

Is UFE for Me?

Uterine Fibroid Embolization

Introduction

Uterine fibroids affect around 80% of all females and 75% of these women treat their fibroids with a hysterectomy. There are many other treatment options available for women to treat their fibroids. Uterine fibroid embolization is a new and upcoming procedure that has great results and limited risk.

Fibroids

Fibroids, also called leiomyomas or myomas, are non cancerous growths found within the uterus. They are made up of smooth muscle cells and connective tissue. There are three different classifications of fibroids: intramural, subserosal, and submucosal fibroids.

- Submucosal fibroids - These fibroids grow into the endometrium, which is the inner part of the uterus.
- Intramural fibroids - These fibroids grow in the myometrium of the uterus. This is the thickest layer of the uterus.
- Subserosal fibroids - These fibroids grow outwards from the uterus in to the abdominal cavity. They stem from the thin fibrous layer on the outside of the uterus.

The three types of fibroids are demonstrated in Figure 1.

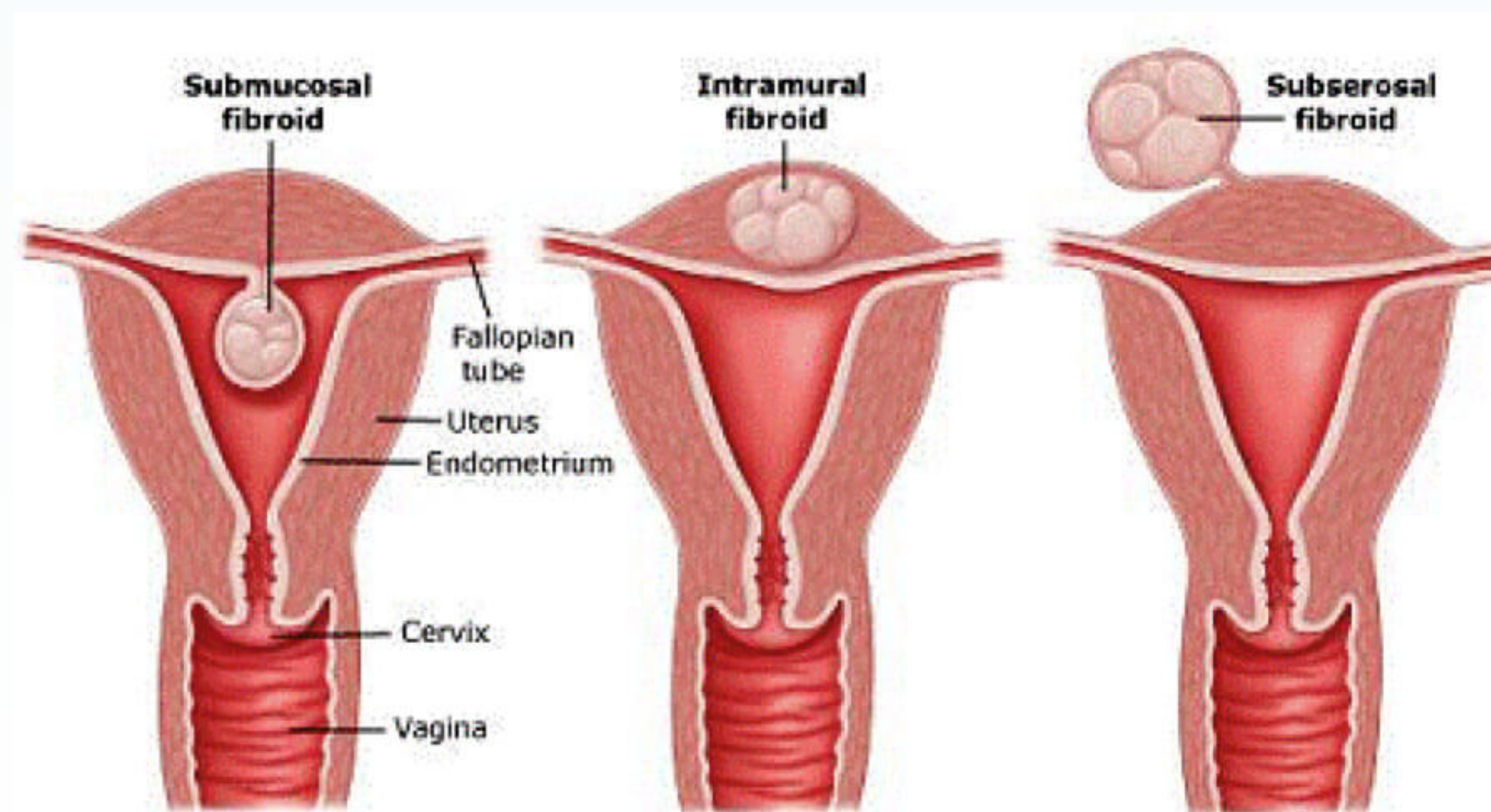


Figure 1. Classification of fibroids

Traditional Treatment Options

There are many traditional options for women to treat their fibroids. Three of the most common are briefly explained below.

- Hormonal therapy - Specific drugs are effective at shrinking fibroids by stopping ovulation and decreasing the production of estrogen, which is linked to fibroid growth.
- Myomectomy - A procedure that is effective at removing smaller fibroids while leaving the uterus in tact. It can be performed either laparoscopically or through the vaginal canal via hysteroscope. Not ideal for larger or multiple fibroids, as it creates a higher risk of blood loss.
- Hysterectomy - A procedure that completely removes the uterus and the fibroids it contains. This is also done either laparoscopically or through the vaginal canal with a hysteroscope. This procedure reduces the risk of future fibroids, but also eliminates that chance of a woman bearing future children

Uterine Fibroid Embolization

Uterine fibroid embolization (UFE) is a newer treatment option for women suffering from fibroids. It was first performed in 1995 and hundreds of thousands of procedures have been performed since. It is a minimally invasive procedure done in interventional radiology and utilizes conscious sedation. The interventional radiologist first gains access to the femoral artery and then locates the uterine artery. From there the radiologist is able to determine which artery is supplying the fibroid with blood. The radiologist is then able to inject small particles into the artery and efficiently occlude the blood vessel. This is demonstrated in Figure 2. With no blood flow, the fibroid will stop growing and the tissue will die over time. Patients are left with a small incision in their groin from where the artery was accessed and a minimal recovery time. Most patients are able to leave the same day or the day following the procedure. Fibroids will continue to decrease in size over the next couple months following the procedure. This is demonstrated in Figure 3. The body naturally expels or absorbs the dead tissue so no follow up procedure is needed.



Figure 3. MRI showing fibroid size comparison at 0, 3, and 9 months following uterine fibroid embolization

Benefits of UFE

- Effective on all fibroid types
- Minimally invasive procedure = small incision/scar
- Reduced risk of infection vs. traditional surgery
- Smaller chance of needing a blood infusion
- Short procedure time
- Utilizes conscious sedation rather than general anesthesia
- Can be performed as an outpatient procedure allowing recovery at home
- Uterus is left in tact (allows for future pregnancy)
- Recovery time is around 7-10 days vs. 6-8 weeks with hysterectomy
- 85-90% of patient's symptoms are significantly reduced

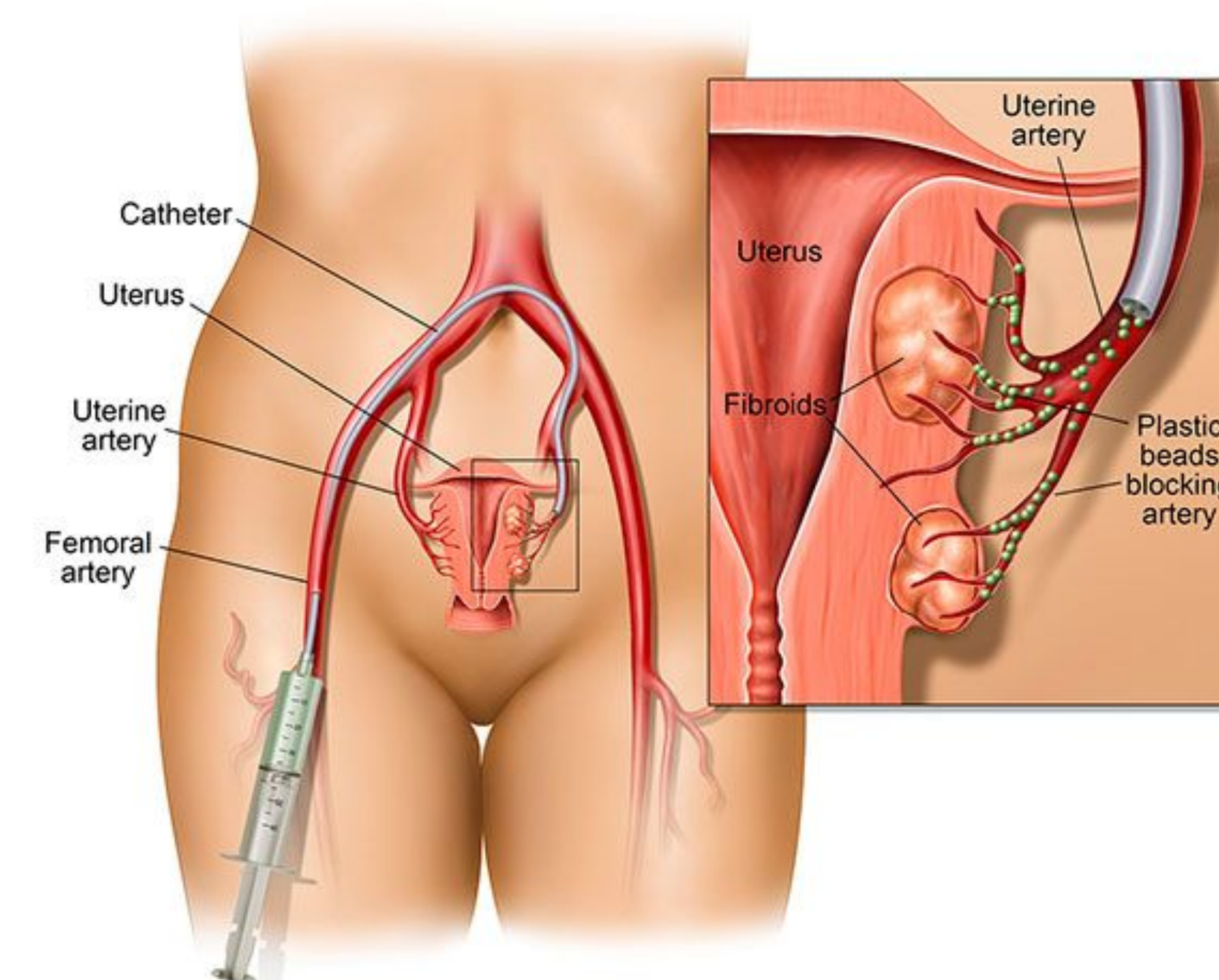


Figure 2. Pathway of the catheter from the femoral artery to the artery supplying the fibroid(s). Embolization particles shown exiting the catheter and occluding the vessel.

Conclusion

Uterine fibroid embolization is a great option for women seeking relief from symptomatic fibroids. It is a quick, safe, and organ sparing procedure that is vastly under recognized. Utilizing smaller incisions, shorter recovery time, and being effective on all fibroid types, fibroid embolization is a treatment option that should be considered for all women suffering from fibroids and looking to conceive in the future.

Sources

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