



Uterine Fibroid Embolisation

Information for patients

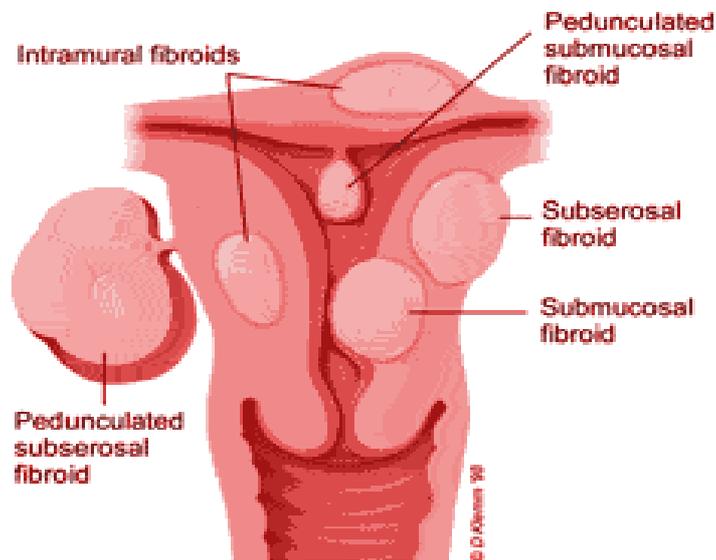
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What are Fibroids?

Fibroids are abnormal growths of the muscle wall of the womb or uterus. Uterine fibroids are the most common tumours of the female genital tract. You might hear them referred to as "fibroids" or by several other names, including leiomyoma, leiomyomata, myoma and fibromyoma. Fibroids are non-cancerous (benign) growths. While fibroids do not always cause symptoms, their size and location can lead to problems for some women including painful or heavy periods and pressure symptoms. Fibroids may occur in a number of locations. They most commonly lie in the wall of the uterus (intramural fibroids) but may protrude either outside the uterus or into the cavity of the uterus.



How Common are fibroids?

Uterine fibroids are very common. The number of women who have fibroids increases with age until menopause: about 20 percent of women in their 20s have fibroids, 30 percent in their 30s and 40 percent in their 40s. From 20 percent to 40 percent of women aged 35 and older have uterine fibroids of a significant size. Fibroids are more common in certain ethnic groups.

Do fibroids need treatment

Fibroids are very common and do not necessarily require any treatment at all. The most common indications for treatment are pain, heavy menstrual bleeding or pressure on adjacent organs such as the bladder.

What treatments are available?

Your gynaecologist is the person best qualified to discuss the various treatment options with you. The choice of treatment is highly individual and tailored to individual circumstances.

Medical treatment with tablets or injections manipulate hormones that affect fibroid growth but fibroids tend to regrow on discontinuation of treatment.

Myomectomy is a surgical procedure that removes just the fibroids, not the entire uterus. Various types of myomectomy may be possible depending on the type and location of the fibroids, including minimally invasive laparoscopic and hysteroscopic myomectomy. This is most commonly used in younger women who wish to maintain their ability to have a child.

Hysterectomy is the most common current therapy for women who have fibroids and is effective in essentially all cases in which bleeding is a problem. It usually resolves the pain or urinary symptoms that women may have. It is typically performed in women who do not wish to have more children.

Endometrial Ablation is a treatment particularly suited to subendometrial fibroids which lie under the lining of the cavity of the uterus. It is performed by gynaecologists via a camera inserted through the cervix and is particularly suitable when heavy bleeding is the dominant symptom.

Uterine fibroid embolisation (UFE), also known as **Uterine artery embolisation (UAE)** is a more recent treatment first used clinically in the mid 1990s. Over 200,000 embolisations have now been performed worldwide and the procedure has gained mainstream acceptance.

MRI Guided Focused Ultrasound Ablation (MRgFUS), which focuses ultrasound waves on the fibroids and destroys them by heat treatment under MRI guidance. This is still not widely available and is only suitable for certain types of fibroids in a suitable treatment location.

What is Embolisation?

Embolisation is the process of causing an organ or tumour to reduce in size by blocking its blood supply. This can be achieved using a number of different materials such as small foam particles, metal coils or, as in the case of fibroid embolisation, polyvinyl alcohol (PVA) particles specially designed for the purpose. The interventional radiologists performing the procedure already have years of experience of embolisation in other parts of the body for problems such as cancerous growths or to stop bleeding following trauma. Dr. Crowe was one of the earliest specialists to offer fibroids in the UK and has done over 2000 fibroid embolisations since 2000. The team at the BMI Priory Hospital is one of the most experienced in Europe for this particular procedure.

Who is involved?

A team of people is involved in the fibroid embolisation procedure.

Your General Practitioner or gynaecologist will need to refer you to the Priory Hospital to a Consultant Gynaecologist who will meet you, examine you and discuss the various treatment options with you. Embolisation may not be the most appropriate treatment of fibroids in many cases and your gynaecologist can explain the various alternatives. Through the Birmingham Fibroid Clinic Dr. Crowe works closely with Consultant Gynaecologist, Miss Shirin Irani, to offer the full range of minimally invasive fibroid treatment options.

Consultant Interventional Radiologist – Dr. Paul Crowe who performs the actual embolisation procedure and also arranges the necessary pre-procedure scans and follow-up scans. When possible Miss Irani and Dr. Crowe can arrange to meet you together.

Nursing staff – Sister Lillian Pyke and her team in the Interventional Radiology Suite.

The ward nurses who will prepare you for the procedure and look after you afterwards.

Radiographers – One or two radiographers will be present controlling the X-Ray equipment.

Your GP who is kept informed about the procedure and who will be important recognising any possible complications later on.

What is involved before the procedure?

Referral

You will have been referred to the interventional radiologist by your gynaecologist who will have performed an examination and possibly arranged imaging tests such as an ultrasound or MRI scan. If you are referred directly by your GP arrangements can be made for you to see a gynaecologist at the Priory Hospital. You will also have the opportunity to meet your consultant interventional radiologist to ask any further questions you may have after reading this booklet.

Although you will probably already have had an ultrasound scan we routinely perform an MRI scan before proceeding to embolisation. MRI very accurately defines the size and location of the fibroids and, more importantly excludes other conditions that can mimic fibroids. If the MRI scan shows suitability for embolisation arrangements will be made for admission for the procedure itself.

The Day of the Procedure

On the day of the procedure you will be admitted and clerked in by the nursing staff. A pregnancy test is routinely performed prior to the procedure. It is routine to insert a bladder catheter. This is for your own comfort as you will need to lie flat for several hours after the procedure. More importantly, however, the catheter keeps the bladder empty during the procedure as the contrast or dye injected to show the arteries is excreted by the kidneys and ends up in the bladder. Without a catheter the views the radiologist gets of the uterine arteries would be obscured.

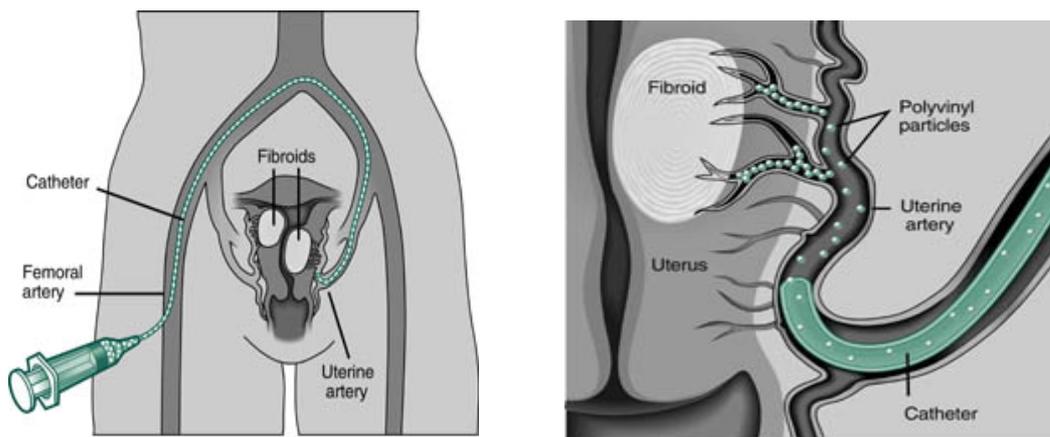
As embolisation can be painful we routinely set up a PCA (patient controlled analgesia) pump which runs through a small drip in the back of your hand and allows you to give yourself small doses of morphine as required. This can be used during the procedure and for 24 hours or so afterwards. The amount of discomfort felt by patients varies enormously and the advantage of a PCA pump is that you are in complete control of the painkillers and can use as much or as little as you need so there is no need to feel any pain.

Just at the start of the procedure you will be given antibiotic injections which prevent the introduction of any infection at the time of the procedure.

The procedure itself

Local anaesthetic is injected in the groin. This may just sting a little for a few minutes but will then go numb. A small nick of only a few millimetres is made at the crease at the top of the leg to access the femoral artery, and a tiny tube (catheter) is inserted into the artery. The interventional radiologist steers the catheter through the arteries to the uterus using X-ray imaging to guide the catheter's progress. The catheter is advanced into the uterine artery to a point where it divides into the multiple vessels supplying blood to the fibroids.

An angiogram (a series of images taken while radiographic dye is injected) is performed to provide a road map of the blood supply to the uterus and fibroids. The interventional radiologist slowly injects tiny plastic (polyvinyl alcohol or PVA) or gelatin sponge particles the size of grains of sand into the vessels. The particles flow to the fibroids first, wedge in the vessels and cannot travel to other parts of the body. Over several minutes, the arteries are slowly blocked. The embolisation is continued until there is nearly complete cessation of flow in the vessel.



It is necessary to embolise the arteries feeding both sides of the uterus even if the fibroids are confined to one side. It has been shown that if we just block one side the artery on the opposite side will grow to take over and feed the fibroid. This may mean having to make small punctures in both groins. The x-ray dose is small but as the ovaries are very sensitive to radiation we take all possible measures to minimise the dose. You are awake during the procedure which normally takes 30-60 minutes but can have some sedation if you wish.

After Fibroid Embolisation

Following the embolisation procedure you will be taken back to your room where you will be looked after by nursing staff familiar with looking after embolisation patients. You will need to lie flat for at least 4 hours to reduce the risk of bleeding from the puncture sites in the groins. You will have the morphine pump to control any pain and the nursing staff can give medication to relieve any nausea caused by the morphine. The morphine is normally stopped by the following morning at which time the bladder catheter is also removed so you can get up and about. Most patients stay in hospital one night in total. The amount of time needed to get over the procedure varies enormously with some patients returning to work within a week and others experiencing fatigue and crampy pain (like severe period pain) for several weeks. It is advisable to book a week to 10 days off work.

The results of studies that have been published or presented at scientific meetings report that 78 percent to 94 percent of women who have the procedure experience significant or total relief of pain and other symptoms, with the large majority of patients considerably improved. The procedure is successful even when multiple fibroids are present. Unlike hysterectomy or myomectomy embolisation does not physically remove the fibroids but shrinks them. Realistically the best that can be aimed for is 70% reduction in volume over 12 months but this is usually more than enough to significantly improve symptoms.

Follow up

You will see the interventional radiologist for a follow up ultrasound scan at 6 months (or earlier if required) and a repeat MRI scan at 12 months to assess shrinkage of the fibroid.

What are the Possible Complications?

Infection

Antibiotics are given at the time of the embolisation and this is a rare but serious complication that occurs in about 1-2% of patients treated. It may occur within a week or two, but may appear up to 20 weeks (five months) later. If you develop increasing pain, tiredness, discharge or an unexplained fever at any time after the procedure, you should contact your gynaecologist or radiologist immediately for further advice. You may need to have a swab taken to check for infection. You may need to be admitted for antibiotics.

Post Embolisation Syndrome

This is an effect of the fibroids dying away. This results in mild flu-like symptoms, and sometimes a minor temperature. It is helped by the painkilling tablets, which you should take regularly for the first few days. It should not last more than a week.

Periods

It is not uncommon for your first period to be either missed or heavier than usual after the procedure, it is rather unpredictable. Following that your periods should return normally. Due to the risk of infection and the possible passage of fibroid material you should use pads rather than tampons for at least a few months following embolisation.

Vaginal Discharge

You may have a vaginal discharge for some weeks after the procedure. If you feel otherwise well, this is not a cause for alarm; it represents dead fibroid tissue being expelled from the womb and it should eventually clear up. A few patients have even passed solid lumps of fibroid tissue, sometimes many weeks after the procedure. If you have a discharge lasting more than a few weeks or pass any solid lumps, you should contact your gynaecologist for review.

Ovarian Failure

If particles enter the ovarian artery during the procedure it is possible that ovarian failure and early menopause may result. This is a very small risk as all measures are taken during the embolisation to prevent particles ending up where they shouldn't (so called non-target embolisation). A blood test taken before the embolisation (FSH or follicle stimulating hormone) provides a baseline measure of ovarian function.

Pregnancy

The official UK guidelines from the Royal College of Radiologists and Royal College of Obstetricians and Gynaecologists Joint Working Party (November 2000) recommends that women undergoing uterine fibroid embolisation should be advised not to try and conceive due to theoretical adverse effects on the embryo. It is recognised however that many women choose UFE as an alternative to hysterectomy in order to preserve fertility and most of the major centres around the world performing UFE now have patients who have had normal pregnancies following embolisation. The early concerns are proving largely unfounded as more data becomes available. It is not advisable, however, to become pregnant within 12 months of the procedure as the fibroids are still breaking down.

Accessing the service

Your GP or Gynaecologist will need to refer you to Dr. Paul Crowe, Consultant Interventional Radiologist. If you are not already under the care of a gynaecologist or your gynaecologist does not practice at the Priory Hospital you will need to be referred one. Miss Shirin Irani, Consultant Gynaecologist, works with Dr. Crowe to provide this service.

If you have medical insurance you will need to check with your insurance company beforehand whether you are covered.

Further Information

If you have access to the internet there is a wealth of information available. The following is a selection:

www.drpaulcrowe.com

www.birminghamfibroidclinic.co.uk

www.bsir.org

British Society of Interventional Radiologists
(see 'Patients' section)

www.sirweb.org

Society of Interventional Radiologists (USA)
(see 'patients & public' section)

www.fibroids.com

UCLA website

www.femisa.org.uk

UK patient support group

If you have any queries having read this leaflet please do not hesitate to contact either consultant via their secretaries.

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