggs were desired in each IVF cycle. First, a good responder to conventional daily injections tends to be a good IVF candidate. Second, a larger number of eggs were required in old days to perform sub-zona sperm insertion in case of severe male factor infertility before ICSI was widely available. Finally, it is commonly believed that more eggs mean more embryos, and therefore, more good embryos may be selected.

However, apart from the commonly known side effects stemmed from hyperstimulation less than 20% of oocytes retrieved from conventional stimulation can actually produce live births. That means the biological wastage of human oocytes through conventional IVF is almost 80%. The fundamental difference of mild stimulation from conventional stimulation is to have oocyte selection start in vivo rather than to have a larger number of follicles were stimulated, and in turn, all collected oocytes are left to embryologists for in vitro oocytes selection through fertilization and culture.

Since October 2004 we have performed more than 3,500 IVF using clomid/hMG stimulations. Our data indicates that compatible pregnancy rates can be achieved in patients with good ovarian reserve during 6 months of treatment period. For patients with advanced age (>39 year old) or with diminishing ovarian reserve gentle stimulation provides patients with more opportunity to achieve pregnancies.