

MonashHealth  monash ivf life starts here

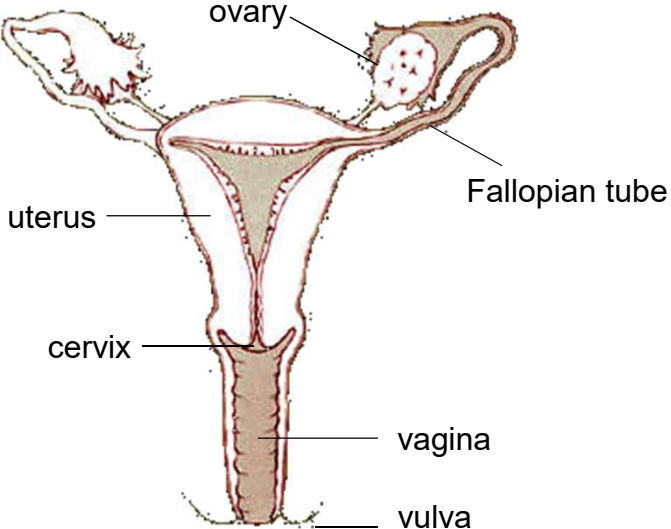
Jean Hailes
FOR WOMEN'S HEALTH

Causes of female infertility and treatment



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Monash IVF

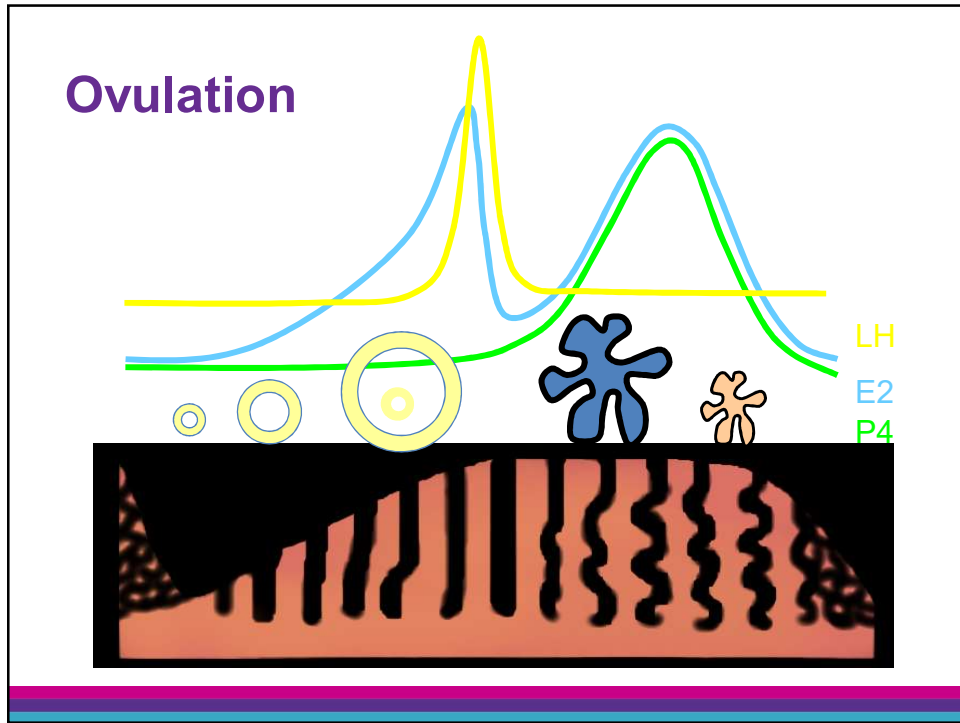
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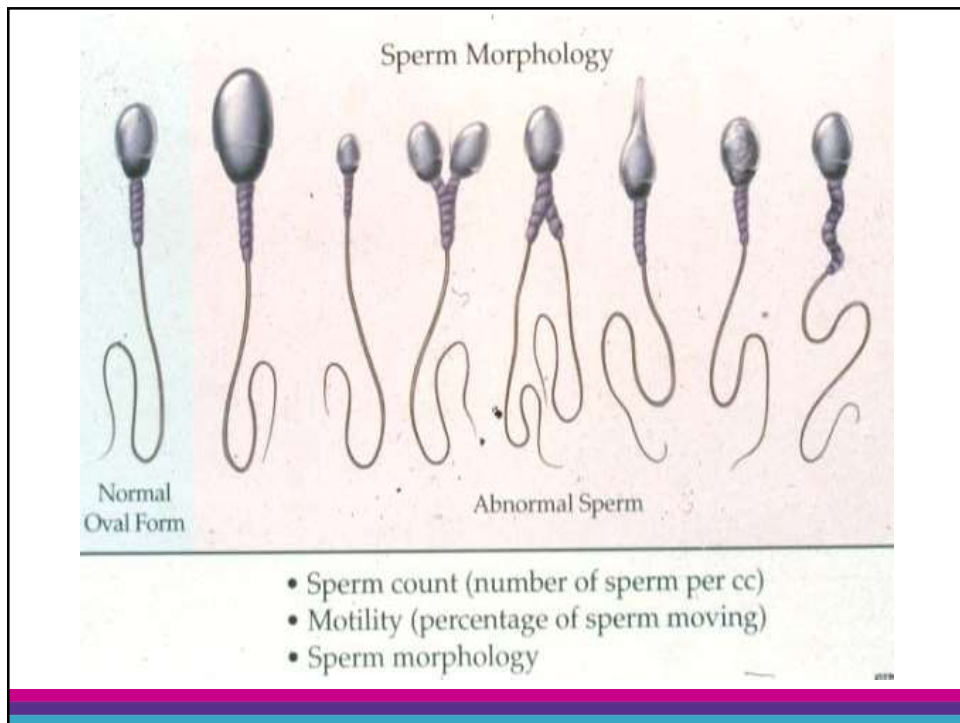
ovary
Fallopian tube
uterus
cervix
vagina
vulva

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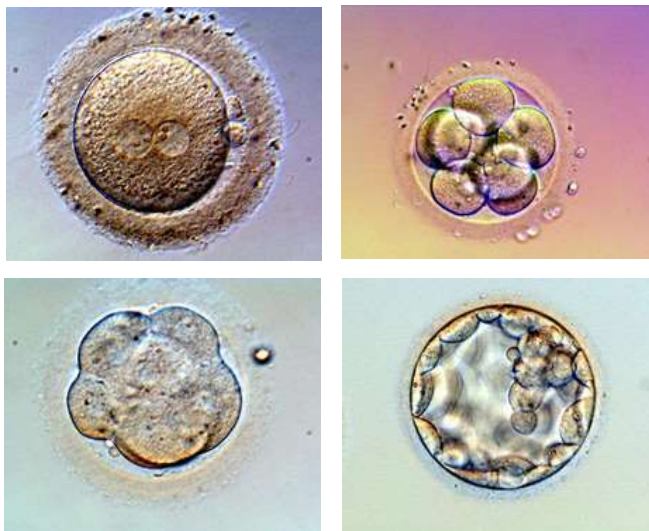
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Intercourse

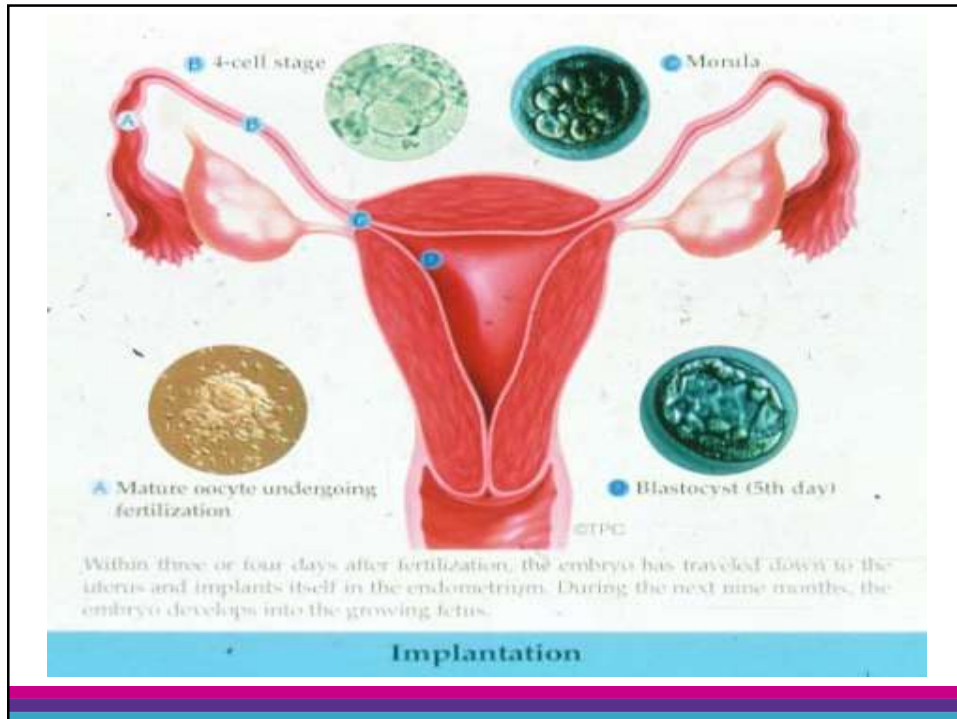


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Fertilisation & Development



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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%

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What is Infertility?

Absence of conception
after 1 year
of regular, unprotected intercourse

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How many couples are affected?

15%

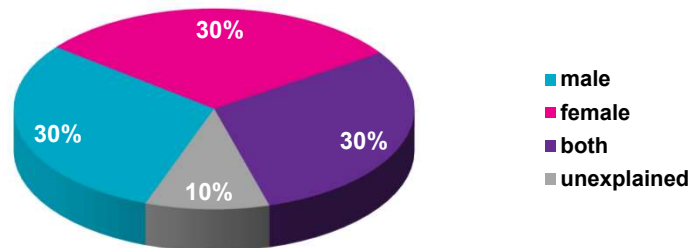
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Infertility is a Growing Problem

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

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Who is affected?



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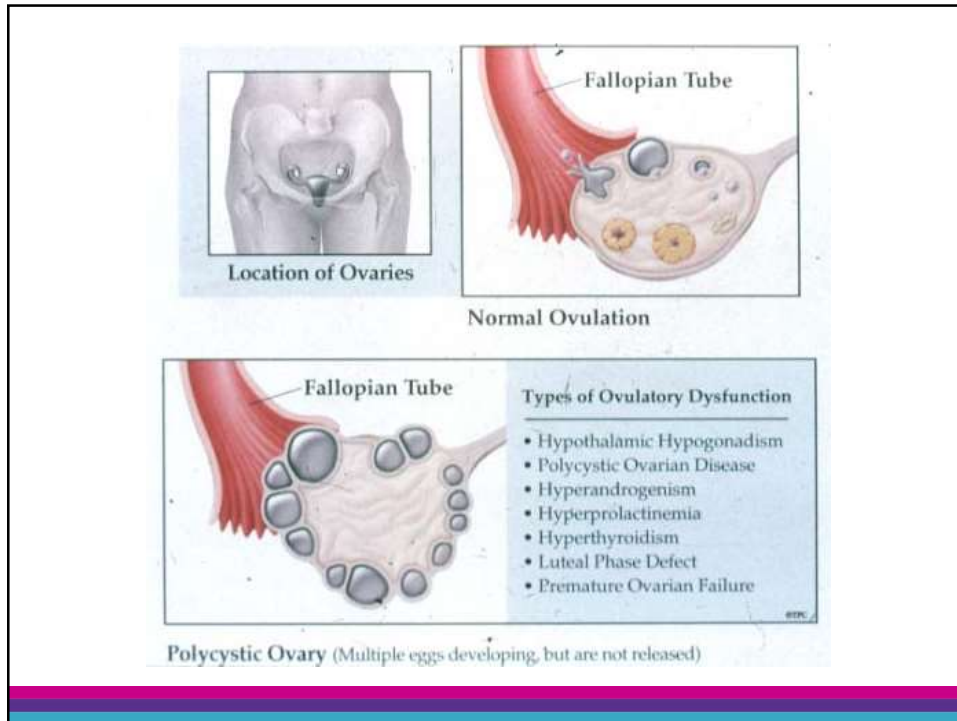
What are the causes of Infertility?

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

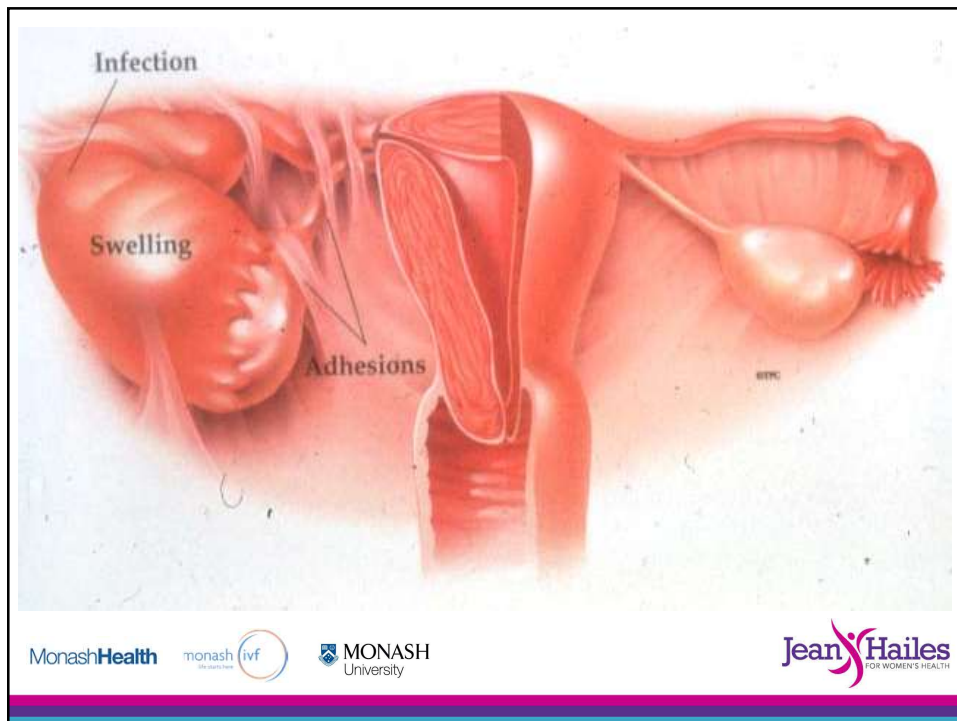
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The duration of infertility and the time remaining for conception may be more important than the cause of infertility itself.

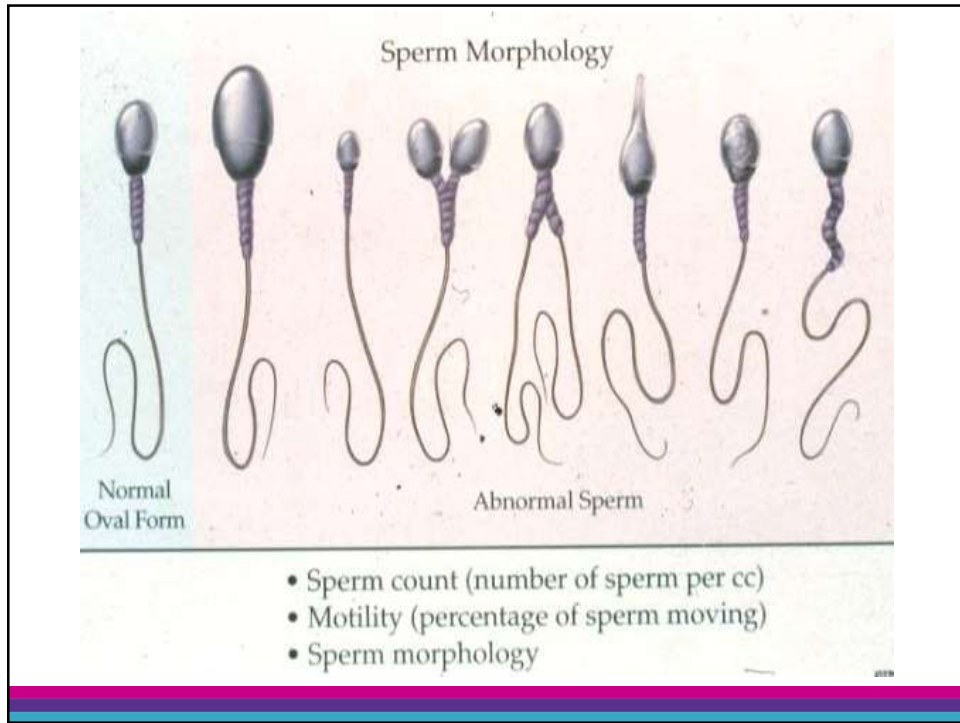
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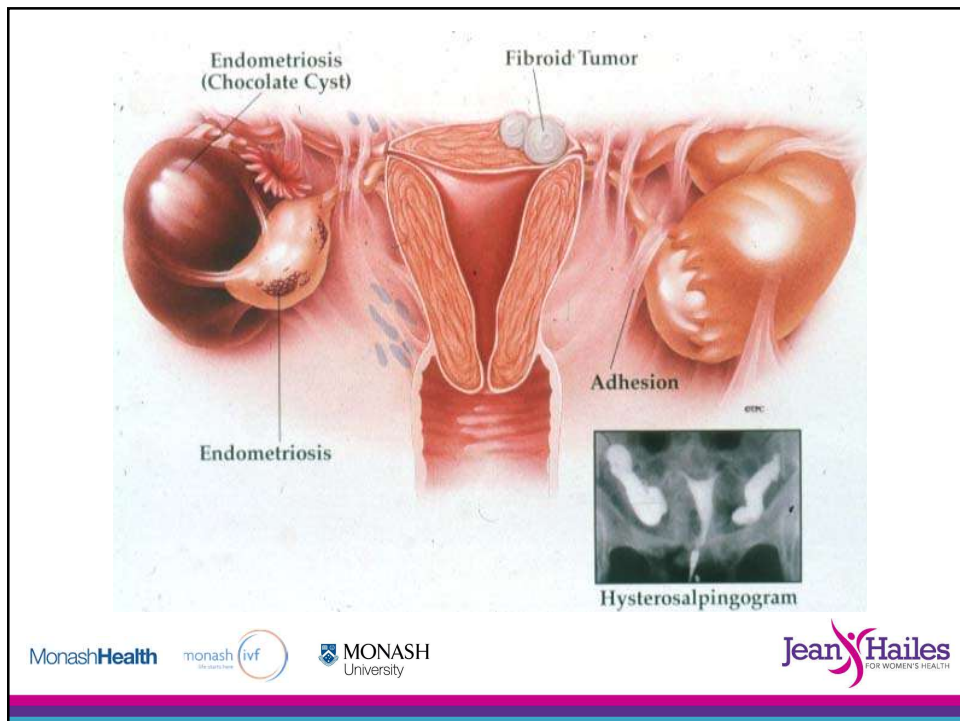
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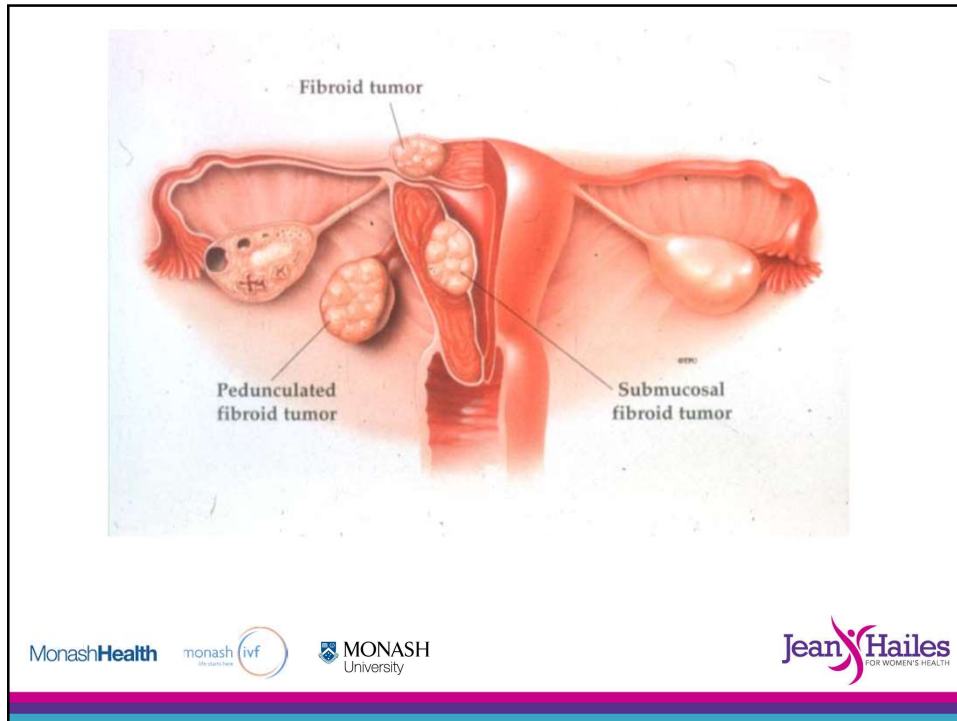
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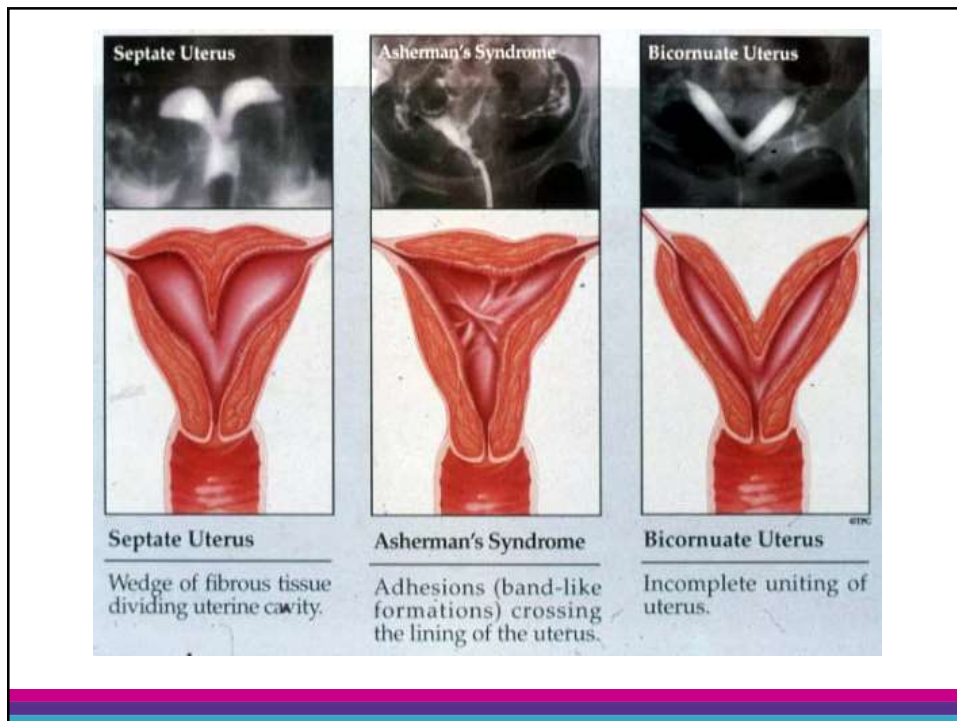
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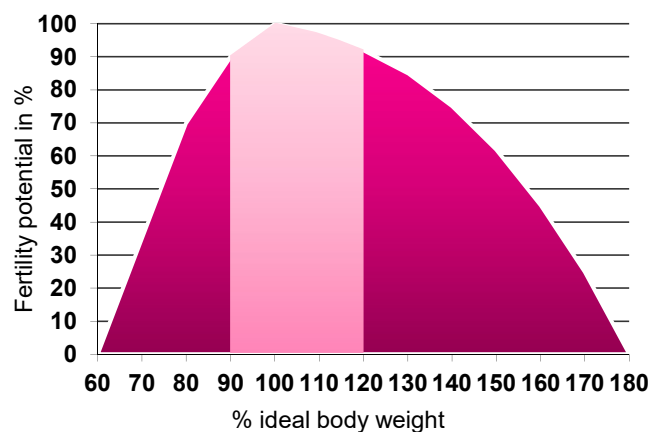
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Effect of Age on Fertility

- 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 – $\frac{1}{2}$ after age 40 years

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Effect of Weight on Fertility



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Effective Treatment of Infertility

- **Clomiphene, Gonadotrophins, Bromocriptine, ?Metformin** – ovulation Disorders
- **Surgical** – endometriosis, fibroids, adhesions
- **COH and IUI** – idiopathic, endometriosis
- **IVF ± ICSI** – tubal, male, endometriosis, unexplained, failure of other treatments
- **Sterilisation Reversal**
- **Donor Gametes**
- **Surrogacy**

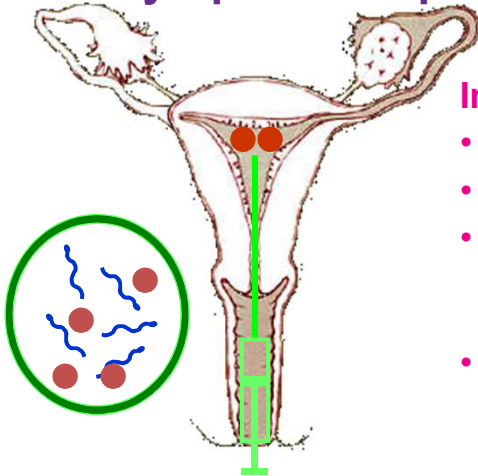
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Controlled ovarian hyperstimulation (COH)/Intrauterine insemination (IUI)

- 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





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In vitro fertilisation (IVF) ± Intracytoplasmic sperm injections (ICSI)



In Vitro Fertilisation


- Ovaries stimulated +++
- > 10 eggs collected
- Sperm washed and mixed with eggs or ICSI
- 1 embryo transferred back into uterine cavity

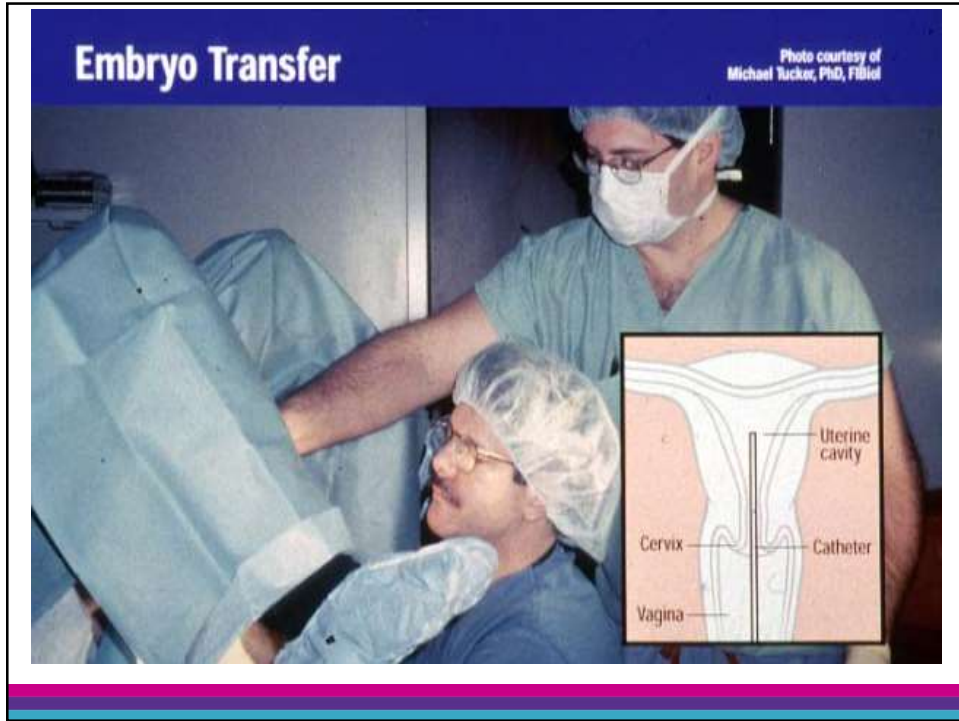
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Ultrasound Showing Mature Follicles

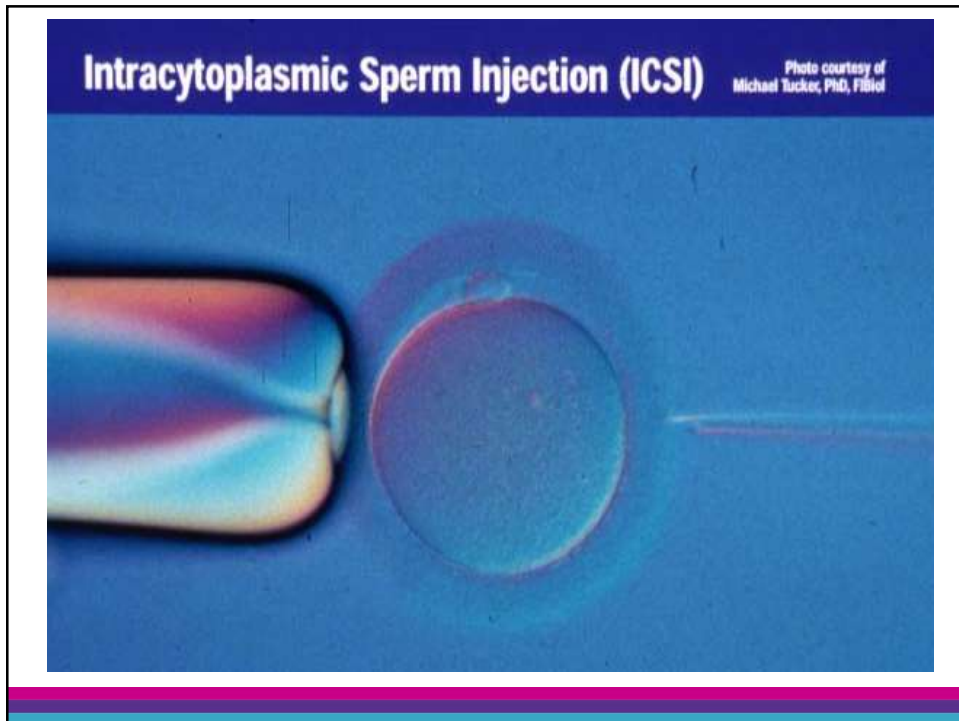
Photo courtesy of
Karen Hammond, MSH, CRNP



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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

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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