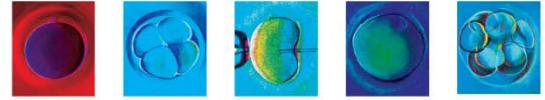


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FERTILITY FACT SHEET

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TREATMENT FOR MEN WITH AZOOSPERMIA (NO SPERM IN EJACULATE) USING IVF WITH ICSI

Intra Cytoplasmic Sperm Injection is now a proven technique to treat couples with a severe male factor (*poor sperm count motility or morphology*). Recent information suggests that it even offers men with azoospermia a chance to achieve a biological child.

Men with azoospermia secondary to an obstructive process include those with congenital absence of the vas deferens, failed vasectomy reversals, and other irreparable obstructions. In these situations the woman goes through a typical IVF cycle and on the day of egg retrieval, sperm are also retrieved. Sperm retrieval can be done by:

Micro Epididymal Sperm Aspiration (MESA), involving a delicate surgical technique utilizing the microscope to get a specimen of sperm from proximal to the obstruction. It is done as an outpatient procedure, but is the most involved of the options.

Percutaneous Epididymal Sperm Aspiration (PESA), utilizing a small needle under local anesthetic to aspirate sperm from proximal to the obstruction.

Testicular Sperm Biopsy (TESE), taking a small biopsy of testicular tissue under local anesthesia.

TESE is most often used when no sperm are obtained with MESA or PESA. Sperm obtained from MESA, PESA or TESE all need to be processed by an experienced IVF lab for ICSI. These sperm are then injected into the mature egg retrieved from the woman and embryos are replaced 3-5 days later. These sperm fertilize well with ICSI and pregnancy and delivery rates are no different than with regular IVF, and are quite dependent on the age of the woman. Epididymal sperm can even be frozen for future use so that the man does not have to go through the sperm retrieval each time.

Recently IVF with ICSI has been shown to be successful even if men with non-obstructive azoospermia, i.e. a problem with the testicles producing sperm. Most patients with non-obstructive azoospermia have minuscule production of sperm by the testicles. In more than 50% of men with non-obstructive azoospermia and with no sperm in their ejaculate enough sperm are found with an extensive testicular biopsy to perform ICSI. Even in patients whose routine diagnostic testicular biopsy did not reveal sperm, a thorough search of testicular tissue often reveals enough sperm for ICSI.

Fertilization, cleavage and pregnancy rates with ICSI from men with non-obstructive azoospermia may be lower than in patients with obstructive azoospermia. Many men with non-obstructive azoospermia probably have some genetic etiology for this. It may be that azoospermia could be passed on to male offspring from IVF with ICSI. Prior to sperm collection, men with azoospermia should undergo a complete evaluation, including genetic testing.

It is now very exciting that even men with azoospermia, obstructive and non-obstructive, have the option of IVF with ICSI to have a biological offspring, where in the past donor insemination, adoption, or childfree living were their only options.