



N o v a I n V i t r o F e r t i l i z a t i o n

Treatment Protocol

Testicular or Epididymal Sperm Aspiration

If sperm cannot be obtained by masturbation, they can be aspirated from the testes or epididymis (tightly coiled tubules, attached to the top of the testes).

Testicular or epididymal sperm aspiration is a technique that can be added to *in vitro* fertilization, oocyte donation, and gestational surrogacy treatments.

The most common conditions requiring sperm aspiration are:

- Previous vasectomy (with or without an attempt at reversal).
- Congenital absence of vas deferens (the connecting tube between testicles and penis is missing).
- Sperm concentration and/or sperm quality so low that no normal sperm can be found in the ejaculate.

Sperm aspiration is normally an uncomplicated, quick outpatient procedure requiring only a small amount of local anesthetic.

Once sperm are successfully aspirated, intracytoplasmic sperm injection (ICSI) procedure is used for fertilization of eggs obtained through *in vitro* fertilization, oocyte donation or gestational surrogacy. In ICSI, a single sperm is inserted into an egg under a microscope using micro-instruments.

The sperm aspiration can be scheduled for the morning of egg retrieval procedure and the sperm is used for the ICSI the same day. Any sperm left over can normally be cryopreserved and stored for potential subsequent use.

Alternatively, the sperm aspiration can be done prior to the egg retrieval. The collected sperm is frozen and stored in liquid nitrogen. The sperm sample is then thawed the morning of the egg retrieval and used for ICSI fertilization.