



## PATIENT FACT SHEET

# Intracytoplasmic Sperm Injection (ICSI)

Before a man's sperm can fertilize a woman's egg, the head of the sperm has to attach to the outside of the egg. Then it pushes through the outer layer of the egg to the inside of the egg (cytoplasm). Sometimes the sperm cannot penetrate the outer layer. A procedure called intracytoplasmic sperm injection (ICSI) can help fertilize the egg by injecting the sperm directly into the egg.

### *How does ICSI work?*

In traditional IVF, the sperm are mixed with the woman's egg in a laboratory. If ICSI is needed, a small needle is used to inject a sperm into the center of the egg. The fertilized egg grows in a laboratory for one to five days, then it is placed in the woman's uterus (womb).

### *Why would I need ICSI?*

ICSI helps to overcome a man's fertility problems, for instance:

- He may produce too few sperm
- His sperm may be not be shaped correctly or move in a normal fashion
- The sperm may have trouble attaching to the egg
- A blockage in his reproductive tract may keep sperm from getting out

ICSI can also be used when the use of traditional IVF has not produced fertilization, regardless of the condition of the sperm.

### *Will ICSI work?*

ICSI fertilizes 50% to 80% of eggs. But the following may occur after the use of ICSI:

- The ICSI procedure might damage some eggs
- The egg might not grow into an embryo even after it is injected with sperm
- The embryo may stop growing

Once fertilization takes place, a couple's chance of giving birth to a single baby, twins, or triplets is the same if they have IVF with or without ICSI.

### *Can ICSI affect a baby's development?*

If a woman gets pregnant naturally, there is a 1.5% to 3% chance that the baby will have a major birth defect. The chance of birth defects after ICSI are rare. Certain conditions that have been associated with the use of ICSI (Beckwith-Wiedemann syndrome, Angelman syndrome, hypospadias, or sex chromosome abnormalities) are thought to occur in far less than 1% of children conceived using this technique.

Some of the problems that caused your infertility may be genetic. Therefore, boys conceived with the use of ICSI may have infertility issues as adults.