Clomiphene Citrate Ovulation Induction

Purpose: Clomiphene citrate is a medication used to stimulate ovulation in women who have infrequent periods and/or long cycles. It may also be used to stimulate ovulation of multiple eggs in patients with regular cycles and unexplained infertility. Clomiphene works by blocking the estrogen receptors in the hypothalamus, causing it to "think" there is an estrogen deficiency in the bloodstream. As a result, the hypothalamus stimulates the pituitary gland to secrete more FSH and LH into the bloodstream. The high level of FSH induces the development of an ovarian follicle. As the follicle grows it secretes estrogen into the bloodstream. About a week after the last Clomiphene tablet is taken, the hypothalamus senses the now high estrogen level and tells the pituitary to release a surge of LH. As a result, the egg is released from the mature follicle. For more information about Clomid, click here.

Administration: Clomiphene citrate can be purchased under the brand name Clomid or Serophene. Clomiphene is a pill and is taken by mouth. Treatment is started on either cycle day three, four, or five with an typical initial dose of 50 mg/day or five days. If ovulation occurs, this dose is continued in subsequent cycles. If the patient does not ovulate, 100 mg/day for five days is prescribed. If ovulation still does not occur, the daily dosage may be increased by 50 mg/day to a maximum dose of 250 mg/day for five days.

Monitoring: Ovulation induction with Clomiphene may be monitored by basal body temperature (BBT) chart or by urinary LH surge detection. Alternatively, your physician may use ultrasound and/or estrogen levels to determine the ovarian response to Clomiphene. An injection of hCG (human chorionic gonadotropin) may be administered to induce ovulation more precisely when follicle size is appropriate by ultrasound. The hCG injection may be followed by intrauterine insemination or intercourse within the next 24 - 36 hours.

Success Rate: Clomiphene will induce ovulation in about 50 - 75% of the patients who take it. When Clomiphene is used to induce or improve ovulation and no other infertility factors are present, the pregnancy rate approaches that of normally fertile couples. About 50% of fertile couples engaging in unprotected intercourse will become pregnant after six ovulatory cycles.

Risks: When taking Clomiphene, the frequency of twin gestation is 5 - 10%. The likelihood of having more than two babies is less than 1%. The rates of ectopic pregnancy, spontaneous abortions, and congenital anomalies are not higher than those which occur after spontaneous conception. Ovarian cysts may occur in approximately 5% of treatment cycles. Other side effects may include hot flashes and mood swings during the days that Clomiphene is taken. Depression, nausea, and breast tenderness may also occur. Severe headaches or visual problems, which are rare, are signs to stop treatment and call your physician.

Costs: Clomiphene costs approximately \$30.00 - \$150.00 for a one-month course depending on the amount of medication required.