Uterine Fibroids May Increase Stillbirth Risk

BY PATRICE WENDLING

CHICAGO — Women with fibroids have a twofold increased risk of stillbirth, according to a retrospective study of 62,489 pregnancies.

"Although fibroid tumors are typically thought of as benign, they may not in fact be clinically benign," Dr. Molly Stout said at the annual meeting of the Society for Maternal-Fetal Medicine. "One reasonable approach may be to increase surveillance in the subset of women with fibroids at greatest risk for stillbirth."

Fibroid tumors are common, occurring in an estimated 1%-20% of reproductive-age women. The incidence in postmortem studies is more than 50%, she noted.

The study population included 72,373 consecutive women with singleton pregnancies who underwent routine level II second-trimester ultrasound between 1990 and 2007 at a large tertiary care center. A total of 8,151 women did not have obstetric follow-up and 1,733 had major fetal anomalies, leaving 62,489 nonanomalous pregnancies available for analysis.

One or more fibroids were present in 2,022, or 3.2%, of the 62,489 pregnancies, reported Dr. Stout of Washington University in St. Louis.

Consistent with prior research, women with fibroids were significantly more likely than those without fibroids to be older (35 years vs. 30 years), to be African American (34.5% vs. 20.3%), to have a higher body mass index (26 kg/m² vs. 25 kg/m²), and to have medical comorbidities including chronic hypertension (4.9% vs. 2.3%) and preexisting diabetes (1.9% vs. 1.7%). They were, however, less likely to use tobacco (9.2% vs. 11.3%).

Stillbirth occurred in 445, or 0.7%, of pregnancies. The incidence of stillbirth was significantly higher in the fibroid group at 1.6% vs. 0.7% in the no-fibroid group (unadjusted relative risk, 2.1), said Dr. Stout of the university's department of obstetrics and gynecology.

The twofold increased risk of stillbirth in the fibroid group persisted in a multivariate analysis, even after covariates of African American race, preexisting diabetes, and chronic hypertension (adjusted odds ratio, 2.1) were controlled for. Age was not significantly associated with stillbirth in the multivariate analysis.

The presence of four or more fibroids (adjusted OR, 2.2) and fibroids 5 cm or more in diameter (adjusted OR, 2.6) were significantly associated with an increased risk of stillbirth. No association was found between stillbirth and location of the fibroid within the uterus or relative to the placenta, Dr. Stout said.

The presence of fetal growth restriction, however, significantly increased the likelihood of stillbirth (RR, 2.6; adjusted OR, 2.5). Among the 7,933 pregnancies with fetal growth restriction, the incidence of stillbirth was 3.9% in women with fibroids vs. 1.5% in those with no fibroids. In pregnancies without fetal growth restriction, the corresponding

rates were 0.4% and 0.2%."Although no known causal pathway can be determined, the increased risk for intrauterine fetal death in the cohort of women with fibroids and a growth-restricted fetus may suggest that the increased risk of fetal demise occurs via a pathway involving growth restriction," she said. Another attendee asked whether the investigators observed a pattern as to when the fetal deaths occurred. The incidence of stillbirth occurred relatively equally across gestational ages, with 26.7% occurring at 24-27 weeks' gestation, 16.7% at 28-31 weeks, 24.1% at 32-36 weeks, and 32.5% at 37-42 weeks, Dr. Stout said.

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Major Finding: The incidence of stillbirth was significantly higher in women with fibroids at 1.6% vs. 0.7% in the no-fibroid group, for an unadjusted relative risk of 2.1.

Data Source: A retrospective cohort study of 64,489 women who underwent routine level II second-trimester ultrasound at a large tertiary care center.

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