University College Hospital

Uterine Artery/Fibroid Embolisation (UAE)

Imaging Department

Information for Patients, Relatives & Carers
If you would like this document in another language or format, or require the services of an interpreter, contact us on:

020 3447 0225. We will do our best to meet your needs.

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1 Introduction

This booklet contains information for patients, (and their family and carers), who are considering having Uterine Artery Embolisation (UAE). It explains what is involved and the possible risks.

2 What is a Fibroid?

Fibroids are benign (non-cancerous) tumours of the uterus (womb). They are very common, affecting about half of all women at some stage in their lives. Though most women with fibroids have no symptoms and may not even know they have them, a minority suffer significant symptoms.

Fibroids are made up of disorganised muscle fibres and have a large supply of blood to them. No one knows for sure what causes fibroids, but they are certainly influenced by hormones, and most likely to grow faster when oestrogen is highest in a woman’s middle life. They are rare in teenagers and are most common in 30-50 year olds; they shrink naturally after the menopause.

Fibroids vary considerably in size and number. They can affect a woman’s life considerably, and the effect of their treatment can vary greatly from one patient to another.

How are Fibroids diagnosed?

Your GP or gynaecologist may have a good idea that you have fibroids from the symptoms that you report and the internal examination he/she performs. However, to confidently make the diagnosis requires some form of scan. The most common is an ultrasound scan, which may be undertaken internally (a transvaginal scan). They may also refer you to have an MRI
scan. This scan provides detailed anatomy of your lower abdomen and can show exactly how many fibroids you have, where and how big they are and how much blood supply they have. The scan can also tell us if there is any indication of anything else that is wrong, which may be relevant to the management of your problems.

3 What is Uterine Artery Embolisation (UAE)?

UAE is a “key hole” operation in which the blood supply to the fibroid is blocked off causing the fibroids to shrink. The procedure takes place in an Imaging (radiology) operating theatre and is performed by an Interventional Radiologist, a Consultant who specialises in Image-guided treatments.

The procedure is carried out under sedation and takes around 30 minutes to complete. You will be admitted overnight to the ward for recovery and observation.

The success rate of UAE is over 80%¹. UAE eliminates all the fibroids in one treatment, with a very low recurrence rate long term.

Fibroids and Fertility

Fibroids are associated with reduced fertility.

With regards to the treatment of fibroids, the Royal College of Obstetricians and Gynaecologists state that “The evidence for the beneficial effect of myomectomy or embolisation on fertility and pregnancy outcome is weak (myomectomy) or lacking entirely (embolisation)”².

The UK national institute for clinical excellence (NICE) recommends that “Patients contemplating pregnancy should be informed that the effects of the procedure (fibroid embolisation) on fertility and on pregnancy are uncertain”³.
4 What are the risks of UAE?

The risks of UAE are low, but any procedure that involves placement of a catheter inside a blood vessel (artery) carries certain risks.

These risks include:

- **Bruising/bleeding at the access site in the groin or wrist** (e.g. bruising or bleeding at the puncture site and infection can occur (1 patient in 100).

- **Very rarely (1 patient in 500)**, there is a chance that the embolic (blocking) particles can lodge in the wrong place and cause pain/damage to other tissues.

- **Late risk of infection of the uterus. (1 patient in 500)** This is rare and treated with antibiotics. Severe infection requiring hysterectomy has been reported at no greater frequency than infection after myomectomy operation.

- **As with any operation using X-ray contrast ‘dye’** (e.g. a CT scan) 1 patient in 10,000 may have an allergic reaction to the X-ray contrast ‘dye’ used during uterine fibroid embolisation. The effect may range from mild itching to severe reactions.

- **After the age of 40 years, the likelihood of menopause increases every year.** Treatment for fibroids is a shock to the uterus and 1-3 menstrual cycles may be missed after embolisation. In older women, periods may not resume and menopause may occur.

- **A discharge is common after embolisation (sometimes passing small pieces of fibroid tissue), and may persist for**
some weeks. Rarely a larger fibroid is passed and you may need to see your Gynaecologist to assist in its removal.

- In 10-15% of women, the blood supply to the fibroid uterus is so strong and drawn from many alternative arteries such that the fibroids are not completely destroyed and can regrow. In over half of these cases a further UAE procedure completes the treatment of the fibroids. A small number of women may have to then consider hysterectomy.

5 What alternatives are available?

There are two alternatives to UAE:

- There are medications, which reduce oestrogen levels and cause fibroids to shrink. A six month course can reduce the fibroid by up to 50% and reduce many of the symptoms. The drugs also stop your normal periods and cause the symptoms of menopause (hot flushes and vaginal dryness.) They can however, only be taken for about six months. After this time, the fibroids often start growing again and cause more symptoms. Drugs may be very helpful in patients nearing the menopause, but are unlikely to be a good solution for younger women with large symptomatic fibroids. They may be helpful in making surgery easier and safer by temporarily reducing the blood supply to the uterus.

- Surgery has traditionally been the most common form of treatment for fibroids, and large numbers of women used to undergo hysterectomy (removal of the womb) for this reason. Hysterectomy is not however the only surgical option. The larger fibroids can be removed leaving much of the uterus intact (myomectomy). This can be performed through normal surgery, or, with keyhole techniques.
6 How should I prepare for UAE?

You must let your doctor know if you have a known allergy to intravenous contrast dye (Iodine). This is used for angiograms and CT scanning.

On the day of the procedure you must not eat or drink for 6 hours before the procedure. You can continue to drink small amounts of clear fluids up to 2 hours before to your appointment.

You should continue with most of your regular medications. Your medications will be discussed with you at your pre-assessment clinic appointment.

Please tell the doctor who refers you for this procedure, if you are taking Clopidogrel™, Warfarin™ or other blood thinning medication.

Please ensure that you have had any intra-uterine devices (IUD) removed prior to this treatment.
7 The day of the UAE

You need to come to the Imaging Department, which is on the second floor of the Podium building on the morning of your procedure. Please arrive 30 minutes before your appointment time.

Upon arrival you will be checked into the department by an admission nurse who will fill in some paperwork and do some clinical observations like blood pressure and pulse rate. You will also have a small cannula inserted into one of your arm veins so that you can have some pain relief during and after the procedure, and some antibiotics. You will also have a pregnancy test in order to confirm that you are not pregnant.

You will be seen by the pain management team who will set up your morphine pump for use after the procedure for pain relief.

An anti-inflammatory suppository may be given just prior to the procedure, which is very effective in reducing possible pain.

You will be asked to change into a hospital gown.

If you have any allergies, you must let the admission nurse know. If you have previously reacted to intravenous contrast (the dye used for CT scans), then you must also tell the admission nurse about this.

8 Asking for your consent/permission

We want to involve you in all the decisions about your care and treatment. If you decide to go ahead with procedure, by law we must ask for your consent and will ask you to sign a consent form. This confirms that you agree to have the procedure and understand what it involves.

The consent form is a form that both you and the Interventional Radiologist sign confirming that you have discussed the
procedure and have been informed of the risks, benefits and alternatives and you have agreed to carry on with the UAE. (You can have a copy of this form to take with you.)

Please feel free to ask any questions that you may have and remember that even at this stage, you can decide against going ahead with the UAE if you so wish.

9 What happens during UAE?

You will lie on your back on an X-ray table. We will make you comfortable. We will put a small needle into a vein in your arm, so that we can give you sedation and pain medication. Once in place, this will not cause you any pain.

The Radiologist will keep everything sterile, and will wear a theatre gown and operating gloves. The groin area will be thoroughly cleaned with an antiseptic fluid, and a local anaesthetic will be injected to numb the skin in the groin. A needle is then inserted into the artery, which allows the radiologist to move a fine tube (catheter) into the arteries of the uterus.

The Radiologist will use the X-ray equipment to guide the catheter and carry out the operation. A special X-ray dye, called contrast (Iodine), is injected through the catheter into the uterine arteries. This may give you a hot feeling in the pelvis area. Once the uterine arteries have been identified, embolic (blocking) particles are injected into the arteries via the catheter to stop the blood flow to the fibroid (embolisation).

At the end of the treatment, the catheter is withdrawn and the Interventional Radiologist will press firmly on the skin for several minutes to prevent bleeding. A dressing is placed over the groin area.
Fig. 1 Catheter in an artery of the uterus (Loma Linda University Medical Center, 2017)
10 What should I expect after UAE?

Immediately after the procedure, there may be a small bruise around the site where the needle has been inserted, and this is quite normal.

You will be taken to the recovery area where the recovery nurses will observe your heart rate and pulse, and they will check that you are not in any pain. Once the recovery nurses are satisfied you are recovering well you will be sent up to your ward bed.

You may feel some pain after the procedure due to uterine spasm (similar to strong period pains), which normally last for about 12 hours. During this time, you will be given anti-spasm medication and pain relief medication.

You are usually able to go home the day after the procedure and you can go back to work after a week or two. Patients generally feel totally normal after two weeks, but in the meantime you may experience some cramping pains and suffer from irregular bleeding. A discharge is very common that will clear but may persist for some weeks. A slight raised temperature is also common and is a natural reaction to the fibroid tissue being destroyed in the body. The fibroids shrink gradually over 6 months and symptoms continue to improve over this time.

11 Where can I get more information?

British Society of Interventional Radiology
www.bsir.org

The Royal College of Radiologists
www.goingfora.com
Society of Interventional Radiology - Nonsurgical Treatments
www.sirweb.org
Fibroid Embolisation: Information, Support, Advice
www.femisa.org.uk
National Institute of Clinical Excellence
www.nice.org.uk
Royal College of Obstetricians and Gynaecologist
www.rcog.org.uk

UCL Hospitals cannot accept responsibility for information provided by other organisations.

12 How to contact us

Please contact the Interventional Radiology Superintendent Radiographer:
Direct line: 020 3447 0225
Switchboard: 020 3456 7890 ext. 70225
Fax: 0203 443 0288 (not confidential)

Address:
Interventional Radiology Department
University College Hospital
2nd Floor Podium
235 Euston Road
London
NW1 2BU
13. How to find us & transport

Procedures:
The Imaging Department, Level 2 Podium in the main University College Hospital building with the entrance on Euston Road (see map on page 15).

Travelling to the hospital
No car parking is available at the hospital. Street parking is limited and restricted to a maximum of 2 hours.

Please note the University College Hospital lies outside, but very close to the Central London Congestion Charging Zone.

Tube
The nearest tube stations, which are within 2 minutes’ walk are:

- Warren Street (Northern and Victoria lines)
- Euston Square (Hammersmith & City, Circle and Metropolitan lines)

Overground trains
Euston, King Cross & St Pancras and Kings Cross Thames link railway stations are within 10-15 minutes’ walk.

Bus
Bus services are shown on the map on page 15.
Further travel information can be obtained from http://www.tfl.gov.uk 020 3054 4040

Hospital transport service

If you need (and are eligible for) transport please call:
020 3456 7010 (Mon to Fri 8am-8pm) to speak to a member of the Transport Assessment Booking Team.

If you have a clinical condition or mobility problem that is unlikely to improve you will be exempt from the assessment process. However, you will still need to contact the assessment team so that your transport can be booked. If your appointment is cancelled by the hospital or you cannot attend it, please 020 7380 9757 to cancel your transport.

Can an escort be arranged to accompany me in hospital transport? This will depend on your clinical condition or mobility. If you meet the criteria then an escort will be booked to accompany you to and from the hospital. However, we aim to keep these to a minimum as escorts take up seats that would otherwise be used for patients.

13. References

1. Long-Term Follow-Up of Uterine Artery Embolisation – An Effective Alternative in the Treatment of Fibroids (WJ Walker & P Barton-Smith, 2006)


3. Uterine Artery Embolisation for Fibroids (NICE, 2010)

https://www.nice.org.uk/guidance/ipg367/chapter/1-guidance
Spaces for notes & questions