

Donor-Egg Pregnancies, Hypertension Linked

BY NANCY A. MELVILLE
Contributing Writer

PHOENIX, ARIZ. — Pregnancies achieved using donor-egg in vitro fertilization can present a higher risk of pregnancy-induced hypertension than those achieved through standard IVF, according to the results of a retrospective study.

Investigators compared 50 oocyte-donation pregnancies with 50 standard IVF pregnancies at three private practice medical groups at the California Pacific Medical Center in San Francisco. The rate of pregnancy-induced hypertension (PIH) was more than three times higher in the donor-egg IVF group than in the standard IVF group (27% vs. 8%), said Donna Wiggins, M.D., the study's lead investigator and a San Francisco ob.gyn.

PIH was defined as a systolic blood pressure (BP) of at least 140 mm Hg or a diastolic BP of at least 90 mm Hg occurring after 20 weeks' gestation in a woman with previously normal BP.

In looking separately at nulliparous patients, the researchers found greater PIH rates in the donor-egg IVF group (37% vs. 8%), she said at the annual meeting of the Pacific Coast Obstetrical and Gynecological Society.

Among women who had twins, 58% of those in the donor-egg IVF group and 17% of the standard IVF group developed PIH.

The women were between the ages of 30 and 50 years, and the average maternal age in the donor-egg IVF group was 42, compared with 38 in the standard IVF group. But Dr. Wiggins explained that when age stratifications were applied, there was not an increasing incidence with advancing age. And when the multiple logistic regression was applied, age fell out as an indicator of significance with regard to PIH.

Aside from the PIH rates, the two groups showed similar results in most other categories. The cesarean-section rate was 43% in the donor-egg group and 45% in the standard IVF group.

First-trimester bleeding occurred in 12% of the donor-egg group and 14% in standard IVF. And the most common postpartum complications of "lactation difficulties" and postpartum depression occurred in both groups at about the same rate of 10%.

Birthweight was an average of 3,044 g in the donor-egg group and 3,017 g in standard IVF group, and premature labor occurred in the donor-egg group at a rate of 16%, compared with 10% in the standard IVF

group.

"In looking at donor-egg and [standard] IVF pregnancies, there aren't that many differences, aside from the significant difference in hypertensive disorders," said Dr. Wiggins. "All things considered, however, the women for the most part had good outcomes."

The reasons for the higher PIH rates in donor-egg IVF may have to do with the fact that the donor egg is foreign, Dr. Wiggins speculated. "Unlike any other pregnancy, a donor-egg pregnancy is 100% allogeneic, and this may affect the adequacy of trophoblast invasion and hence hypertensive disorders," she said at the meeting, cosponsored by the American College of Obstetricians and Gynecologists.

When initially introduced in 1984, donor-egg IVF was primarily indicated for premature ovarian failure, defined as menopause occurring before the age of 40. But the primary indication for egg donation at most IVF centers is now diminished ovarian reserve in women with functioning ovaries, Dr. Wiggins said. ■

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MRI Can Diagnose Acute Abdominal Pain in Pregnancy

BY MICHELE G. SULLIVAN
Mid-Atlantic Bureau

Magnetic resonance imaging is an effective means of diagnosing acute abdominal and pelvic pain in pregnant patients, and it avoids fetal exposure to the radiation of a computerized axial tomography exam, Katherine Birchard, M.D., and her colleagues have reported.

Although there have been no documented cases of MRI causing adverse effects to the fetus, MRI scans should be used in pregnant patients only when the benefits clearly outweigh the risks, the researchers said. "However, we should stress that the single greatest factor in morbidity and mortality of the pregnant patient is delay in diagnosis," reported Dr. Birchard of the University of North Carolina, and associates (AJR Am. J. Roentgenol. 2005;184:452-8).

The researchers retrospectively analyzed all MRI studies of 29 pregnant patients referred to their facility from 2002 to 2004 for evaluation of acute abdominal or pelvic pain. The patients' mean age was 25 years (18-35 years), and mean gestational age was 23 weeks (10-36 weeks). Most of the patients (22) did not have gadolinium administered.

Every patient underwent fetal sonography before any other imaging. Six also

underwent complete abdominal sonographic examination before the MRI, which was the imaging exam used in 23 patients.

MRI identified appendiceal abscess (1 case), appendicitis (2 cases), intraabdominal and rectus muscle abscess (1), pancreatitis (1), and ulcerative colitis (1). MRI also showed Crohn's disease with diffuse peritoneal inflammation (1), intussusception (1), bilateral adrenal hemorrhage (1), pyelonephritis (2), hydronephrosis (1), uterine fibroid degeneration (2), degeneration and torsion of a subserosal uterine fibroid (1), simple ovarian cysts (1), and ovarian torsion (1). The other 12 examinations were normal.

The MRI results were congruent with follow-up medical records in 28 of the 29 patients and accurately described the disease process in all except one patient. This patient was at 18 weeks' gestation and complained of acute right lower quadrant pain. The MRI identified multiple ovarian cysts, but a laparoscopy 1 month later showed a torsed right ovary with multiple cysts. When examined retrospectively, the MRI did not show this finding.

"We believe this is due to the fact that the ovary was largely cystic, and therefore, edematous tissue was not seen," the researchers said. ■

Researchers Tie Subfertility to Higher Risk of Neonatal Death

BY KATE JOHNSON
Montreal Bureau

Women who do not conceive within 1 year of trying may face an increased risk of their babies dying by the first month post partum, according to Danish researchers.

"Subfecundity may be associated with an increased risk of neonatal death and should be included as a risk indicator in neonatal care," reported Olga Basso, Ph.D., and Jørn Olsen, M.D., from the Danish Epidemiology Center at the University of Aarhus in Denmark (BMJ [Epub ahead of print], Feb. 4, 2005. Article DOI number: 10.1136/bmj.38336.616806.8F).

"Unlike advanced age, or pregnancy following in vitro fertilization, a period of infertility is not routinely considered a risk factor in pregnancy," Dr. Basso told this newspaper. "We think it would be advisable to include this when evaluating pregnant women, because it is possible that some complications might be noticed earlier," she said.

The study analyzed 27,329 singleton births and 66 deaths recorded in the Danish national birth cohort. The analysis was restricted to primiparous women, 73.5% of whom had no previous pregnancies.

The women were grouped by waiting time to pregnancy: up to 2 months (ref-

erence group); 3-12 months; more than 12 months with no infertility treatment; more than 12 months with infertility treatment; and those who hadn't planned their pregnancy.

After adjustment for maternal age, body mass index, smoking, and social class (derived from the mother's job title), the analysis found an increased risk of neonatal death associated with increasing time to pregnancy.

Women who reported trying to conceive for more than 12 months had an odds ratio (OR) of 2.80 for neonatal death. Within this group, there was little difference in risk between those who reported infertility treatment (OR 2.21), and those who reported none (OR 3.38).

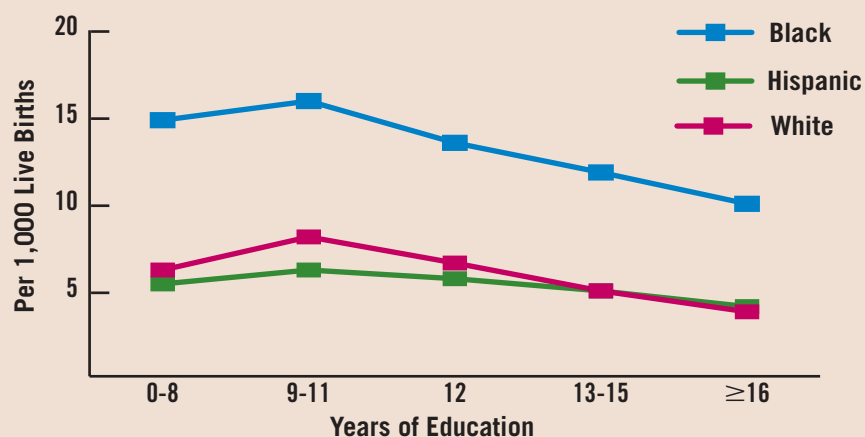
The authors noted potential weaknesses in their data. About 35% of eligible women participated in the study, and the mother's job title may be a poor proxy for social class (even though adjustment for confounders did not change the estimates). Moreover, subfertile women who do not seek fertility treatment may also not seek or receive adequate prenatal care.

The researchers noted that the findings do not indicate a causal relationship.

"Our finding needs ... to be corroborated elsewhere before it can be stated that a long time to pregnancy increases the risk of neonatal death," they said. ■

DATA WATCH

Infant Mortality Inversely Related to Mothers' Education Level



Note: Most of the women with 0-8 years of education were born outside the 50 states and D.C., and they tend to have lower infant mortality than do native-born mothers.
Source: 2002 data, Centers for Disease Control and Prevention