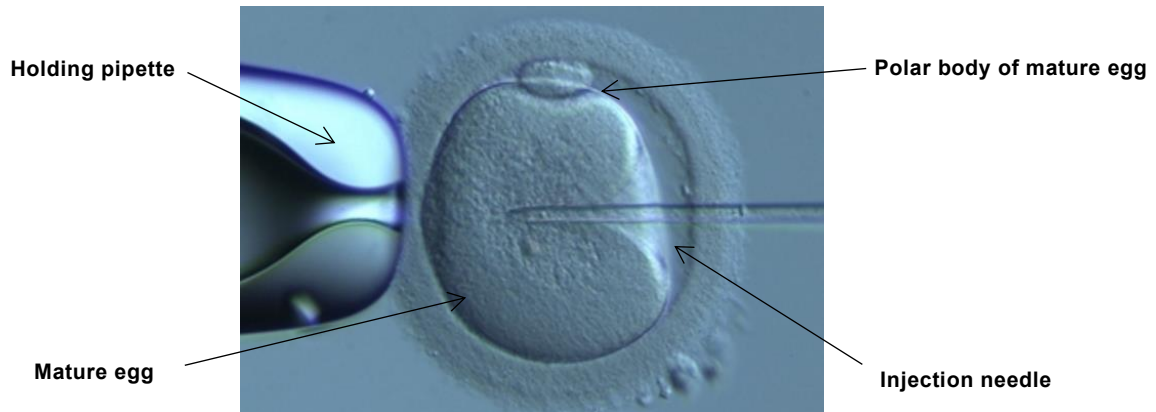


ICSI

Background

Intra-cytoplasmic sperm injection (ICSI) is a technique, introduced in 1992 to help certain types of infertility. Thousands of couples have become parents as a result of ICSI. It involves the injection of a single sperm directly into the centre of an egg to fertilise it. This procedure bypasses the natural process of the sperm travelling to the egg.



What is the difference between IVF and ICSI?

Both IVF and ICSI start with the same processes; egg collection and sperm preparation. The difference between the procedures is the process of insemination. Instead of the sperm being mixed with the eggs as in IVF, with ICSI, a single sperm is injected directly into each egg. A highly trained embryologist selects a singular sperm based on their shape and movement for each egg injection. ICSI allows the use of sperm that may not otherwise have been able to fertilise an egg.

Are there any risks associated with ICSI?

Eggs are prepared for ICSI by removing the cells from around the eggs, and this process may cause damage to a small number of eggs. The number of eggs available for ICSI can also decrease if they are not mature after the cell removal process. There is also a small risk that the injection process used to insert a sperm into each egg can cause egg damage.

ICSI has previously been linked with certain genetic and developmental defects in a very small number of children born using this treatment. However, it is difficult to determine whether this is a result of the ICSI procedure or the underlying cause of infertility. Follow up studies from children born using this technique are still on-going. Another issue to consider is the possibility that if you conceive a male child as a result of ICSI, there is a risk of inherited male infertility. At this stage it is too early to know if this is the case. If you need more information about the genetic risks of ICSI, please contact us.

It is important that you discuss possible risks with your doctor before going ahead with treatment. You may also find it helpful to discuss your concerns with a counsellor.

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How could ICSI help me?

ICSI could be helpful if you or your partner have:

- Low sperm count (oligozoospermia)
- Abnormal sperm shape (poor morphology)
- Sperm with poor swimming ability (poor asthenozoospermia)
- Sperm that cannot bind or penetrate the eggs for an unknown reason
- Damaged or missing tubes (vas deferens) which carry sperm from the testicles to the penis
- Immune system adverse reaction to sperm (anti-sperm antibodies)
- Difficulty obtaining an erection or achieving ejaculation. This particularly affects men with spinal cord injuries, Hodgkin's disease and numerous other disorders.
- Previous failed or low fertilisation
- Failed reversed vasectomy. Testicular sperm extraction (TESE) may be required to obtain sperm. For more information about TESE and what it involves, and whether these may be options for you, please speak to your doctor.

What are my chances of having a baby with ICSI?

The chances of having a baby using ICSI are similar to those for IVF. As with most fertility treatment, success depends on many factors such as female age and sperm quality.

For up-to-date information and access to recent patient experiences using ICSI, please use the following link to access the HFEA website:

<https://www.hfea.gov.uk/treatments/explore-all-treatments/intracytoplasmic-sperm-injection-icsi/>

This leaflet can be made available in different formats on request. If you would like to make any suggestions or comments about the content of this leaflet, then please contact the Patient Experience Team on 0151 702 4353 or by email at pals@lwh.nhs.uk

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