



IVF (In Vitro Fertilization)

In Vitro fertilization (IVF) literally means 'fertilized in glass'. Very simply, eggs are removed from the ovary just before ovulation. The eggs and sperm are then placed together outside the body in a glass dish or test-tube. If fertilization occurs, the embryo is placed in the uterus (womb) 2-3 days later. The original indication for IVF was damaged fallopian tubes, but it is now also used for a wide range of disorders.

IVF might help if:

- the female partner has blocked or damaged fallopian tubes – the egg and sperm might not be able to meet or the fertilised egg cannot make its way into the uterus
- there is a problem with the male partner's sperm – the number of sperm is low, the sperm do not move well or there are high numbers of sperm which are not properly formed
- the female partner has ovulatory (egg releasing) problems
- the female partner has endometriosis
- no cause has been found for not being able to conceive, especially in couples that have been trying for more than three years

ICSI (Intra-Cytoplasmic Sperm Injection)

In conventional IVF the eggs and the sperm are mixed together in a dish and the sperm fertilise the eggs naturally. ICSI bypasses the natural processes involved in a sperm penetrating an egg and is therefore used when there are problems that make it difficult to achieve fertilisation naturally or by conventional IVF. Circumstances in which ICSI may be appropriate include:

- When the sperm count is very low
- When the sperm motility is low
- When the abnormal forms are high
- When sperm has been retrieved directly from the epididymis (PESA) or the testicles (TESA/TESE), from the urine or by electro-ejaculation
- When there are high levels of antibodies in the semen
- When there has been previous fertilisation failure

Patients who do not fall into these categories may wish to discuss any concerns about their treatment with their clinician.

Men who have very few sperm (oligozoospermia) or no sperm (azoospermia) in their semen, or who have high numbers of abnormal sperm that are unable to fertilise an egg, would previously have had little or no chance of fathering their own genetic offspring. ICSI offers these men and their partners real hope of having a genetically related child.