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STATE OF THE ART AND SCIENCE

Treating Uterine Fibroids

Audiey Kao, MD, PhD

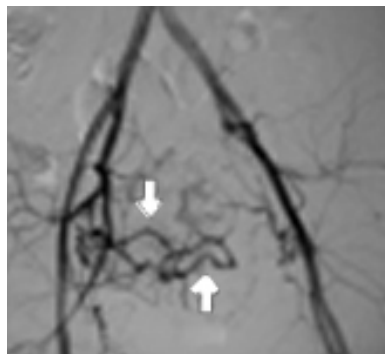
Uterine leiomyomas or fibroids are benign tumors of the uterus that develop in up to 25 percent of women.¹ Significant morbidity from uterine fibroids include prolonged or heavy menstrual bleeding, pelvic pressure or pain, and, in rare cases, reproductive dysfunction.²

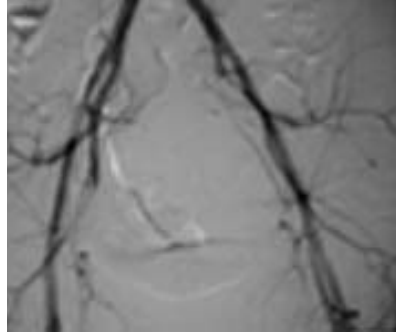
Surgery has been the mainstay of fibroid treatment, and in fact, uterine fibroids are the most common indication for hysterectomies. Treatment with gonadotropin-releasing hormone agonists, alone or in combination with more conservative surgical treatments, such as myomectomy or myolysis, are also used.

More recently, patients have a less invasive option than hysterectomy—uterine artery embolization (UAE). Studies have found that UAE is safe, effective for the treatment of fibroids and less costly than a hysterectomy.^{3,4,5,6,7} Some patients, however, may not be good candidates for UAE such as patients who:

- Have extremely large fibroids (fibroid volume is generally reduced by no more than 50 percent),
- Have fibroids that compress the bladder (uterine arterial embolization in these cases may not provide sufficient symptomatic relief),
- Wish to bear children in the future.

UAE interrupts the uterine blood supply by injecting agents such as polyvinyl alcohol articles. As seen in Figure 1, the pre-embolization angiogram shows the uterine arterial blood flow (arrows designate the uterine arteries), while in Figure 2, the post-embolization angiogram reveals no further blood flow through the right or left uterine arteries.





Side effects and complications of UAE include:

- Infection (in approximately 2 percent of cases),
- Irregular menses or amenorrhea (in approximately 10 percent of cases),
- Partial bowel obstruction (rare).

References

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Audiey Kao, MD, PhD is the editor in chief of *Virtual Mentor*.

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