Will I need an operation?

In the carotid arteries, the problem is related to the possibility that small pieces of solid material may break off the plaque and pass with the bloodstream into the brain causing a TIA or stroke.

There is good evidence that some patients, usually those with narrowings greater than about 70% of the diameter of the artery, benefit from surgery; a carotid endarterectomy.

Your surgeon will advise you whether you will need an operation.

It is likely that if you have had a stroke, a TIA or amaurosis fugax that you will be advised to have the operation as soon as possible to prevent a further stroke.

What happens now?

Your surgeon will make sure that you are on the right medications and discuss whether you need surgery or not.

You must stop smoking completely.

CIRCULATION FOUNDATION
The Vascular Charity

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The Circulation Foundation is an operating division of the Vascular Society, a charitable company limited by guarantee, company number 5060866 and registered charity number 1102769

PATIENT INFORMATION

CIRCULATION FOUNDATION
The Vascular Charity

CAROTID ARTERY DISEASE

Vascular disease is as common as both cancer and heart disease and accounts for **40% of deaths in the UK**, many of which are preventable.

SAVING LIVES AND LIMBS
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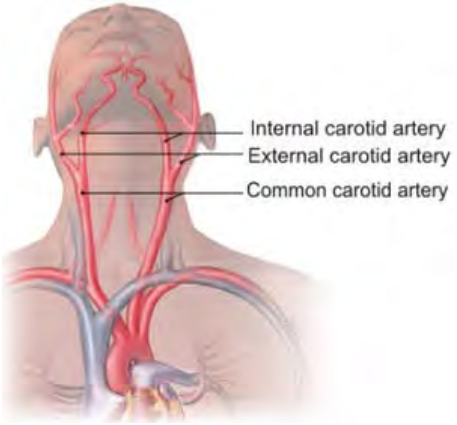
What are the carotid arteries?

The carotid arteries are the blood vessels that carry oxygen-rich blood to the head, brain and face. They are located on each side of the neck. You can easily feel them by placing your fingers gently either side of your windpipe.

The carotid arteries supply essential oxygenated blood to the large front part of the brain. This part of the brain controls thought, speech, personality as well as our sensory (our ability to feel) and motor (our ability to move) functions.



What is carotid artery disease?

The brain survives on a continuous supply of oxygen and glucose carried to it by blood.

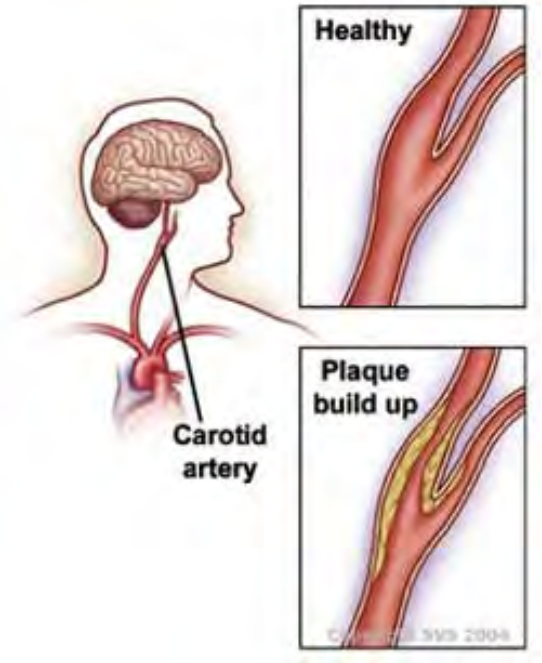
Carotid artery disease is the narrowing or blockage of these arteries (stenosis) due to plaque build-up (atherosclerosis). The plaque can then crack, and develop an irregular surface, which is when it begins to cause problems.

If a piece of plaque or a blood clot breaks off from the wall of the carotid artery it can block the smaller arteries of the brain.

When blood flow to the brain is blocked, the result can be a transient ischemic attack (TIA), which is a temporarily affects brain function or a stroke, which is permanent loss of brain function.

Common symptoms of TIA include brief attacks of weakness, clumsiness, numbness or pins and needles of the face, arm or leg on one side of the body. The eye can also be affected resulting in loss of vision in one eye. This is called Amaurosis Fugax.

Carotid artery disease is one of the most common causes of stroke. More than half of the strokes occur because of carotid artery disease.



What causes carotid artery disease?

Although everyone is affected to some extent, there are several influences determining how severe it is in individual people.

Some are fixed, such as being male, having a family history of stroke or angina, or getting older.

Others can be modified such as smoking, high cholesterol, high blood pressure or diabetes.

If you already have peripheral arterial disease (PAD) or coronary heart disease you are at higher risk of carotid disease and stroke.

Furring of the arteries is a normal part of the ageing process; however it does need to be monitored throughout the body, especially around major arteries and the heart where it can cause heart attacks and angina.

How is the diagnosis made?

The diagnosis is usually made with an ultrasound scan of the arteries in the neck (duplex), or sometimes after a CT or MR scan.

Diagnosis of this condition is important because it increases the risk of you having a stroke in the future.

Can medication help?

All patients with carotid artery disease can benefit from taking aspirin and a statin and from treatment of their individual risk factors, particularly stopping smoking completely.

There are multiple benefits from giving up cigarette smoking, including reducing the excessive tendency for blood to clot, increasing the amount of oxygen in the blood and most importantly preserving the cells lining the blood vessels which are very sensitive to the toxins in smoke.

The benefit of the aspirin is to reduce the stickiness of small blood cells called platelets which adhere to the irregular surface of the plaque, but can then break off as a small clump. Where aspirin is not appropriate, other anti-platelet drugs can be prescribed.

The benefit of a statin is partly in reducing the cholesterol, which was the initial reason for them being developed, but they also appear to reduce the tendency for atherosclerotic plaques to crack and so even patients with low cholesterol will benefit from taking them.