Transient ischemic attack (TIA)

Information for patients
You have been given this booklet because you have been referred to the TIA clinic. This means that you have had a suspected TIA or ‘mini stroke’.

This booklet will give you more information about TIAs and help you understand what will happen next, including medication you may be prescribed and tests that you may need. This booklet also includes some useful information about living a healthy lifestyle and contact details for organisations that you may find helpful.

What is a TIA?
TIA stands for transient ischemic attack. This is sometimes called a ‘mini stroke’. A TIA is similar to a full stroke but the symptoms don’t last as long (anything from a few minutes to up to 24 hours). It’s caused by a temporary disruption in the blood supply to the brain. This is usually due to a blockage in a blood vessel caused by either a narrowing of the blood vessels or a clot travelling from somewhere else in your body. This disruption in blood supply results in a lack of oxygen to the brain. As a result, your brain cannot send out the correct signals to your body and you experience symptoms similar to those of a stroke. These include speech and visual disturbances, numbness or weakness in the face, arms and legs. A TIA is very rarely caused by a bleed in the brain.

What are the key symptoms?
• Weakness, numbness, clumsiness or pins and needles on one side of the body, for example in an arm, leg and/or the face.
• Loss of vision in one or both eyes.
• Speech changes, for example slurred speech (dysarthria) or talking unintelligibly (expressive dysphasia) or the inability to understand what is said to you (receptive dysphasia).
• A sudden change in or loss of concentration.

What causes TIAs?
Certain things increase your likelihood of having a TIA, including:

• having high blood pressure (hypertension)
• having high cholesterol levels (hyperlipidemia)
• having problems which cause blood clots such as an irregular heartbeat (atrial fibrillation)
• diabetes (a condition which causes high blood sugar levels)
• drinking a lot of alcohol
• smoking
• taking illegal drugs
My TIA risk factors
You, along with your carer or a member of your family may wish to talk to the TIA specialist nurse or doctor about any factors that may put you at increased risk of a TIA, and discuss changes you can make to reduce these.

My risk factors for TIA:
(complete with your TIA specialist nurse or doctor)

Changes I can make to reduce my risks:

About your medication
Medication you may be prescribed may include:

- **Anti-platelet agents** such as aspirin and clopidogrel; these are to prevent blood clots by reducing the stickiness of your blood
- **Blood pressure tablets** to help lower your blood pressure (such as amlodipine or ramipril)
- **Statins** to reduce the cholesterol levels in your blood (such as atorvastatin)
- **Anticoagulants** to reduce your blood’s ability to clot

My medications

**Antiplatelets:**

**Statin (cholesterol medicines):**

**Blood pressure medications:**

**Anticoagulants (blood thinners):**
Tests and investigations that you may have
There are a number of tests and investigations that you may require. These include:

- **Blood tests**: to check your cholesterol levels and to check if you have diabetes, for example.
- **CT brain scan**: a special x-ray that passes over your head to check for any changes in your brain.
- **MRI head scan**: this takes more detailed pictures of your brain.
- **Echocardiogram or ‘echo’**: this records pictures of your heart.
- **Carotid Doppler’s**: for assessing the blood flow in the arteries of the neck.
- **24 hour, 48 hour or 7 day tape**: this records your heart rhythm over a day, two day or seven day period; a small tape recorder is attached around waist level and stickers are attached to your chest.
- **ECG**: which looks at the rate and rhythm of your heartbeat.

Driving
If your consultant tells you that you have had a TIA then the DVLA state that you must not drive for a month from when it occurred. If you have more than one TIA within a few weeks then you cannot drive for three months. If you hold a passenger carrying licence (for example, as a taxi driver) or a HGV or PSV licence then there may be additional restrictions.

Please contact the DVLA directly on **0843 658 0785** for more information and clarification.

Returning to your usual activities
You may feel tired to start with following your TIA. You should try to pace yourself and listen to your body. You may return to your usual activities/work as soon as you feel well enough, after discussion with your GP.

Sexual concerns
Some people feel worried about taking part in sexual activity following a TIA, as they are concerned that it may cause their blood pressure to go up. However, this is unlikely (if you can climb the stairs comfortably your blood pressure will not be affected by sexual activity).

Flying
There are no absolute rules for air travel following a TIA but we would advise you not to fly for the first month. Ask your doctor for advice.

Adjustment
A TIA can be a worrying experience for you, your family and friends. We have included the contact details of some organisations who are able to offer help and support following a TIA at the end of this booklet.
Prevention
It is difficult to pinpoint one cause of TIA and stroke, but there are certain factors which can increase the risk.

High blood pressure (hypertension)
This often has no obvious symptoms and you usually do not feel ill. Lowering blood pressure can help to reduce the risk of a TIA or stroke. High blood pressure can be lowered by medication. If your blood pressure is lowered and then remains low, your dose of blood pressure medicine may be reduced, but it is rarely withdrawn completely. It’s important that you continue to have your blood pressure checked to make sure that it doesn’t rise again. Ask your GP or practice nurse about checking your blood pressure.

Smoking
Smoking can increase your risk of having a TIA or stroke. Nicotine and tobacco smoke contain over 4000 chemicals which are deposited in the lungs or absorbed into the bloodstream. Some of these damage the linings of blood vessel walls causing them to narrow and ‘fur’. Smoking increases the stickiness of platelets (small cells in blood which cause it to clot). This increases the risk of blood clots forming in the major arteries to the brain and heart.

People who smoke are two to three times more likely to have a TIA or stroke that those who don’t. The more you smoke the greater the risk; by giving up smoking completely, you can more than halve your risk. Passive smoking may also be hazardous. Research shows that those who live or work in a smoky atmosphere are twice as likely to have a stroke compared with those who don’t.

Diabetes
Diabetes is a condition caused by too much glucose in the blood. If not treated or controlled well, diabetes can increase your risk of a TIA or stroke. Your GP can refer you to a dietitian if you need help with your diet.

Family history
TIAs and strokes are not hereditary, but if a close family member has had a stroke, some of the risk factors may be; such as high blood pressure or diabetes.

Ethnicity
People of African-Caribbean and Asian descent are more likely to have strokes than people of other ethnic groups. This is linked to high incidences of diabetes and high blood pressure. It’s very important therefore to have regular health checks.

Stress
Many people think that strokes are caused by stress. Stress does not actually cause a TIA or stroke, but it can affect blood pressure which can contribute to the risk.

Alcohol
Reducing your intake of alcohol can help reduce high blood pressure, which can in turn help to reduce your risk of having a TIA or stroke. Avoid binge drinking (more than six units in six hours) as this can cause your blood pressure to rise. Stay within safe drinking limits which are no more than 2-3 units a day for women and 3-4 units a day for men. One unit is half a pint of beer, a small glass of wine or a single pub measure of spirits.

Exercise
Regular gentle exercise is another effective way to reduce high blood pressure, increase fitness levels and lose weight. It’s important to start slowly and build up your level of exercise. It’s more beneficial to walk regularly each day than to jog for just one day a week. Brisk walking, swimming and cycling are great for circulation and maintaining a healthy weight. Please speak with a member of the team for more information about exercising safely.
**Weight**
Being overweight and not taking enough exercise can lead to high blood pressure which in turn can lead to a TIA or stroke, so try to keep your weight at a reasonable level and take regular exercise. If you need to lose weight, consider joining a slimming club or speak to your GP about referral to a dietitian. Avoid crash or fad diets as these can be damaging to your health. Aim to lose weight slowly, for example 1-2 lbs per week.

**Salt**
Having a lot of salt in your diet can lead to high blood pressure, the biggest single risk factor for TIAs and strokes. Try to avoid adding salt to food both during cooking and at the table. Be aware of hidden salt in processed food. Ready-prepared convenience foods are often very high in salt.

**Cholesterol and fats**
Cholesterol is an essential component of all body cells. It is mainly made by the liver, but is also found in the food we eat, particularly foods high in saturated fat. A high level of cholesterol in the body may increase the chance of having a stroke or heart attack, because although some cholesterol is needed by the body, extra cholesterol may get stored in your blood vessels (arteries). This can cause them to narrow over time, leaving deposits or patches on the blood vessel walls called atheroma. Large deposits can cause blockages, meaning that blood cannot flow through. This can affect any blood vessel; if it’s an artery to the brain, then a TIA or stroke can occur.

The terms saturated, monounsaturated and polyunsaturated refer to the make-up of fats and oils. Saturated fats raise cholesterol more than unsaturated fat, so a diet containing more unsaturated fat than saturated is thought to be healthier.

**Saturated fats** are found in most red meats, sausages, butter, lard and hard cheese.  
**Monounsaturated fats** are found in some oils, for example olive, rapeseed or walnut oil, and in some spreads such as Bertolli.  
**Polyunsaturated fats** are found in oils like sunflower, corn or soya oil and in oily fish such as herring, mackerel and trout.

**Healthy eating**
A healthy balanced diet is important in helping to prevent a TIA or stroke. Fatty foods (such as cheese, butter and cream, for example) should be eaten in moderation and semi-skimmed milk used instead of full fat. You should also eat at least five portions of fruit and vegetables each day. They are a good source of fibre and contain antioxidants which are thought to have a protective effect against heart disease and strokes. A portion is about 80g (3 ounces) – for example, an apple, an orange or a glass of orange juice, a large carrot, two broccoli florets, a bowl of mixed green salad, a handful of grapes or three tablespoons of peas.

Don’t eat too much red meat – choose fish, poultry (with skin removed), game or vegetarian alternatives instead. Most red meat is high in saturated fat which contributes to the arteries furring up. You need some fat in your diet, but too much can clog up your arteries and add to weight problems. Aim for two portions of fish each week, one of which should be oily, for example mackerel, sardines, salmon or fresh tuna.

Foods high in fibre help control blood fat levels and protect against atherosclerosis (furring of the arteries). According to research, three portions a day of wholegrain cereals can almost halve the risk of a stroke. It is suspected that this may be because cereals contain folic acid and are also rich in other B vitamins which help lower levels of homocysteine, a chemical found in the blood that is thought to raise the risk of stroke.

Soluble fibre, which helps to lower blood fat levels, includes fruit and vegetables, porridge oats and pulses (peas, lentils and beans, including baked beans). Insoluble fibre, which helps to keep bowels healthy and functioning, includes wholemeal bread and wholegrain cereals. When increasing your fibre you will need to drink plenty of fluid. Aim for eight to ten cups a day, for example water, tea, coffee or sugar-free drinks.
Some ideas for meals which may form part of a healthy diet

Breakfast ideas
- Unsweetened fruit juice and porridge
- Wholegrain cereal with banana or dried fruit and skimmed milk
- Wholemeal toast, reduced fat spread, marmalade or honey
- Grilled lean bacon with baked beans and wholemeal bread
- Poached kipper with wholemeal bread

Lunch ideas
- Wholemeal bread sandwich with lean meat or fish
- Baked beans or sardines on toast
- Salad with tinned fish or lean meat
- Jacket potato with low fat-filling, for example baked beans, tuna fish or cottage cheese

Main meal ideas
- Pasta or bean salad
- Pasta with tomato and vegetable sauce
- Lean roast meats or casseroles with potatoes, rice and vegetables
- Poached or grilled fish with boiled potatoes and vegetables
- Vegetable lasagne and salad
- Lean chop or gammon with jacket potato and vegetables
- Beef or chicken curry with brown rice
- Chilli con carne with rice and salad
- Mackerel fillet with potatoes and vegetables

Dessert ideas
- Fruit – fresh, stewed or tinned in natural juice
- Custard or rice pudding made with skimmed/semi-skimmed milk
- Low-fat yogurt or fromage frais, jelly, meringues or sorbet

Healthy eating tips
- Eat more fruit and vegetables
- Drink a glass of fruit juice every day
- Sprinkle some fresh or dried fruit on your cereal
- Eat some oily fish such as pilchards, sardines and mackerel
- Eat more white meat and less red meat
- Eat cheese and dairy products in moderation
- Drink less alcohol
- Choose low-fat dairy products
- Drink plenty of fluids
- Use less salt in cooking and at the table
- Grill, steam, bake or microwave, don’t fry
- Avoid adding oil to food when you’re cooking
- Use a mono/polyunsaturated margarine and spread very thinly on bread
- Use semi-skimmed or skimmed milk
- Cut out high fat snacks such as crisps, biscuits, cakes and chocolates; try fruit, tea cakes or English muffins instead
Follow-up
If you have been diagnosed as having had a TIA, you will receive a follow-up appointment for four to six weeks’ time. At this appointment we will see how you are, review your tablets, check your blood pressure and discuss any test results.

Who will my follow-up appointment be with?
This will depend on where you live.

Your healthcare professional will advise whether you will be followed up by:

- TIA specialist nurse
- Stroke consultant
- Lymington Hospital*

*Please contact the secretaries on 01590 663460 or 01590 663044.

Other

For any queries or concerns
If you have any questions about anything covered in this booklet, or would like to discuss any general queries you may have about your TIA, you can contact the TIA specialist nurse on 07766 800 370, Monday to Friday 8am to 4pm.

If you have any new symptoms (see the key symptoms section on page 3) you must seek urgent medical advice immediately by dialling 999 for an ambulance.

Useful contacts

**Stroke Association**
National stroke charity fighting to improve stroke services.
Telephone: 023 8072 0420
(local office number)

**UHS Stroke website**
Our hospital website provides further details on strokes and our service.
Web: www.uhs.nhs.uk/stroke

**Age UK**
Offers a gardening service, befriending service, computer classes and more.
Telephone: 023 8036 8636
Web: www.ageuk.org.uk/southampton

**Dial a Ride**
A transport system for people unable to use existing public transport. You are required to become a member of the scheme before you use it.
Telephone: 023 8022 2289

**DVLA**
Driving is not allowed for one month after having a TIA. However if you have a passenger carrying licence or an HGV licence then you need to contact the DVLA.
Telephone: 0843 658 0785
Web: www.dvla.gov.uk

**Steps2Wellbeing**
A group which offers support and advice for anyone who is experiencing anxiety or depression as a result of their stroke.
Telephone: 023 8027 2000
Web: www.steps2wellbeing.co.uk

**italk**
Offers a wide range of mental health services.
Telephone: 023 8038 3920
Web: www.italk.org.uk/

**Health Trainers**
Helping you to become healthier by motivating you to be more active, quit smoking and eat more healthily.
Telephone: 023 8051 5222
Web: www.healthtrainersengland.com

**Southampton Quitters**
A free friendly advice and practical tips organisation to stop smoking.
Telephone: 023 8051 5221
Stroke service
Southampton General Hospital
Tremona Road
Southampton
Hants
SO16 6YD

Main hospital switchboard: 023 8077 7222

TIA specialist nurse: 07766 800 370

If you need a translation of this document, an interpreter or a version in large print, Braille or on audiotape, please telephone 023 8120 4688 for help.