

NEWS RELEASE

Research at The Center for Advanced Reproductive Services Enables High Pregnancy Rates and Reduced Incidence of Triplets

Farmington, CT – Identifying the best embryos through a method called zygote scoring and by understanding the relevance of embryo quality is enabling high pregnancy rates while reducing the incidence of multiple births.

The Z's of Reducing Multiple Births

Research conducted by physicians at The Center for Advanced Reproductive Services at the University of Connecticut, shows that a technique called zygote, or “z” scoring can help predict the likelihood of an embryo successfully implanting during the process of in vitro fertilization.

The delicate balance is this: choosing embryos with the best developmental chance and reducing the risk of multiple pregnancy associated with the number of embryos transferred.

According to Dr. John Nulsen, reproductive endocrinologist at The Center, “the ability to identify the embryos with the best potential should allow for the transfer of fewer embryos which enables us to reduce the incidence of multiple births while maintaining high pregnancy rates.”

A criticism of in vitro fertilization (IVF) treatment is that it often leads to an increase in multiple pregnancies. Over the past ten years there has been a concentrated effort to find ways to control and reduce higher order multiple gestations: triplets or more.

Understanding Embryo Quality

In addition to the studies done on identifying the best embryo prospects, the Center also recently conducted an analysis to better understand the role of age on the number of embryos implanted, and the impact of previous IVF cycles. It was found that embryo quality and number, but not number of previous failed cycles, were important in determining outcome. The conclusion was that couples who have had previous IVF failures should not necessarily have extra embryos implanted in subsequent cycles in order to achieve success. In addition, it was found that optimal pregnancy rates were achieved with the transfer of two good embryos. Addition of a third embryo resulted in a higher rate of triplet pregnancies without increasing the overall pregnancy rate.

Research that Leads to Results

The incidence of higher order birth rates—triplets or more—is 30% lower at The Center for Advanced Reproductive Services at the University of Connecticut than the reported national average. Yet, the success rates at The Center are among the highest in the state, according to the most recent report from The Society of Assisted Reproductive

Technologies (SART), the agency that reports IVF (in vitro fertilization) outcomes for the CDC (Centers for Disease Control).

Based on the recently published Centers for Disease Control/SART report, “2001 Assisted Reproductive Technology Success Rates, National Summary and Fertility Clinic Reports”, The Center for Advanced Reproductive Services distinguished itself by achieving:

- success rates above the mean of 35%, (live birth rates per cycle, women under age 35)
- greater than 50 IVF cycles per year
- a higher order multiple rate (triplets or more) of less than 5.3%.

Of the 384 reporting clinics, only 37 in the country achieved these outcomes.

The Center offers many advanced techniques to help patients achieve successful pregnancies. Formed in 1998 in the division of Reproductive Endocrinology and Fertility at the University of Connecticut Health Center, it has grown to include over 40 staff members. For more information about The Center, please call (860) 679-4580 or visit the website at <http://www.fertilitycenter-uconn.org/>.

For more information about any of the above information pertaining to these research studies, success rates, or SART, please call 860-679-4324.

Reference:

“Is Pronuclear Morphology Predictive of Outcome”, Linda J. Siano, Claudio Benadiva, MD; Donald Maier, MD; John Nulsen, MD; The Center for Advanced Reproductive Services at the University of Connecticut Health Center

“Transferring 2 or 3 embryos in women 35 to 37 years old: Influence of embryo quality and number of previous cycles on pregnancy and multiple pregnancy rates”, David Schmidt, MD, Linda J. Siano, Claudio Benadiva, MD; Donald Maier, MD; John Nulsen, MD; The Center for Advanced Reproductive Services at the University of Connecticut Health Center