

# Fistula Thrombectomy

Radiology

## Introduction

The aim of this leaflet is to explain the procedure for patients undergoing a fistula thrombectomy. This leaflet is not meant to replace informed discussion between you and your doctor, but can act as a starting point for outlining risks and benefits.

## What is a thrombectomy?

Fistula thrombectomy is the surgical removal of a clot within the vein/artery or graft using a specialist device used to suck out the clot.

## Why am I having this procedure?

Most patients present with symptoms that may suggest there is a clot that is blocking the artery/vein or a dialysis graft. Various tests such as an ultrasound and blood results may also suggest there is a clot.

## Who has made the decision?

The choice about which treatment is best for you will be made together with your doctor. This will be based on the risks and benefits of the treatment and your individual circumstances.

## Who will carry out the procedure?

An interventional radiologist will perform the thrombectomy. Interventional radiologists are doctors with special expertise in interpreting the images and using imaging to guide catheters and wires to aid diagnosis and treatment.

## Consent

We must seek your consent for any procedure or treatment beforehand. Written consent will be obtained from yourself, by a doctor, to give permission to have the procedure carried out. Your doctor will explain the risks, benefits and alternatives where relevant before you sign the consent. A referral will be made and your appointment will be arranged. If you are unsure about any aspect of the procedure or treatment proposed, please do not hesitate to ask for more information.

**The prevention of infection is a major priority in all healthcare and everyone has a part to play.**

- Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111
- Keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.

## What are the potential risks of having a thrombectomy?

Serious complications are uncommon but you should be aware of the following:

- Failure of treatment
- Any procedure where the skin is penetrated carries a risk of infection. There is still a chance of infection even if you have been given antibiotics
- Damage to the blood vessel
- Bruising or bleeding at the puncture site
- Embolisation may occur when the clot dissolves as small pieces may break off and move, for example to your lung, causing breathlessness, or into your arm or hand. This would require immediate treatment, possibly with an operation
- Unsuccessful treatment could result in loss of the affected limb, but this would be very rare
- The treated vessel may re-block after the procedure
- Death as a result of the procedure is very rare
- **Radiation:** Ionising radiation may cause cancer many years or decades after the exposure. We are all at risk of developing cancer during our lifetime. 50% of the population is likely to develop one of the many forms of cancer at some stage during our lifetime. It has been estimated that undergoing this procedure may increase the chances of this happening to you to about 0.1%. The requesting doctor and the doctor that will be performing your examination feels that the benefit of having the test or treatment outweighs the risk from the exposure to radiation. If you have further questions about the risk of exposure to radiation, please talk to your doctor during consent.

**Please contact the X-ray Department as soon as you receive this appointment if you think you may be pregnant.**

- **Contrast agent:** The “dye” that is used to show up the blood vessels can have side effects for a minority of patients:
  - 3 in 100 patients experience nausea and hot flushes
  - 4 in 10,000 may have more serious effects including breathing difficulties
- If a side effect does occur the doctors, nurses and radiographers are trained to deal with it.

## What are the potential benefits of having a thrombectomy?

- Catheter-directed thrombolysis can greatly improve blood flow and reduce or eliminate the related symptoms and effects without the need for more invasive surgery
- Thrombolysis is less invasive than conventional open surgery to remove clots and the hospital stay is relatively brief. Blood loss is less than with traditional surgical treatment and there is no obvious surgical incision.

## Are there any alternative treatments and what if I decide not to have it done?

The consultant in charge of your care will discuss the alternatives with you which may include surgery. They will also discuss the consequences of no treatment.

## Are you required to make any special preparations?

These procedures are usually carried out as a day case procedure under local anaesthetic (a medication used to numb an area of the body to reduce pain).

- You can eat and drink as normal unless a doctor or nurse has specifically said otherwise
- If you have any allergies or have previously had a reaction to the dye (contrast agent), you must tell the radiology staff before you have the procedure

- Please inform the Interventional department if you require transport to the hospital

If you are taking the following medication and the doctor has not discussed them during consent please contact the X-ray department when you receive this information:

- Acenocoumarol, Apixaban, Aspirin, Bivalirudin, Dabigatran, Dalteparin, Danaparoid, Dipyridamole, Edoxaban, Enoxoparin (clexane) Fondaparinux, Heparin, Phenindione, Tinzaparin, Warfarin.

## Where will the procedure take place?

The procedure will take place in the angiography suite. This is located within the radiology department. This is similar to an operating theatre in which specialised X-ray equipment has been installed.

If you are on a different ward the angiography suite will liaise with your ward nurse and porters to arrange transport for your procedure.

## What actually happens during the procedure?

You may be asked to change into a hospital gown. Observations of your heart rate and blood pressure will be taken during and after the procedure. This is routine. A team of nurses and radiographers will assist the radiologist during the procedure.

An interventional radiologist uses an ultrasound probe and X-rays to allow accurate diagnosis and treatment of the narrowed artery or vein through a minute incision. Local anaesthetic is injected at the procedure site (this may be your arm or groin depending on where the fistula/graft is). This may sting for a few seconds but then will go numb. The interventional radiologist will place various catheters up or down the artery / vein. You may be able to feel this but there should be no pain. Contrast will be used to highlight the blood vessels and highlight the narrowing.

During the thrombectomy a device is used that will move up and down the narrowing sucking out any clot that may be blocking your fistula. You may be able to feel this. Some patients are given an anti-clotting drug into the artery or vein. If this is given, the radiologist will have to wait 30-60 minutes for the therapy to work before using the device to remove the clot. A balloon may also be inserted if the fistula still has a narrowing after the thrombectomy. All tubes will be removed at the end of the procedure. You will be left with sutures after the procedure.

## Will it hurt?

When the local anaesthetic is injected it will sting but this will soon wear off. After this, the procedure is not usually painful. Some people experience discomfort when the balloon is inflated. There will be a nurse next to the X-ray table to look after you. As the dye passes around your body you may get a warm feeling which some people can find a little unpleasant. This should not last long. Pain relief may be given at the time of the procedure if appropriate. You should discuss this with the interventional radiologist doing your procedure on the day.

## How long will it take?

Every patient is different, and it is not always easy to predict; however, expect to be in the radiology department for about one hour 30 minutes.

## What happens afterwards?

- You will return to the radiology day case unit
- The nurse on the unit will take your pulse and blood pressure to make sure that there are no problems. They will also look at the skin entry point to make sure there is no bleeding from it
- If the nurses are happy, they will remove your sutures
- A follow up appointment may be required after one month
- If you are expected to have renal dialysis, porters will be arranged to transport you there.

## Going home advice

- Observe the puncture site for any bleeding or swelling
- Any concerns should be reported to the interventional radiology department between 08:30 and 16:30 or your renal dialysis unit
- It is unlikely that the puncture site will bleed, but if this happens, you should follow the instructions below:
  - Stop what you are doing and lie down
  - Press firmly on the site with your fingers
  - Call NHS helpline on 111 or 999, or contact the on-call renal nurse through switch board. Explain that you have had a fistula thrombectomy and the site is bleeding
- Special care must be taken when driving especially if your access site is in the groin. We advise you do not drive for the first 48hrs after the procedure but if your procedure resulted in bruising over the groin that may prevent you from braking quickly and effectively, it is advised you do not drive until the bruise has resolved. Further information can be found on the DVLA website: <https://www.gov.uk/guidance/general-information-assessing-fitness-to-drive>.

## Trainees

A radiology trainee (qualified experienced doctors training in radiology) or occasionally a student may be present during the examination. If you would prefer them not to attend, please let a member of radiology staff know.

## How to contact us

If you have any personal access needs, require wheelchair access or wish to speak to a member of staff for further information please contact the interventional radiology department on 01902 307999 ext. 6344 between 08:30 and 16:30 as the department cannot help with queries outside of these hours.

### **Angiography Suite / Interventional Radiology**

Second floor Radiology A2, New Cross Hospital, Wolverhampton, West Midlands, WV10 0QP

### **Patient Advice and Liaison Service**

New Cross Hospital

01902 695362

Email: [rwh-tr.pals@nhs.net](mailto:rwh-tr.pals@nhs.net)

### **New Cross Hospital Haemodialysis Unit**

01902 695010

Out of hours – ask for on call renal nurse through switchboard.

### **Walsall Dialysis Unit**

Alumwell Close, Walsall

Telephone: 01922 746876

### **Cannock Satellite Dialysis Unit**

Brunswick Road, Cannock

Telephone: 01543 576480

### **Pond Lane Renal Unit**

Pond Lane, Parkfields, Wolverhampton

Telephone: 01902 695455 / 695456

## Further information

Further information about your examination is available from The Royal College of Radiologists: <https://vascular.org/patient-resources/vascular-treatments/thrombolytic-therapy>

## English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

## Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

## Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

## Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਭਾਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

## Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

## Traditional Chinese

如果您需要以其他方式了解信息，如易读或其他语种，请告诉我们。

如果您需要口译人员或帮助，请告诉我们。