

# Uterine Fibroids May Increase Risk for Stillbirth

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.

## VITALS

**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 62,489 women who underwent routine level II second-trimester ultrasound between 1990 and 2007 at a large tertiary care center.

**Disclosures:** The University of Washington supported the study. Dr. Stout reported no conflicts of interest.

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 vs. 30 years), to be African American (34.5% vs. 20.3%), to have a higher body mass index (26 vs. 25 kg/m<sup>2</sup>), 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%, compared with 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 with-

in 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.

During a discussion of the study, one attendee was sharply critical of this explanation, noting that other studies have not found a relationship between fetal growth restriction and fibroids. Dr. Stout responded that the study was not designed to specifically address the causal pathway. ■

## MR-Guided Ablation May Yield Improvement of Fibroid Symptoms

BY KERRI WACHTER

TAMPA — Of women who underwent magnetic resonance-guided focused ultrasound ablation for uterine fibroids, 90% reported their symptom improvement as excellent or considerable at 12 months' follow-up, in a small study of the noninvasive treatment.

MR-guided focused ultrasound ablation (MRgFUS) has a "reported symptom improvement in

toring of the temperature increase in the fibroid tissue.

A total of 125 patients were scheduled for MRgFUS at the Mayo Clinic between March 2005 and September 2008. The researchers followed 119 patients who completed MRgFUS treatment for 12 months using phone interviews to

assess symptomatic relief and any additional procedures for fibroid-related symptoms, including uterine embolization, myomectomy, hysterectomy, and gonadotropin-releasing hormone agonist treatment.

The women in the study were premenopausal, had no desire to have children in the future, and had at least one uterine fibroid at least 3 cm in diameter. Women with many uterine fibroids were counseled to have uterine embolization instead of MRgFUS, said Dr. Hesley of the department of radiology at the Mayo Clinic in Rochester, Minn.

Symptomatic improvement was self-reported based on percent improvement. The researchers considered 0%-10% improvement as insignificant, 11%-40% im-

## VITALS

**Major Finding:** Of all patients, 74% rated their symptom improvement as excellent, 16% as considerable, 9% as moderate, and 1% as insignificant.

**Data Source:** A study of 69 women with fibroids who underwent MRgFUS and rated their improvement.

**Disclosures:** Dr. Hesley reported that she has received research grant support for other studies from InSightec, which makes the ExAblate system. However, this study was not funded by outside sources.

provement as moderate, 41%-70% improvement as considerable, and 71%-100% as excellent.

Following treatment, 15 patients were lost to follow-up and 4 patients had their fibroids removed during surgeries performed for reasons unrelated to fibroid symptoms. Of the remaining 100 patients, 6 patients had hysterectomies, and 2 had myomectomies.

At 12-months' follow-up, a total of 69 patients rated their percent improvement. In all, 74% rated their symptom improvement as excellent, 16% as considerable, 9% as moderate, and 1% as insignificant.

The researchers have received initial approval for National Institutes of Health funding of a randomized controlled trial comparing MRgFUS and uterine embolization. ■

## Exercise Significantly Cut Menopausal Symptoms

BY SHERRY BOSCHERT

Postmenopausal women improved their physical fitness and reported reductions in the severity of menopausal symptoms after 12-24 weeks of aerobic exercise in three 70-minute sessions per week.

The 65 women (mean age 50 years) rated the severity of menopausal symptoms on the self-administered Menopause Rating Scale questionnaire at baseline, 12 weeks, and 24 weeks in the uncontrolled study. The program of aerobic and calisthenic exercise aimed for 75%-80% of maximal heart rate according to the Karvonen method and consisted of 10 minutes of warm-up exercises; 40 minutes of aerobics; 15 minutes of exercise targeting the abdomen, hip, and leg muscles; and 5 minutes for cool-down and stretching.

Participants reported significant decreases in the severity of hot flashes, night sweats, cardiac symptoms, muscle and joint pain, sleeping disorder symptoms, depressive mood, irritability, anxiety, exhaustion, sexual problems, and urinary symptoms between the start and the end of the study, Dr. Sel-

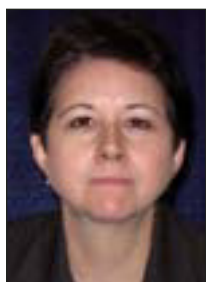
ma Karacan of Selcuk University in Konya, Turkey, reported.

Some of the symptoms showed improvement by 12 weeks and further significant improvements by 24 weeks, including vasomotor symptoms, muscle and joint pain, psychological symptoms, and sexual problems. The women reported no significant change in vaginal dryness (Sci. Sports 2010; 25:39-46).

Significant improvements also were seen in resting heart rate, systolic and diastolic blood pressures, flexibility, aerobic power, and the ability to perform sit-ups, push-ups, and right or left hand grips. Body weight, body mass index, body fat percentage, and fat weight decreased significantly, with no change in lean body mass.

The findings support results from previous observational studies of physically active postmenopausal women compared with age-matched, sedentary control women. No randomized controlled trials have looked at the efficacy of exercise in managing hot flashes. ■

**Disclosures:** Dr. Karacan reported having no conflicts of interest.



**Symptom improvement with MRgFUS was comparable to myomectomy and uterine artery embolization.**

DR. HESLEY

patients that is very comparable to the literature for myomectomy and uterine artery embolization," Dr. Gina K. Hesley said at the annual meeting of the Society of Interventional Radiology.

In MRgFUS, high-intensity focused ultrasound is used during an MR scan to thermally destroy pathogenic tissue—in this case, fibroids. The main advantage of MRgFUS is that the procedure is noninvasive. The concomitant use of MRI allows precise targeting of the fibroid and moni-