

## Radiology

# Uterine fibroid embolisation

You have been advised by your hospital consultant to have uterine fibroid embolisation.

This leaflet may not answer all your questions, so if you have any concerns, please ask the ward staff. If you feel unhappy with any part of your care within the X-ray Department, please ask to speak to a senior member of staff.

Please read this leaflet carefully to ensure you are successfully prepared for the examination.

Please contact the X-ray Department if your weight is equal to or more than 205Kg (32 stone) as you may require an alternative examination.

## Points to remember

- Please bring any sprays or inhalers that you are taking with you to the X-ray Department
- Leave any valuable possessions at home.
- **If you are taking aspirin or warfarin please inform the radiology staff** as this medication may need to be stopped before the procedure.

## What is a uterine fibroid embolisation and why do I need one?

Uterine fibroid embolisation is a non-surgical way of treating fibroids. The uterine arteries that feed the fibroids are blocked, making the fibroids shrink.



## Patient Information

The procedure is performed by an Interventional Radiologist who will be assisted by radiographers and radiology nurses. An interventional radiologist is a specially trained doctor who has expertise in using X-ray equipment, and also in interpreting the images produced.

It is not easy to predict how long the procedure will take. As a guide, expect to be in the X-ray room for at least one hour. The procedure is an alternative option to an operation.

The interventional radiologist will look at the images while carrying out the procedure to guide catheters (long, thin, flexible tubes) into blood vessels. They will then inject tiny particles or beads into the correct blood vessel to deliver them to the fibroids.

Other tests you have had showed that you have fibroids. Your gynaecologist or GP should have discussed this with you and determined that these are the cause of your symptoms. They will also have discussed different ways of treating them.

The options for treating fibroids include:

- medical treatment - usually with hormones
- an operation - generally a hysterectomy, where the womb is removed altogether
- myomectomy - where only the fibroids are removed from the womb.

In your case, it has been decided that embolisation is the best treatment.

## Referral and consent

If you are having the uterine fibroid embolisation as a planned procedure, the doctor who referred you should have discussed the reasons for the procedure and any alternative treatment options with you. The radiologist will confirm that you understand why the procedure is being done and its potential risks and the benefits to you.

**You should have had sufficient explanation before you sign the consent form.**

## Patient Information

If after discussion with your hospital doctor or the radiologist you do not want the procedure carried out, then you can decide to not have the procedure.

If the radiologist feels that your condition has changed or that your symptoms do not mean such a procedure is needed, they will explain this to you. They will communicate their reasons with the referring clinician and ask that you return to your referring clinician for review. At all times, the radiologist and referring clinician will be acting in your best interests.

## Before the test

Please bring all your usual medicines into hospital with you. Please remember to take any sprays or inhalers with you when you have the procedure.

**If you are taking water tablets or diuretics, you may stop this on the day of the procedure.**

Please tell the doctor if:

- You have had any allergies or bad reactions to drugs or other tests
- You have asthma, hay fever, diabetes, or any heart or kidney problems.

It is important that you understand the test and its implications, so if you have any questions, please ask the doctor. You will be asked to sign a pink consent form confirming that you understand the procedure and are aware of the risks and benefits. We will want you to be as relaxed as possible for the procedure.

## Preparation

You will be admitted to Gynaecology Ward 23 before the procedure for preparation.

- You will have had some blood tests to check your blood clotting ability and kidney function. Sometimes, it is necessary for you to have these blood tests on the morning of the procedure when you are admitted.
- **Please do not eat for the 6 hours** prior to your procedure time. You can drink water only during this time but **must stop 2 hours** before your procedure time.

## Patient Information

- Some painkillers (non-steroidal anti-inflammatory drugs such as ibuprofen or diclofenac) **may** have to be stopped on the day of the examination for 24 hours. Please discuss this with your doctor. You can use paracetamol as a substitute pain relief medicine during this time if needed.
- If you are taking metformin, please inform the Radiology staff as this **may** have to be stopped for 48 hours after the procedure.

As the procedure is generally carried out using the big artery in the groin, you may be asked to shave the skin around this area.

You need to have a needle put into a vein in your arm, so that the radiologist can give you a sedative or painkillers. Once in place, this will not cause any pain.

Antibiotics will be given. You will also receive an injection for pain relief and a suppository to reduce inflammation.

You will need to change into a hospital gown. You may bring a dressing gown to wear over this until the procedure starts.

## Safety

The contrast agent contains iodine and is excreted by the kidneys in your urine. Please inform the radiologist or radiographer:

- If you are allergic to iodine, have any other allergies or suffer from asthma.
- If you have reacted previously to the injection used for kidney X-rays or CT scanning.
- If you have known kidney problems.

**Patients aged 12-55 years – could you be pregnant?** The risks of radiation are slightly higher for the unborn child so you will be asked to confirm that you are not pregnant before the examination can proceed.

## **Important information for patients with renal impairment:**

- If you are under the care of a renal specialist or have to follow a fluid restricted diet, you should include this preparation as part of your fluid allowance
- If you have severe kidney problems and are not having dialysis treatment, you will be put on intravenous fluids (a drip) for 6 hours, starting 2 hours before the procedure.

Please contact the Radiology Department as you will need to be admitted to renal day case ward (UHCW Ward 50A) for this procedure

## **During your examination**

- You will lie on the X-ray table, generally flat on your back. You may also have a monitoring device attached to your chest and finger, and may be given oxygen through small tubes in your nose.
- The interventional radiologist will keep everything as sterile as possible, and will wear a theatre gown and operating gloves. The skin near the point of insertion, usually the groin, will be thoroughly cleaned with antiseptic, and then most of the rest of your body covered with a theatre towel.
- The skin and deeper tissues over the artery in the groin will be anaesthetised with local anaesthetic, and then a needle will be inserted into this artery. Once the interventional radiologist is satisfied that this is correctly positioned, a guide wire is placed through the needle, and into this artery. Then the needle is withdrawn allowing a fine, plastic tube, called a catheter, to be placed over the wire and into this artery.
- The interventional radiologist will use the X-ray equipment to make sure that the catheter and the wire are then moved into the correct position, into the arteries which are feeding the uterus and fibroids. These arteries are called the right and left uterine arteries. A special X-ray dye, called contrast medium, is injected down the catheter into these uterine arteries. This may give you a hot feeling in the pelvis.
- Once the fibroid blood supply has been identified, fluid containing thousands of tiny particles is injected through the catheter into the small arteries which supply blood to the fibroid. This blocks the arteries so that the fibroid is starved of its blood supply.

## Patient Information

- Both the right and the left uterine arteries need to be blocked in this way. This can often all be done from the right side of your groin, but sometimes may be difficult so a needle and catheter will be inserted into the left groin as well.
- At the end of the procedure, the catheter is taken out and the radiologist may press firmly on the skin entry point for several minutes to prevent any bleeding. Alternatively, the interventional radiologist may put a small stitch into the puncture site to prevent bleeding.

## Will the procedure hurt?

When the local anaesthetic is injected, it will sting to start with, but this soon passes. The skin and deeper tissues should then feel numb.

The procedure itself may become painful. However, there will be a nurse standing next to you looking after you. If the procedure does become too painful for you, they will be able to arrange for you to have some painkillers through the needle in your arm. You will be connected to a PCA (Patient Controlled Anaesthesia) pump. This will be controlled by you, and will deliver drugs which are strong painkillers when you press a button. The PCA pump limits how much painkiller is delivered and will only allow a certain amount to be delivered every 5 minutes, so you cannot overdose on it.

As the X-ray dye, or contrast medium, passes around your body, you may get a warm feeling which some people can find a little unpleasant. However, this soon passes and should not worry you.

Once the particles have been delivered to the fibroids, the fibroids will begin to be starved of oxygen. This can be painful, so painkillers and sedative medications are administered throughout the procedure. The pain is similar to periods pains, and can last for a number of hours.

## Hypogastric nerve block

For some patients, it is possible to perform a hypogastric nerve block to help with pain relief. This involves inserting a very fine, long needle through your skin next to your belly button and down onto the backbone.

## Patient Information

By injecting analgesia (pain killers) into this area, it will provide improved pain relief for around 6 to 8 hours. This is not the same as an “epidural” or “spinal” and does not go anywhere near the spinal cord, but instead helps numb the nerves in the pelvis which supply the uterus.

This is not possible in all patients but will be offered to you if it is clinically appropriate.

## Risks of the procedure

As with any procedure or operation, complications are possible. We have included the most common risks and complications in this leaflet. The probability of these complications occurring will vary for each patient, and the possibility of these complications happening to you will be discussed with you before you sign the consent form.

- There may occasionally be a small bruise, called a haematoma, around the site where the needle has been inserted. This is quite normal.

If this becomes a large bruise, then there is the risk of it getting infected. In this case you should seek medical advice as this may require treatment with antibiotics.

- Most patients feel some pain afterwards. This ranges from very mild pain to severe crampy, period-like pain. It is generally worst in the first 12 hours but will probably still be present when you go home.

While you are in hospital, this can be controlled by powerful pain killers. You will be given further tablets to take home with you. Most patients get a slight fever after the procedure. This is a good sign as it means that the fibroid is breaking down. The pain killers you will be given will help control this fever. Try and take these painkillers regularly to keep on top of any pain you may experience.

- A few patients get a vaginal discharge afterwards, which may be bloody. This is usually due to the fibroid breaking down. Usually, the discharge persists for approximately 2 weeks from when it starts, although occasionally it can persist intermittently for several months. This is not a medical problem, but you may need to wear sanitary protection.

If the discharge becomes offensive and if it is associated with a high fever and feeling unwell, there is the possibility of infection and **you should ask to see your gynaecologist urgently.**



## Patient Information

- **The most serious complication of fibroid embolisation is infection.** This happens to about 2 in every 100 women having the procedure. The signs that the uterus is infected after embolisation include great pain, pelvic tenderness and a high temperature. Lesser degrees of infection can be treated with antibiotics.
- Rarely the X-ray dye used can cause deterioration in kidney function. This is usually only temporary but occasionally can be more long term. This is of particular concern for people who already have impaired kidney function. If you are under the care of a renal doctor, you should have a blood test to assess your kidney function prior to the procedure.
- Rarely, allergic reactions can occur with the X-ray dye. These very rarely require any treatment. You will be asked about allergies by the radiologist at the time.

Despite these possible complications, the procedure is normally very safe. At all times during and after the procedure, the staff will be monitoring your responses to this treatment.

X-rays are a type of radiation. We are all exposed to natural background radiation every day of our lives - this comes from the sun, food we eat, and the ground. Exposure to X-rays carries a small risk, but your doctor feels that this risk is outweighed by the benefits of having the procedure. We will take all safeguards to minimise the amount of X-rays you receive.

Uterine fibroids are benign tumours, but in very rare circumstances, can mutate into cancers. This is incredibly rare and we can sometimes identify features of this on an MRI scan.

We usually perform an MRI scan before the procedure and then 6 months after the procedure to try to help reduce this risk. However, often it is very difficult to diagnose when a fibroid becomes cancerous.

## After your examination

You will be taken back to the ward on the bed. Nurses on the ward will carry out routine observations, such as taking your pulse and blood pressure. They will also look at the skin entry point to make sure there is no bleeding from it.



## Patient Information

You will generally stay in bed for 4 to 6 hours, until you have recovered. This will be less if a stitch has been placed in the groin at the end of the procedure. You will generally be kept in hospital overnight or for a day or two. Once you are home, you should rest for 3 or 4 days.

You can eat and drink normally. **We recommend that you drink at least one pint of liquid within 2 hours after your examination.**

**If you have severe renal impairment (a GFR below 30ml/min) and are not on dialysis:** It will be necessary for you to attend renal day case unit (UHCW ward 50A) 48 hours after your examination to monitor your renal function if you have had an intravenous injection of contrast.

## What else may happen after this procedure?

Some patients may feel very tired for up to 2 weeks following the procedure, and some people feel fit enough to return to work 3 days later. However, patients are advised to take at least 2 weeks off work following embolisation. Approximately 8% of women have spontaneously expelled a fibroid, or part of one, usually six weeks to 3 months afterwards. If this happens, you are likely to feel period-like pain and have some bleeding.

A very few number of women have undergone an early menopause after this procedure. This has probably happened because they were at this time of life to begin with. In our experience, we have not seen this in women less than 45 years of age.

## What is the success of fibroid embolisation?

This procedure has been performed since 1995 and short and medium term results are good. Long term results are not available yet. Most women are pleased with the results, and most fibroids are shrunk by about 50-70% of the size they were before.

Once fibroids have been treated like this, it is believed that they do not grow back again.

## Patient Information

For information about the effects of X-rays and information about radiology departments visit the NHS website: <https://www.nhs.uk/conditions/x-ray/>.

Please note that the views expressed in these websites do not necessarily reflect the views of UHCW NHS Trust.

The Trust has access to interpreting and translation services. If you need this information in another language or format, please contact the number on your appointment letter and we will do our best to meet your needs.

The Trust operates a smoke free policy.

### Did we get it right?

We would like you to tell us what you think about our services. This helps us make further improvements and recognise members of staff who provide a good service.

Have your say. Scan the QR code or visit:

[www.uhcw.nhs.uk/feedback](http://www.uhcw.nhs.uk/feedback)



#### Document History

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