British Society of Interventional Radiology
The Royal College of Radiologists
63 Lincoln's Inn Fields
London WC2A 3JW

Uterine artery embolisation

This information sheet explains the procedure of uterine artery embolisation for uterine fibroids, what it involves and what to expect when you come to the Interventional Radiology department for treatment.

Please note that this leaflet is not meant to replace discussion between you and your doctor. You should raise any questions you may have with the doctor who has referred you for, or is performing, the procedure.

What is a uterine artery embolisation?

Uterine artery embolisation is a minimally invasive procedure that causes fibroids to shrink by reducing or blocking off their blood supply. Very small particles like sand are injected into the arteries that supply the fibroids. The particles travel through to the small vessels and block them. The reduction in blood supply causes the fibroids to reduce in size. The minimally-invasive nature of the procedure means that the recovery is faster with a shorter stay in hospital than surgical alternatives. Uterine artery embolisation also preserves fertility, i.e. this procedure will not stop you from being able to get pregnant.

Why do I need a uterine artery embolisation?

The main reason to have a uterine fibroid embolisation is to treat uterine fibroids that are causing pain or other problems. These include heavy menstrual bleeding, severe period pains, low blood count (anaemia) or pressure symptoms due to the size of the fibroid.

How do I prepare for the procedure?

All patients considered for uterine artery embolisation should undergo assessment by a gynaecologist and interventional radiologist (the doctor who performs the procedure). You should inform them of any health conditions you have as well as any medications you are currently taking. The interventional radiologist will discuss more about the procedure including benefits, risks and follow-up.

You will also be examined to confirm the diagnosis of a uterine fibroid. Depending on local policy, you will have an ultrasound scan and/or an MRI with an injection of dye. You should have your bloods taken to check for complete blood count, kidney function and in certain situations a coagulation screen. If you have an intra-uterine device, it may be suggested for this to be removed prior to the procedure in order to avoid infection.

You will need to fast prior to the procedure. Specific instructions will be given to you and it is important that these are followed.

How is uterine artery embolisation performed?

The specific details of the procedure may vary depending on your condition and local healthcare provider practices but generally it follows the below process:

- You will be asked to remove any jewellery or other objects that may get in the way of the procedure. You will be given a gown to wear.
- An IV line will be started in your arm or hand. You may be given preventative antibiotics and painkillers prior to the procedure.
- The doctor will clean either the groin area or the wrist with antiseptic solution. They will then inject some local anaesthetic to the area before inserting a tube (sheath).
- A catheter is passed through the sheath and advanced into each of your uterine arteries in turn – there are two, one on each side. The doctor will use contrast dye and X-rays to confirm the small catheter is in the correct position.
- The doctor will then inject very small particles and will take more X-ray images while injecting to observe the flow of the particles. This will then be repeated at the other uterine artery.
- The sheath and catheter will be removed after the procedure is done. Sometimes pressure is used at the site to prevent bleeding and in some cases a device will be used to help close the artery.

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Who performs the procedure and where?

The procedure is done by a doctor called an Interventional Radiologist. This is a type of doctor that specialises in image-guided minimally invasive procedures. The procedure will usually take place in the Interventional Radiology (IR) department of the hospital in specialised operating theatres with X-ray equipment, also known as IR suites or labs.

What are the potential risks/complications of a uterine artery embolisation?

Minor complications can occur including bleeding or infection at the incision site. Pain is common after the procedure and a protocol for pain relief will be followed. Abnormal vaginal bleeding or discharge can occur post procedure.

Major complications are rare. This includes infection of the uterus or other damage to the uterus. In severe cases, hysterectomy can be required. If the procedure is done from the wrist there is a very small risk of causing a stroke.

Occasionally, part of or a whole fibroid can detach from the uterus and be passed via the vagina after the procedure. Improvement in symptoms from the fibroids will take several months.

Some women also experience post-embolisation syndrome which includes pelvic pain and cramping, nausea and vomiting, low-grade fever, fatigue and discomfort. This can last between 2 to 7 days.

What happens afterwards?

After the procedure, depending on local policy, you will be on a pain protocol with anti-inflammatory and anti-sickness medication. You will be monitored for complications and the incision site checked regularly. You will usually be discharged the following morning.

At home, it is important to keep the groin incision clean and dry. You may experience pain some ongoing pain and should be discharged from hospital with a plan for painkillers. You will likely be advised to avoid sexual intercourse and strenuous activity in the short-term. Return to normal activities and work is almost always possible within a week or so.

Most complications are seen in the first week after discharge. You should contact your doctor if you experience any of the following symptoms:

- Fever or chills
- Redness, swelling, bleeding or other fluid drains from the incision site
- Increased pain around the incision site
- Worsening abdominal pain, cramping or swelling
- Increased vaginal bleeding or passing of tissue or other drainage.
- Your follow-up with the interventional/gynaecological team may vary depending on local policy.

Notes