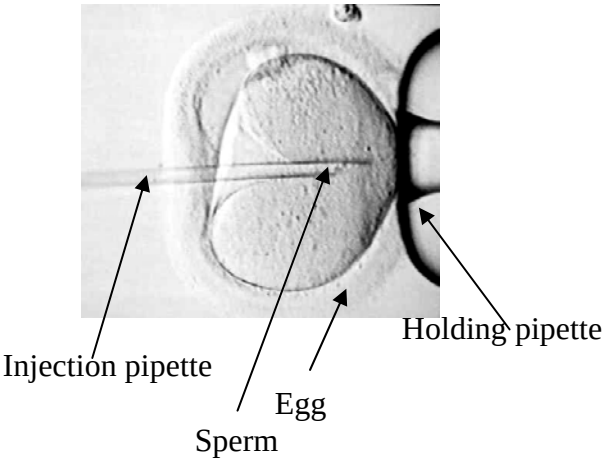
What is ICSI?

Although conventional IVF procedures are becoming more successful, some patients still do not achieve fertilization of the eggs, or their fertilization results may be poor, thus reducing their chance of a pregnancy. Intracytoplasmic sperm injection (ICSI) is a micromanipulation technique used to help couples where there is a known male factor component that is reducing the chances of achieving a pregnancy. Some men have a low sperm count and in these cases the sperm are often not strong enough to enter the egg by themselves. ICSI involves injecting a single sperm into the centre of the egg, using a very fine glass needle, thereby giving these sperm a better chance of achieving fertilization. We can further assist the process of fertilization using ICSI for patients who unexpectedly have had no or low fertilization with conventional IVF.

What does the ICSI procedure involve?



During your treatment, the eggs will be obtained in the same way as for conventional IVF. The semen sample will usually be requested at the same time as the egg collection procedure. The eggs need to be mature for us to do ICSI and so not all of the eggs may be suitable. It is important to remember that not all of the eggs fertilize even when sperm has been injected and there is a small risk that the egg may be damaged during the procedure, resulting in it being unusable. Due to the specialist nature of the equipment used, the expertise and extra time required to carry out these techniques, there is an additional charge for ICSI in addition to the charge for conventional IVF.

What are the success rates?

Our results show that ICSI gives an average fertilization rate of 70% of the eggs injected, with approximately 3% of eggs being damaged. The success of this form of treatment is dependent on the severity of the sperm disorder and also on the number of mature eggs available for injection. It should be remembered that this treatment is not always successful and that some couples still may not achieve fertilization. Pregnancy rates after ICSI are similar to conventional IVF.

What are the potential risks?

There are many reasons why a man might have a low sperm count. The cause is sometimes genetic which means that a sub-fertile man might pass the same type of sub-fertility on to his son. Techniques such as ICSI can help a couple achieve a pregnancy despite a reduced sperm count, but there is understandable concern about the possibility of passing a genetic problem on to children. Studies on whether there is an increased risk of birth defects in babies born from ICSI have shown conflicting results. Some studies show a slight increase in abnormalities and others show no difference to the normal rate. However, it does seem that abnormalities in the sex chromosomes (i.e. the X and Y chromosomes) may occur slightly more frequently.

If you have any queries about ICSI either before or during treatment please contact the Unit.