Causes of female infertility and treatment

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ovary
Fallopian tube
uterus
cervix
vagina

Ovulation

LH
E2
P4
Probability of conception

- After 3 months 30%
- After 6 months 50-60%
- After 9 months 60-70%
- After 12 months 80-90%
- After 24 months 95%

What is Infertility?

Absence of conception after 1 year of regular, unprotected intercourse
How many couples are affected?

15%

Infertility is a Growing Problem

• Postponement of childbearing
• Effective Contraception
• Rising incidence of STIs
• Smoking

Who is affected?

- Male: 30%
- Female: 30%
- Both: 10%
- Unexplained: 30%
What are the causes of Infertility?

- Ovulation disorders ------------ no egg
- Tubal infertility ------------- no transport
- Male factor -------------- no fertilisation
- Implantation failure
- Endometriosis
- Unexplained infertility
- Uterine abnormalities

The duration of infertility and the time remaining for conception may be more important than the cause of infertility itself.
Effect of Age on Fertility

- 1/3 of women who defer pregnancy until > 35 years will have an infertility problem
- 40-44 years old - monthly fecundity of 5%
- Decline due to poor oocyte quality and number
- Increased incidence of spontaneous abortion – ½ after age 40 years
Effect of Weight on Fertility

Effective Treatment of Infertility
- Ovulation Disorders – Clomid, Gonadotrophins, Bromocriptine, ?Metformin
- Surgical – endometriosis, fibroids, adhesions
- COH and IUI – idiopathic, endometriosis
- IVF ± ICSI – tubal, male, endometriosis, unexplained, failure of other treatments
- Sterilisation Reversal
- Donor Gametes
- Surrogacy

COH/IUI
- Aim to create up to 3 mature oocytes
- Treatment with low dose Gn from cycle day 2
- Monitoring with E2 and US
- IUI at time of ovulation
- Risk of multiple pregnancy
IVF ± ICSI

In Vitro Fertilisation
• Ovaries stimulated +++
• > 10 eggs collected
• Sperm washed and mixed with eggs or ICSI
• 1 embryo transferred back into uterine cavity
Psychological Aspects of Infertility

- Stressful - psychological, social, physical, financial
- Emotional stress is a result rather than a cause of infertility
- Psychological counselling is of benefit
Adoption

- Always an option – particularly overseas
- Positive alternative for those who want mostly to be parents
- Most adoptees are emotionally healthy and consider adoption a positive experience