Thrombectomy
(Clot retrieval treatment for ischaemic stroke)

Patient information booklet

Produced by: Selina Monahan Neurovascular Associate Clinic Nurse Specialist.

Reviewed by: Dr Richard Pullicino Consultant Interventional Neuroradiologist and Dr Alakendu Sekhar Consultant Neurologist.

Production date: April 2019
Review date: April 2021
Introduction

This information leaflet has been given to you because you have been admitted to The Walton Centre for an urgent procedure called thrombectomy or clot retrieval from a blocked artery in the brain following a stroke.

The stroke team from your referring hospital has considered this treatment and has discussed this with the neurologist and interventional radiology doctor (The doctor who will perform the procedure) at The Walton Centre. The Walton Centre team has reviewed your scans and agreed you may benefit from this procedure.

You will be reassessed for the suitability of the procedure on arrival at The Walton Centre and in rare circumstances the procedure may be abandoned if there is any concern about safety or suitability, which will be in your best interest.

You and your family may be going through a distressing time and may struggle to remember the information you have been given. For this leaflet has been produced to provide you with general information about the procedure called ‘Thrombectomy’.

If you still have questions after reading this leaflet, please speak to one of the doctors or nurses who are caring for you.

Why is a thrombectomy needed?

You or your relative have been diagnosed with a stroke: A stroke is caused by a blockage in one of the arteries that supply blood to the brain. In your case it is thought the blockage is caused by a blood clot. When the blood supply to the brain has been blocked it does not receive the oxygen and nutrients it needs and can become irreversibly damaged after a period of time. This clot is generally not dissolved by the use of clot busting drugs (thrombolysis) which may have been already started. Thrombectomy is needed to remove the blood clot and return the blood flow to your brain. This is similar to the treatment for heart attack which you may be aware. You may be required to have a general anaesthetic which means going to sleep.
What is a thrombectomy?

Thrombectomy is an emergency procedure which ideally needs to be done within 6 hours of a stroke, although this may be longer in some people.

It is a procedure that is performed by a consultant doctor called an Interventional Neuroradiologists who treat diseases related to the blood vessels of the brain.

The doctor uses special equipment such as a small wire mesh (stent retriever) or small suction devices to remove the clot and to return the blood flow to the brain. The procedure is usually takes 12-15 minutes but in some cases can take longer.

Transferred to The Walton Centre

For thrombectomy to happen, you and / or your relative have been transferred to The Walton Centre in an ambulance escorted by paramedics, doctors and nurses who continue to monitor you during your journey to The Walton Centre and up to the transfer back to stroke unit. In rare circumstances you may need to remain at The Walton Centre for a day or two but the team will inform you and your family if this is going to be the case.

When you arrive, you or your relative will be taken straight to a room called the angiography suite in the radiology (x-ray) department where the procedure takes place.

You will be assessed by a neurologist (a doctor who specialises in medical conditions of the brain), interventional neuroradiologists, radiographers (healthcare professionals who can take scans), nurses and an anaesthetist to ensure you are safe and comfortable during the procedure.
How is a thrombectomy performed?

The interventional neuroradiologist will make an incision into an artery in the groin and then insert a thin plastic tube (catheter). Contrast (dye) is injected and an x-ray will be performed to check the blood vessels (an angiogram). The catheter is then moved through the blood vessels in the body to the blood vessel that is blocked. Whilst moving the catheter, the team use contrast and x-rays to help guide the catheter to the right place.

Once the blood clot has been identified, a clot-retrieval device will be moved through the catheter to the site of the blood clot and attempts will be made to remove it. This will re-establish blood flow to the affected part of the brain. This procedure opens the artery in about 70% of cases.

Benefits of thrombectomy

Thrombectomy has been shown to have greater benefits than the 'standard' treatment for a stroke. Removing the blood clot can lead to better outcomes including greater independence and mobility. On average there is a 45% chance of regaining independence.

Risks of thrombectomy

As with any other procedure, there are risks related to thrombectomy but overall the benefits outweigh the risks and undergoing this treatment may save your own life or your relative’s.

The contrast dye that we use for the procedure carries a small risk of an allergic reaction and in rare cases it can also affect the kidney function.

There is a risk related to the injection site in your groin. This includes bruising, swelling, infection or bleeding to the groin. In very rare cases people require surgery to repair the artery in the groin. You must take note of the advice for caring for the angiogram site which is later in this booklet.

In 1% of patients, angiogram can cause a stroke and for around 10% of patients there is a risk of bleeding in the brain related to the thrombectomy procedure which can lead to disability or death. There is a very small (less than 1%) risk of tearing the artery.

Post thrombectomy care

Once the procedure is done, a scan of the head will be done to ensure there were no complications related to the procedure. You or your relative will then be moved to the post-operative recovery unit to monitor your progress.

The nurses will check your observations such as blood pressure, heart rate, oxygen levels, conscious level, checking your groin and checking the pulses in your feet.

You or your relative will be required to remain on bedrest for a period of time as advised by the interventional radiologist. This will help prevent any complications to the groin.
The neurologist and the interventional radiologist will check to see how you are recovering and once they are happy with your recovery, they will organise your transfer back to your local hospital.

**Transfer back to local hospital**

Once you are safe, you will be transferred back to your local stroke unit by ambulance. This is where the stroke team including the nurses and doctors will care for you and provide specialist rehabilitation if needed.

**How do I look after my groin site?**

Here is a list of instructions to care for the groin site.

**If you are concerned about your groin, please ask a doctor or nurse to check your groin immediately.**

• Do not strain or lift anything greater than 10lb for 7 days following the angiogram.

• When mobilising for the first time, coughing or laughing you will need to place a hand over the groin site to add support.

• Drink plenty of water or juice in the 24 hours following the angiogram to flush the dye from your body (about 2 litres or 10 glasses).

• Keep the dressing on, clean and dry for 24 hours following the angiogram.

• After 24 hours the dressing can be removed and a shower (not bath) can be taken.

• Clean and inspect the site and wash with mild soap and water. Dry and re-cover with a plaster until it is healed completely.

• A bath and swimming is allowed once the site is fully healed.

• Report to your doctor if the site bleeds and not stopped after 10 minutes of firm (but not excessive) manual pressure.

• Report to your doctor if there is any swelling, change in colour (paler or darker) or change in sensation to the leg.

• Report to your doctor if there are any signs of infection such as redness, pain, swelling or pus from the site.

• Report to your doctor if there are signs of excessive new bruising (a small amount of bruising is expected from the procedure)