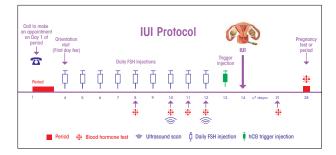
of day 11 of your cycle for an orientation visit, a blood test and then daily monitoring will be carried out by home urine testing (or occasionally blood tests). If you are urine testing you should come in for a confirmatory blood test the morning you detect the 'colour change' (instructions are with the test kits). If a change has not occurred in 5 days you then will need to have blood tests to find out why.

- With Clomiphene/IUI the clomiphene citrate tablets (1 or 2) are usually taken from days 4-8 inclusive of the cycle and you attend on day 11 for an orientation visit, a blood test, then daily testing by a home urine kit or by further blood tests as outlined above. Occasionally 'triggering' may be required to cause ovulation.
- 3 With FSH/IUI the FSH injections will commence on day 4 or 5 and the first will usually be given by one of the nurses at the Clinic. If required, they will also teach you &/or your partner how to do the subcutaneous injections. You then have an injection of FSH daily until approximately day 13.

To monitor the response you have a blood test on the morning of day 9 and another, along with an ultrasound day 11 of the cycle – and thereafter depending on the results. When the monitoring suggests the ovaries (and eggs) are ready, a final 'triggering' injection of hCG will cause ovulation. Insemination is planned to coincide with this, 36-48 hours later.



#### Insemination

We recommend that there be no intercourse after day 10 of the cycle to help build up the sperm numbers (abstinence beyond 5-6 days doesn't help any further). On the day of planned insemination, your partner needs to produce a sperm sample and deliver to us at a prearranged time. Within two hours of the sperm being prepared, you will be inseminated at the Clinic. It takes just a few minutes. There is no anaesthetic involved. Your nurse will place a sterile speculum into the vagina, clean the mucus away from the cervix and then through a small disposable catheter insert a drop of the washed, concentrated sperm into the uterus. This simple procedure is usually not painful but occasionally some mild cramping discomfort occurs. You can then get up immediately, return to work and go about your normal daily routine.

Seven days following an FSH/IUI insemination, you will need a booster injection of hCG, which you will do at home. This is not required with natural cycle or clomiphene IUI.

#### Possible risks and complications

#### Infection

Infection is a rare but important risk occurring in less than one in 500 cases. If you have a history of previous pelvic infection, you may be given antibiotics to minimise this risk.

#### Overstimulation

If there is an unexpected excessive response from your ovaries to the low dose FSH injections the option of IVF may be discussed. Rarely women who over-respond may develop ovarian hyperstimulation syndrome (OHSS) causing severe discomfort, nausea and abdominal distension. This is fortunately, a very rare complication indeed of ovulation induction but you contact the Clinic if any of these symptoms occur.

#### Multiple pregnancy

If you have ovarian stimulation, particularly with FSH injections, a multiple pregnancy may occur in up to 10% of women. In some instances it may be necessary to cancel the treatment because on ultrasound we see that too many follicles are developing and the risk of multiple pregnancy is too high.

#### Failed procedure

In 2% of IUI cases it is not possible to pass the catheter through the cervix to complete the procedure. In this circumstance the sperm can be placed high in the cervix where it finds its own way into the uterus.



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Ovulation induction and intrauterine insemination (IUI) are approaches that are commonly used to treat infertility in women who have healthy fallopian tubes and where more complex treatments are not appropriate.

# Ovulation Induction Intrauterine Insemination

During a woman's menstrual cycle her ovaries will develop a dominant follicle (or small sac) which contains an egg. Fourteen days after the start of a woman's last period this follicle will have grown, the egg matured and is released (or ovulated). The egg then survives for about 24hours during which time it moves into the fallopian tube and awaits fertilisation by sperm. This is a woman's fertile time.

Ovulation is normally confirmed by blood tests (to measure the levels of hormones at specific stages of a woman's cycle) or a transvaginal ultrasound to visualise follicular development and the condition of the lining of the womb.

### **Ovulation induction**

Ovulation induction is very useful in two circumstances:

- · Where there is an abnormality of ovulation in a female
- To improve the pregnancy rates of stimulated uterine insemination in women who ovulate naturally.

# Clomiphene citrate ovulation induction

The use of clomiphene citrate (Clomid or Serophene) alone in unexplained infertility, where the woman ovulates by herself, has only a small benefit. However in women who do not ovulate by themselves, clomiphene may induce ovulation and allow women to conceive reasonably quickly without the need for more complex treatments.

#### **FSH** ovulation induction

The most successful form of ovulation induction (15-20% per cycle) uses subcutaneous (just under the skin) injections of the hormone FSH (Follicle Stimulating Hormone). Sometimes couples prefer to proceed directly to injections without first trying clomiphene but because the ovarian stimulation by FSH is stronger, regular monitoring of the woman is essential to avoid multiple pregnancy.

#### What is Intrauterine Insemination?

Intrauterine insemination (IUI) is the placing of specially prepared, concentrated "washed" sperm into the cavity of the uterus, bypassing the cervix. This is performed close to the time of ovulation (release of the eag).

IUI is not suitable for every couple having trouble conceiving, but when used appropriately can result in a pregnancy rate approaching that of couples in the same age group (eg 30 year olds can expect around 20% 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 three unsuccessful attempts of IUI, consideration should be given to moving onto In vitro fertilisation (IVF).

# Reasons to consider IUI treatment

# Female infertility

#### 1 Unexplained infertility

This is the most common indication for IUI. Whilst pregnancies can be achieved with natural "timed" intercourse in association with mild ovarian stimulation, better pregnancy rates occur with IUI.

#### 2 Tubal disease

There should be at least one normal tube and ovary.

#### 3 Endometriosis

Intrauterine insemination is used for mild forms but not for severe endometriosis.

### 4 Age

This procedure has been shown to have good success in women under 40 years of age.

#### Male infertility

# Mild sperm abnormalities

IUI is an effective treatment where there are minor sperm abnormalities. Where the man has poor quality sperm (low numbers, reduced movement or abnormally shaped sperm), 'natural cycle' IUI has very poor results but in that situation IUI can occasionally still be used in combination with ovarian stimulation of the female.

# **Psycho-social influences**

Men who are away from their partners for extended periods of time may elect to have their sperm frozen and artificially inseminated whilst they are absent.

IUI may also be needed when there are psychosexual problems in the relationship. These can commonly be a longstanding problem while for other couples, problems may occur in times of major financial, marital, or work related stress. IUI using previously stored sperm may help the immediate problem but counselling and/or psychotherapy is essential for the couple's long term relationship.

# **IUI** treatment options

IUI can be done as part of a natural cycle. Some doctors advise combining it with ovulation induction with either clomiphene or FSH injections, as described above.

#### The process

Within the first two days of the beginning of your period, telephone the nurses at the Clinic. Then either:

1 With **natural cycle IUI** you need to attend the clinic on the morning