

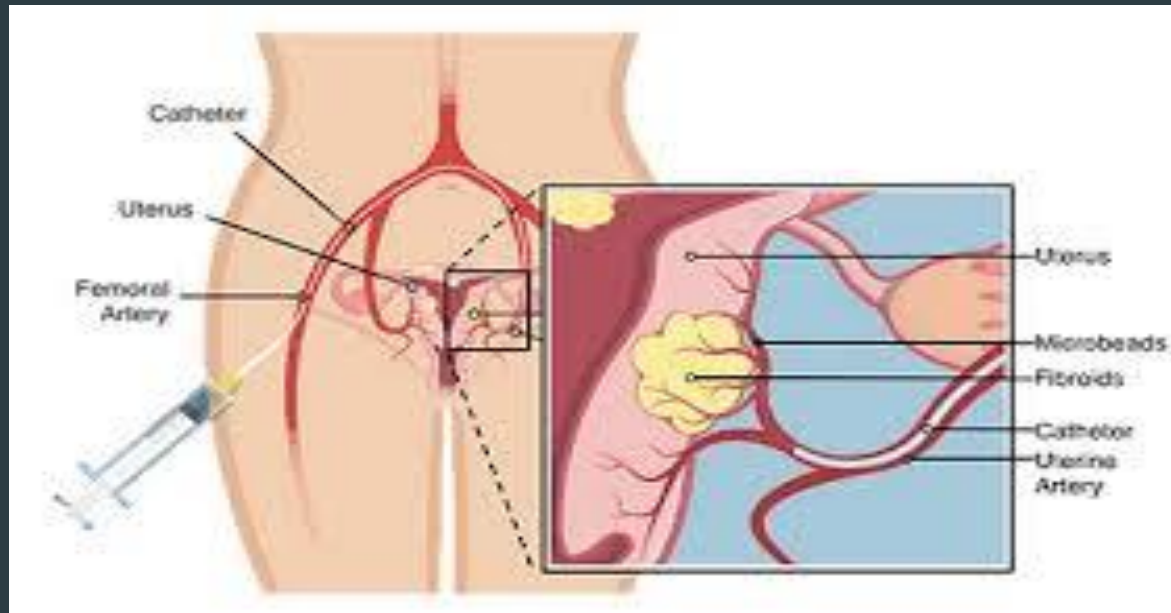
IN THE NAME OF GOD

Non-Surgical Invasive Treatments In
Myoma

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Uterine Artery Embolization

In a UFE procedure, physicians use an x-ray camera called a fluoroscope to guide the delivery of small particles to the uterus and fibroids. The small particles are injected through a thin, flexible tube called a catheter. These block the arteries that provide blood flow, causing the fibroids to shrink. Nearly 90 percent of women with fibroids experience relief of their symptoms



Ideal candidates for UAE include patients with all of the following characteristics:

- Heavy menstrual bleeding or dysmenorrhea caused by intramural fibroids
- Premenopausal
- No desire for future pregnancy

-For patients with these characteristics, a high symptom control rate, satisfaction, and quality of life can be achieved for up to 10 years after treatment ? If bulk-related symptoms (eg, sensation of pressure in the lower abdomen, nocturia, urinary frequency, and urinary incontinence) are the only symptoms, the efficacy of UAE is questionable ?

Contraindications:

- Asymptomatic fibroids
- Pregnancy
- Pelvic inflammatory disease
- Uterine malignancy
- Contraindications to radiologic contrast agents.

Pregnancy :

there was concern that poor uterine perfusion following UAE would negatively impact fertility and result in obstetric complications or adverse fetal effects.

The American College of Obstetricians and Gynecologists states:
the effect of UAE on pregnancy remains understudied but makes no recommendation of whether desire for a future pregnancy is a contraindication.

Fibroid characteristics:

-Location: Subserosal or submucosal fibroids that are pedunculated and have a narrow stalk are considered a relative contraindication

-Size or number of fibroids:

The volume of necrosis after UAE in a large fibroid uterus can be substantial with a proportionate level of postprocedural pain and risk of infection

PREPROCEDURE EVALUATION:

- History and physical examination

- Laboratory testing:

- Hemoglobin/hematocrit : This should be ordered in all patient with heavy or prolonged menstrual bleeding.

- Serum creatinine, with calculation of glomerular filtration rate

Some experts also ensure that cervical cancer screening is current and perform an endometrial biopsy prior to embolization to exclude endometrial pathology

-Pelvic imaging :

The first-line imaging study to evaluate for uterine fibroids is pelvic ultrasound.

Many protocols include magnetic resonance imaging (MRI) before UAE in order to properly determine size and location and ensure that the uterine masses are consistent with uterine fibroids

PREPROCEDURE PREPARATION:

- Informed consent

- Thromboprophylaxis :

only applicable for patient is at increased risk for thromboembolic disease.

COMPLICATIONS:

-periprocedural (first 24 hours):

groin hematoma, arterial thrombosis, (pseudo)aneurysm

-early complications (within 30 days):

Common early complications include fever, nausea, pain, and malaise (post embolization syndrome)

pelvic pain: patient-controlled analgesia

vaginal discharge (16 to 20 percent): discharge is not purulent and fever is absent.

-Late complications :

Ovarian insufficiency following UAE occurs more frequently in patients older than 45 years

OUTCOMES:

Efficacy

-Heavy menstrual bleeding :

It has been shown that most patients (73 to 90 percent) reported improvement or disappearance of heavy menstrual bleeding symptoms up to 10 years.

-Dysmenorrhea :

improvement in up to 85 percent of patients, comparable with hysterectomy group (85 versus 78 percent)

Need for subsequent treatment

-Subsequent hysterectomy for failure or recurrence of symptoms after UAE was reported to be 27 percent at five years

Uterine artery embolization versus surgery:

- Faster resumption of daily activities and return to work
- Lower rates of blood transfusion
- Lower risks of major complications
- Higher risks of minor complications

REPRODUCTIVE OUTCOMES

Pregnancy :

- A meta-analysis that include 227 pregnancies after UAE shows Pregnancies after UAE had significantly higher miscarriage rates (35 versus 17 percent) and were more likely to have a cesarean delivery(66 versus 49 percent)
- postpartum hemorrhage (14 versus 3 percent)

Focused ultrasound surgery :

Focused ultrasound surgery utilizes high intensity ultrasound energy to induce coagulative necrosis of fibroids.

Ideal treatment candidates have three or fewer fibroids, size less than 10 centimeters in maximal dimension, homogenous and dark on T2-weighted images, and well-vascularized without calcification.

The case series of FUS described 54 pregnancies in 51 patients with mean birth weight of 3.3 kg and a 64 percent vaginal delivery rate. There was no specific pattern of complications

Thanks For Your
Attention