**Treatment of Infertility – Notes**

* Microsurgery can solve some problems of infertility e.g., blocked uterine tubes.
* Cervical mucus hostile to sperm may have to be treated.
* Medication can solve problems with ovulation by stimulating ovulation.
* Gonadotropins may be injected to stimulate growth of eggs in the ovaries.
* Oral medication can restore normal levels of prolactin to allow ovulation.
* Ovulatory-stimulating drugs – Stimulates ovaries to release eggs in women with irregular cycles or anovulatory cycles (menstruation without ovulation).

Clomid:

* Taken as a pill.
* Some can be prescribed by gynaecologists without involving a fertility specialist.
* Side effects include hot flashes, breast tenderness, mood swings and nausea; mucus quality may decrease, making it more difficult for the sperm to travel through the cervix.

Artificial insemination by donor (AID):

* High pregnancy rate – 70-80% of women conceive by this method.
* Physical characteristics of the donor are matched as closely to the sterile man as possible.
* Donor is usually never seen by or known to the couple.
* Risk of sexually transmitted disease from donor semen.
* At about the same time ovulation is expected, semen is injected into the upper vagina.

In-vitro fertilisation (IVF):

* A man’s sperm fertilising a woman’s egg in a petri dish; occurs outside the body.
* Embryo is implanted inside the woman’s uterus.
* Can be used by anyone with the possibility of donated eggs and/or sperm.
* Increase risk of ovarian hyperstimulation (due to fertility drugs), allergic reactions, ectopic pregnancy and multiple births.

Gamete intrafallopian transfer (GIFT):

* Eggs are harvested from the ovaries and mixed with sperm in a test tube; mixture is immediately injected into the fallopian tube.
* Sperm and egg are allowed to mix naturally, hopefully fertilise.
* Used when the male has a low sperm count or low motility, or if the couple have objections to IVF.
* Risk of multiple births.

Zygote intrafallopian transfer (ZIFT):

* Similar process to GIFT except that the egg is fertilised in vitro, then injected into the fallopian tube.
* Differences from GIFT – Fertilisation of egg occurs in vitro, not in vivo.
* Differences from IVF – Blastocyst is injected into the fallopian rub, not the uterus.

Intracytoplasmic sperm injection (ICSI):

* A single sperm cell is directly injected into the cytoplasm of an egg.
* Needle is carefully inserted through the zona pellucida; the sperm is slowly injected into the egg and the needle carefully removed.
* Used most commonly to overcome male infertility problems – when the man’s sperm count is very low or if his sperm are of insufficient quality to attempt IVF.
* Double the risk of major birth defects, including chromosomal and musculoskeletal defects.

Donor egg:

* Used when a woman is unable to conceive using her own eggs.
* An egg donated by another woman is mixed with her partner’s sperm.
* Resulting embryo is implanted into the woman’s uterus.
* Can also be done using a donated embryo.

Surrogacy:

* A woman may agree to bear a child for a couple.
* The man provides semen naturally or via artificial insemination.