

What is TIA?

Information for patients



TIA means transient ischaemic attack, sometimes called a 'mini stroke.' It is similar to a stroke except the symptoms usually resolve within an hour without any lasting damage to the brain.

A TIA happens when the blood supply to part of the brain is temporarily cut off. It is usually caused by a blockage in a blood vessel which carries blood to the brain. It can happen due to narrowing of a blood vessel or because a small blood clot has travelled to the brain from elsewhere in the body. The lack of blood supply means that part of the brain does not receive oxygen and cannot send out the correct signals to parts of your body. As the blood flow is restored the symptoms start to improve.

What are the symptoms?

TIA's start suddenly without warning.

There are many symptoms of TIA and stroke, the most common include:

- Weakness or numbness to one side of the body
- Facial droop
- Problems with speech
- Visual loss
- Problems with balance and co-ordination.

If you suspect TIA or stroke think and act FAST!

F.A.S.T

Face	Ask them to smile; does their face look the same on both sides?
Arms	Ask them to raise both arms in the air, can they keep them up?
Speech	Can they speak clearly? Are you able to understand them, can they understand you?
Time	to call 999 if you recognise any of these symptoms.

If you or anyone else thinks you have had a TIA or stroke, it is very important you seek urgent medical attention. You must dial 999 and ask for an ambulance, even if things are getting better or they are back to normal. A TIA can often act as a warning for a stroke in the future.

What are the risk factors for TIA?

- High blood pressure (hypertension)
- High cholesterol (hyperlipidaemia)
- Problems which cause blood clots such as an irregular heart rhythm (atrial fibrillation)
- Diabetes
- Smoking
- Excess alcohol
- Obesity

These are risk factors for TIA because they either cause damage to the walls of the blood vessels or cause blood clots to form.

Investigations you may have performed or arranged:

- Blood pressure check
- ECG - check your heart rhythm
- Bloods - including checking kidney and liver function, your cholesterol and blood sugar levels
- CT and / or MRI scan of your brain
- Ultrasound of the blood vessels in your neck - to check for narrowing in these blood vessels
- Ultrasound of your heart
- 72 hour heart monitoring.

Medications used to treat TIA (further information is available on request).

Type of medication	What does it do	Common medications used	Comments
Anti-platelets	Help prevent blood clots by reducing the stickiness of your blood	Aspirin Clopidogrel	May increase bleeding risk
Statins	Helps to reduce cholesterol and smooths the lining of blood vessels	Atorvastatin Rosuvastatin Simvastatin Pravastatin	Occasionally after starting a statin you may develop muscle pains - if this happens see you GP and stop taking the statin. Some statins should be taken at night

Type of medication	What does it do	Common medications used	Comments
Anti-coagulants	Helps prevent blood clots by reducing blood clotting -usually used if you have an irregular heart rhythm such as atrial fibrillation or atrial flutter	Warfarin Apixaban Edoxaban Dabigatran Rivaroxaban	Warfarin requires regular blood checks and may interact with some food and medications (further information is available if needed). Should be taken at the same time each day. Increases bleeding risk. In case of a major bleed a reversal strategy can be offered

What you can do to reduce your risk

Stop smoking: Smoking can increase your risk of having a stroke or TIA as some of the inhaled chemicals enter your bloodstream and can damage the lining of your blood vessels. This can cause them to become narrow and become 'furred up.' Smoking also increases the stickiness of your blood making blood clots more likely to form.

Carbon monoxide and nicotine enter your blood when smoking - carbon monoxide reduces the levels of oxygen in your blood. Nicotine can make your heart beat faster and cause your blood pressure to rise.

Reduce High Blood Pressure: High blood pressure can cause damage to the walls of your arteries, making them hard and narrow therefore more likely to become damaged and small blood vessels are more likely to block. If your GP has prescribed blood pressure tablets it is important to keep taking them. You can help lower your blood pressure by taking regular exercise, eat less than 6g (1 level teaspoon) of salt per day, reduce stress and relax.

Reduce Cholesterol: Cholesterol is needed in the body; it is made in the liver but also can be found in some foods. High cholesterol is a risk factor for TIA because excess cholesterol is stored in the walls of the blood vessels making them uneven. This can cause the blood vessels to become narrowed reducing blood flow. Some of this build up can break off and travel to the brain blocking a blood vessel. Statins can help reduce cholesterol levels and smooth the lining of blood vessels. Drinking grapefruit juice while taking statins can increase their effect so should be avoided. Eating less red meat and dairy products can help reduce cholesterol levels. Unsaturated fats are healthier than saturated fats.

Diabetes: Is a condition where there is too much glucose in your blood - if not well controlled this can damage the blood vessels and cause them to 'fur' up. Your GP can help with diabetes control.

Stress: Stress does not directly cause TIA or stroke, but it can increase the risk of having a TIA or stroke.

Alcohol: Drinking above the recommended level of alcohol (14 units a week) can increase the risk of TIA or stroke.

Weight: Being overweight is associated with high blood pressure and diabetes. Regular gentle exercise can help with weight loss and reduce blood pressure.

Diet and Exercise: It is recommended to eat five portions of fresh fruit or vegetables daily and maintain a healthy overall diet. Regular exercise helps to reduce your risk of having a stroke or heart attack. It is recommended to do at least 150mins of physical activity a week which can include walking, running, cycling, swimming.

Life after TIA

You can return to your normal activities as soon as you feel well enough, but you might feel tired following your TIA.

Driving: The DVLA state that you must not drive for 1 month from the date of your last TIA. If you hold a passenger carrying license (e.g. Taxi driver) or a HGV license, there are additional restrictions - your doctor or specialist nurse will advise you.

Fatigue: Some people can feel very tired for a few months after having a TIA. This will improve with time.

Flying: There are no absolute rules, but it is best not to fly for the first six weeks (12 weeks if long haul flight). You must inform your travel insurance; some companies may not insure you if you have outstanding investigations relating to your recent TIA diagnosis. When flying it is advisable to avoid alcohol and caffeine, keep hydrated and walk around the plane every hour.

Sexual concerns: Some people worry that sex will cause an increase in blood pressure and cause another TIA.

If you can comfortably climb a flight of stairs your blood pressure will not be affected by having sex.

If you develop further symptoms you must seek urgent medical advice.

Follow up

You will receive a follow-up appointment in approximately two months. This may be in clinic or a telephone appointment depending on your clinical needs.

If you or your family have any concerns about aspects of TIA the following organisations can provide further advice and support:

Stroke Association

www.stroke.org.uk
Helpline: 0303 303 3100

Different Strokes

www.differentstrokes.co.uk

NHS

www.nhs.uk/conditions/stroke

DVLA

www.DVLA.gov.uk

**TIA driving guidance
- page 32**

[www.gov.uk/government/
publications/assessing-fitness-to-
drive-a-guide-for-medical-
professionals](http://www.gov.uk/government/publications/assessing-fitness-to-drive-a-guide-for-medical-professionals)

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