

Neurosciences

Transient Ischaemic Attack (TIA) or Mini-Stroke

This information is for those suspected of having had a TIA. It describes what a TIA is, what causes a TIA and what may happen to you when you attend the Addenbrooke's TIA clinic, which your GP will refer you to if they suspect you may have had a TIA.

What is a Transient Ischaemic Attack (TIA) or mini-stroke?

A transient ischaemic attack (TIA) is a set of symptoms (see below) due to a temporary lack of blood to part of the brain. It is sometimes called a 'mini stroke'. However, unlike a stroke, the symptoms are transient (temporary) and will go over minutes/hours.

(Ischaemic means a reduced supply of blood and oxygen to a part of the body.)

What are the symptoms of a TIA?

The symptoms that develop depend on which part of the brain is affected, and include one or more of the following.

- Sudden weakness, of all, or part of one side of the body
- Numbness or pins and needles of all, or part of one side of the body
- Sudden difficulty with speech
- Sudden loss of vision in one eye, or to one side of the visual field

Is a TIA serious?

A TIA can be a warning sign that something is wrong with the blood flow to the brain. You could go on to have further TIA's, and 1 in 4 people, if untreated, will go on to have a stroke. Recognising the signs of TIA and seeking medical advice are key aspects in preventing strokes, alongside healthy living.

What can cause a TIA?

The main cause of TIA is a hardening of the arteries known as **atherosclerosis**. In TIA, atherosclerosis occurs in the blood vessels that carry the blood to the brain, the Carotid arteries.

Atherosclerosis is a fatty build up on the inside of the blood vessels causing damage to the inner walls of the arteries, causing them to become thicker and less elastic, which leads to the artery becoming narrower.

Part of this fatty build up, called plaque, could break off and become trapped in a smaller vessel within the brain or a blood clot could form and become trapped in the narrow artery. This blocks the blood flow, and a part of the brain is starved of oxygen. The affected part of the brain is without oxygen for just a few minutes, and soon recovers.

What are the risk factors?

There are some risk factors that you are unable to influence, but it is important that they are recognised.

- Age, the risk of TIA increase with age
- Gender: until menopause women are at a lower risk than men
- Ethnic background: people of African or South Asian descent tend to have a higher risk of high blood pressure and diabetes, so are at higher risk of TIA
- Family history of TIA or stroke, especially a close member before the age of 65 years, may mean you are likely to have a TIA or stroke

Your health depends largely on you and the choices you make about lifestyle. There are risk factors you can influence to reduce your chance of having a TIA or stroke.

- High blood pressure, hypertension, this is the single biggest risk factor
- Diabetes
- Smoking, is a major risk factor for TIA and stroke
- Cholesterol
- Obesity

For further advice on healthy living and how to reduce the risk factors of having a TIA, please see **TIA & Stroke: Self help and Health education**

What happens after I have seen my GP?

If your GP thinks you have had a TIA they will refer you to the TIA clinic at Addenbrooke's. Here a specialist doctor with an interest in stroke will see you and a specialist nurse will be able to discuss risk factor modification with you. The doctor will perform a simple **neurological examination** (examination of your nervous system) to determine if all your symptoms have resolved.

You might have

- **blood tests** and a **cardiovascular examination** done to see if there is anything in your blood or linked to your heart that may relate to your symptoms
- an **ECG**, which looks at the electrical activity of the heart
- a **carotid doppler**, which is a scan of the arteries in your neck to look for signs of narrowing. It is a simple scan using the same technology that is used to look at babies in the womb.

You might be referred for

- a **CT** scan or a **MRI** scan. Both these scans show the brain in detail and will be explained to you if you are referred for one.
- a '24-hour tape, this the same as an ECG, except that the recording lasts for 24 hours. You are able to carry on normally whilst the recording is carried out.
- a **carotid artery angiogram**, or an **MRA** which are specialised procedures. They are used to locate blocked or narrowed arteries that may be the cause of the TIA.

If you are found to have a significant narrowing (stenosis) of the carotid artery, you may be offered an operation. This is because a greater than 70% narrowing of the carotid artery is a major risk for stroke occurring. The operation is called a **Carotid Endarterectomy**, and aims to remove the plaque from the artery wall. This reduces the risk of further TIA or stroke. If this course of action is required, it will be discussed fully with you.

Research

Addenbrooke's works closely with Cambridge University, researching into what specifically causes strokes and TIAs. The long-term aim is to find ways to prevent them and improve outcome for people who have suffered them. You may be approached about participating in a study, all the information will be given to you and you will be allowed to decide in your own time whether you would like to take part. Whether you decide to take part in research or not, will not affect the care you receive. The British Heart Foundation (BHF), the Stroke Association, and the Medical Research Council (MRC) fund the research.

References and further information

- **The Stroke Association**,
Stroke House, 240 City Road, London, EC1V 2PR.
Tel:020 7566 0303
www.stroke.org.uk
- **American Stroke Association**
www.strokeassociation.org
- **Canadian Stroke Association**
www.heartandstroke.ca
- **Calgary Health Region**
www.cra-health.ab.ca/hlthconn/items/whatstroke.htm

This document is also available in other languages, large print and audio format upon request – 01223 216032

本文件也可應要求，製作成其他語文或特大字體版本，也可製作成錄音帶。
Cantonese

આ દસ્તાવેજ વિનંતી કરવાથી બીજી ભાષાઓ, મોટા છાપેલા અક્ષરો અથવા ઓડિઓ રચનામાં પણ મળી રહેશે.

Gujarati

A richiesta questo documento è anche disponibile in altre lingue, a caratteri grandi e in formato audio.

Italian

ئەم بەلگەییە ھەروەھا بە زمانەکانی کە، بە چاپی درشت و بە شریتی تەسجیل دەس دەکەوێت

Kurdish

درخواست پر یہ دستاویز دیگر زبانوں میں، بڑے حروف کی چھپائی اور سننے والے ذرائع پر بھی میسر ہے۔

Urdu

Document history

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