

Stroke assessment

Booklet for patients



(excludes FAST text
on back cover)

This booklet is based on a clinical guideline given to all NHS staff. The 2008 guideline was developed by the Scottish Intercollegiate Guidelines Network (SIGN). It is based on the most up-to-date medical evidence.

You can download the full clinical guideline from the SIGN website at www.sign.ac.uk

Cover image: Dr P. Marazzi/Science Photo Library

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Who is this booklet for?

This booklet is for you or your family, if you have had a stroke.

It is based on the recommendations from a national clinical guideline on how to treat, support, and give information to patients who have had a stroke.



What is this booklet about?

This booklet explains:

- what happens to your body when you have a stroke;
- how health-care professionals treat people who they think have had a stroke;
- information about treatment; and
- how to monitor and reduce the risks of someone having another stroke.

It does not cover information on patients with subarachnoid haemorrhage (where a ruptured blood vessel has bled around the outside of the brain).

An aphasia version of this document is available from Chest, Heart & Stroke Scotland (CHSS). This version will help people who cannot understand written or spoken language (because of an injury to the brain) communicate with others. Contact details for CHSS are on page 22

We have explained the medical terms used in this booklet on page 27

What is a stroke?

A stroke is caused when the flow of blood to the brain is stopped by:

- a blocked blood vessel (ischaemic stroke); or
- a burst blood vessel causing a bleed (haemorrhage) into the brain.

As a result, brain cells do not receive the oxygen and nutrients they need to work normally. Some brain cells become damaged and others die. It is not always possible to know what caused a stroke.

Every stroke is different. The symptoms depend on the area of the brain that is affected and how much damage there is.

What is a transient ischaemic attack (TIA)?

A TIA is a 'warning stroke'. It is a clear warning of an increased risk of a stroke and you need urgent medical treatment. As with a stroke, the brain is not getting enough blood and oxygen. You will recover from it within 24 hours.

What information will I need?

Every person's recovery from stroke is different and what information you need will change over time. It may be difficult for you to remember information. To meet your needs, you should be offered information at different times and in different ways, and it should be repeated to you as often as you need it.

Making notes on important information can be helpful. You can then look back at your notes and ask for more information if you need it.

Information for carers

Health-care professionals should always involve carers and talk to them about the support they need before the patient leaves hospital.

Carers should receive:

- advice on where to get support, such as doctor's surgery and voluntary organisations;
- training to help them meet the individual needs of the person they are caring for; and
- ongoing practical information.

You and your family may find it helpful to talk to someone who knows about strokes or to people who have gone through a similar experience. Voluntary organisations offer support for people who have had a stroke and for their families. They can also provide more detailed information in different formats.

There are contact details for some of these organisations at the end of the booklet.

Your GP, practice nurse or district nurse will also be able to give you contact numbers for local voluntary organisations who can help you and your family.

How will I know if I have had a stroke or a TIA?

This section describes the symptoms of stroke.

Some common symptoms of stroke include:

- suddenly feeling weak;
- becoming clumsy;
- feeling heavy;
- loss of movement (this may affect an arm or leg, one side of your face or one side of your body);
- problems walking;
- eye problems;
- numbness down one side of your body;
- lack of balance;
- feeling dizzy;
- problems swallowing; and
- problems speaking (including slurring words, not finding the right words to say or not being able to understand what other people are saying).

What should I do if I have these symptoms?

If you think that you are having a stroke, you need to contact emergency medical services immediately.

If you are taking any medicines you should take them with you to the hospital.

How will I be assessed?

Paramedics will use an assessment scale called FAST (Face Arm Speech Test) before you arrive at the hospital.

The health-care professionals will give you a more thorough assessment, which will include FAST. Using FAST helps health-care professionals find out what treatment you need more quickly.

FAST is explained on the back cover of this booklet.



What will happen when I arrive at the hospital?

Once you arrive at the hospital you may be taken to the emergency department and then into the stroke unit.

Stroke units

If you need to stay in hospital, you should be taken directly to a stroke unit, if possible. The stroke unit is made up of a team of health-care professionals who are specially trained in caring for people who have had a stroke.

Telemedicine consultation

If your hospital does not have a stroke specialist available, a telemedicine consultation may be set up with another hospital to help with your treatment. Telemedicine consultation uses cameras and TV screens so a specialist can discuss your examination and test results with you.



What tests may I have?

If the team of health-care professionals think that you may have had a stroke, you should have brain imaging (a brain scan). Brain imaging may help find out what type of stroke you have had and help rule out other causes of your symptoms. Other scans may be used to look directly at the blood supply to your brain.



These are the most common types of brain imaging used for strokes.

- CT scan (computed tomography) – this can show the kind of stroke you have had (for example, a stroke caused by a blocked or burst blood vessel) and how much damage it may have caused.
- MRI scan (magnetic resonance imaging) – this can give a more detailed picture of your brain. It is sometimes used instead of a CT scan for certain types of strokes, or to make sure what was found in the CT scan is correct.

Other tests that health-care professionals may do after you have had a stroke include:

- blood tests;
- a chest X-ray;
- electrocardiogram (ECG) to measure the electrical activity of your heart; and
- doppler ultrasound (to measure blood flow and blood pressure).



How will I be treated?

Your treatment will depend on:

- the type of stroke you have had;
- whether you have any other medical conditions; and
- the results of your brain scan.

What medicines will I get straight away if my stroke was not caused by a bleed?

- Thrombolytic (clot busting) drugs – if these are appropriate you will be given them within four and a half hours of your symptoms starting.
- Aspirin – this is given within 48 hours of the stroke and for 14 days after the stroke. After this, you will take a low dose of aspirin for life.

What if I have trouble swallowing?

Your health-care professional should check if you can swallow by giving you a water test before you get anything to eat or drink.

If there is a problem you may be given fluids through an intravenous (IV) drip into a blood vessel in your arm. If you continue to have problems swallowing, you may have to be given food through a nasogastric (NG) tube which is placed through your nose and throat into your stomach.

You may also get your medicine through an IV drip or through a NG tube. If your treatment cannot be given through the NG tube, then it will be changed.

How will I be cared for?

Health-care professionals will pay close attention to your body position and will help you move as soon as possible after your stroke, to help protect your limbs and reduce any possible complications such as:

- blood clots in your legs;
- chest infections; and
- urine infections.

This will involve careful positioning and moving of your arms and legs. Health-care professionals will help you to sit upright in bed or in a chair as soon as possible.



John Cole/Science Photo Library

What treatment will help me reduce the risk of having another stroke?

Antiplatelet therapy

After an ischaemic stroke (caused by a blocked blood vessel) most people will be given antiplatelet therapy to reduce the risk of another stroke. Antiplatelet therapy prevents blood cells called platelets from sticking together to make blood clots. The medication you are prescribed will depend on your particular situation and whether you have allergies or experience side effects.

You may be given:

- low-dose aspirin and dipyridamole;
- clopidogrel; or
- low-dose aspirin.

The combination of aspirin and clopidogrel is not recommended to be used in the long term as a way of preventing a stroke or TIA.



Anticoagulation therapy

If you have an irregular heartbeat (atrial fibrillation) and you have had an ischaemic stroke, anticoagulation therapy (warfarin) may be used to reduce the risk of blood clots that could cause another stroke.

Statin therapy

Statins are used to help to reduce the level of cholesterol in your blood. A build-up of cholesterol in your blood can block your arteries and cause you to have a stroke. Two of the most common statins are:

- atorvastatin; and
- simvastatin.

Anti-hypertensive medication

Anti-hypertensive medication is used to help reduce high blood pressure and the risk of developing heart failure, heart attacks and strokes. Even if you don't have high blood pressure, you may be given an anti-hypertensive to prevent it from happening.

Your blood pressure will be monitored throughout your treatment and the medication will be changed when necessary.

The two most common types of medications which also help to lower blood pressure are:

- ACE inhibitor drugs; and
- thiazide diuretic (a water tablet).

You may need other medications that we have not listed here. Many of these medications will be treatments you take for the rest of your life.

If you have any problems with your medication, you should talk with your health-care professionals.

Is surgery right for me?

Not all patients need surgery.

You may have a test called doppler ultrasound. This will show if the carotid arteries (which carry blood from your heart to the brain) in your neck have become more narrow. If the doctor thinks your stroke was caused by the carotid artery narrowing, then they will decide if you should have surgery. The surgery removes the fatty deposits that cause your arteries to become narrow and reduces the risk of having another stroke.

Your doctor will also look at your general health and whether you may have another stroke before going ahead with the surgery. Specialist surgeons will perform the surgery.

Surgery should be performed as soon as you are stable and fit enough. The best time is within two weeks of your stroke.

Older patients should also be considered for this procedure.

How can I help myself?

Along with taking all of your medications, there are changes you can make to your lifestyle that will help reduce your risk of having another stroke.

To help you to make these changes, you should be offered help to find the things that will help you manage the risk of another stroke.


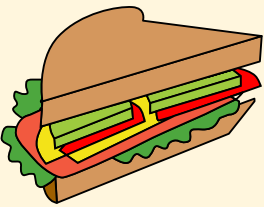

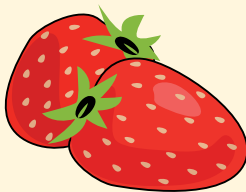
Lifestyle changes

1 Have a healthy diet

- Eat less saturated fat (for example dairy products and meat)
- Eat two portions of fish each week (one of which should be an oily fish, for example mackerel, tuna or salmon)
- Eat less salt (less than six grammes a day)
- Eat more fruit and vegetables (at least five portions a day)

There is no evidence that taking vitamin or dietary supplements helps to prevent another stroke.

See how easy it is to eat at least five portions of fruit and vegetables.

<i>Meal</i>	<i>Eating suggestion</i>	<i>Number of portions of fruit or vegetables</i>
Breakfast 	Breakfast cereal with two spoonfuls of dried apricots or another dried fruit and semi-skimmed or skimmed milk.	1
	A glass of orange juice.	1
Lunch 	A sandwich on wholemeal bread, with carrot, tomato or salad.	1
	A drink made from fresh fruit and low-fat yoghurt or milk.	1
Snack 	An apple or a banana	1
Main meal 	A couple of pieces of broccoli and a spoonful of carrots as part of your meal.	2
	A handful of strawberries with low-fat yoghurt or ice cream.	1
Total		8

2 Keep to a healthy weight

3 Stop smoking - see details for Smokeline on page 23

4 Reduce the amount of alcohol you drink to the lower recommended level

<i>Recommended maximum amounts of alcohol</i>	<i>Each day</i>	<i>Each week</i>
Women	2 to 3 units	14 to 21 units
Men	3 to 4 units	21 to 28 units

One unit is the same as:



One small (125 millilitres) glass of wine



Half a pint of ordinary (3.5%) strength beer
(Beware: strong beer will count as more than one unit)



One single (25 millilitres) measure of spirits

If you have had a stroke or have heart disease, you should stick to the lower recommended limit.

Both men and women should have at least two days each week where they do not drink alcohol.

5 Exercise

- Any increase in the amount of exercise you do will be helpful. It can make you feel better physically and emotionally and can help to lower your risk of heart disease and another stroke. What and how much you can do depends on your ability.
- You should aim to be physically active for at least 30 minutes a day. However, this does not have to be all in one go. It can be divided into three 10-minute sections or two 15-minute sections.
- Discuss how much exercise and what kind of exercise would be best for you with your health-care professional.



You can get more detailed information about these lifestyle issues in the Chest, Heart & Stroke Scotland booklet 'Reducing the Risk of Stroke'.

Factsheets are also available on salt, cholesterol and healthy eating.

Who can give me more information and help?

Carers Scotland

The Cottage
21 Pearce Street
Glasgow G51 3UT
Tel 0141 445 3070
E-mail: info@carerscotland.org
Website: www.carerscotland.org

Chest, Heart & Stroke Scotland

Rosebery House, 9 Haymarket Terrace,
Edinburgh EH12 5EZ
Phone: 0131 225 6963 • Fax: 0131 220 6313
Advice line: 0845 077 6000
E-mail: admin@chss.org.uk
Website: www.chss.org.uk

Connect: the communication disability network

16-18 Marshalsea Road
London, SE1 1HL
Phone: 020 7367 0840
Website: www.ukconnect.org

Different Strokes (Scotland)

53 Elmore Avenue
Glasgow, G44 5BH
Phone: 0141 569 3200
E-mail: glasgow@differentstrokes.co.uk
Website: www.differentstrokes.co.uk

DIPEX – Personal experiences of health and illness

Website: www.dipex.org/strokestrokeinfoplus

Princess Royal Trust for Carers

Charles Oakley House

125 West Regent Street

Glasgow, G2 2SD

Phone: 0141 221 5066

E-mail: infoscotland@carers.org

Website: www.carers.org.uk

Smokeline

Phone: 0800 84 84 84

Open: 12 noon to 12 midnight

Free advice and support including the booklet 'You can stop smoking' is available.

Speakability

1 Royal Street

London, SE1 7LL

Helpline: 080 8808 9572

Website: www.speakability.org.uk

Stroke Association

Links House, 15 Links Place

Edinburgh, EH6 7EZ

Phone: 0131 555 7240 • Fax: 0131 555 7259

National Stroke Helpline: 0845 30 33 100

E-mail: scotland@stroke.org.uk

Website: www.stroke.org.uk

nhsinform

Website: www.nhsinform.co.uk/

Useful documents from Chest, Heart & Stroke Scotland (CHSS)

You can get copies of the following documents by phoning CHSS on 0131 225 6963 or visiting their website at www.chss.org.uk.

Booklets

Stroke journey part 1 (aphasia friendly), updated July 2008

Stroke journey Part 2 (aphasia friendly), updated July 2008

Stroke journey Part 3 (aphasia friendly), updated July 2006

Aphasia identity card, updated April 2008

Stroke: a guide to your recovery, updated October 2007

Stroke: a carers guide, updated March 2004

Reducing the risk of stroke, updated February 2007

I've had a stroke, updated April 2004

Understanding TIAs, updated November 2007

Sex after stroke illness, updated September 2002

Stroke in younger people, updated April 2005

Coming to terms with stroke, updated July 2006

Thinking and behaviour issues after stroke, updated August 2006

Thrombolysis after stroke, updated October 2008

Fact sheets

Salt, May 2007

Cholesterol, February 2007

Warfarin, May 2007

Helping someone with communication problems,
October 2006

Holiday information, May 2008

Sympathetic insurance companies, May 2008

Booklist, April 2006

Driving after a stroke, October 2007

10 common questions after a stroke, September 2006

Mouthcare after stroke, September 2006

Continence problems after stroke, May 2007

Air travel, February 2007

Eye problems after stroke, February 2007

Memory problems after stroke, April 2006

Positioning for people affected by stroke, August 2004

Diabetes: the links with heart disease and stroke,
September 2006

How to conserve your energy, September 2006

Illustrated risk factors, October 2005

How to make the most of a visit to your doctor, July 2005

Living with stress and anxiety, July 2005

Healthy eating, July 2005

ACT FAST, October 2007

Understanding help in community, January 2006

HRT and stroke, February 2007

Glossary, November, 2005

Swallowing problems after a stroke, May 2006

Just move, October 2006

10 Common questions after stroke, September 2008

Coping with tiredness, September 2008

Swallowing problems, September 2008

Cholesterol, October 2008

Healthy eating, October 2008

Managed clinical networks and you!, October 2008

Stress and anxiety, October 2008

DVD and video

Stroke Matters

Definitions

Aphasia – used to describe the problems people have communicating after a stroke

Brain imaging – various scans of the brain

Carotid Endarterectomy (CE) – an operation to remove the fatty deposit which is narrowing the carotid arteries

Carotid Stenosis – when a carotid artery (which carries blood from the heart to the brain) becomes narrow

Haemorrhage – bleeding from a ruptured blood vessel

Ischaemic Stroke – a stroke caused when a blood vessel gets blocked and stops blood flowing to the brain

Primary Intracerebral Haemorrhage (PICH) – when a blood vessel ruptures and causes bleeding in the brain and causes a stroke

Subarachnoid Haemorrhage – when a ruptured blood vessel bleeds around the outside of the brain

Transient Ischaemic Attack (TIA) – a mini-stroke where symptoms last less than 24 hours

What is SIGN?

The Scottish Intercollegiate Guidelines Network (SIGN) writes guidelines which give advice to doctors, nurses, surgeons, physiotherapists, dentists, occupational therapists and patients about the best treatments that are available. We write these guidelines by working with doctors, nurses and other NHS staff and with patients, carers and members of the public. The guidelines are based on the most up-to-date evidence.

Other formats

If you would like a copy of this booklet in another language or format (such as large print), please phone Karen Graham, Patient Involvement Officer, on 0131 623 4740, or e-mail her at karen.graham2@nhs.net.



Think FAST & save a life

A stroke is a medical emergency.
It can happen to anyone and it happens fast.
By calling 999 you help ensure that someone gets
diagnosis and treatment as quickly as possible.
This will improve their chances of recovery.

To check if someone is having a stroke, use the F-A-S-T test.

FACE – Can they smile? Does one side droop?

ARM – Can they lift both arms? Is one weak?

SPEECH – Is their speech slurred or muddled?

TIME – To call 999.

If you see these signs call 999 FAST.
The faster you react, the better their chances of recovery.

Chest, Heart & Stroke Scotland

For further information please visit our website: www.chss.org.uk or call our Advice Line: 0845 077 6000

Head Office: Chest, Heart & Stroke Scotland, Rosebery House, 9 Haymarket Terrace, Edinburgh EH12 5EZ
Phone: 0131 225 6963 • Fax: 0131 220 6313 • Fundraising: 0800 316 0555

Chest, Heart & Stroke Scotland and CHSS are operating names of The Chest, Heart & Stroke Association Scotland, a registered Charity No. SC018761