Uterine Fibroid Embolization Progresses

James B. Spies, MD, MPH, discusses the status of UFE and why it can be rewarding in an interventional practice if referral barriers can be overcome.

How has uterine fibroid embolization (UFE) advanced over the last decade?

UFE is still evolving. It is a mature procedure overall, as it has been shown to be very effective and achieved formal gynecologic approval. It is an iterative process of improving the technique and potentially improving the tools, such as embolics. However, the evolution has slowed somewhat compared to the rapid phase of innovation that occurred 8 or 9 years ago, at which point its growth was exponential.

Some new embolic materials are being evaluated, with a lot of interest in resorbable embolics and the potential of imageable embolics. There is innovation happening in the area of pain control after the procedure, and new techniques, such as superior hypogastric nerve block, are being used in different parts of the world. We have also seen a growing interest in having this treatment incorporated into formalized practice pathways, in the context of the ongoing reform of health care, in which it would be a key consideration for every patient who has symptomatic fibroids.

Researchers in the field have performed randomized trials on UFE with 5-year follow-up of large patient cohorts, such as the REST trial and the EMMY trial. We’ve also created registries, including the SIR’s FIBROID registry, the British UAE registry, and others, and we know the types and frequencies of complications very well. Overall, UFE is well-accepted and well-proven. If you compare UFE to other decade-old procedures that interventional radiologists perform, we know more about UFE.

If you compare UFE to other decade-old procedures that interventional radiologists perform, we know more about UFE. We’re practicing in a field that is dominated by gynecologists, so it has required us to be a little more rigorous in gathering evidence for this treatment, which is good for our understanding of the procedure and its role in patient care. We don’t need to prove that this procedure works—we have solid, scientific evidence that it does. The new facet of this practice is integrating UFE into the ongoing health care reform and cost-control efforts.

A few years ago, there was a change in the current procedural terminology code that reduced physician reimbursement. If one considers the reimbursement for physicians and the facility together, UFE is a bargain compared to surgery. The question is, will this procedure be more widely adopted in the years ahead, as health care reform and cost-control really start to take hold?
Because an interventional radiologist performs UFE rather than a patient’s gynecologist, what steps need to be taken to bridge any barriers between the specialists?

I believe UFE is underutilized because it is not often in the algorithm or the list of alternatives that gynecologists consider when they evaluate patients. There is a deeply ingrained belief that hysterectomy is the solution to fibroids in women who are past the child-bearing age. This belief is almost dogmatic in some parts of the country and certainly in many practices, regardless of location. Sometimes it is difficult for a gynecologist to look beyond a long-standing paradigm, and in this way, many patients have moved ahead of their physicians. Gynecologists must realize that most women with uterine fibroids do not want their uteri uses removed.

There needs to be a broader approach for patients with symptomatic fibroids requiring intervention; a range of less-aggressive approaches must be explored, including UFE.

Because UFE is performed by another specialty, gynecologists may have some reservations about handing their patients over to interventional radiologists for the procedure for a variety of reasons. Gynecologists will be the ones seeing patients after UFE, and they are generally responsible for managing potential complications down the road. This may cause understandable unease on their part. I believe we must work to convince gynecologists one at a time that embolization can be used effectively in a collaborative environment.

How has UFE been received in other parts of the world compared to the United States?

I believe UFE is performed more in the United States. There has been great resistance to UFE in some parts of Europe, despite the procedure having been developed in France. Traditionally, medicine has been more regulated and more narrowly controlled in some countries than it is in the United States. Some patients do not have a choice to go directly to an interventional radiologist. The health care system may not provide a venue for interventional radiologists for clinical practice and patient assessment, and this is something that organized interventionists in other countries are working on.

There are also certain regulatory barriers. For example, in some European countries, medical practices cannot advertise, including patient information websites. It can be difficult to circulate information in a broad way; whatever information a patient might get regarding the UFE procedure must therefore come through her gynecologist. In a few places, a gynecologist has to refer a patient for uterine artery embolization; she may not go directly to the interventionist.

This is slowly changing, and there has also been growing interest in emerging markets, such as China and India. I have been to China once to teach this procedure, and I’m going back again in the fall. There is considerable interest in being able to offer UFE as an alternative to hysterectomy. As health care systems evolve and have greater resources, I think the total numbers of UFE procedures performed will grow dramatically worldwide.

In your experience, what kind of interaction works between an interventional radiologist and a gynecologist?

Frankly, there is room for improvement in collaboration on the part of both interventional radiologists and gynecologists in the management of patients seeking a nonsurgical approach to fibroids. Collaboration between the American College of Obstetricians & Gynecologists (ACOG) and the Society of Interventional Radiology toward reaching an overall consensus on the management of fibroids would be beneficial so that we wouldn’t oversell one approach versus another. If we could get beyond the marketing, I think that we could better educate patients. I would like to see more collaborative efforts within organized medicine, but I realize that this can be difficult to achieve.

Personally, I have collaborated on the basic level of “one patient at a time.” A number of gynecologists who were initially opposed to the concept now refer patients to me. Some of their patients came to me on their own, I evaluated them, and then I communicated in writing to the gynecologist every time I saw these patients. This includes the initial consult, when the procedure is completed, when I see the patient for follow-up, and if the patient contacts us with a problem. In that case, I evaluate the problem and talk directly to the gynecologist to resolve any issue. I have done this on a patient-by-patient basis for 15 years, so I have a very good relationship with gynecologists in my community.

I have tried to let gynecologists know that this procedure exists, using the communication about their specific patients to educate them. Recently, I saw a woman who told me that UFE changed her life completely. She couldn’t believe that she didn’t know about UFE or that it took her so long to finally undergo the procedure. If a patient relays that type of message to
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her gynecologist—who may not be fully aware of the procedure and its potential impact on quality of life—that’s a step in the right direction.

It is also important for interventionists who perform UFE to recognize that some patients are at increased risk for complications, particularly fibroid expulsion, after the procedure. Some patients may be better served with surgery. A patient who has a strong desire to become pregnant is probably better off undergoing the myomectomy if she is a good candidate for it.

We performed a study a few years ago that looked at more than 500 office visits, and about one-third of the patients we evaluated in the clinic were recommended for something other than uterine embolization. These options included hysterectomy for about 10%, myomectomy for about 8%, and conservative therapy or other minor procedures in the balance. If a patient has trivial fibroids and no significant symptoms that we can identify, she should not undergo any procedure right away. When patients are sent back to gynecologists with recommendations for other treatments, in the appropriate setting, trust begins to be built, which helps the collaborative effort.

What impact did the ACOG 2008 statement have on UFE practice patterns?

I credit the ACOG for their statement in 2008, which was authored primarily by Elizabeth Stewart, MD, a very well known gynecologist in fibroid treatment. This official document recognized that there was level 1 evidence supporting the safety and effectiveness of the UFE procedure. This is the first official recognition by the ACOG of the appropriateness of UFE and provides a reliable source for gynecologists to consult. When I talk to gynecologists or noninterventionists, I mention that particular guideline and recommend they review it. UFE is no longer experimental. Although it may be new to their practices, it’s been around a long time.

The long-term goal should be for gynecologists to recognize that minimally invasive approaches to fibroid treatment should be the first option. One reason that uterine embolization may not be growing quite as quickly as it had in the past is that the laparoscopic skills of gynecologists have improved dramatically. They have now organized many fibroid centers that specialize in robotic or laparoscopically assisted hysterectomies. That innovation has been driven by the competition of UFE and provides minimally invasive options for women seeking treatment. While these treatments compete with UFE, they provide the patient with a wider array of choices beyond abdominal hysterectomy.

Over time and generationally, I believe we will see this change. There’s been a lot of discussion about companies informing gynecologists about UFE, and some have done a good job. Although it is a big undertaking to change medical practice, I believe that over time, we will see greater acceptance of UFE.

What makes UFE different from other interventional procedures you perform?

It’s not the only thing I do, but UFE has been a large part of my practice for a long time. It is one of the most rewarding procedures to be involved in because you are able to treat a condition that has a huge impact on quality of life for women. With UFE, I am able to do something definitive and effective, and the patients come back so delighted. Of course, there are risks and complications that can occur, and some of the satisfaction of this practice is learning to manage those problems and bringing the patient to a successful conclusion, even if it requires additional intervention.

I cherish my UFE practice because it is such a positive procedure overall. Many interventional procedures are palliative, which, although they may be necessary, may not have a huge impact on the quality of the patient’s life. With UFE, you can clearly see it. If you are not currently offering UFE, you should consider adding the procedure because it’s a great practice, and these are great patients.

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