

Intra-uterine insemination (IUI)

Intra-uterine insemination (IUI) is a very common procedure which is done during the treatment of infertility. This is a simple procedure and does not need hospitalization. In this procedure, sperms which have undergone certain laboratory process are introduced into the woman's uterus (womb) at around the time of ovulation (i.e. release of the egg from the ovum), with the aim of conception and pregnancy.

This process is done in many conditions. It is done when the man has a low sperm count or poor motility (the ability of the sperm to move). Different clinics use different criteria to decide whether the quality of sperm is sufficient for IUI.

It is also done with ovulation induction treatment in cases where there is cervical factor of infertility which means the mouth of uterus is not allowing the sperms to ascend further in the uterus.

IUI can also help couples who are unable to have intercourse because of disability, injury, or difficulties such as premature ejaculation. It is also recommended for women with mild endometriosis, and is often used as the first line of assisted conception treatment for couples with "unexplained infertility".

Depending on your particular fertility problem you may or may not be advised to use fertility drugs alongside the IUI treatment. The fertility drugs are medicines which help good growth of eggs in the ovary. If fertility drugs are used it is called a "stimulated cycle" because the drugs stimulate ovulation. If drugs are not used it is called an "unstimulated cycle" or "natural cycle".

In unstimulated cycles, IUI is timed to take place around the time of natural ovulation. Your doctor may track your cycle using ultrasonography to determine the size of the ovum. At the time when the egg is likely to be released the IUI will be advised.

If your doctor has offered you IUI during a stimulated cycle, you'll probably be given fertility drugs in the form of an injections and tablets. On doing serial sonographies, when your doctor finds that you are very close to ovulation, the doctor will advice you to come for IUI.

Close to ovulation, your partner produces a sperm sample by the process of masturbation. If the male is not able to produce the sample, the female partner can help him to do so. This sample is further processed by the doctor.

The semen is added to a medium and centrifuged. This process removes the unwanted debris. At the end the sample is incubated. This whole process is aimed at washing the sample and getting the sperms with best quality for insemination. So the sample for IUI is now ready.

The female partner is asked to lie down on examination table. The mouth of the uterus is seen and stabilized. A very thin tube called IUI catheter is gently introduced in the uterus. The sample is slowly pushed in the uterine cavity. The procedure takes few minutes. The patient will be asked to remain lying down and relax for few more minutes. After that the patient can go home.

There is hardly any discomfort caused in the process of insemination. No anaesthesia is required. You rest for a short time afterwards and then carry on life as normal. No admission to the hospital is required. You may experience some abdominal cramps similar to menstrual cramps which are usually relieved on its own.

If 100 patients undergo IUI treatment in particular cycle, around 15 to 25 patients will become pregnant in that cycle. This success rates depend on the causes of you and your partner's infertility and your age.

If you are on fertility medicines, there is a possibility of multiple pregnancies. It is uncommon to have infection due to IUI. Occasionally, one may find a pregnancy settling outside the uterus called ectopic pregnancy. Sometimes, like any natural pregnancy, the IUI pregnancy can also land up in natural miscarriage.

Sometimes due to the fertility medicines especially with injections of fertility hormones the ovaries get stimulated abnormally. This can cause multiple problems such as fluid retention, swelling, collection of fluid in the abdomen. In extremely rare cases, admission to hospital or intensive care unit is required. That particular cycle obviously goes waste as IUI is not done. The above problem is called ovarian hyperstimulation syndrome. It is due to medications and injections and not due to the process of IUI per say.

As compared to in vitro fertilization, commonly called as (IVF), IUI is a cost effective, technologically simpler procedure. The success rate of IUI is lesser than IVF. As

compared to merely keeping sexual relations near ovulation, the success rate of IUI is much better.

Thus IUI gives a new hope for couples who are desperate for having a child and the procedure can be easily performed without much discomfort and complications. So after about 2 weeks of the procedure, be ready for the pregnancy test!