

Information for patients

Carotid Endarterectomy



You have been diagnosed as having Carotid Artery Disease and need an operation called a **Carotid Endarterectomy**.

This leaflet explains more about Carotid Endarterectomy, and answers some of the most frequently asked questions.

If, after reading it, you have any questions or concerns, you should write them down and discuss them at your next appointment.

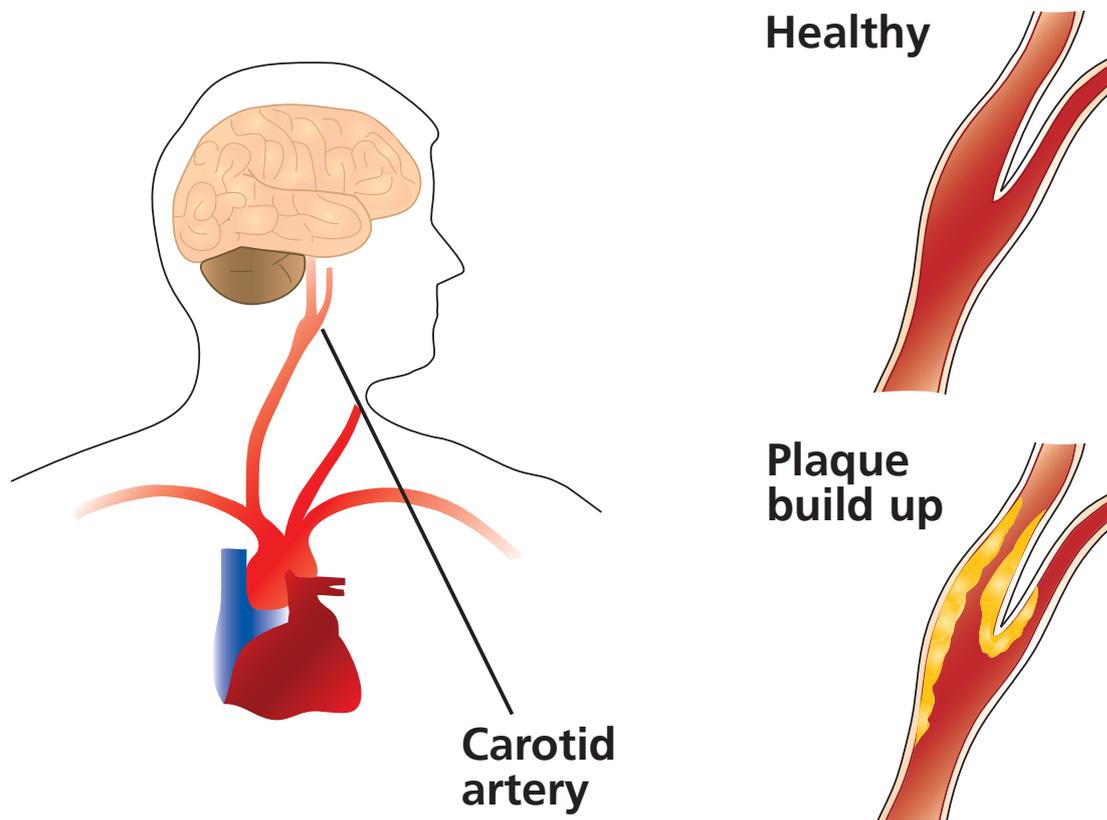
Where will my hospital appointments take place?

Your appointments will usually be at the Sheffield Vascular Institute at the **Northern General Hospital**. We also run local outpatient clinics at the Royal Hallamshire Hospital, Rotherham and Barnsley District General.

The Sheffield Vascular Institute is one of the largest vascular centres in Europe. We specialise in the treatment of all circulatory conditions affecting the arteries, veins and lymphatics. If you wish to find out more about the Sheffield Vascular Institute then look under the Guide to Services of the Sheffield Teaching Hospitals NHS Foundation Trust website (<http://www.sth.nhs.uk>)

Why do I need the operation?

You need the operation because you have a narrowing of the **carotid artery** in your neck that supplies blood to the brain. This narrowing is due to a build up of **plaque** (atherosclerosis), otherwise known as hardening of the arteries. If you have already had symptoms, (for example a small stroke or transient blindness), this narrowing is associated with a 10 - 15% risk of a further stroke in the first year and a 5% risk of stroke every year after that. If we successfully treat the narrowing with an operation, this risk is reduced to 0.5 - 1% per year.



It is important to realise that the left side of the brain looks after the right arm and leg and the right side of the brain looks after the left arm and leg. For this reason you may think that the "wrong" side is being operated upon when in fact it is the correct side!

Are there any alternative treatments?

Another method for treating carotid artery disease is to insert a stent into the carotid artery. This is called carotid stenting and is a minimally invasive procedure, however not all patients are suitable for this. The treatment option will have been discussed with you by your surgeon at your clinic appointment.

Will I need any tests first?

Yes. You will be seen in the Pre-admission Clinic 1 or 2 weeks before your surgery when you will have a number of pre-operative tests including blood tests, an electrocardiogram (ECG) and a chest x-ray (CXR), if necessary, to check that you are fit for the operation. If you are taking clopidogrel (Plavix) as well as aspirin, you will need to stop the clopidogrel one week before the operation.

How long will I need to be in hospital?

You will need to be in hospital for about 3 to 5 days, and the operation will usually be carried out on the day after you come in.

Do I need to bring anything in particular with me?

Please bring all the medicines you are taking into hospital with you. You will also need to bring toiletries, nightwear, and glasses or hearing aid, if you wear them. We do ask that you bring a supply of your own clothing into hospital,

especially if you will be in for a long stay, perhaps because you are going to have physiotherapy and occupational therapy rehabilitation.

However, we do advise that you leave valuables and cash, with the exception of a small amount for you to purchase newspapers and other items, or to pay to use the patient-line, at home.

Before your operation

Before the operation, one of the surgeons will see you to check that you are happy to go ahead and to mark the side of the operation, and the anaesthetist will see you to double-check that you are fit for the operation. The Anaesthetist and Surgeon will decide on the best type of anaesthetic for you and discuss this with you. This will be either a general or a local anaesthetic.

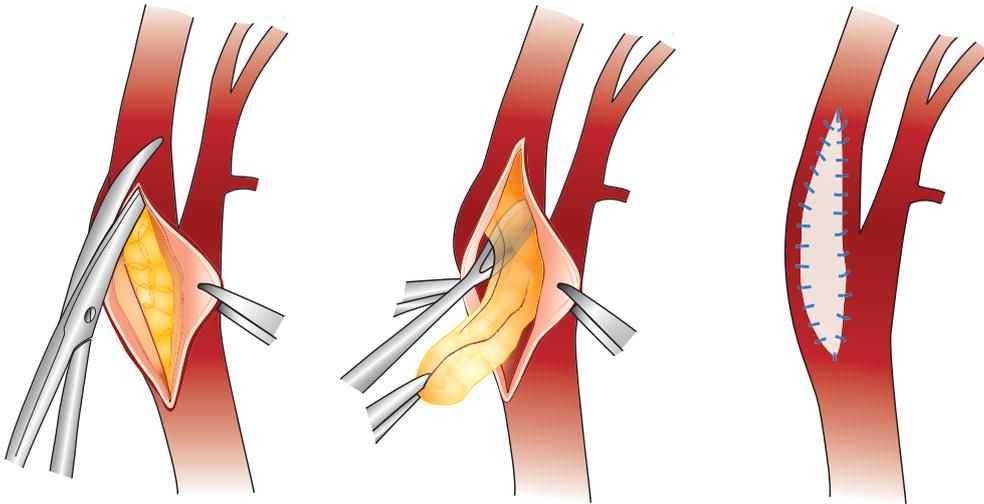
Your nurse will explain the ward routines and will answer any other questions that you may have. You will be asked to eat or drink absolutely nothing for 6 - 12 hours before the operation. About one hour before the operation you may be given a sedative.

How is it done?

Once you have been anaesthetised, a cut is made in the skin of the neck over the carotid artery. You will be given an injection of a drug called heparin, to prevent the blood clotting and then the carotid artery is temporarily clamped.

The diseased lining is removed and the artery is then closed, often with a plastic patch to prevent any narrowing.

A drainage tube may be attached, which will be taken out after 24 or 48 hours, and metal clips are used to close the skin.



What happens after the operation?

Usually we take patients to the Post Operative Surgical Unit (POSU) after this operation. This allows us to monitor our patient's progress closely for 24 hours.

You will be given fluids by a drip connected to your arm, and wires will be attached to your chest and arms to monitor your blood pressure, pulse and breathing. You will be allowed to eat and drink after you have recovered completely from the anaesthetic.

The operation itself is not particularly painful although you may need some painkillers, which will be given to you, if required.

On the day after surgery, you will be taken back to your original ward and you will be allowed to get out of bed. In many cases, you can go home on the second or third day after your operation. If your clips have not been removed whilst you are still in hospital, your practice or district nurse will remove them and check your wound.

You will usually be prescribed aspirin to reduce the stickiness of the blood, and a statin to reduce your cholesterol level. Another anti-platelet agent called clopidogrel (Plavix) may be used if you cannot tolerate aspirin. Tablets for blood pressure may also be started, or your blood pressure medication changed after the operation. All these medications are aimed at reducing the risk of further trouble from arterial disease.

Are there any risks with the operation?

Some minor bruising around the wound is common after the operation. Bruising of the neck may take several weeks to settle down. Occasionally, excessive bleeding is caused by the heparin that we use to stop the blood clotting, and we may have to take you back to the operating theatre to stop it. Sometimes a blood transfusion is necessary.

There is likely to be a numb area on the side of the neck or ear which can take several months to settle down. Occasionally this numbness can be permanent. Temporary weakness of the side of the mouth or tongue is possible, though this rarely lasts more than a month

There is a small (but definite) risk of developing a stroke during the operation, and a very small risk of death due to medical complications like a heart attack. At the Sheffield Vascular Institute, this combined risk of stroke and death is less than 1 in 50 (2%). You may wish to discuss these risks with your Surgeon in more detail before the operation.

How will I feel afterwards?

You may have some soreness around the site of the cut, but after a couple of days you should feel back to how you did before the operation.

How long before I can resume normal activities?

You should be able to start a gradual return to your normal levels of activity as soon as you return home.

Will I need to come back to hospital for a check up?

Yes, we will need to check that the wound has healed properly and that you have had no complications. We will usually arrange an appointment for you for about 6 - 8 weeks after you leave hospital.

How can I help myself?

The operation usually gives a good long-term reduction in the risk of stroke. You can also help in improving your general health, by taking regular exercise, stopping smoking, reducing the amount of fat in your diet and eating more fruit and vegetables. Advice and support on stopping smoking is available from your GP or the hospital. All these things will help reduce the chances of further trouble from arterial disease.

Is there any activity that I should avoid doing?

If you are a man, you should be careful when shaving around the wound site, especially if the area is numb. With time, sensation around this area usually returns to normal.

What if I think there is something wrong when I get home?

If you think there is something wrong with your wound or neck once you are at home, you should contact the ward from which you were discharged from for advice. This should be:

Firth 2 0114 271 4602 / 271 4685

For more information please contact:

The Circulation Foundation

www.circulationfoundation.org.uk

The Stroke Association

www.stroke.org.uk

**Sheffield Teaching
Hospitals supports
organ donation.**



Do you?

organdonation.nhs.uk

This information can be made available on request in alternative formats including Braille, large print, audio, electronically and other languages. For further details email: **alternativeformats@sth.nhs.uk**

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