

How does IUI (Intra-uterine insemination) work?



Ovarian stimulation in IUI is used to stimulate the growth of one or two eggs during the menstrual cycle. Once one or two follicles have reached their target size the female is given an injection to trigger ovulation. IUI involves obtaining a semen sample from the male partner at the time of ovulation, preparing it in the laboratory and then placing it in the woman's uterus. During sperm preparation, dead and poor quality sperm are removed leaving a small, highly purified sample of healthy sperm, at the correct concentration for fertilization. This is then placed into the uterine cavity using a very soft, thin catheter (a procedure quite similar to having a smear test).

Intra-uterine insemination must be performed at the time of ovulation and so requires accurate timing. The woman's cycle is monitored via vaginal ultrasound scanning.

IUI is one of the less stressful methods of ART. It is recommended for certain problems such as mild sperm abnormalities, cervical problems or psycho-sexual problems. It may also be used for unexplained infertility. It is not suitable if there is significant endometriosis (grades III – IV), tubal disease (e.g. following tubal infection) or significant sperm abnormalities.

IUI can be used in the following ways:

In a natural cycle

This method is used for patients who do not like to take medication and have regular cycles, or for those who cannot have natural intercourse because of psychological or medical problems (eg spinal cord injuries or retrograde ejaculation). It is not a good method for women whose partners have poor sperm quality.

With clomiphene citrate

The use of clomiphene citrate alone in unexplained infertility has only a small benefit, but if used in combination with IUI there is a marked increase in the pregnancy rate, to 10-12% per cycle.

With FSH stimulation

The most successful form of IUI (15-20% per cycle) is that which also uses subcutaneous (just under the skin) injections of the hormone FSH (Follicle Stimulating Hormone).

IUI is not suitable for every couple but when used appropriately can result in a pregnancy rate approaching that of 'normal' couples in the same age group (e.g. 30 year olds can expect around 14-18% per cycle).

Many couples prefer to avoid more complex treatments such as IVF where possible and in many situations IUI is a better, cheaper and easier alternative to try.

It is recommended however that after 3/4 unsuccessful attempts consideration should be given to moving onto IVF.