

Information for Patients

Thrombolysis

This leaflet tells you about having Thrombolysis. It explains what is involved and what the possible risks are. It is not meant to replace informed discussion between you and your doctor but can act as a starting point for such discussions. If you have any questions about the procedure, please ask the doctor who has referred or the department which is going to perform it.

What is Thrombolysis?

Thrombolysis is the breakdown of blood clots with the use of medication. Once a clot starts to form in a blood vessel, it may continue and block the whole vessel. While an operation may be necessary to remove the clot, it is also possible to dissolve the clot by directly injecting a special 'clot-busting' medication into the artery or vein.

This can lead to a great improvement in blood flow and may avoid the need for an operation. Sometimes an underlying narrowing is revealed in the blood vessel once the clot has dissolved, and it may be possible to treat this by angioplasty (balloon) or stent insertion at the same time.

Why do you need Thrombolysis?

Your doctors know that there is a blockage in a blood vessel based on the tests you have already had. These tests might include a doppler ultrasound scan, magnetic resonance imaging (MRI) or computed tomography (CT) angiography.

If nothing is done about the situation, then severe and permanent damage may occur. While the blockage could need treatment with surgery, in your case, it has been decided that Thrombolysis is the best way of proceeding.

What happens during Thrombolysis procedure?

A trained specialist doctor called a radiologist, with a team which may include radiographers and nurses will perform your Thrombolysis procedure.

- You may be asked to change into a hospital gown
- You might be asked to remove certain items of clothing and jewellery
- You will be asked to confirm some details including date of birth and pregnancy status

A small cannula (thin tube) will be placed into a vein in your arm. You will lie on the x-ray table, generally flat on your back.

The procedure is performed under sterile conditions and the interventional radiologist, and the radiology nurse will wear sterile gowns and gloves to carry out the procedure. The skin near the point of insertion, usually the groin, will be swabbed with antiseptic and you will be covered with sterile drapes. The skin and deeper tissues over the artery or vein will be numbed with local anaesthetic, and a fine plastic tube (catheter) is then passed over a wire and into the artery or vein.

The radiologist will use the x-ray equipment and small amounts of dye (contrast agent) to make sure the catheter is moved into the right position, very close or into the blood clot. The clot-busting medication (thrombolytic) is injected down the catheter and into the blood clot. The catheter is left in the artery or vein and attached to an infusion pump, so that injection of the clot-busting medication can be continued over hours (occasionally up to 48-72 hours) during which time you will have been transferred back to the ward for careful observation. You will return to the x-ray department periodically for the radiologist to check how much the clot has dissolved.

Once the procedure is completed, the catheter will be removed, and firm pressure applied, for about ten minutes, to prevent any bleeding.

Will I feel any pain?

When the local anaesthetic is injected, it will sting for a short while, but this soon wears off. You may feel a warm sensation for a few seconds when the dye is injected and feel like you are passing urine.

Are there any risks with this examination?

Thrombolysis is generally a safe procedure, but as with any medical procedure there are some risks and complications that can arise.

Bruising at the puncture site is very common and rarely may require a small operation. Occasionally, ongoing leakage from the puncture site may cause swelling called a 'false aneurysm' that may require a further procedure.

Clot-busting medications have to be very powerful to work, consequently there is a risk that bleeding will occur elsewhere in your body. Commonly, this is from the bowel and might require treatment or stopping the thrombolysis. Very rarely, bleeding can occur in the brain and cause a stroke.

Sometimes the blood clot may be so extensive that the clot-busting medication simply cannot dissolve it all away. In these cases, surgery may be required to relieve the blockage.

If angioplasty or venoplasty is required, then there are additional risks related to these procedures (see relevant patient information leaflets).

Radiation risk

Interventional procedures use ionising radiation to form images of your body and provide treatment. Ionising radiation can cause cell damage that may, after many years or decades, turn cancerous.

Radiation exposure during interventional procedures is generally regarded as low but higher radiation doses might be necessary in difficult or complex cases.

We are all at risk of developing cancer during our lifetime. The normal risk is that this will happen to about 50% of people at some point in their lifetime. Having this procedure will increase the chances of this happening by a very small amount.

In some higher radiation dose procedure, there can be a risk of skin damage in the localised area, similar to sun burn. If we think that you are at risk of this, we will inform you before you leave the department.

Contrast risk

We will need to give you contrast dye to make your arteries or veins show up more clearly.

The contrast dye that is sometimes used can cause allergic reactions however the staff available will be checking for any risks before we proceed.

Is there anything I need to inform you of before I attend for my appointment?

Pregnancy:

Radiation can be harmful for an unborn baby. If you are or think you may be pregnant you must tell the radiographer before the examination.

How do I prepare for my Thrombolysis procedure?

We will advise you not to eat or drink before your procedure. Your appointment letter will tell you how long beforehand to stop or if you are an inpatient, the medical team on the ward will take care of the preparations.

If you are taking blood thinning medication such as warfarin, aspirin or clopidogrel you will require special instructions; please contact the department as soon as possible for further advice, if you are an inpatient, the medical team on the ward will take care of this.

If you are taking any other medications, please continue to take these as usual unless you have been told otherwise by your doctor. If you are taking metformin and have poorly functioning kidneys, please contact the department to review this as you may be asked to stop taking this medication 48 hours prior to your appointment.

Help and support in the department

If you have any medical problem which you feel may affect your safety in the department, or if you feel you may need any assistance, please let us know when you arrive.

Do I need to give my permission (consent)?

The radiologist will discuss with you your symptoms, the procedure you have been referred for and the associated risks and benefits, this is an opportunity to ask any questions you may have. If you

understand the procedure, risks and benefits, and want the procedure to go ahead, we will ask you to sign a consent form. This is called informed written consent.

If you do not wish to have the examination or are undecided, please ask the radiologist so that they can answer any questions you may have.

Remember, it is your decision. You can change your mind at any time and your wishes will be respected.

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 at least an hour initially. You may require several trips to the radiology department to check on progress and sometimes an underlying narrowing is revealed once the clot has cleared which may be treated at the time by an angioplasty or stent procedure.

Please expect to stay in hospital for at least a few days in total.

What happens after Thrombolysis procedure?

You will be transferred back to a specialised ward and must lie fairly flat for anywhere between 24 and 72 hours, you will not be able to get out of bed or sit completely upright. The nursing team on the ward will check your blood pressure, heart rate, puncture site and foot pulses frequently until you are discharged. We will also carry out frequent blood tests to make sure that your blood has been thinned by the correct amount by the clot-busting medication given to you.

You will come back to the radiology department at set time intervals over the 24-72 hours to assess the progress of the procedure and the clot-busting medication.

When will I get my results?

The radiologist will let you know of the outcome throughout the process and again once the procedure is completed.

You may already have an appointment with the clinicians who referred you. If not, please contact them to arrange a time to talk about the results and any treatment you may need.

As you are staying in hospital, the results will be given to the doctors looking after you on the ward.

What should I do if I have a problem?

You should not have any problems that are a result of the Thrombolysis procedure.

If you feel your condition has changed, or you need further medical advice before receiving your results/leaving the hospital, please make an appointment with the doctor that referred you, or in an emergency, go to your nearest Emergency Department (ED).

How can I provide feedback for the appointment I have attended today?

The Division of Imaging welcomes feedback from all our patients. We actively take part in the Friends and Family Test and we complete a patient experience questionnaire every month to obtain feedback on the experiences you have had. Please speak to a member of staff regarding the feedback or there are posters within the department with QR codes so you can complete these online.

Contact us

Language and accessible support services:

If you need an interpreter or information about your care in a different language or format, please get in touch.

Your comments and concerns

If you would like to provide feedback you can:

- Ask to speak to the department lead / manager
- Write to us: Patient Advice and Liaison Services, 1st Floor, Cobbett House, Manchester Royal Infirmary, Oxford Road, Manchester, M13 9WL
- Log onto the Patient Opinion website www.patientopinion.org.uk/ click on 'Tell your Story'

If you would like to discuss a concern or make a complaint:

Ask to speak to the department manager – they may be able to help straight away.

Inpatients can speak to a senior nurse or manager by contacting the Tell Us Today service on (0161) 701 1999.

Contact our Patient Advice and Liaison Service (PALS) on (0161) 276 8686 email: pals@mft.nhs.uk. Ask for our information leaflet.

We welcome your feedback so we can continue to improve our services.

NHS 111

This service offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

Telephone: 111, 24 hours a day

Website: www.111.nhs.uk

Finally

Some of your questions should have been answered by this leaflet but remember that this is only a starting point for discussion about your treatment with the doctors looking after you. Further information can be obtained by contacting the radiology department that is performing the procedure. Do satisfy yourself that you have received enough information about the procedure, before you sign the consent form.