Long-Term Efficacy of Uterine Fibroid Embolization Confirmed

The three-year follow-up data from the FIBROID (Fibroid Registry for Outcomes Data) Registry continue to show durable and excellent results for uterine fibroid embolization (UFE) across a variety of practice settings.

Ninety percent of women who underwent UFE avoided a hysterectomy, said Scott Goodwin, M.D., the lead author and a professor and chair of the Department of Radiological Sciences in the School of Medicine at the University of California, Irvine.

Study results were published in the January 2008 issue of Obstetrics & Gynecology. RSNA first reported on the FIBROID Registry, a multicenter prospective gathering of outcomes data for UFE, in the June 2006 edition of RSNA News. Including 25 geographically diverse high-volume centers in the U.S. and a nearly equal number of contributing sites around the globe, the study initially accrued more than 3,300 patients. At the end of three years, 1,916 patients remained in the FIBROID Registry, with 1,278 completing their surveys.

“The procedures were performed by individuals with varying levels of experience, but all of whom met standards of competency,” said Dr. Goodwin. “There was no statistical difference in the outcomes between the procedures conducted at academic medical centers and those performed at community hospitals or in private medical practices. One of the goals of the registry was to establish that good outcomes could be obtained across a variety of practice settings.”

Symptom Reduction, Improved Quality of Life Reported

The study indicated UFE reduced symptoms such as excessive menstrual bleeding, pelvic pain and infertility, with 85 percent of participants reporting substantial improvements in symptoms and quality of life. “Significantly, this study showed durable results 30 days, six months, one year, two years and, now, three years afterwards,” said Dr. Goodwin.

Dr. Goodwin said he expects the number of UFE procedures to continue to grow, as uterine fibroids affect an estimated 20 to 40 percent of all American women over the age of 35. The percentage is even higher among African-American women, with nearly 50 percent experiencing uterine fibroids.

“There are one million new cases of fibroid disease diagnosed each year,” said Dr. Goodwin. Treating symptomatic fibroids accounts for more than a third of the 600,000 hysterectomies that are performed annually in the U.S., he said. By comparison, he said, the number of myomectomies or embolizations performed for fibroid relief is only in the tens of thousands.

Women who undergo UFE are usually hospitalized overnight and can return to work in a couple of weeks—a significantly faster turnaround than the expected four-to-six week recovery after a hysterectomy, said Dr. Goodwin.

OB/GYNs Targeted with New Information

While the Society of Interventional Radiology and RSNA have worked to promote UFE to interventional radiologists, Dr. Goodwin said it was crucial to publish all four papers from the FIBROID Registry in Obstetrics & Gynecology. “Publishing a report like this in Radiology is like preaching to the choir,” he said. “It has taken 10 years, but patients are now getting information about UFE from their OB/Gyns when seeking medical options other than surgery to ease fibroid symptoms.”

Dr. Goodwin said he believes more research is being conducted today on UFE than on myomectomies or hysterectomies. This view is shared by another study author, James Spies, M.D., who noted the value of the FIBROID Registry is that it shows a large number of patients in a variety of hospital settings successfully undergoing UFE.

Dr. Spies, a professor and chief of
service in the Department of Radiology at Georgetown University Medical Center, and his colleagues at Georgetown showed a 20 percent fibroid recurrence rate five years after UFE. There is a higher likelihood that women who undergo embolization will need additional surgery later, said Dr. Spies, because the uterus isn’t removed. “The uterus is still there, and new fibroids can grow,” he said, adding, however, that the recurrence rate is comparable to that following myomectomy.

Dr. Spies also pointed to three additional significant randomized trials conducted in Europe. “The FIBROID Registry and the European studies are key additions to public policy and show embolization gives good results,” he said.

In the Randomized Clinical Embolization versus Hysterectomy (EMMY) trial, researchers in The Netherlands found that six weeks after treatment, women who underwent UFE reported higher satisfaction scores than those who had hysterectomies. Two years later, 90 percent of the women in both categories said they were satisfied with their therapies, the researchers reported in the March 2008 edition of *Radiology*.

The Scottish Randomized Study of Embolization and Surgical Treatment for Uterine Fibroids (REST) study, published in the January 25, 2007, issue of *The New England Journal of Medicine*, compared hysterectomy, myomectomy and UFE. The study indicated that the faster recovery after embolization must be balanced against the need for repeated treatment in a small percentage of the women.

Researchers in Prague, meanwhile, studied myomectomy versus UFE in women trying actively to get pregnant. The study indicated that for women in their 30s or younger who want to have children, myomectomy resulted in a higher pregnancy rate and fewer spontaneous abortions.

“UFE is no longer considered experimental. It is a well established procedure with good quality evidence supporting its safety and effectiveness,” said Dr. Spies.

Angiograms of an approximately 40-year-old patient before and after treatment with uterine fibroid embolization (UFE). The Fibroid Registry for Outcomes Data (FIBROID) multicenter trial indicated UFE reduced fibroid symptoms such as excessive menstrual bleeding, pelvic pain and infertility, with 85 percent of participants reporting substantial improvements in symptoms and quality of life. Durable results were reported up to three years post-treatment.

Images courtesy of Scott Goodwin, M.D.

Learn More

Abstracts for journal articles cited in this story are available online:

- “Uterine Artery Embolization for Treatment of Leiomyomata,” published in the January 2008 issue of *Obstetrics & Gynecology* [www.greenjournal.org/cgi/content/abstract/111/1/22](http://www.greenjournal.org/cgi/content/abstract/111/1/22)
- “Symptomatic Uterine Fibroids: Treatment with Uterine Artery Embolization or Hysterectomy—Results from the Randomized Clinical Embolization versus Hysterectomy (EMMY) Trial,” published in the March 2008 issue of *Radiology* [radiology.rsna.org/cgi/content/abstract/246/3/823](http://radiology.rsna.org/cgi/content/abstract/246/3/823)