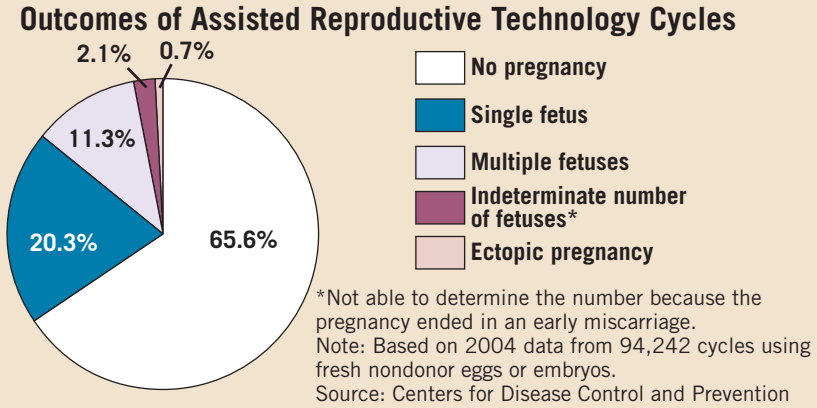
DATA WATCH

Outcomes of Assisted Reproductive Technology Cycles



*Not able to determine the number because the pregnancy ended in an early miscarriage.
Note: Based on 2004 data from 94,242 cycles using fresh nondonor eggs or embryos.
Source: Centers for Disease Control and Prevention

Elsevier Global Medical News

Aromatase Inhibitor Use In PCOS Needs More Study

BY MARY ELLEN SCHNEIDER
New York Bureau

PHILADELPHIA — The jury is still out on whether aromatase inhibitors could offer an alternative to clomiphene in the treatment of infertility associated with polycystic ovary syndrome, according to Dr. Andrea D. Coviello, an endocrinologist who is at Boston University.

Aromatase inhibitors are on the horizon, Dr. Coviello said at Endocrinology in the News, sponsored by Boston University, INTERNAL MEDICINE NEWS, and FAMILY PRACTICE NEWS. Although they have been approved for use in breast cancer, they are still experimental for ovulation induction.

Instead of blocking the receptors centrally in the hypothalamus and the pituitary, aromatase inhibitors completely block estradiol production. Like clomiphene, aromatase inhibitor drugs are used during the follicular phase, she said.

The rationale for moving to aromatase inhibitors is that this class of drugs is thought to have fewer antiestrogenic side effects. But there are also significant concerns about fetal development problems in the babies conceived using aromatase inhibitors, Dr. Coviello said.

A definitive study that would help physicians assess how aromatase inhibitors stack up to clomiphene has yet to be done. The available data are derived from very small studies, said Dr. Coviello, who also said she has no commercial support to disclose.

Aromatase inhibitors are thought to have fewer antiestrogenic side effects, but there are concerns about fetal development problems.

In a prospective, randomized trial of 74 patients, researchers did not find a significant difference in pregnancy rates between women who received clomiphene and those who received the aromatase inhibitor, letrozole (Fertil. Steril. 2006;86:1447-51). However, the researchers found significantly lower estrogen levels in the letrozole group on the day of human chorionic gonadotropin administration, which indicated the potential for a better side-effect profile with letrozole, Dr. Coviello said.

Another study, published online, compared the efficacy of letrozole and clomiphene among women who had failed to ovulate when taking 100 mg/day of clomiphene citrate (Fertil. Steril. 2008 January [Epub doi:10.1016/ j.fertnstert. 2007.08.044]). Sixty-four patients were randomized to receive either 7.5 mg/day of letrozole or 150 mg/day of clomiphene. The researchers found that letrozole had better ovulation and pregnancy rates compared with clomiphene.

However, in that study, the results came as no surprise because the women in the study were clomiphene resistant, Dr. Coviello said. So although it showed that letrozole is not inferior in terms of ovulation, it failed to make the case that aromatase inhibitors outperform clomiphene.

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