

Patient information from BMJ

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Carotid artery stenosis: what is it?

Carotid artery stenosis is a condition that can increase your chances of having a stroke. But treatments can greatly reduce your risk. Here, we look at the condition and how it is diagnosed. To read about treatments, see the leaflet *Carotid artery stenosis: what treatments work?*

What happens in carotid artery stenosis?

The carotid arteries are blood vessels that supply oxygen-rich blood to parts of your brain. You can feel the pulse in these arteries with your fingers on either side of your neck, just below your jaw.

If you have carotid artery stenosis (sometimes called carotid artery disease) it means that your carotid arteries have narrowed, usually because of a build-up of fatty substances called plaques. This can cause a stroke. Preventing strokes is the main reason for treating carotid artery stenosis.

Certain things increase your chance of getting carotid artery stenosis (doctors call them 'risk factors'). They are some of the same things that increase your chance of other problems that affect your heart and blood vessels. These include:

- Being older
- Smoking
- Having other problems with your heart or blood vessels (cardiovascular disease)
- Having high blood pressure
- Having high cholesterol.

If your doctor thinks you might have carotid artery stenosis they will probably do a test called an **ultrasound**. This is a scan that can show how well blood is flowing through your arteries and whether they have become narrowed.

A doctor passes the ultrasound probe over the area of your body they want to test. Information from the probe can then be seen on a screen. The scan doesn't hurt. It can take up to 45 minutes.

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There are other types of scans that can help show if you have carotid artery stenosis, but ultrasound is the one most commonly used. Your doctor can also use a stethoscope to listen to the blood flow in your neck for an abnormal sound (called a cervical bruit). This sound isn't proof that you have stenosis, but if your doctor hears it they will want to look at you more closely.

What are the symptoms?

Most people don't have symptoms at all. But doctors often check for carotid artery stenosis if they think someone is at high risk of having it, and if they hear a cervical bruit.

But many people won't know they have carotid artery stenosis until they have a stroke or a 'mini stroke' (called a transient ischaemic attack or TIA).

Strokes usually happen quickly and without any warning. The symptoms can be serious. But the symptoms someone has in the first few days after a stroke might not last forever. When someone has a stroke:

- They might feel weak or numb on one side of their body
- They might feel dizzy and have trouble walking
- One side of their face might droop
- They might have problems with their vision, or trouble speaking or swallowing
- They might pass out
- They might have a severe headache.

The symptoms of a mini stroke are similar to those of a stroke but they don't last as long. They might last only a few minutes and they stop within 24 hours. But it's important to get medical help straight away, even if the symptoms stop quickly.

About 10 in 100 people who have a stroke die from it and many others are unable to live a normal life afterwards. So doing all you can to avoid a stroke is important.

What will happen to me?

If you have carotid artery stenosis you have an increased chance of having a stroke. But treatments and lifestyle changes can do a lot to lower your risk. To learn more, see our leaflet *Carotid artery stenosis: what treatments work?*

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