

12. Management of Infertility

Women with PCOS who are desirous of pregnancy will require specific treatments to normalize ovulation in addition to management of PCOS. Before initiating definitive treatment of Infertility, it is essential to ensure that insulin resistance is under control. To improve pregnancy chances and reduce pregnancy risk, overweight and obese women must lose 7-10% body weight. The weight loss helps improve insulin resistance, menstrual irregularity, normalize female hormone levels, lower male hormone levels, and improve pregnancy chances. The management of Infertility requires the supervision of an Infertility doctor. Typically, Infertility treatment includes all of the following:

- a) Food and lifestyle interventions outlined above to reduce Insulin resistance- Aim for at least 7-10% weight loss and reduce the waistline
- b) Folic acid supplementation 0.4mg/day
- c) Cessation of smoking and alcohol
- d) Metformin
- e) Fertility drugs to promote ovulation—The medications used include:

Clomiphene (Clomid, Serophene)- Combination of Metformin and Clomid increases the frequency of ovulation. Clomid is administered 50mg/day on the third or fourth day of the menstrual cycle for five days and repeated for up to three cycles. A higher Clomid amount of 150mg is prescribed if deemed appropriate by the infertility physician when a 50 mg dose is ineffective. The ovulation occurs between 4-7 days of taking the last Clomid pill during each cycle. The ovulation monitor helps predict ovulation. Sexual intercourse requires timing (to coincide with the ovulation cycle) to maximize the chances of pregnancy.

- f) **Letrozole(Femara)-** The alternate medication to Clomid is Letrozole 2.5 mg/day. The medication is superior to Clomid in enhancing ovulation and chances of pregnancy. The dose can be increased to 7.5 mg/day if deemed necessary by the Infertility physician. Letrozole is becoming the first-line treatment for Infertility in PCOS. The schedule for administering Letrozole and the timing of ovulation is similar to Clomid.

g) *Injectable gonadotropins (expensive hormone treatment)*—Infertility physicians must closely monitor this treatment. It consists of administering the medication and timing it with sexual intercourse, artificial insemination, or In Vitro fertilization.

h) *Surgical procedures* such as ovarian drilling or wedge resection of ovaries to help enhance ovarian function.