

Uterine Fibroid Embolization (AKA Uterine Artery Embolization)

UFE, or UAE, as this procedure is commonly abbreviated, is an exciting minimally invasive treatment for fibroids that does not require surgery. The concepts of the procedure were actually developed in the 1970s to treat life threatening bleeding after childbirth. The first UAE treatment for fibroids was published in the respected journal, *The Lancet*, in 1995. Since that initial publication, over 100,000 UAEs have been performed with an enviable safety record, superior to that of the surgical alternatives. The procedure gained an unsolicited boost in notoriety when the US national security adviser, Condoleezza Rice, had the procedure done in 2004.

Fibroids are benign (non-cancerous) growths of fibrous and muscular tissue that develop in the muscular layer of the uterus. They can range in size from that of a pea to that of a bowling ball. Between 20 and 40 percent of North American women are affected by fibroids. African-American women are particularly high risk, with as many as 50% having significant sized fibroids. Fibroids can cause symptoms, including prolonged or heavy periods, pain, and a sense of fullness or heaviness. UAE has a high success rate for these symptoms. Symptoms related to size of the fibroids such as the pain, fullness, or heaviness, can be reduced or eliminated in up to 92% of patients. It is over 90% effective in resolving abnormal bleeding during periods.

Women with fibroids are usually referred to the interventional radiologist by another physician, typically their primary care physicians (PCP) or gynecologist. The workup includes imaging of the uterus by an ultrasound and/or MRI to verify the size, number, and position of the fibroids. In addition, some routine bloodwork is necessary.

The procedure is done by an Interventional Radiologist in the interventional radiology suite of a hospital or outpatient facility. As stated by the Society of Interventional Radiology (www.sirweb.org), "Interventional Radiologists are board certified physicians who specialize in minimally invasive, targeted treatments performed using imaging for guidance. Their procedures have less risk, less pain and less recovery time compared to open surgery."

UAE is done entirely through a small incision at the groin (about ¼ inch long) where a small catheter is placed in the groin artery and guided with fluoroscopy to the uterine arteries (one on each side of the uterus). After documenting the blood supply with angiograms, the uterine arteries are embolized, or blocked, with small particles typically made out of gelatin or polyvinyl alcohol. Once a second set of angiograms is done documenting a successful embolization, the catheter is removed and the patient is moved to the recovery area. Depending on how the patient tolerates the recovery, they will go home the same evening, or the next day. After having a UAE, patients can expect some degree of cramping in the pelvis for up to 2 weeks, however, with early and judicious pain control, this can be minimized or avoided completely. The procedure usually takes about an hour to complete. After a UAE, women average about 10 days to get back to work. The typical alternative, surgical hysterectomy requires an average of 36 days before getting back to work.

If you are interested in having this procedure done, talk to your physician or contact your local interventional radiologists. Get information about UAE, other interventional radiology procedures, or interventional radiologists in your area by visiting the "Patients & Public" section at www.sirweb.org.

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