Services Offered

Assisted Reproductive Technologies

New York State Department of Health
Licensed Tissue Bank

- In-Vitro Fertilization
- Intracytoplasmic Sperm Injection (ICSI)
- Blastocyst Culture
- Assisted Hatching
- Embryo and Gamete Cryopreservation
- Egg Donation

Endocrine Evaluation and Treatment

New York State Department of Health Licensed and CLIA certified Endocrinology Laboratory

- Ovulatory Problems
- Polycystic Ovarian Syndrome/ Hirsutism/Acne
- Recurrent Miscarriages
- Menopausal Symptoms

Full Service Andrology Laboratory

New York State Department of Health Licensed and CLIA certified Andrology Laboratory

- Intrauterine Insemination (IUI) using husband or donor sperm
- Sperm Processing (Washing)
- Semen Analysis with Kruger Strict Criteria Morphology

New York State Department of Health
Clinical Laboratory Permit
PFI: 5006 CLIA: 33D0697586

Directions

By subway, take the IRT #4 or #5 to 86th Street and Lexington Avenue. Walk east to Third Avenue and then walk up to 91st Street.

By bus, take the 3rd Avenue bus, #101 or #102, to 91st Street.

By car from New Jersey, take the George Washington Bridge to Harlem River Drive which becomes the FDR Drive-South. Exit at 96th Street. Turn right on 96th Street to 2nd Avenue. Turn left on 2nd Avenue to 89th Street. Turn right on 89th Street to 3rd Avenue. Turn right on 3rd Avenue to 92nd Street. Turn right on 92nd Street. Garages are located on 92nd between 2nd and 3rd Avenues. Special parking rates are available for AFS patients at the GGMC garage on 92nd Street. Give your parking ticket to our receptionist for validation.

From Long Island, Westchester or Connecticut, take the Triboro Bridge to the FDR Drive-South. Exit at 96th Street. Turn right on 96th Street to 2nd Avenue. Turn left on 2nd Avenue to 89th Street. Turn right on 89th Street to 3rd Avenue. Turn right on 3rd Avenue to 92nd Street. Turn right on 92nd Street. Garages are located on 92nd between 2nd and 3rd Avenues.

Meter parking (1 hour) is available on 2nd and 3rd Avenues after 9.00 AM

Hablamos Español
Мы говорим по - русски

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Advanced Fertility Services

In Vitro Fertilization Center

ICSI

INTRACYTOPLASMIC SPERM INJECTION

Hugh D. Melnick, M.D., F.A.C.O.G.
Medical Director

AFS
IVF CENTER

ICSI

(Intracytoplasmic Sperm Injection)

WHAT IS ICSI?

Intracytoplasmic sperm injection (ICSI) is a specialized form of in vitro fertilization (IVF) which is used for the treatment of certain cases of male infertility. ICSI involves the injection of a single sperm directly into a mature egg.

WHEN IS ICSI USED?

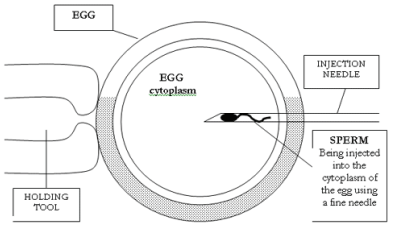
Approximately 30 - 40% of all infertility is due to a male factor. ICSI revolutionized the treatment for male infertility. Prior to the first successful ICSI pregnancy, very little could be offered to couples with male factor infertility, aside from using donor sperm. ICSI may be of value for couples who have had poor or no fertilization during standard IVF, as well as men who have:

- many abnormal sperm (poor morphology)
- few moving sperm (poor motility)
- very low sperm counts
- an obstruction in the testes or epididymis which prevents release of their sperm
- antisperm antibodies (antibodies produced by the man's own body which may inhibit sperm function)
- a vasectomy reversal which results in a very low sperm count or poor quality sperm production.

HOW IS ICSI PERFORMED?

Before ICSI can be done, mature eggs must be retrieved from the female partner during a standard IVF cycle. This is described in more detail in the IVF pamphlet. The male partner's semen sample is prepared in the lab to isolate as many healthy moving sperm as possible. After allowing the eggs to rest for 4-6 hours, the tight outer coating of cells (cumulus) is removed from each egg. Only then can we be sure the egg is mature enough to undergo ICSI.

A special instrument is used to hold the egg in place. It is so small you can barely see the tip with the naked eye. A thinner, sharp, needle-like instrument is used to pick up a single sperm which has been singled out. With great precision, the needle is inserted through the egg's outer coating (the zona pellucida) and into the egg itself. The sperm is slowly injected into the egg, and the needle removed, leaving the sperm behind.



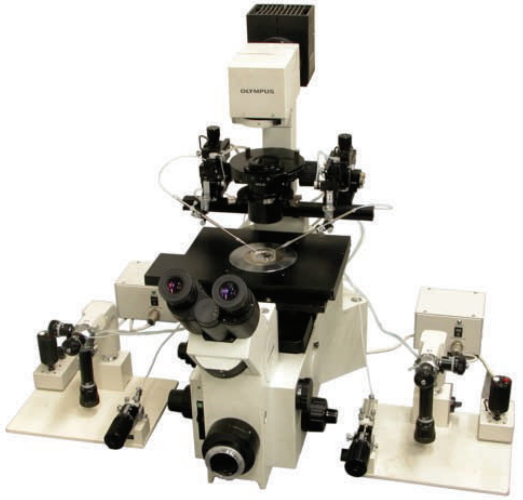
The injected eggs are placed in an incubator overnight and checked the next morning for signs of fertilization. After an additional 24 hours, we can determine how many have divided and gone on to form embryos. *Not all eggs fertilize, and not all fertilized eggs become embryos.* As with standard IVF, the number of embryos replaced is determined by several factors, including the woman's age. Provided they appear healthy, additional embryos can be frozen if desired.

POSSIBLE RISKS

Thousands of children have been born around the world as a result of ICSI. To date, there is no evidence that the incidence of physical birth defects is any different with ICSI or IVF as compared to the general population.

The mother's age at delivery, her health, and the family history are the most important predictors of birth defects. However, it is possible that the male children born as a result of ICSI could inherit fertility problems similar to the father's. Some men have an acquired cause of their sperm problem which we know will not be hereditary (i.e. vasectomy, or spinal cord injury)

However, some men have sperm problems which may have been present since birth. These may be passed on to the male children produced by ICSI because there is a small chromosomal rearrangement, a deletion of a small portion of the Y chromosome, etc. As well, men with very low sperm counts or an obstruction in their sperm ducts (vas or epididymis) may carry one of the cystic fibrosis genes. In addition to passing on their sperm problem, they also have a higher chance of producing a child who actually has cystic fibrosis if their partner also carries one of the cystic fibrosis genes.



Complete ART* Micromanipulation System

AFS Ultrasound Department is Accredited by AIUM

AFS Medical Services Surgical & Recovery Room

*Assisted Reproductive Technology