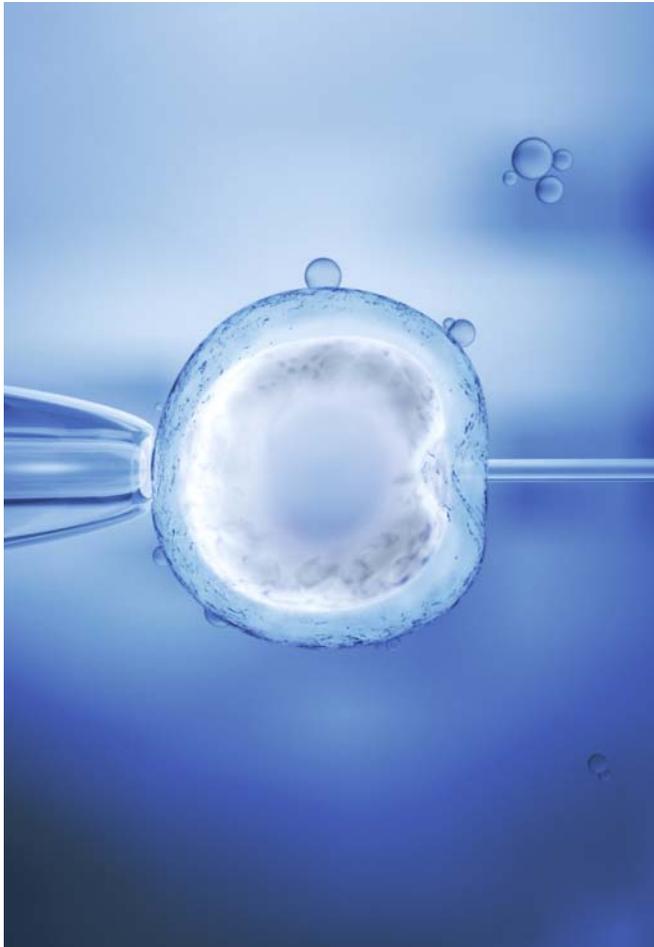


After the procedure

Your fertilised eggs are monitored closely and our embryology team will assess the best day to transfer the developing embryo(s) into the womb.

You can be assured of the best possible treatment throughout these procedures and of our continued support and care. Our team of embryologists has recently been recognised by **GameteExpert 2014** as one of the very best in Europe for their expertise in assessing embryos and sperm. We are consistently one of the top performing fertility clinics in the UK.



Herts & Essex Fertility Centre



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ICSI and PICSI

Intra-Cytoplasmic Sperm Injection and
Physiological Intra-Cytoplasmic Sperm Injection

Herts & Essex
Fertility Centre



What are ICSI and PICSI?

Intra-Cytoplasmic Sperm Injection (ICSI) is a technique used to inject a single sperm into a mature egg, using a very fine needle under microscopic control. PICSI is a method which helps to choose the best sperm for ICSI.

ICSI and PICSI are treatments indicated for Male Factor infertility in the following cases:

- Low sperm parameters (count, motility abnormal forms) or the presence of anti-sperm antibodies within the sample.
- No sperm in the ejaculate due to previous vasectomy, blockage or absence of the Vas Deferens, early testicular failure or problems with ejaculation. Surgical sperm retrieval known as PESA and/or TESE, will be required in those cases.
- Previous low fertilisation rate or failure to fertilise with conventional IVF.
- When the female partner is over the age of 40, the age-related thickening of the shell surrounding the egg may make it harder for sperm to naturally penetrate.

We understand that some men may have difficulties providing a semen sample under clinical conditions. Please let us know in advance, and we may recommend producing a sample for freezing ahead of the egg collection or to bring a sample from home on the day of egg collection.

Following ICSI, the injected eggs are incubated overnight and assessed the following morning by an embryologist for evidence of fertilisation. Average fertilisation rate following ICSI is similar to IVF, with 60-70% of injected eggs fertilising normally.

Are there risks associated with ICSI?

ICSI was introduced in 1992 and is now a very well established technique used to treat Male Factor infertility.

ICSI is a more invasive technique because a fine needle is used to introduce the sperm into the egg. Therefore there is a risk that a small proportion of eggs may be damaged by the injection procedure.

Only eggs which are mature will be suitable for ICSI, therefore some eggs retrieved may not be injected.

Studies have examined the long-term consequences of using ICSI to achieve fertilisation. Risks which have been identified include:

- Certain genetic and developmental defects in a very small number of children born as a result of this technique. However, these problems may be associated with underlying conditions causing the infertility in the first place, rather than the ICSI itself.
- The possibility that a boy born from this treatment may also inherit his father's infertility. However, as the oldest boys born from this treatment are still in their early twenties it is therefore too early to know if this will be the case. Infertile men with low or zero sperm count may wish to undergo additional testing for cystic fibrosis and chromosomal abnormalities. Your Clinician will guide you if this is the case.
- There is a risk of miscarriage because the technique may use a sperm that would be unable to fertilise an egg during natural conception.

What is PICSI?

PICSI, or Physiological ICSI, is a modified form of the ICSI procedure that may benefit a subset of patients who require ICSI.

Men with poorer sperm samples often have a greater degree of immature sperm. Immature sperm can still show normal motility and morphology, however they have higher levels of damaged DNA, which, if selected for fertilisation can result in poor embryo quality and pregnancy loss. PICSI is a method that enables us to select mature sperm for injection.

Your Clinician will guide you as to whether PICSI may be appropriate for you. There are no additional risks in using sperm selected by this method.

Preparation for ICSI

Please note that the only difference between ICSI and conventional IVF is the laboratory procedure chosen once the eggs and sperm have been obtained. The preparation for the female patient for ICSI is identical to that of IVF. The woman will be required to undergo viral screening, drug stimulation, ultrasound monitoring and egg collection as for IVF. (Please see leaflet entitled "IVF").

