

Uterine Fibroid Embolization

Patient Awareness

Interventional Radiology:
your alternative to surgery

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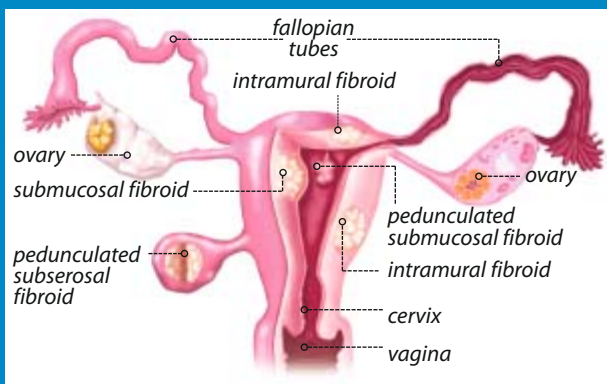
www.uterinefibroids.eu

Cardiovascular and Interventional Radiological Society of Europe

The most common tumours of the female genital tract

What are uterine fibroids?

Fibroids are non-cancerous (benign) growths that develop in the muscular wall of the uterus. The exact causes for fibroid development are unclear, but researchers believe that genetics and a subsequent development of susceptibility to hormone stimulation. Fibroids range greatly in size from very tiny to the size of a cantaloupe or larger. In some cases, they can cause the uterus to grow into the size of a five-month pregnancy or more.



There are three primary types of uterine fibroids:

Subserosal fibroids

develop under the outside covering of the uterus and expand outward through the wall, giving the uterus a bumpy appearance.

Intramural fibroids

develop within the lining of the uterus and expand inward, increasing the size of the uterus, making it feel larger than normal in a gynaecologic internal exam. These are the most common fibroids.

Submucosal fibroids

are just under the lining of the uterus. These are the least common fibroids, but they tend to cause the most problems. Even a very small submucosal fibroid can cause heavy bleeding - gushing, very heavy and prolonged periods.

The Symptoms

Depending on location, size and number of fibroids, a woman might experience the following:

- Pelvic pain
- Pelvic pressure or heaviness
- Pain in the back or legs
- Pain during sexual intercourse
- Bladder pressure leading to a constant urge to urinate
- Pressure on the bowel, leading to constipation and bloating
- Abnormally enlarged abdomen
- Heavy, prolonged menstrual periods and unusual monthly bleeding, sometimes clots, often leads to anaemia.

Most fibroids do not cause symptoms - only 10 % to 20 % of women who have fibroids ever require treatment.



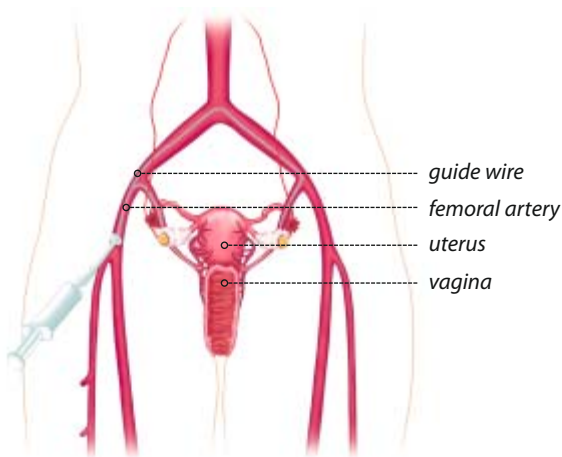
Who is most likely to have uterine fibroids?

Uterine fibroids are very common, although often they are very small and cause no problems.

- **20 % - 40 % of women aged 35+ have uterine fibroids of a significant size.**
- **Women of African origin are at a higher risk with as many as 50% having fibroids of a significant size.**

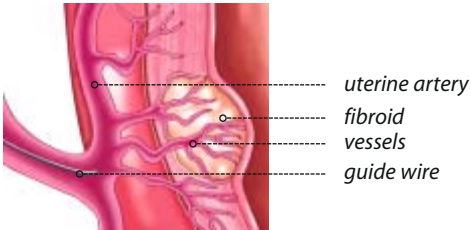
Fibroid tumours may start in women when they are in their 20s, however, most women do not begin to have symptoms until they are in their late 30s or 40s. Physicians are not able to predict if a fibroid will grow or cause symptoms.

The Principle

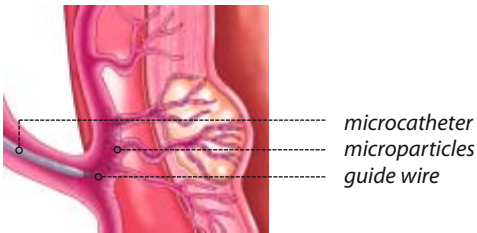


The puncture is performed and the guide wire inserted in the opposite femoral artery and then guided into the uterine artery sustaining the fibroid.

The Procedure



A guide wire is inserted in the uterine artery that is providing blood supply to the fibroid.



A microcatheter is glided over the guide wire so that contrast material as well as microparticles can be simultaneously injected.



These microparticles are attracted by the high flow of the fibroid and then obstruct the vessels thereby cutting off the blood flow to the fibroid, causing it to shrink.

The Facts

While embolization to treat uterine fibroids has been performed since 1995, embolization of arteries in the uterus is not new. It has been used successfully by interventional radiologists for more than 20 years to treat heavy bleeding after childbirth. UFE is now available at hospitals and medical centres across the globe.

Benefits

- A hospital stay of only one night is usually required
- Many resume light activity after a few days. The majority return to normal activity within 7 to 10 days
- On average, 90 % of women experience significant or total relief of heavy bleeding
- The procedure is about 85 % effective for pain
- The procedure is effective for multiple fibroids and large fibroids
- Recurrence of treated fibroids is very rare
 - Short- and mid-term data show UFE to be very effective with a very low rate of recurrence
 - Long-term (10 year) data is ongoing and not yet available, but in a 6 year study, no recurrence was reported

Risks

Fibroid embolization is considered to be very safe:

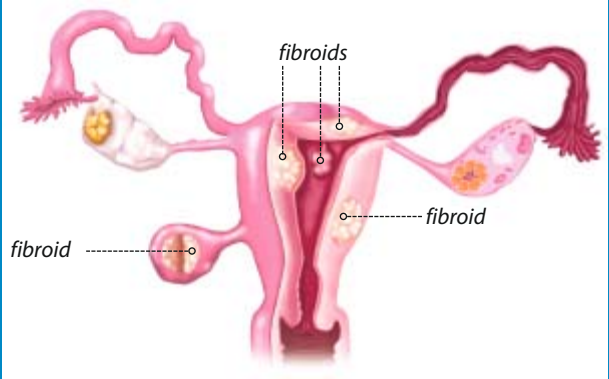
However, there are some associated risks, as with any procedure:

- Most women experience moderate to severe pain and cramping in the first few hours following the procedure
- Some experience nausea and fever (controlled with appropriate medication)
- A small number of patients have experienced infection (usually controlled with antibiotics)
- A 1 % chance of injury to the uterus is present, potentially leading to hysterectomy. These complication rates are lower than those of hysterectomy and myomectomy (surgical removal of fibroids)
- A small number of patients have entered into menopause after embolization (more likely to occur if the woman is in her mid-40s or older, and is already nearing menopause)

Myomectomy (surgical removal of fibroids) and hysterectomy carry higher risks of complications, including:

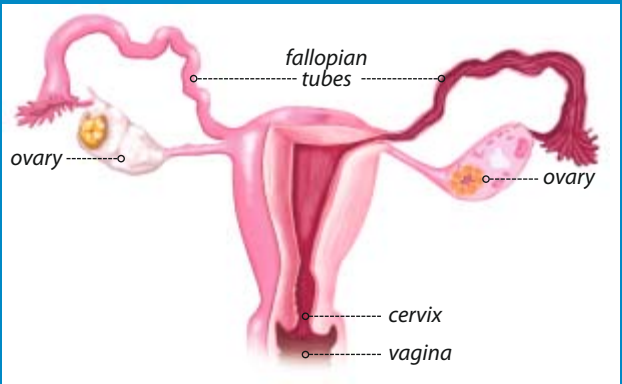
- Infection and bleeding leading to transfusion
- Adhesions may develop, causing fusion of tissue and organs in the abdomen, which can lead to infertility
- Recovery time is much longer for abdominal myomectomy, generally 1 to 2 months

Before



The uterus showing the various possible fibroid locations.

After



The fibroids and the uterus have decreased in size and the associated undesirable symptoms have disappeared.

Organisation

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