Physiotherapy after stroke

If a stroke causes damage to the part of your brain that controls movement, you may experience weakness or paralysis on one side of your body, and problems with movement and carrying out everyday activities. This guide explains how physiotherapy can help you to recover, what your treatment might involve and how you can see a physiotherapist.

**How can a stroke affect my movement?**

- You may experience weakness, or even complete paralysis (called hemiplegia) in the muscles of one side of your body. This can make it difficult to move or use your limbs and get about. Your limbs may move in a different way when you try to use them. For example your hip may move upwards when you want to step forwards, or your elbow may move out to the side when you want to lift something.

- The affected side of your body may feel different. Your limbs may feel heavy because the weakness makes them difficult to move, or they may feel numb (like after you have had an injection at the dentist). Some people have more unusual sensations such as pins and needles, hot and cold sensations or feeling as though water is running down their limb. Occasionally these can be painful.

- You may have problems with your posture and balance, making it difficult to stay upright and you may be more likely to have a fall.

- Joints on your affected side, such as your shoulder, may be vulnerable to injury, for example if your arm is pulled or its weight is allowed to ‘drag’. This can cause a partial dislocation (called subluxation) or ‘frozen shoulder’, where your shoulder becomes painful and difficult to move.

- Some muscles on the affected side may become stiff (most often at the wrist, fingers and the ankle) which can limit your movement at the joint, and some people may develop muscle spasms or a type of stiffness called spasticity.

You can read more about these effects of stroke in our guides F33, *Physical effects of stroke* and F22, *Balance problems after stroke*. 
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What is physiotherapy?

Physiotherapy can be an important part of your rehabilitation. If you have experienced a loss of movement as a result of stroke, the main focus of physiotherapy will be to help you learn to use your arms and legs again and regain as much strength and movement as possible.

Neurophysiotherapy is a specialism of physiotherapy. A neurophysiotherapist is trained to understand the impact of changes caused by damage to the brain and nervous system as in stroke.

How can physiotherapy help?

After a stroke, our brains cannot grow new cells to replace the ones that have been damaged, but the brain has the ability to reorganise its undamaged cells and make up for what has been lost. This is called neuroplasticity. This process can be guided by the rehabilitation you receive following your stroke, and your physiotherapist will provide expert guidance on how to relearn movement and regain function.

Physiotherapists often work with other professionals to help you with the range of problems that stroke can cause. You may be helped by occupational therapists, speech and language therapists, doctors, nurses and social workers.

For more information, read our guides F14, Speech and language therapy after stroke and F17, Occupational therapy after stroke.

What a physiotherapist does

Depending on your needs, your physiotherapist will:

• help the stroke nurses set up your plan of care to keep you as well as possible and avoid any complications that might slow down your recovery

• advise on how you should be positioned when lying or sitting, and how often you need to be moved

• decide when you should begin to get up out of bed and start walking and what equipment (if any) is needed to move or support you

• motivate you to be actively involved in your physiotherapy sessions to help you relearn normal patterns of movement

• offer therapy to strengthen your limbs and teach you how to move again as independently as possible

• work together with the rehabilitation team, and your carer, family or friends to support your recovery in a coordinated way

• advise you, your family and any carers how you can do as much as possible for yourself and move around as much as possible.

When can physiotherapy begin?

From 24 hours after a stroke, you will be encouraged to get up and about as much as you are able to, whether this is continuing with your previous activities or just sitting in a chair.
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In the early stages, and for people with relatively mild problems, physiotherapy will focus on preventing complications and restoring your ability to move and be active again.

As time goes on, physiotherapy focuses on helping you to become more independent and do what is important to you, for example using equipment or doing things a different way.

**Where will it take place?**

Where therapy will take place will depend on how severe your stroke is and how your local rehabilitation services are organised. If you were admitted to hospital following your stroke, your physiotherapy will begin there with exercises in bed and moving around on the ward. Once you are ready, you should progress to more active sessions, which you will probably receive in a rehabilitation area or special physiotherapy gym.

You may be moved out of the stroke unit to a different ward or rehabilitation unit to continue your treatment. In some places a specialist community rehabilitation team will support you to continue your recovery at home. Other places offer a transition period between hospital and home in an intermediate care centre.

You can still have physiotherapy even if you were not admitted to hospital, or didn’t see a therapist while in hospital. Ask your GP to refer you to a hospital stroke team or community rehabilitation team for help with any persisting problems. You may also be able to refer yourself.

**What does physiotherapy involve?**

**Early assessment and care**

Following your stroke, you should be assessed by a physiotherapist as soon as possible after being admitted to hospital. This assessment should take account of any health problems you had before your stroke. It should make sure that any movement problems are identified at the start, so that care can be organised to give you every chance of making a good recovery.

Good care in the early days is important to help prevent joint stiffness or muscle tightness. If you are confined to a bed or chair, the therapist will start by changing your position to improve your posture and balance, and make you feel more comfortable.

If you have one-sided paralysis, correct positioning is important to prevent spasm or injury. If you are unable to move, you will need a special mattress and the nurses may need to move you at regular intervals (usually every two hours) to prevent bedsores.

If you are unable to move, you may be given chest physiotherapy to keep your lungs free of infection. If possible, you should be helped to sit up, as this will help avoid blood clots in your legs, improve your breathing and help your recovery.

If you’re still having major problems after 24 hours, then you will need a full multidisciplinary assessment by the rehabilitation team, ideally within five working days.

For more information visit stroke.org.uk
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Moving again

If your symptoms don’t improve in a few days and you are medically stable, your physiotherapist will use more active therapy to teach you how to do the things you are having difficulty with and get your limbs moving again.

The more therapy you have and the more active you are after a stroke, the better. Guidelines recommend that while undergoing rehabilitation in hospital, you should receive at least 45 minutes of each type of therapy they need per day.

Once you are medically stable, the aim will be to get you moving as soon as possible. This will include moving around your bed, then from bed to chair, sitting to standing, walking with and without support and finally climbing stairs. This is likely to be a gradual process, and it is important to get each step right, so that you will end up with a balanced way of moving.

It is more difficult to sit up safely in bed than in a chair, so you may soon find yourself sitting in a suitable bedside chair with your affected side supported by pillows. This will help re-establish your balance and a sense of your mid-line (the imaginary line that divides your body into left and right sides).

When you are ready, the therapist will get you onto your feet using a hoist or two or three extra helpers. This will give you a chance to support your own weight and encourage you to use the muscles of your trunk, hips and legs. Your therapist may not encourage you to walk straight away if you need time to recover your strength and flexibility.

Exercises

During physiotherapy you often do exercises and practise specific skills that you need to improve. So if you are having difficulty keeping your balance when standing, you may be asked to practise standing up a lot. If you have difficulty lifting your arm you need to practise doing activities that make you lift your arm. If you are having difficulty walking you need lots of walking practice.

There are many ways to practise. You will work on a one-to-one basis with a physiotherapist, particularly on the tasks and the movements you are learning to do. You may also work with a physiotherapy assistant, in a group, or have tasks and activities for you to practise on your own outside of therapy sessions.

One of the main physical problems facing stroke survivors is weakness in the arms and legs. This can be improved with strengthening exercises. Exercises to build up your stamina and stretching exercises to prevent muscle and joint stiffness are also beneficial.

There are different ways that you can do these exercises. You may exercise under the supervision of the physiotherapist and/or an assistant, attend a group exercise or circuit training class, or work individually in a gym. You can also practise independently in your own time outside a formal therapy session. Talk to your physiotherapist about what is suitable for you. For more general information about exercise see our guide R7, Exercise and stroke.
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**Equipment**

Although most people regain the ability to walk, some do not and others are only able to walk short distances such as around the house. If this is the case for you, your physiotherapist and occupational therapist will get a wheelchair for you and teach you and your carers how to use it.

After an assessment, they will also arrange for any other equipment you may need, such as a hoist to help you get in and out of a chair or bed. You may need adaptations to the house when you go home, such as a ramp or wider doors.

Physiotherapists can provide other equipment to help you get about more easily such as walking frames, rollators (walking frames with wheels) and sticks.

**Your hopes and plans**

Your therapist will work with you to set a number of goals. This will take into account your priorities, hopes and plans and is a way to make sure that your treatment is focussed on the things that are important to you. Your goals will depend on how severe your stroke is, your previous abilities, and the life you hope to lead in the future. Your goals may be small to start with and involve a simple task, such as reaching for and grasping an object.

**How can my family or carer help?**

It is possible for members of your family, friends or carers to attend rehabilitation sessions with you. They can be involved in your exercises and rehabilitation after you have left hospital. Your physiotherapist may also show your family or carer how to help you practise your exercises and include them in everyday activities.

If you need help with daily tasks such as getting dressed, getting in and out of bed or using the stairs, your physiotherapist can teach your family or carer how to help, and how to use any equipment you have been given.

**What happens when I leave hospital?**

If you need further therapy after leaving hospital, there are many options available. If you can’t get around very easily or you need a lot of support, you can be referred to a community rehabilitation team who will see you in your home. If you only require physiotherapy then you may be referred to a physiotherapist based in the outpatients department of your local hospital.

Where you continue your therapy depends on your abilities, your needs and preferences, and how services are organised locally. This should be explained and discussed with you.

When you get home, try to keep as active as you can to look after your health and reduce your risk of having an accident or fall. Your physiotherapist can advise you on ways to continue improving your strength and overall health, and give you activities you can do to help you to stay healthy.

For more information visit stroke.org.uk
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Some areas have an ‘exercise referral scheme’ where you can exercise in your local gym or leisure centre under the guidance of a fitness instructor who has been trained to help people with disabilities. Ask your GP for more information.

When will my therapy end?

Most people recover quickly in the first weeks after their stroke. After approximately three months, the recovery period usually slows down. After this time, improvements usually happen because you have become fitter, stronger and more able to use your body, rather than due to recovery from the damage caused by the stroke itself. Your brain will be able to change by being challenged in a similar way to when we all learn new skills. This process is called ‘neuroplasticity’. It means the way the brain can recover after it has been damaged. Brain cells can’t grow back, but other parts of the brain can take over.

It is recommended that if you have ongoing difficulties resulting from your stroke, you should continue to have rehabilitation (including physiotherapy) for as long as you need. This means for as long as you have clear goals and the therapy is helping you make progress towards them.

You should also be reassessed six months after your stroke to see if you need further treatment or a change to your treatment plan. At any time, if new problems arise or old ones resurface, you can ask your GP or consultant to refer you to a physiotherapist. Many services now operate a ‘direct referral’ system, where you can contact the team or department directly to make an appointment without having to go through your doctor. If you find it hard to get the support you need, call our Helpline for advice and information.

Private therapy

You may wish to consult a private physiotherapist, for instance if you feel you could benefit from further therapy, or if you want to supplement any NHS treatment. This is allowed under current guidelines. Let your NHS therapist know you plan to do this, both as a courtesy and to ensure you continue your treatment and goals.

Check that the private therapist has substantial experience of stroke rehabilitation and the appropriate qualifications. Look for the initials MCSP (Member of the Chartered Society of Physiotherapy) and SRP (State Registered Physiotherapist) after their name. Also ensure that you understand their fee structure, how many sessions are likely to be involved and whether you can be treated at home. For further information, see our guide R10, Private treatment.

Top tips for recovery

• Practise the exercises your therapist has set you.

• Keep to a routine of exercising at a regular time each day.

• Use a notebook to remind you what you need to do and record your progress.

• Remember to involve and move your affected side as much as possible.

• Many people worry that being active might cause another stroke. This is very unlikely but if you have any pain or are excessively breathless (getting a little out of breath is a good thing) then stop. If this does not subside after a short rest then seek medical attention.
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• Be patient with yourself. You are aiming for long-term rather than immediate results.

• If you suffer from post-stroke fatigue, exercise can help, but start slowly and build it up gradually. Choose a time of day to exercise when you are feeling relatively lively. Recognise that you may need to rest afterwards.

• Take steps to keep to a sensible weight.

• Join an exercise group or stroke club to meet and be encouraged by other people. Contact us for details of clubs in your area.

• Ask your physiotherapist about resuming sports and activities that you enjoy.

Where to get help and information

From the Stroke Association

Talk to us
Our Stroke Helpline is for anyone affected by a stroke, including family, friends and carers. The Helpline can give you information and support on any aspect of stroke.

Call us on 0303 3033 100, from a textphone 18001 0303 3033 100 or email helpline@stroke.org.uk.

Read our publications
We publish detailed information about a wide range of stroke topics including reducing your risk of a stroke and rehabilitation. Read online at stroke.org.uk or call the Helpline to ask for printed copies.

My Stroke Guide
My Stroke Guide is the online stroke support tool from the Stroke Association. Log on to find easy-to-read information, advice and videos about stroke. And our chat forums can connect you to our online community, to hear how others manage their recovery. Log on at mystrokeguide.com.

Our dedicated Enquiry Line is on hand to support you with using My Stroke Guide. Call 0300 222 5707 or email mystrokeguide@stroke.org.uk.

Other sources of help and information

Chartered Society of Physiotherapy
Website: www.csp.org.uk
Tel: 020 7306 6666
Email: enquiries@csp.org.uk
Has a register of therapists who are members of the Association of Chartered Physiotherapists interested in Neurology (ACPIN).

Physio First
Website: www.physiofirst.org.uk
Tel: 01640 684 960
Email: minerva@physiofirst.org.uk
Has an online database of qualified physiotherapists, which can be searched by location and specialism.
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About our information

We want to provide the best information for people affected by stroke. That’s why we ask stroke survivors and their families, as well as medical experts, to help us put our publications together.

How did we do?
To tell us what you think of this guide, or to request a list of the sources we used to create it, email us at feedback@stroke.org.uk.

Accessible formats
Visit our website if you need this information in audio, large print or braille.

Always get individual advice
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Together we can conquer stroke.