

Optimize Outcomes of Hysteroscopy for Myomas

BY DAMIAN McNAMARA
Miami Bureau

FORT LAUDERDALE, FLA. — Outcomes of operative hysteroscopy for uterine leiomyomas can be optimized using tips and techniques presented at a meeting on hysterectomy sponsored by the Cleveland Clinic.

► **Large fibroids.** If a patient has larger fibroids or the case is long or involves a new resident, use a bipolar resection device instead of a unipolar instrument, recommended Dr. Linda Bradley, director of the center for menstrual disorders, fibroids, and hysteroscopic services at the clinic.

"You will have more time to do the procedure. You just continue to shave, shave, shave, always working toward yourself. ... Sometimes it's a lot of work," she said.

New technology targets the tedium of large fibroid resections. For example, perforated roller devices "are good for removal of huge myomas," Dr. Bradley said. "You step on the pedal and within 10 minutes you can get about half of the volume out." A hysteroscopic morcellator is another option. This device uses no electricity but quickly removes tissue as it cuts. A third option is a conventional resectoscope. "This will suck 85%-90% of the chips right into the scope. But you have to go a little slower and make smaller

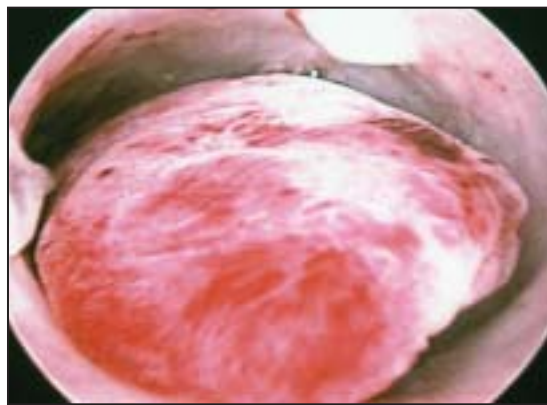
bites of the tissue. I still like my conventional hysteroscope, but you can see how this would be less frustrating," she said.

► **The "snowstorm."** With traditional hysteroscopy, free-floating tissue pieces in the saline can obscure the view.

"Sometimes at the end you get what we call the 'snowstorm,'" Dr. Bradley said. The pieces can be pulled out with polyp forceps or removed one by one with the loop.

"I have a rule of thumb. If I go three times through and do not catch any, I go back to work. Be careful not to perforate while you are doing this."

► **Pressure.** Inflation and deflation during hysteroscopy aid visualization, Dr. Bradley said. "When pressure is at 100, everything is really flat. Lower the pressure to 50-80 and a fibroid might pop out of its capsule."



A velvetlike secretory endometrium covers a submucosal fibroid.

If the visual field gets very bloody, you can turn the pressure back up, she added. "It's a very dynamic process."

► **Complications.** Reinspect the endometrial cavity a few minutes after removal of the hysteroscope, Dr. Bradley said. Postoperative hysteroscopic complications are infrequent, but malodorous discharge and persistent fever, nausea, vomiting, constipation, or abdominal pain can occur. Instruct patients to call if symptoms are not improving, she added, especially if the pain worsens or there is a new onset of fever.

► **Contraindications.** Contraindications to operative hysteroscopy include fibroids that are completely intramural or subserosal.

"These are much more difficult to remove hysteroscopically," Dr. Bradley said.



A large polyp is shown attached to a submucosal fibroid.

Contraindications also include myomas that are larger than 3 cm and/or situated more than 50% within the myometrium. "Not everything can be done with hysteroscopy," she said. "You may want to do a laparoscopy or open procedure [in these cases]."

► **Saline infusion sonography.** Hysteroscopy is a complementary procedure to saline infusion sonography, Dr. Bradley said. "Ultrasound can show a large intracavity fibroid, and we can measure and know how deep it goes."

"Remember volume," she said. A 1-cm fibroid on ultrasound is approximately 0.5 cm³ of tissue to remove; 2 cm is approximately 4 cm³; and 3 cm is approximately 14 cm³ of tissue.

"A 1-cm [fibroid] you can remove within a few moments. A 5-cm [fibroid] might be a two-stage procedure."

► **D&C.** Myomas are often missed on a routine dilatation and curettage (D&C). They can be in the submucosal region, for example. If a deep intramural lesion is observed, Dr. Bradley advised waiting a few minutes. In some cases, uterine contractions will expel the myoma into view, in a way similar to the expulsion of a placenta.

Dr. Bradley disclosed that she is a consultant to Gynecare, a researcher for Smith & Nephew, and a consultant for Gyrus/ACMI. ■

Risk Reduction of Salpingo-Oophorectomy Tied to Genetics

BY KATE JOHNSON
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The type and degree of cancer protection afforded by prophylactic salpingo-oophorectomy varies depending on whether women are BRCA1 or BRCA2 mutations carriers, according to a multicenter, prospective study in the *Journal of Clinical Oncology*.

In women with BRCA1 mutations, risk-reducing salpingo-oophorectomy (RRSO) significantly reduced gynecologic cancer risk, with only a trend toward breast cancer risk. By comparison, in carriers of the BRCA2 mutation, the surgery's protection against breast cancer was significant, with only a trend toward gynecologic cancer protection, concluded Dr. Noah D. Kauff of Memorial Sloan-Kettering Cancer Center and his colleagues.

"The current report represents, to our knowledge, the first prospective study to evaluate the impact of RRSO on BRCA-associated breast and gynecologic cancer risk when carriers of BRCA2 mutations are evaluated separately from carriers of BRCA1 mutations," they wrote (doi: 10.1200/JCO.2007.13.9626). "These findings should help women with BRCA mutations and their doctors make more informed choices about strategies to reduce their risk of breast and [gynecologic] cancers," said Dr. Kauff in a written statement.

The findings are a "strong confirmation that RRSO remains the most effective risk-

reduction strategy" for the prevention of BRCA1-associated gynecologic cancer, noted the authors. However, the low incidence of BRCA2-associated gynecologic cancer in the study group limits conclusions about the protective effect of RRSO in this group. This observation "however, may have important implications for women comparing the relative risks and benefits of specific gynecologic cancer risk-reduction strategies," they suggested. Additionally, "in women with BRCA2 mutations, prophylactic removal of the ovaries and fallopian tubes is profoundly protective against breast cancer. Although the surgery greatly reduces gynecologic cancer risk in women with BRCA1 mutations, they may need to pursue other strategies, such as intensive monitoring or prophylactic mastectomy, to reduce their breast cancer risk."

The study prospectively enrolled women with confirmed mutation of either the BRCA1 or BRCA2 genes, but not both. A total of 792 participants were followed for a mean of 39 months for gynecologic cancer, 509 of whom had undergone RRSO and 283 of whom had not (surveillance-only group). Additionally, 597 participants were followed for a mean

of 35 months for breast cancer events, 303 of whom had undergone RRSO, and 294 of whom were under surveillance only.

Among the participants being followed for gynecologic cancer, 498 had the BRCA1 mutation (325 of whom had undergone RRSO), and 294 had the BRCA2 mutation (184 of whom had undergone the surgery). Cases of gynecologic cancer occurred more frequently in the surveillance-only group (12 vs. 3 cases), revealing a hazard ratio (HR) of 0.12 for developing gynecologic cancer after RRSO, reported the authors. A total of 13 of the 15 gynecologic cancers were identified in BRCA1 mutation carriers.

Among the 597 participants who were followed for breast cancer, 368 had the BRCA1 mutation (190 of whom had undergone RRSO), and 229 had the BRCA2 mutation (113 of whom had undergone the surgery). Again, cases of breast cancer occurred more frequently in the surveillance-only group (28 vs. 19), revealing a HR 0.53 of developing breast cancer after RRSO. The majority (34) of all 47 breast cancers were found in BRCA1 carriers.

When invasive and noninvasive breast cancers were examined independently, RRSO appeared to be more protective

against noninvasive breast cancer (HR 0.32) than invasive breast cancer (HR 0.73), wrote the authors. They noted also that when the 34 known invasive cancers were examined, RRSO appeared to be protective against estrogen-receptor (ER) positive invasive breast cancer (HR 0.22), but not ER-negative invasive breast cancer (HR 1.10). "Prevention of ER-negative breast cancer remains a challenge," they wrote. "The optimal strategy for reducing the risk of this important cancer in carriers of both BRCA1 and BRCA2 mutations will emerge from future prospective studies stratified according to genetic linkage to one or the other of these related, but distinct, cancer susceptibility syndromes."

The authors suggested one explanation for the study's failure to find a significant protective effect of RRSO against BRCA2-associated gynecologic cancer could be the age of the participants.

As lead author of the study, Dr. Kauff disclosed that he was compensated by Wyeth Pharmaceuticals for a consultant/advisory role, as well as for providing expert testimony. A coauthor, Dr. Judy E. Garber, director of the cancer risk and prevention program at Dana-Farber Cancer Institute, Boston, acknowledged consultant/advisory compensation and honoraria from Myriad Genetics, and remuneration from AstraZeneca Pharmaceuticals was declared by coauthor Dr. Rosalind A. Eeles of the Institute of Cancer Research at the Royal Cancer Hospital, London. ■



'These findings should help women with BRCA mutations ... make more informed choices.'

DR. KAUFF

PHOTOS COURTESY DR. LINDA BRADLEY