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Endovascular clot retrieval for clot stroke

The following information is for patients, or their support person, experiencing a clot stroke (ischaemic stroke) and considering endovascular clot retrieval (ECR or thrombectomy) as a treatment.

Endovascular clot retrieval (ECR) can follow clot-busting treatment (thrombolysis). Please speak with the doctor or nurse for further information about thrombolysis if it has not already been provided to you.

What is a stroke?

Stroke is a medical emergency requiring rapid, time-critical access to specialist neurological assessment, diagnostics and management.

Stroke causes a loss of brain function. Symptoms may include weakness of limbs, difficulties with speech, problems with vision or balance. If left untreated, even for a short period of time, it can lead to permanent disability or death.

Ischaemic stroke is the most common type of stroke. In an ischaemic stroke a clot blocks an artery that supplies blood to the brain. The clot reduces or stops the oxygen from reaching the brain tissue and causes the brain cells to die.

If an ischaemic stroke is identified and the blockage is removed quickly, the flow of blood to the brain tissue may be restored using reperfusion therapies, and the damage to the brain minimised.

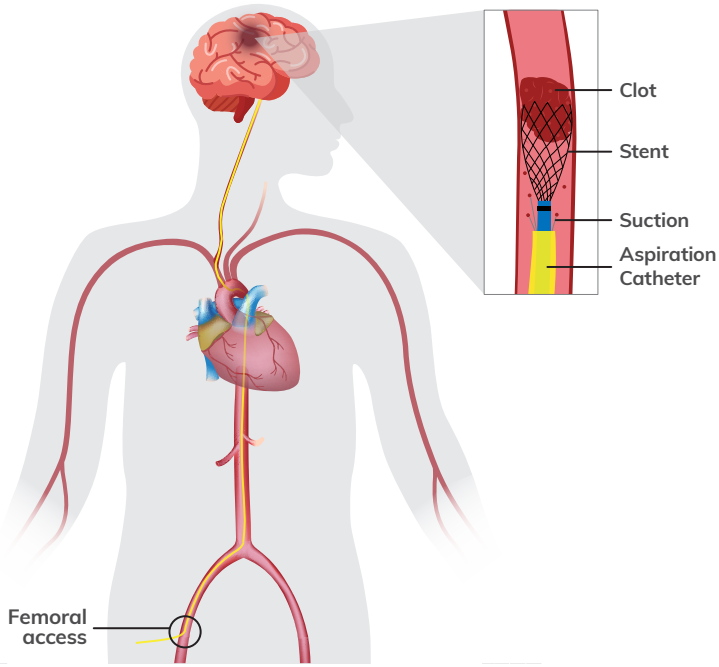
When it comes to the assessment and treatment of stroke patients, 'time is brain'. The faster a patient receives treatment for stroke, the better the chances for recovery.

Clot retrieval as a treatment option

When a large blood vessel in the brain is blocked, a procedure to remove the clot may provide your best chance of recovery. This can occur after thrombolysis or clot-busting drugs have been used.

Clot retrieval needs to be conducted by an interventional neuroradiologist (a specialist in this brain procedure). If this treatment is decided to be the best option for you, then you will need to be transferred to a highly specialised facility which offers this treatment.

Once agreed, rapid transfer will be arranged via air or Ambulance to take you to the specialist facility.



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Removing the clot

Clot retrieval can be performed awake, using local anaesthetic and sedation, or asleep, using general anaesthetic. In this procedure a small tube (catheter) is inserted into a blood vessel, usually in the groin, and up to the brain.

Images of the blood vessels are obtained using dye, similar to that used for the brain scan, to confirm the blockage. Once this is confirmed the most appropriate device is used to attempt to remove the clot. This may involve clot suction or clot trapping with a metal retrieval device. The device and clot removal often causes a very brief headache which settles within seconds.

Sometimes it is necessary to repeat this stage of the procedure more than once before all of the clot is removed. Occasionally, if the vessel is very narrow, a stent is inserted into the blood vessel to keep it from closing or blocking after the procedure.

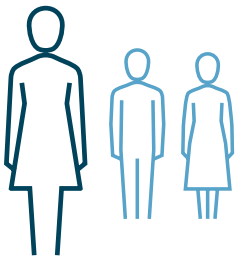
Decision making about treatment options

Only a small number of strokes are suitable for clot retrieval. This treatment is performed under very strict guidelines.

The local and telestroke doctors will collect information relating to your specific situation. They may ask questions about your medical history, medications and past surgeries. They will also complete blood tests and a series of brain scans before making a final a decision.

The recommendation for progressing with this treatment depends on the individual benefits versus the risks. After careful assessment and a review of test results, the telestroke and local doctors weigh up the risks and benefits of treatment for you, and they will decide your suitability for this procedure.

The treatment decision is made as quickly as possible to minimise damage to the brain tissue. The doctors treating you or your loved one are experts in stroke and will assist you to make the best decision.



One in every three treated patients receives some benefit, that is improved post-stroke function, with clot retrieval.

Treatment benefits

Patients who benefit most from this procedure are those with very large blockages. Removing the clot results in restoration of blood flow to the affected part of the brain, in most cases. If blood flow is restored quickly enough, patients may have a less severe stroke and better chances of recovering.

Treatment risks

Like all treatments, there are certain risks associated with clot retrieval.

Severe complications may include vessel injury and bleeding. The most severe but rare complication from the procedure is that one of the brain blood vessels may tear and cause a bleed, which may result in death (2%).

The groin artery wound is sealed. There is a small risk of bleeding at the wound site.

Care after clot retrieval

For the first 24 hours after clot retrieval has been performed, your activities are kept to a minimum. You will be closely monitored for complications in a high care environment, such as an intensive care or coronary care unit.

The team at the larger facility will discuss with you the steps that need to be undertaken to get you back home when it is safe to do so.

For more information, please ask your doctor or nurse if you have any additional questions.

Receiving care away from home can be difficult both emotionally and financially. Important information is available via the Social Work Team. The **Friendly Faces Helping Hands Hotline 1800 014 234** can also support your family or carers' practical needs associated with travel to a distant facility.

If you would like to contact the NSW Statewide Telestroke Service please visit http://bit.ly/nsw-telestroke email SESLHD-NSWTelestrokeService@health.nsw.gov.au or call **02 9382 4069**.

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