

Carotid endarterectomy



The information contained in this leaflet is of general interest only; the guidelines may not apply in your individual case.

What is the problem?

Every day in Great Britain, many people have a stroke (sometimes called a "CVA") or warning signs of a stroke (a mini stroke sometimes called a "TIA"). Such patients are at a higher risk of having another, perhaps major, stroke.

All patients with an increased risk of stroke are given treatment for high blood pressure, diabetes, high fat levels, and heart disease, if they suffer from any of these. In addition, aspirin is generally given to patients who can tolerate it. They are also advised to stop smoking.

However, in some cases, an operation is also recommended. In these cases, such as yourself, there is a narrowing of the artery in your neck that supplies blood to the brain. This is caused by hardening of the arteries (atherosclerosis).

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, the patient may think that the "wrong" side is being operated upon when in fact it is the correct side.

We know that the presence of a significant narrowing (stenosis) in your carotid artery makes the chances of suffering a stroke in the future much higher than in a person without such a narrowing.

We also know that performing an operation called carotid endarterectomy (to correct the narrowing) will reduce the chances of stroke and/or death significantly.

Before the operation

Surgery involves admission to hospital for 2-3 days and the operation will usually be carried out on the day of admission. On admission you may have a repeat ultrasound scan to make sure that there have not been any changes in the narrowing of the carotid artery since you were first investigated.

Before the operation you will be seen by:

- your nurse who will explain the ward routines
- one of the surgical team who will explain anything that you are not sure about
- the doctor who will give you your anaesthetic (an anaesthetist) will also visit you.

Many people are concerned about anaesthetics, so please ask the anaesthetist if you have any worries so that he or she may reassure you.

All of these people are ready to answer any questions you may have, so please ask.

You will have either a general or a local anaesthetic, depending on the preference of the surgeon and anaesthetist carrying out your treatment. Recent studies have shown no benefit for one anaesthetic technique over the other, but if you have a strong preference you can discuss this with your surgeon and anaesthetist.

You will have a number of tests including blood tests and a cardiogram. We will ask you not to eat or drink anything for 6 hours before your operation. If you feel unable to sleep, please ask the nurses or doctor to give you a sleeping tablet to allow you plenty of rest.

Are there any alternatives?

If your narrowed carotid artery has caused symptoms, then surgery to correct the narrowed artery may reduce your 5 year risk of stroke by between 6 and 10 times the risk if you just continue on aspirin and cholesterol lowering medicines. It is thought that each year you have a one in 12 risk of having a stroke if you continue on medicine treatment alone without an operation.

On the other hand, if your narrowed carotid artery has never caused symptoms and has only been found by chance, then surgery is only likely to be of benefit if you are under 75 years of age, and at best will halve your 5 year risk of stroke from 12% to 6%.

You may have read about keyhole treatments for carotid stenosis (angioplasty and stenting), but to date there is no evidence that these techniques are as effective as surgery and currently they are confined to limited specific indications in specialist centres.

The operation

Initially we will take you on your bed to the anaesthetic room where you will be given your anaesthetic.

Whilst you are asleep, a cut is made in the skin of your neck over the carotid artery. The diseased lining is then removed from the artery. Often an artificial patch is stitched into the artery to prevent further narrowing. We will use stitches or skin staples to close the skin and there may be a drainage tube in place which we will take out after 24 to 48 hours.

After your operation

In certain circumstances you may be returned to the High Dependency Unit so that we can keep a special eye on you for 24 hours, after this you will be returned to your own ward.

When you wake up:

- you will find that your arm is connected to 1 or 2 plastic tubes; these provide you with fluids and monitor your blood pressure
- you will be allowed to drink once you are fully awake.

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

On the day after your operation you will be able to get out of bed and eat normally.

In many cases, you may be allowed home on the first or second day after your operation. If you have any stitches or skin staples that need to be removed, we will make the necessary arrangements with your GP surgery.

Are there any complications?

- Sometimes a blood transfusion is necessary, although this is uncommon.
- Some minor bruising around the wound is common after the operation; this may take several weeks to settle down.
- There is likely to be a numb area on the side of your neck that may take several months to settle down, occasionally this numbness can be permanent.
- Temporary weakness of the side of your mouth or tongue is possible, although this is rarely permanent.

Are there any risks?

There is a small risk of developing a stroke during the operation, combined with a very small risk of death. Here, this combined "operative" stroke and death risk is about 4%. However, you are more likely to avoid a major stroke in the long run, if you undergo successful surgery. You may wish to discuss these risks with your Surgeon in more detail before the operation.

What about afterwards?

We will usually send you an appointment to be seen in the outpatient clinic in about 6 weeks time.

An ultrasound scan, similar to the one that was performed before your operation, will be carried out at this visit to check your carotid artery is working properly.

The operation usually gives good long-term relief.

You can also help improve your general health by:

- taking regular exercise
- stopping smoking
- reducing the amount of fat in your diet.

All of these things will help reduce the chances of further trouble from arterial disease.

Further information

Please feel free to discuss any concerns you may have with your vascular specialist.

The National Institute for Clinical Excellence (NICE) can provide further information and guidance on stent graft placement:

NICE

Midcity Place

71 High Holborn

London

WC1V 6NA

Website: www.nice.org.uk

Other useful sources of information are:

The Vascular Society

35-43 Lincolns Inn Fields

London WCA 3PE

Tel: 020 7973 0306

Website: www.vascularsociety.org.uk

The Circulation Foundation

35-43 Lincolns Inn Fields

London WCA 3PE

Tel: 020 7304 4779

Website: www.circulationfoundation.org.uk

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