OVULATION INDUCTION AND SUPEROVULATION THERAPY

WHAT ARE OVULATION INDUCTION & SUPEROVULATION?

Ovulation induction and superovulation are terms to describe the use of injectable fertility drugs (gonadotropins) to stimulate the ovaries to produce mature eggs. The goal of ovulation induction (OI) is to grow and ovulate an egg in a women who normally does not ovulate, while the goal of superovulation (SO) is to produce more than one egg to improve fertility in a women who already ovulates. Based on your diagnosis, your doctor will prescribe the treatment most appropriate for you.

WHO IS OVULATION INDUCTION & SUPEROVULATION THERAPY FOR?

Ovulation induction and superovulation might benefit you if:

You have ovulation problems that have not responded to simpler medications (such as clomiphene tablets).

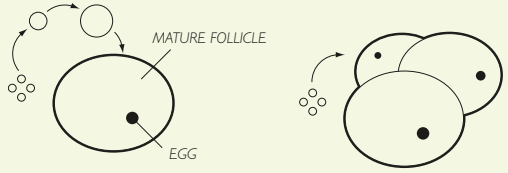
You have unexplained infertility and wish to try superovulation therapy in order to increase the number of eggs produced in each cycle – thus increasing the chance of conception.

To be a candidate for ovulation induction you must have a normal uterine cavity, at least one normal fallopian tube, and your partner must have a normal sperm count.

In certain circumstances, same sex couples may do superovulation.

HOW DO INJECTABLE FERTILITY DRUGS (GONADOTROPINS) WORK?

During a natural menstrual cycle you release luteinizing hormone (LH) and follicle stimulating hormone (FSH) from the pituitary gland. These hormones stimulate the growth of a follicle – the fluid space in the ovary where the egg grows. Although several follicles grow each month, in a natural cycle only one becomes mature enough to ovulate its egg.



NORMAL CYCLE STIMULATED CYCLE

In ovulation induction, women who do not ovulate at all take gonadotropins (forms of FSH and/or LH) by injection to stimulate the growth of one or more eggs. In superovulation, women who usually ovulate take these same gonadotropin injections to stimulate the growth of more than one egg. During your treatment, your doctor will carefully monitor you with blood tests and ultrasounds in order to minimize complications like ovarian overstimulation or multiple births.

WHAT SHOULD I EXPECT DURING TREATMENT?

Your treatment usually starts on day three or four of your menstrual cycle and lasts approximately eight to ten days. A nurse will teach you and your partner how to give the injections at home. You will likely have two to four clinic appointments for blood tests and/or vaginal ultrasounds to monitor your response and adjust your medication dose.

Your appointments will be scheduled between 7:30 am and 9:00 am, and will become more frequent toward the time of ovulation. Although each woman is different, this is an example of a treatment cycle schedule.

TREATMENT DAYS	1	2	3	4	5	6	7	8	9	10
INJECTION	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BLOOD TEST				✓			✓		✓	
ULTRASOUND							✓		✓	

When the blood tests and ultrasounds indicate one to four mature follicles, one of our doctors will prescribe a second medication (hCG) to trigger ovulation. You will usually ovulate 36 to 48 hours after this final injection.

Approximately 24 to 36 hours after the hCG injection, you will have an intrauterine insemination (IUI). This is accomplished by inserting a specially prepared sample of your partner's sperm through the cervix and placing it near the top of your uterus where it has the best chance of fertilizing an egg. The procedure takes only a few minutes and should be relatively painless.

HOW SUCCESSFUL IS THIS THERAPY?

Typically, 20% to 25% of healthy, fertile couples become pregnant each month they try. In contrast, the pregnancy rate among couples with infertility is usually between 2% to 10% per month. Superovulation usually produces pregnancy rates of 10% to 20% per cycle, depending on a woman's age, diagnosis, and duration of infertility. Among women with certain ovulatory disorders ovulation induction treatment may even restore normal fertility rates of 20% to 25% per month. If you do not become pregnant within the first three treatment cycles we will discuss other treatment options with you.

Approximately 15% to 20% of gonadotropin pregnancies will miscarry, similar to the general population. There is no increase in the risk of congenital abnormalities, ectopic pregnancies, or birth defects as compared to other women your age.

WHAT ARE THE SIDE EFFECTS OF THIS THERAPY?

Because your ovaries will be stimulated to produce more than one follicle at a time, you may find that your usual menstrual period symptoms are exaggerated. You may experience bloating, breast tenderness, cramping, pelvic twinges or heaviness, fatigue, and headaches.

WHAT ARE THE RISKS?

Ovarian Hyperstimulation Syndrome (OHSS): While most women produce one to four mature follicles during this treatment, in some cases the ovaries overstimulate and produce too many mature follicles. We try to minimize this by frequent monitoring and dose adjustments.

In about 0.5% to 1% of cases this "overstimulation" causes ovarian hyperstimulation syndrome (OHSS). OHSS develops when the ovaries become extremely enlarged and extra fluid accumulates within the abdomen. This is a serious complication which may require bed rest, intravenous fluids or even drainage of the abdominal fluid.

If we think you are at high risk for a multiple pregnancy or OHSS, we may decide not to proceed with the ovulating injection of hCG and the rest of the cycle. Alternately, we may suggest converting the cycle into in vitro fertilization (IVF) as a safety measure. By retrieving the eggs from the ovaries and transferring only a few embryos back to the uterus, we can decompress the ovaries and potentially lower the risk of multiple pregnancies and hyperstimulation syndrome.

Multiple Pregnancy: Although ovulating more than one egg may increase your chances of conceiving, it will also increase your chances of having a multiple pregnancy. Between 15% to 25% of all gonadotropin pregnancies result in twins (depending on the woman's age and cause of her infertility), while 1% to 3% result in triplets or more. If you become pregnant with triplets or more, you may choose to have a selective pregnancy reduction at BC Women's Hospital.

Several large follow-up studies have provided reassurance that the risk of breast, ovarian, and uterine cancer is *not increased* following the use of fertility drugs. A yearly physical exam is important for the prevention and early detection of all diseases.

WHAT DOES IT COST?

Although no two cycles are exactly the same, medication costs usually range from $700 to $1500 for each cycle. There is also a fee for each cycle for injection supplies, monitoring, and the insemination. Please see our website for our current list of fees and check with your extended benefits carrier to see if any of the medications are covered. Infertility consultations and tests are covered by MSP.

HOW SHOULD I PREPARE FOR TREATMENT?

Your appointments will be scheduled between 7:30 am and 9:00 am and will become more frequent toward the time of ovulation. Because of the intensive nature of the monitoring these visits are tightly scheduled and are essential for your treatment. If you cannot accommodate the frequent morning visits, it would be better for you to wait until you have a more flexible schedule before starting treatment.

Supplements: We recommend that you take a multivitamin supplement containing folic acid (0.4 to 1.0 mg daily). This B vitamin reduces the risk of some serious defects of the brain and spinal cord in the fetus. You should start taking it a few weeks before your treatment begins.

Weight: Women who are underweight or markedly overweight may have difficulties during this treatment or a resulting pregnancy. As gonadotropin doses may be weight-related, heavy women may require more medication, may have more difficulty absorbing it, and may have lower success rates. If you are markedly overweight or underweight, we will calculate your body mass index, and may ask you to delay treatment until your weight is in a safer range.

Smoking: Women who smoke have a lower chance of becoming pregnant and a higher rate of miscarriage. Quitting smoking increases the success of your treatment and your chance of having a healthy baby.

Please feel free to ask us about this or other aspects of your treatment if you have concerns.

CONFIDENTIALITY All services are provided in a completely discreet and confidential environment.

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genesis fertility centre
embrace a new beginning