Pregnancy Possible After Fibroid Embolization

Uterine fibroid embolization is not the contraindication to conception it was thought to be.

BY KERRI WACHTER

FROM THE ANNUAL MEETING OF THE SOCIETY OF INTERVENTIONAL RADIOLOGY

TAMPA — Pregnancy rates following treatment with uterine fibroid embolization are comparable to those with myomectomy, offering hope for women who choose embolization but still want to conceive, study results showed.

"Uterine fibroid embolization [UFE] is not a contraindication in patients who want to conceive," Dr. Joao-Martins Pisco said at the meeting.

The fertility rate in a small population of women who underwent UFE was comparable to that reported for myomectomy—58% vs. 57%.

Dr. Pisco reported on 74 women who underwent UFE but still wished to become pregnant. More than half of the women (58%) had spontaneous pregnancies following the procedure. They ranged in age from 29 to 43 years (mean age, 36 years).

UFE is typically offered to women who no longer wish to become pregnant, and myomectomy is usually offered to women who still wish to become pregnant.

However, there are limited data on fertility rates and pregnancy outcomes following UFE to support this practice, said Dr. Pisco, an interventional radiologist at St. Louis Hospital in Lisbon.

VITALS

Major Finding: Of the more than half of women who became pregnant after uterine fibroid embolization, 30 women had successful live births and seven pregnancies are ongoing; there were five abortions (one induced and four spontaneous) and one stillbirth.

Data Source: A study of 74 women who underwent UFE.

Disclosures: None was reported.

None of the women in this series had been able to conceive prior to UFE. Before the procedure, the women were informed of the uncertain effect of UFE on fertility and pregnancy.

Polyvinyl alcohol particles or Embozene microspheres were used to embolize the uterine arteries.

The mean size of the dominant fibroid was 151 cc. The women were cautioned to wait at least 6 months before trying to conceive.

In all, 30 women (84%) had successful live births. Two of these babies (7%) were born prematurely. There were five abortions—one induced and four spontaneous.

One stillbirth occurred in a woman who had previously undergone five myomectomies and who had conceived through in vitro fertilization.

Seven of the remaining pregnancies are ongoing.

Dr. Pisco noted that larger, multicenter, randomized prospective studies are needed comparing UFE and myomectomy. ■

Vitamins C, E: No Effect on Preeclampsia

BY KATE JOHNSON

FROM THE NEW ENGLAND JOURNAL OF MEDICINE

Daily supplementation with vitamins C and E starting between 9 and 16 weeks' gestation did not reduce the rate of pregnancy-associated hypertension, according to a large multicenter trial in low-risk, nulliparous women.

The findings "provide no support for the use of vitamin C and E supplementation in pregnancy to reduce the risk of preeclampsia or its complications," wrote Dr. James M. Roberts of the University of Pittsburgh and his colleagues (N. Engl. J. Med. 2010;362:1282-91).

The study randomized 10,154 nulliparous women from 16 clinical centers. All women had singleton pregnancies, with gestational age at randomization ranging between 9 weeks, 0 days and 16 weeks, 6 days. The women were randomly assigned to take 1,000 mg of vitamin C and 400 IU of vitamin E daily, or matching placebo, until the end of their pregnancies. They returned any unused study drug each month and received a new batch, at which time they reported any side effects, and had their blood pressure and urine protein levels measured.

VITALS

Major Finding: The rates of preeclampsia were not significantly different between groups, occurring in 7.2% of the women receiving vitamin C and vitamin E and 6.7% of the placebo group.

Data Source: A large multicenter trial of 10,154 low-risk, nulliparous women from 16 clinical centers.

Disclosures: The study was supported by grants from the National Institute of Child Health and Human Development; the National Heart, Lung, and Blood Institute; and the National Center for Research Resources. Some of the investigators disclosed financial conflicts.

The primary outcome of the study was a composite of pregnancy-associated hypertension and serious adverse outcomes in the mother, fetus, or neonate, while the secondary outcomes included preeclampsia and other maternal and neonatal outcomes.

After some subjects were lost to follow-up or removed, a total of 4,993 women from the vitamin arm and 4,976 from the placebo arm were included in the final analysis.

Neither the primary or secondary outcomes of the study were significantly affected by vitamin treatment. A total of 6.1% of the vitamin group and 5.7% of the placebo group met criteria for the primary outcome. Similarly, the rates of the secondary outcome, preeclampsia, were not significantly different between groups—occurring in 7.2% of the vitamin group and 6.7% of the placebo group.

Several other studies have found a similar lack of benefit to antioxidant vitamins in terms of altering the risk of hypertension in pregnancy, and the authors suggested several possible explanations.

First, although there is evidence of oxidative stress in preeclampsia, it might not necessarily be important in the pathophysiology of the disease. Or, perhaps it is relevant, but only to a subset of preeclamptic women.

Yet another suggestion was that supplemental vitamin C and E may not be beneficial if women already have adequate concentrations at baseline. It has been suggested that the therapeutic antioxidant window might be between 8 and 10 weeks' gestation at the initiation of intervillous blood flow. However a post hoc subgroup analysis limited to women who were treated before 13 weeks' gestation showed no difference in outcome. ■

JAMES E. REINAKER/ELSEVIER GLOBAL MEDICAL NEWS

This and other studies have found no benefit of the antioxidant vitamins C and E in altering the risk of hypertension in pregnancy.

Training Boosts Bedside Ultrasound Use in ED

FROM THE ANNUAL MEETING OF THE AMERICAN INSTITUTE FOR ULTRASOUND IN MEDICINE

SAN DIEGO — After a simple training intervention, emergency physicians at a large tertiary-care hospital performed more than twice as many focused bedside ultrasound exams on pregnant patients as before the training.

"Pregnant women who get the ultrasound by the emergency physician are usually in and out of the department in 20-30 minutes," Dr. Michael Antonis said in an interview during a poster session.

"Basically, you're looking for a heartbeat and anything worrisome in the adnexa," explained Dr. Antonis, ultrasound fellowship director at the Georgetown University/Washington Hospital Center's emergency medicine residency program, Washington. "With those questions answered, they're out the door in 20-30 minutes. You don't have to send them to radiology. It's something that's done right at the bedside."

In a 9-month study led by Dr. Antonis's associate, Dr. Elizabeth Pontius, a third-year resident in the emergency medicine residency program, researchers developed a training program for attending physicians in the ED. The program consisted of two modules: an online training module on how to use the bedside ultrasound machine in general, and a second training module describing how to use the machine for transabdominal and endocavity scans during pregnancy. Next, the attending physicians were assigned to dedicated "sounding" shifts with Dr. Antonis and Dr. Carolyn Phillips, also of Washington Hospital Center, in which they learned how to perform focused ultrasound exams.

After that training, Dr. Antonis and his associates reviewed all ultrasound exams during weekly quality-assurance reviews, and the total number of scans performed by each physician during the intervention period was counted. Before the intervention period, 31 physicians had performed a total of 645 transabdominal or endocavity pregnancy ultrasound exams. After the intervention, 34 physicians had performed 2,350 exams. That translated into a 264% increase in the number of scans performed during the 9-month intervention.

—Doug Brunk

Disclosures: *None was reported.*