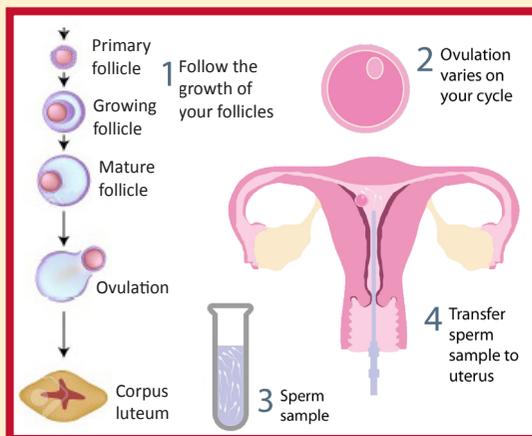


# INTRAUTERINE INSEMINATION (IUI)



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## What is Intrauterine Insemination?

The technique of Intrauterine Insemination (IUI) is a popular fertility treatment due to its simplicity and affordability. The IUI procedure involves introducing washed and actively motile sperms directly into the uterine cavity (womb), at or around the time of ovulation, with the aim of increasing the chances of pregnancy. The purpose of IUI is to increase the number of active sperms reaching the egg in the fallopian tube, bypassing the vagina and cervix, thus shortening the distance to be travelled by the sperms.

IUI is a simple procedure and can be performed whether or not the woman is receiving medication for egg formation. However, stimulation of egg development by medication does improve success rates, as more than one egg may develop. Monitoring by ultrasound is essential to track follicular growth and time the ovulation. Once the egg reaches maturity, hCG injection is given to facilitate ovulation, which usually takes place within 24 to 36 hours of the injection.

## Who are eligible for IUI procedure?

To consider IUI :

- The female partner should be ovulating normally or should be able to ovulate with medication for ovulation.
- She should have open fallopian tubes or at least one fallopian tube should be patent and healthy.
- The male partner should have satisfactory sperm counts, motility and morphology.

## IUI not indicated in following conditions

- Female partner with
  - tubal block on both sides
  - inability to develop eggs
  - age  $\geq$  40 years
  - advanced stages of endometriosis
- Male partner with azoospermia (absence of sperms in semen) or very low scores of sperm count, motility and morphology.

## What is the procedure for IUI?

The procedure has three components : semen collection, semen preparation and deposition of active sperms in the uterine cavity. The entire procedure takes approximately 1–3 hours.

## Semen collection and preparation

A short period i.e. 1-2 days of ejaculatory abstinence is advised prior to scheduled IUI. At the predicted time of ovulation, the male partner is asked to collect semen into a sterile container and submit it in the laboratory for sperm preparation. (**Please note:** The sample should be collected in our lab and not at home and in a sterile container provided by our lab.)

Semen analysis is performed to check for initial parameters and the sample is processed. Active sperms are separated and the rest of the seminal fluid (containing dead sperms, bacteria and other components which can cause painful contractions of the uterus) is discarded. Post-wash active sperm count is noted for sample adequacy for insemination. A minimum count of five million active sperms is acceptable.

## Actual IUI procedure

Once the specimen is ready, the female partner is called to the IUI procedure room. She is made to lie down on the couch with legs flexed. A speculum is introduced into the vagina to expose the cervix and it is gently cleaned. The prepared sperms are loaded into a slender semi flexible sterile catheter (tube) and introduced into the uterine cavity.

## How much time does the actual IUI take and will it cause any pain?

Actual IUI (deposition of active sperms into the uterus) procedure takes only a couple of minutes. The procedure is usually painless, although some women may experience a menstrual cramp like pain. There may be a little vaginal spotting or discharge after IUI.

### **Is rest necessary after IUI?**

The female partner will be asked to lie down for 20 minutes after IUI. Then she can resume her regular activities. The sperms will not escape from the uterine cavity if she gets up.

### **Is intercourse advised after IUI?**

Yes, this will increase the chances of conception.

### **How many sittings of IUI are performed in one cycle?**

Usually one single properly timed insemination is sufficient.

### **How many cycles of IUI are recommended?**

Four to six cycles of IUI may be tried as there is no improved success seen later.

### **Chances of success with IUI**

Average success rate ranges from 15–20% in a single cycle. The success rates may be low if the post-wash sperm count is less than 3-5 million.

### **What are the risks involved with IUI?**

Procedure-related complications are infrequent and include infection when the woman may experience lower abdominal pain and vaginal discharge in which case doctor consultation is advised.