GONADOTROPHIN OVULATION INDUCTION

WHAT ARE GONADOTROPHINS?

Gonadotrophins are hormones particularly LH (leuteinising hormone) and FSH (Follicle stimulating hormone) that are produced by the pituitary gland. The hormones stimulate the ovary to produce a follicle, which contains an egg. Some medications contain a mixture of LH and FSH and some FSH alone. The brand and type will be chosen individually dependant on you history and tests.

WHO IS SUITABLE FOR GONADOTROPHIN TREATMENT?

Ovulation induction should be considered for those patients that remain anovulatory despite taking 100mg Clomiphene Citrate or for those who have not tolerated Clomiphene Citrate.

To be successful Patients need:
A recent test of tubal patency either Lap and Dye or HSG.
A recent normal semen analysis
Ideally a BMI<30

For patients who have had a baby using gonadotrophin ovulation induction seeking a subsequent attempt they need.

A recent normal semen analysis.
Ideally a BMI < 30
unless birth was complicated they do not need a test of tubal patency

WHO WILL BENEFIT FROM GONADOTROPHIN TREATMENT?

Women who do not ovulate or who ovulate irregularly on medication.
Women who do not respond to Clomiphene Citrate, Tamoxifem or Letrozole
Women who are intolerant of the above

It important to exclude ovarian failure before the start of treatment

HOW IS THE TREATMENT CARRIED OUT?

Before the start of treatment an ultrasound is carried out. This is a transvaginal ultrasound scan of the uterus and ovaries and excludes ovarian cysts and other abnormalities and measures endometrial thickness.

The couple will receive a full oral explanation of the programme. This will include the possible side effects and complications of the treatment, e.g. ovarian hyper stimulation and the risk of multiple pregnancy.
The fertility nurse will demonstrate the method of self-administration of the drugs to be used and

ensure that the couple are confident in this technique before leaving the unit.

Oligomenorrhoea/Amenorrhoea

In the cases of the patients with oligomenorrhoea or amenorrhoea (irregular or absent periods) the thickness of the endometrium will be taken into account and Provera 10mg for 7 days will be issued to those with an endometrial thickness >5mm. These patients will be advised to do a pregnancy test prior to starting the Provera.

Prescriptions

A prescription for the Gonadotrophins drugs (Menopur or Gonal F) and HCG (Pregnyl) will be issued from central homecare. The standard starting dose for the gonadotrophins will be 50iu unless otherwise advised starting on the 2nd or 3rd day of menstruation.

Ultrasound Scans

The patient will be booked for an ultrasound scan around the 8th -10th day of her cycle. Patients will see one of the fertility nursing team after every ultrasound scan.

Oestrogen Levels and Drug Increases

Oestrogen levels will be monitored on a regular basis and in particular when considering increasing the dose of the gonadotrophins. Dose increases will only rise by a small incriment unless otherwise instructed by Mr. Pampiglione.

Monitoring

The scans continue with or without oestrogen bloods until the follicle is ready to be triggered. A single injection of hCG (human Chorionic Gonadotrophin or Ovitrelle) is given to trigger ovulation. This acts in exactly the same way as the natural LH trigger and ovulation occurs 40-44 hours later.

hCG

There are strict criteria for giving hCG to reduce the risk of multiple pregnancy.

These are:

There should be no more than 3 follicles of 16mm or over and no more than 10 follicles >10mm in total.

If patients have more than 3 dominant follicles then the hCG is withheld. The patient will be advised to use a barrier contraceptive until she menstruates to avoid the possibility of a multiple pregnancy. She must also be given clear advice regarding the possibility of ovarian hyper stimulation syndrome. This will no be counted as one of her six cycles.

Patients will be advised to have intercourse at least twice in a 48 hour period following the last injection. They will also have clear instructions on what to expect following the hCG injection and how to book another cycle if the cycle is unsuccessful.

Pregnancy
Following a successful cycle the patient will have an ultra sound scan booked for her at 6/40 weeks. These appointments will take place in the outpatients' clinic.

HOW MANY CYCLES?

We advise no more than 6 cycles of treatment

WHAT ARE THE RISKS?

Multiple pregnancy approx. 5%
Ovarian Hyperstimulation syndrome. This is rare and can largely be prevented by withholding the hCG injection which potentates it.

HOW SUCCESSFUL IS IT?

This depends upon age and BMI. For under 35s the pregnancy rate should exceed 80%. For women over 40 it may be under 12%.

last reviewed 1-11-16 JSP