

Clinical Pearl

Treating Uterine Fibroids

Uterine artery embolization is an alternative to a hysterectomy that is safe, effective, and less costly for treatment of uterine fibroids.

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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 [3-7]. 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.



Figure 1
pre-embolization angiogram

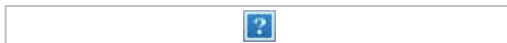


Figure 2
post-embolization angiogram

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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