

Uterine Fibroid Embolisation

Consumer Information

Contributors:

Dr Stuart Lyon

MBBS, FRANZCR

Dr James Burnes, Ms Ann Revell, Dr Christine Walker,
A/Prof Stacy Goergen

What is a Uterine Fibroid Embolisation?

Fibroids (also known as leiomyoma) are benign growths (non-cancerous) in the uterus or womb. They are common in fertile women and usually shrink after the menopause. The majority of fibroids are asymptomatic (without any obvious symptoms) and are either not known about by the individual or are found incidentally on examination or medical imaging.

Fibroids can cause symptoms depending on their size and location. Symptoms include heavy bleeding, pelvic pain, increased period pain, increasing need to pass urine (frequency) and may be associated with infertility.

Uterine Fibroid Embolisation (UFE), also known as Uterine Artery Embolisation (UAE), is a way to treat the symptoms of fibroids without having surgery. UFE blocks the blood flow to the fibroids so as to reduce the size of the fibroid and remove the symptoms. The uterus (or womb) is not removed.

UFE is performed in an angiography suite (or room) of a hospital, which looks like an operating theatre. Angiography is the X-ray examination of blood vessels after a dye (or contrast medium) has been injected into the bloodstream that shows up on live X-ray pictures or images used to diagnose any abnormalities (see [Iodine-containing contrast medium \(ICCM\)](#)).

Contrast medium is a liquid substance injected into an artery or blood vessel and if you have fibroids, the contrast will clearly show on the X-ray images.

How do I prepare for a Uterine Fibroid Embolisation?

UFE is a medical procedure and is performed in a hospital or day care facility. Patient preparation will vary between different practitioners and hospital or day care facilities. You will usually be asked to have only a light breakfast or fast, that is go without food or liquid, prior to the procedure. Blood tests may be requested to see if you have any kidney or blood related problems.

A frequent concern from patients is that they are having their period at the time they are to undergo the procedure. UFE is performed from inside the blood vessels and it does not matter if you are having your period or where you are in your menstrual cycle.

When you arrive at the hospital or day care facility you will be admitted as a patient and a drip or needle is inserted into your arm or the back of your hand. You may receive a "pre-med" (a medication to make you drowsy to treat any pain or anxiety).

Hospital stays vary between different practitioners and different patients, but generally your hospital stay will be between 1-3 days.

What happens during a Uterine Fibroid Embolisation?

UFE will be performed in the angiography suite of the hospital or day care centre. This is a room like an operating theatre that is specifically set up for this type of procedure, where there is an X-ray machine, showing the womb, to guide the procedure. There is also monitoring equipment, trained medical staff and medications to ensure the procedure is performed comfortably and safely.

You may be anxious, and the staff are well trained and expecting this. It is common to receive an injection of sedative medication (usually through the drip) at this stage to make you feel a little drowsy and treat any feelings of anxiety.

You will be given an injection of a liquid dye, or contrast medium, that will enable the arteries to show up clearly on the X-ray images (see [Iodine-containing contrast medium \(ICCM\)](#)).

The UFE begins with a needle and wire being placed into the artery, usually the right common femoral artery in the right groin (which you can feel pulsating). However, sometimes arteries in the left groin or arm are used. The overlying skin will have been injected with local anaesthetic to make it go numb. You do not have feeling inside the blood vessels, so you do not usually feel anything during the procedure. Once the wire is put into the artery a plastic tube known as a catheter is steered into the arteries supplying blood to the fibroids. Most commonly these are the right and left uterine arteries, but also occasionally the ovarian arteries or other arteries supply the fibroids.

Blood supply to the fibroid is stopped by injecting tiny particles of plastic known as polyvinyl alcohol or cis acryl gelatin. Once this has been completed, the catheter is removed from the groin and a small clip or stitch is put into the tiny hole in the artery, or firm compression with the finger (of the radiologist or nurse) is applied to the tiny hole in the artery to stop the bleeding. The procedure is now finished and you will be taken back to the ward.

Are there any after effects of a Uterine Fibroid Embolisation?

UFE is a medical procedure and there will be some effects experienced immediately after the procedure as well as for some time later. You do not usually feel anything during the procedure.

It is common to get some degree of pelvic pain or cramping after the procedure as well as nausea (feeling sick) or vomiting. This is often called post embolisation syndrome and you will be given medications to lessen the chance of this happening or to lessen the feeling of nausea, often before and after the procedure.

You may also have a temperature (fever) after the UFE. Post embolisation syndrome differs greatly between patients and if you do not get this it does not mean that the UFE did not work.

Approximately 1 out of 20 patients suffer a more severe post embolisation syndrome, which can be quite uncomfortable and requires a longer stay in hospital. If this happens, strong medications can be given to keep you comfortable. This does not mean there are problems with the procedure or that you are not going to get a good result.

How long does a Uterine Fibroid Embolisation take?

UFE on average takes 40 minutes to perform. The procedure can sometimes take longer, depending on how many arteries need to be blocked, the size of the fibroid or fibroids and the structure (number of turns and positions) of the blood vessels being treated. You often do not notice the time taken due to medications given during the procedure which will make you sleepy and relaxed.

What are the risks of a Uterine Fibroid Embolisation?

Like any medical procedure, UFE is associated with some risks or complications. However, these are usually less than with other procedures to treat uterine fibroids including uterine surgery. Uncommon risks at the time of the UFE include damaging the artery in the groin and having an allergic reaction to any of the medications you are given, including the iodinated contrast media (see *Iodine-containing contrast medium (ICCM)*).

Damaging or blocking the blood supply to other parts of the body, other than the fibroid or uterus, is very rare.

Two weeks or more after the procedure you may develop a fever, sweats or increasing pelvic pain. This is uncommon (less than 1 in 50 women) but if this happens you should call the doctor performing the procedure straight away, as you may have an infection in the fibroid.

If your period does not come back after three months you need to contact your doctor, as you may have damage to the ovary. This will lead to early menopause. However, this is also uncommon (less than 1 in 50 women). This can be more common if you are having the procedure at about the time you are going through menopause or the "change of life", when you stop having your periods.

What are the benefits of a Uterine Fibroid Embolisation?

The major benefit of UFE is that it is an effective treatment for fibroids that are causing you to experience symptoms of pain, heavy periods, etc., while keeping the uterus, and which does not involve surgery. It is regarded as effective and safe for short and long term treatment of symptomatic fibroids.

The effective treatment of symptoms is higher than uterus preserving surgery (myomectomy) with a lower adverse or side effect rate. UFE is not as effective as uterus removing surgery (hysterectomy) but has a lower complication rate. You can ask about these other treatments in order to decide, in consultation with the doctor, which procedure is best for you.

You need to be aware that there is a treatment failure rate of 10-15%, usually requiring a repeat procedure.

Who does the Uterine Fibroid Embolisation?

UFE is performed by **radiologists** (specialist doctors) known as interventional radiologists, who have had special training in this procedure.

Where is a Uterine Fibroid Embolisation done?

The procedure will be performed in an angiography suite (or room) in a hospital or day care facility. It looks like an operating theatre with special equipment that shows up the fibroids on live X-ray pictures or images after a dye (or contrast medium) has been injected into the bloodstream.

When can I expect the results of my Uterine Fibroid Embolisation?

The benefit from UFE is usually seen within a few period cycles for heavy bleeding and pain related symptoms. It may take some months for the increased need to pass urine and pressure related symptoms to go away.

Useful websites about Uterine Fibroid Embolisation

- Society of Interventional Radiology
<http://www.sirweb.org/patients/uterine-fibroids/>

Please note:

This information is of a general nature only and is not intended as a substitute for medical advice. It is designed to support, not replace, the relationship that exists between a patient and his/her doctor. It is recommended that any specific questions regarding your procedure be discussed with your family doctor or medical specialist

The QUDI Program is managed by the Royal Australian and New Zealand College of Radiologists and funded by the Australian Commonwealth Department of Health and Ageing.

Publication Date: May 1st 2009

The RANZCR is not aware that any person intends to act or rely upon the opinions, advices or information contained in this publication or of the manner in which it might be possible to do so. It issues no invitation to any person to act or rely upon such opinions, advices or information or any of them and it accepts no responsibility for any of them.

The RANZCR intends by this statement to exclude liability for any such opinions, advices or information. The content of this publication is not intended as a substitute for medical advice. It is designed to support, not replace, the relationship that exists between a patient and his/her doctor. Some of the tests and procedures included in this publication may not be available at all radiology providers.

The RANZCR recommends that any specific questions regarding any procedure be discussed with a person's family doctor or medical specialist. Whilst every effort is made to ensure the accuracy of the information contained in this publication, The RANZCR, its officers, councillors and employees assume no responsibility for its content, use, or interpretation. Each person should rely on their own inquires before making decisions that touch their own interests.