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## Sperm Injection: Male-factor Infertility Technique Surging

**ScienceDaily (July 20, 2007)** — A national study reveals that the use of intracytoplasmic sperm injection or ICSI — an assisted reproductive technology used to treat male-factor infertility — has increased dramatically in the United States since 1995, while the proportion of patients receiving treatment for male-factor infertility has remained stable.

“Despite its added cost and uncertain efficacy and risk, the use of ICSI has been extended to include patients without documented male-factor infertility, said **Dr. Tarun Jain**, assistant professor of reproductive endocrinology and infertility at the University of Illinois at Chicago and lead author of the study that appears in the July 19 issue of the *New England Journal of Medicine*.

The research also compared the use of ICSI in states with and without mandated insurance coverage for infertility treatment. States with mandated insurance coverage for infertility (Illinois, Massachusetts and Rhode Island) had a greater use of ICSI for reasons other than male-factor infertility when compared to states without mandated insurance coverage.

The researchers analyzed national data on assisted reproductive technology during a 10-year time span from 1995 to 2004. The study included all in vitro fertilization cycles involving fresh embryos from non-donor eggs in women younger than 43. “The percentage of IVF cycles that used ICSI increased dramatically during the 10-year time span, from 11 percent to 57.5 percent, while the percentage of diagnosis for male-factor infertility remained steady,” said **Jain**.

They also found that the number of fertility clinics and the number of fresh-embryo cycles has increased, as have pregnancy and live-birth rates. **Jain** notes that some physicians may feel ICSI is appropriate for patients who have failed prior IVF cycles, for patients who have very few eggs available, or to overcome barriers to the normal fertilization process.

The largest study to compare traditional IVF with ICSI in patients without male-factor infertility found that patients who underwent ICSI had lower rates of implantation and pregnancy than patients who did not have ICSI, according to **Jain**. There have been very few studies to evaluate the routine use of ICSI and the possibility of associated risks, such as genetic disorders and congenital anomalies.

“Further studies are needed to better understand the proper role of ICSI, and perhaps guidelines may be useful to determine what the best indications are for use of the technology in patients without male-factor infertility,” said **Jain**. Ruchi Gupta of Northwestern University is co-author of the study.

**For complete copies of the above publication or any other of Dr. Jain’s recent publications, please call 1(866) IVF-CHGO.**