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Giving Fibroids the Heat

By LESLIE WHITAKER

No one knows precisely what causes fibroid tumors. No one can say why those abnormal muscle-like growths in the uterus are so common, with 40% of women over 35 believed to have them. But this much is certain: fibroids cause an awful lot of misery. Although many fibroids remain small and symptomless, the benign tumors can grow to the size of grapefruits or even cantaloupes. Women with large fibroids often experience unrelenting pressure on the bladder and menstrual bleeding heavy enough to cause anemia. Fibroids are the reason for 30% of the 600,000 hysterectomies performed each year in the U.S. and 30,000 myomectomies, surgeries that remove the tumors but leave the uterus intact.

Like many women burdened with fibroids, Dorla Smith, 48, found the surgical options unappealing. The Chicago accountant dismissed the idea of a hysterectomy as "out of the question." She didn't want to face major surgery, the loss of her uterus and a prolonged recovery period. And she was uncomfortable with a less invasive option called uterine fibroid embolization (UFE), which involves injecting pellets of glycerin into the arteries that lead to the fibroids, choking off their blood supply. UFE can cause temporary but intensely painful cramps. But after living for three years with occasional pain and a belly swollen as if she had been six months pregnant, Smith opted for a new therapy that uses sound waves to shrink fibroids.

Focused ultrasound (FUS) was approved by the FDA in 2004 and is available at 16 U.S. medical centers. Smith was treated at the Mayo Clinic in Rochester, Minn. She lay belly down in a machine designed by an Israeli company, InSightec, for three hours the first day and almost four hours the second day. The device focuses high-frequency ultrasound beams at targeted spots of fibroid tissue, heating them to 180°. Doctors use magnetic resonance imaging (MRI) to track the volume and temperature of the fibroids after each zap. No incisions are needed. The treated fibroids shrink and become dead tissue, which the body later reabsorbs.

Smith wore earplugs to block the grinding sound of the MRI and clutched a shutoff button in case the heat got too intense. She never used it. She felt only a little back pain from lying still for so long. Afterward, she "felt immediate relief from the heaviness," she says. "I was amazed." She's symptom free 15 months later.

Only 500 women in the U.S. and 1,500 worldwide have been treated with FUS so far, and there are drawbacks. Some large fibroids may not shrink more than 10% after treatment, and fibroids can grow back in some cases. Women with fibroids that are too numerous, too large or too close to the kidney and bladder (which may be damaged by the heat) are not candidates for FUS, nor are women who plan to get pregnant; the effects on fertility are unknown. Cost is another issue. The procedure runs from \$8,500 to \$12,000 and is covered by insurance only on a case-by-case basis.

Still, the arrival of a new nonsurgical treatment for one of women's most common complaints is good news. Women have a tendency to delay treatment for fibroids until they are huge and causing big problems. "As we develop less invasive procedures," says Dr. Elizabeth Stewart of Boston's Brigham and Women's Hospital, "we will be able to treat women earlier."