

# Stroke Information Book

## A Generic Stroke Unit The General Hospital

My Details (Label)	
My Diagnosis	
My Consultant for follow up	
My Follow up	

**To be issued to all patients or next of kin.**

**Some of the details contained here may not apply to you but if you have any concerns or suggestions please let us know. We believe that patients and those important to them should have information to help them make decisions and understand what is happening. You are encouraged to speak with us if you need any issues explained.**

This is a document under development and we welcome feedback. Any comments please speak to the stroke specialist nurses or other staff.

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Welcome to XXXX General Hospital. We are a busy stroke centre and we are here to help you in your stay. Please read this document and feel free to ask questions of staff. We have written this document as a series of questions and answers which should hopefully help you.

## **About Strokes**

### **What is a stroke?**

A stroke is a loss of basic brain function that happens when the blood supply to part of your brain is cut off and a part of the brain is injured. Blood carries essential nutrients and oxygen to your brain. Without blood your brain cells can be damaged or die. The damage varies greatly depending on the size and location of the damage in the brain. There is a great deal of variation from patient to patient.



A stroke can affect the way your body works as well as how you move, feel, see, think and communicate. If the part of the brain affected deals with speech then you will have difficulty with speech. If the part of your brain that moves your right arm is affected then the right arm will be weak and have reduced sensation and so on. One of the important findings in the brain is that different parts do very different things.

Some patients with a stroke are so well that they do not need to be admitted to hospital; others do and need to stay a long time.

### **What are the signs of a stroke ?**

Strokes tend to come on suddenly within a minute and they may cause weakness of the face, arm or leg usually all on the same side as well as altered vision and speech. Some affect speech and communication or cause loss of balance and clumsiness, as well as altered or even double vision. Very severe strokes will result in the patient being drowsy or in a coma.

### **What are the different types of stroke?**

There are two main types of stroke. The first and commonest is called an **Ischaemic stroke**: there is a blockage cutting off the blood supply to a part of the brain. It is a bit like a “Blocked pipe”. These are the commonest and cause 4 out of every 5 strokes. The less common type is a **Haemorrhagic Stroke**: there is bleeding from one of the blood vessels in the brain. This is more like a “Burst pipe”. These are the less common and cause 1 out of 5 strokes. Both of these types look the same on the surface and the doctor cannot tell what type your stroke is without first doing a CT scan. This is very important and once done will help to give you the best treatment. The CT scan will straight away show bleeding from a Haemorrhagic stroke. If there is no bleeding then an ischaemic stroke is likely.

### **How does the doctor diagnose stroke ?**

Usually from finding out what happened “the history”, from examining you and from the imaging either CT or MRI. Once the doctor diagnoses a stroke the next question is why and the doctor may then organise further tests to look into this.

### **What is a TIA ?**

A TIA is where stroke signs appear for a short period of time e.g. 10-20 minutes and then completely clear up. It can be a warning that a full stroke is coming in the next few days and so medical help is very important to prevent a full stroke from developing. Patients are seen urgently the next day in our TIA clinics. However the diagnosis of TIA is for experts and many of those patients whom we see have not had a TIA.

### **What will happen to me in hospital when I have a stroke ?**

Most of our patients are brought in by the ambulance service. They usually notify us in advance so we can be on hand quickly after you arrive. At first you will need to have tests to confirm that you have had a stroke and make sure that you receive the right emergency treatment. The quicker your stroke is diagnosed and treated, the better your recovery will be. We will see you and talk to you and examine and assess you and in most cases get a CT brain scan done, blood tests and an ECG and the doctors and the specialist nurses will be involved. If needed you will be admitted to the hospital for further tests and treatment. You may also need a period of rehabilitation.

We aim to get all our patients directly to a stroke bed on the stroke unit but if this is not possible then stroke team will come and see you on the acute medical unit and you will still be under the care of the stroke team. You may stay with us for further tests and rehabilitation which will be done on the rehabilitation ward. Once you are up mobilising and able to manage we will try to get you home with ongoing support and rehabilitation from our early supported discharge or community stroke team if that is required. Some of our patients stay 1-2 days and some stay many months. It all depends on the severity of the stroke and how quickly patients improve.

### **What types of scan are done**

A CT scan which is quick and easily available is done on admission. It takes 5 minutes. It is very sensitive but sometimes does not pick up all strokes especially when done early but it does show bleeding. Occasionally the doctors may decide that you need a more detailed MRI scan, and this may be done here or after discharge. You may be unable to have an MRI scan if you have an older pacemaker.



### **What Treatments might I receive**

#### **Stroke Thrombolysis**

If your stroke of the ischaemic blocked pipe type and caused by a blood clot, we may treat it with a clot-busting drug to try to disperse the clot and return the blood supply to your brain. We try to

unblock the pipe. This will not prevent the stroke but should help to make the stroke smaller. The medicine itself is called **alteplase**. The process of giving this medicine is known as **thrombolysis**. Thrombolysis can break down and disperse the clot. For most people thrombolysis needs to be given within four and a half hours of your stroke symptoms starting. However the more time that passes, the less effective thrombolysis will be. This is why it's important to get to hospital as quickly as possible when your symptoms start. Thrombolysis doesn't work every time – one in seven people who receive it benefit from the treatment. There is also a risk that thrombolysis can cause harmful bleeding in your brain. This happens in approximately 7% of cases. The doctor will discuss this with you and family if the need arises.



Not all patients can have thrombolysis if there is increased risk of bleeding. At present only 15% of people who are admitted to hospital with a stroke are eligible to receive it. If you are not suitable, it may be because: you have or previously had a bleed in the brain, you do not know or cannot tell doctors when your symptoms began, you did not reach hospital in time, you have a bleeding disorder, you have recently had major surgery or you have had another stroke or head injury within the past three months your current medication is not compatible with alteplase. At all times the doctor will be putting safety first.

### **Thrombectomy**

In patients with a large blocked vessel who come to us within 6 hours we may be able to do a procedure called thrombectomy here an interventional neuroradiologist is able to remove the clot using a wire inserted in the groin and threaded up into the brain. This is very specialist and is only available in certain centres. In some centres it is only available in office hours.

### **Hemicraniectomy**

Rarely in some of our patients with large strokes the brain swells quickly and this can be very dangerous. In these cases we organise for our patients to go to Oxford for neurosurgery where part of the skull is removed and this allows the brain more space and prevents even more damage or death. This usually happens in the first few days of a large stroke. We will discuss it if the need arises. The patient then returns to continue their recovery and rehabilitation.

### **New Medications**

Those with an ischaemic stroke will usually be started on a blood thinner such as Aspirin. This will then be changed to Clopidogrel after 2 weeks. Those with AF will need a stronger blood thinner such as Warfarin, Apixaban, Dabigatran or Rivaroxaban. They will also need in most cases a cholesterol lowering medication usually a statin. E.g. simvastatin or atorvastatin. Those with a haemorrhagic stroke need to avoid blood thinners as they can increase the risk of further bleeding into the brain. Those with hypertension (high blood pressure) will need blood pressure tablets. Some patients who develop epilepsy need tablets to prevent further seizures.



The hospital will provide you with medications and these will be continued by your GP. It is sensible to make an appointment to see your GP following discharge to let them know you have had a stroke and to check blood pressure and for basic health advice.

## What sort of assessments will I get

- **Blood pressure, Temperature, Heart rate:** These should be taken as soon as you get to hospital. They reveal if your stroke may have been caused by high blood pressure, and whether you may need medication to help lower it. It identifies if the heart is going too fast or if there is a fever.
- **Electrocardiogram (ECG):** can show if an irregular heart beat called atrial fibrillation may have caused your stroke. Atrial fibrillation can increase your risk of stroke, but can also be managed with medication
- **Blood tests:** this will check your cholesterol and blood sugar levels and check for clots. We also check your blood count and kidney function and if needed your thyroid and other tests that may be relevant.
- **Swallowing test:** someone in your stroke team will need to check whether your stroke has made it difficult for you to swallow. If swallowing problems aren't addressed they can lead to complications such as chest infections or pneumonia.
- **Speech assessment:** We will ask the speech and language therapists to see you and help communication if you have a new speech problem.
- **Mobility assessment:** your stroke team will need to assess how your stroke has affected you physically and what help you need with positioning and moving around
- **Pressure area risk assessment:** to make sure that you don't develop any sores or ulcers whilst you can't move about
- **Nutritional status and hydration:** to make sure that you are getting the right nutrition and that you aren't becoming dehydrated.
- **Contenance assessment:** you will be assessed to see if you have any continence problems, and if so, what can be done to help you manage them.
- **Communication and cognitive assessments:** to find out if your stroke may have caused any communication or cognitive problems and what help you may need with them



## In the first few days and later

- **Carotid artery** scans to see if it is diseased.
- **A 24 hr or 7 day ECG:** where you carry a small box that counts the heartbeats. This can be done in hospital or more commonly after discharge.
- **Echocardiogram** – a scan of the heart
- **MRI** may be done in selected patients

## Rehabilitation

It continues for as long as it is working and by that we mean that every week or so you are able to do more. If despite rehabilitation you remain unchanged then we then begin to consider building help around you with carers to support you after discharge. Most of our patients would get several weeks of rehabilitation and be given a good chance to improve. We treat each person's needs as an individual and we deliver rehabilitation as a multidisciplinary team so we can do our best to enable as much recovery of function as possible. The functions we are talking about include the most basic **activities of daily living** – getting out of bed, standing, washing oneself, walking to the toilet, using a toilet, feeding oneself, cooking etc. We are very keen that patients regain independence and do as much for themselves as possible.

Rehabilitation helps the patient regain function. We both try and change the patient through rehabilitation but also consider adaptation to the patient's environment that will also enable them to do as much as possible. Whilst you're in hospital you will have daily sessions with your different therapists to help you relearn the skills you have lost and learn how to manage any longer term problems. It will probably involve some of the following aspects:

- setting goals that are then broken down into small, manageable steps
- exercises to help you recover any abilities you have lost
- being shown new and different ways of doing things, such as dressing with one arm instead of two.
- Using new ways to do transfers – moving your body weight from one surface to another.
- Scanning to help when the visual fields are lost to one side (hemianopia) so to prevent injury from walking into door frames etc.



## Who's who on the Stroke Unit

### What is the stroke team

The team on your stroke unit will include a number of different health professionals who all have specialist training and experience in stroke. You may hear them called a multidisciplinary team or MDT for short. The multidisciplinary team can include:

- Doctors – junior and senior, ward nurses, clinical nurse specialists and healthcare assistants
- Physiotherapists, Occupational therapists, Speech and language therapists, rehabilitation assistants, Clinical psychologists, dietitians, social workers, pharmacists.

Most of the team meet once a week to discuss progress and help share information and discuss patient centred goals which have been agreed with the patient.

### Nurses

Nurses are present 24/7 and are very important for managing your personal care, medical and nursing care and for all the normal ward tasks. They are usually the first contact for any patient. Please talk to them if you have any questions or concerns and if they cannot help they will get someone who can.

## **Healthcare assistants**

They are key members of the team and work with the nursing teams to deliver your personal care. They can answer many questions about care and pass on other concerns.

## **Doctors**

There are several grades from trainees who may wear a white coat to consultants. Each patient has their own consultant but if they are away another colleague will cover so you may see several during your stay. They will usually follow you up locally unless you are from Kettering where their team will see you after discharge. Feel free to ask any express any concerns to the medical staff who are there to help you.

## **Physiotherapist (PT)**

You will recognise the physiotherapists from their white tunic and blue stripe. Physiotherapists look at optimising the return of function for normal mobility and upper limb function after a stroke. After a stroke some patients need at first to learn to sit up, then to sit in a chair and then learn to stand and then walk. This may take weeks or months in some patients. Some patients do not regain their mobility. They may use wheelchairs, walking sticks and various types of walking frames. We try hard to get patients as mobile as possible and encourage independence where possible. We use what we call "goals" to give us targets which can be agreed with the patient to aim for. This gives our work focus and allows us to measure success. Family members can be involved with therapy and this can be very helpful for positive for all. If you wish to get involved please speak to the team.



## **Occupational therapist (OT)**

You will recognise the occupational therapists from their white tunic and green stripe. They work at using returns in physical function to optimise the patient's ability to do simple tasks that are needed for daily living from walking, washing, dressing, eating, drinking. We call these activities of daily living (ADLs). Often there is an overlap in some of the physiotherapy and occupational therapy work and their goals so they may choose to work together.

## **Speech and Language therapists**

They are key in helping those with altered swallowing, speech and language communication. More information below.

## **Dieticians**

Dieticians monitor your diet and ensure that you are getting enough calories. They will spend more time with those with difficulty swallowing or who are losing weight and will not see all patients.

## **What causes a stroke?**

There are a lot of different reasons why people have strokes and this will be one of the main things that your doctor will be looking into. Age is one of the commonest reasons though strokes can happen at any age even in babies and children. As we age our arteries become harder and narrower and more likely to become blocked. However, certain medical conditions and lifestyle factors can speed up this process and increase your risk of having a stroke. High blood pressure is a significant risk as well as an irregular heartbeat called atrial fibrillation. Smoking is also a risk factor.

## What are the risk factors for me having a stroke?

- **High blood pressure:** Hypertension is one of the leading risks for heart disease and stroke. Your physician may advise dietary or lifestyle changes, or specific medications to lower your blood pressure.
- **Diabetes:** High blood sugar can increase your risk, so you should work closely with your doctor to manage it.
- **Heart disease:** If you have an irregular heartbeat (atrial fibrillation), disease of the heart valves, congestive heart failure or have had a recent heart attack, your physician may prescribe medications to thin your blood and/or reduce your cholesterol level.  
Smoking: is a major preventable risk factor for stroke and heart disease. Even if you have smoked for years, you can still reduce your risk by quitting now. We can help you if you wish to stop.  
Obesity, elevated cholesterol, and elevated lipids: Reducing your dietary intake of saturated fats and cholesterol may help reduce your risk of a stroke.
- **Physical inactivity:** A sedentary lifestyle void of regular exercise can contribute to heart disease which may lead to stroke.
- **Excessive alcohol intake:** keep alcohol intake to less than 14 units per week
- **Increasing age:** Stroke is more common in people over 60.
- **Male sex:** Men and women both have strokes but stroke is more common at younger ages in men.
- **Heredity and ethnicity:** Stroke is more common in people whose close relatives have had stroke at an early age.

## Functional Stroke

Some patients have many of the symptoms and signs of a stroke but their brain is normal and there is no damage and no stroke. They have not had a stroke but there is some functional possibly subconscious block to normal function and the result and appearance can look very much like a stroke on the surface and even experts can be unsure. This happens in otherwise normal individuals and no one really understands why. However, the key is that the tests show a healthy brain. Patients can be helped to regain function with therapists but do not stroke medications and all the other stroke investigations. Goal setting is useful to help patients work on their 'blocks'. Most patients get better rapidly and do well long term. The main issue is to get the diagnosis correct and to reassure the patients and be positive and supportive about regaining normal function. Functional problems can recur and if we recognise that as the recurring problem it can help to avoid us mistakenly giving potentially harmful treatments.

## Issues seen following a stroke

### Recovery from a stroke?

All strokes are different and their effects are very different. For some people the effects may be relatively minor and may not last long and they need no therapy help at all. Others may be left with more serious problems that make them dependent on other people. Sadly some patients have a very large stroke and do not survive. Early medical help can be helpful in reducing disability.

### Communication problems

Communication problems are very common after stroke. Around one third of stroke survivors have problems with speaking, reading, writing and understanding what other people say to them. When we communicate our brain has to complete a series of tasks. Different parts of our brains are responsible for each of these tasks. If one of these parts is damaged by a stroke, it can cause problems with communication. One of the roles of the brain is to turn sounds into meaning and also to generate sounds "speech" that conveys meaning and allows communication.



Aphasia affects your ability to speak and understand what others say. It can also affect your ability to read and write. It happens when you're no longer able to understand or use language. Aphasia is common problem after strokes that affect the right hand side of the body (left side of the brain) and around a third of stroke survivors have it.

Dysarthria happens when you're not able to control the muscles in your face, mouth and throat very well, so it's difficult to speak clearly. This can mean that your speech becomes slurred or slow or that your voice sounds quiet.

Apraxia of speech is when you can't move the muscles in your face, mouth or throat in the order you need to when you're speaking. This can make it difficult for other people to understand you.

Although some people assume that they do, communication problems do not affect your intelligence. If you have communication problems, you simply have problems with the process of speaking and understanding language.

Generally, most communication problems do improve, but it's difficult to predict how much they'll improve or how long it will take, as it's different for everyone. Problems tend to be worst in the first few weeks and will improve quite quickly within the first three to six months. However, people continue to recover for months and even years after this. Being able to speak again is particularly important for a lot of people and loss of the ability to understand and produce speech is hugely disabling and distressing. Patients may learn to communicate without speech.

Patients should have speech and language therapy. They can help you to improve your speech, reading and writing as much as possible. They can also help you to learn other ways to communicate. These are known as compensation or coping strategies. They include anything from gestures to electronic devices – anything that can help you get across what you want to say. Speech and language therapy isn't just about the time you spend with your therapist. Your communication will only improve with practice, so the work you put in outside of your therapy sessions is just as important and having access to someone else who will encourage speech is useful.

### **Fatigue**

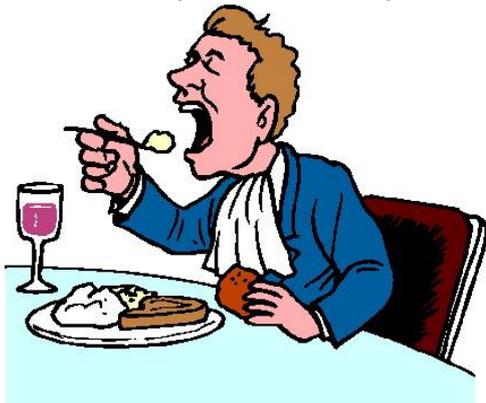


Even in those who make a good physical recovery fatigue and lack of energy can be an ongoing problem for the first few months and patients may find they need more rest and sleep. Low mood can be seen but often resolves as patients adjust. If these happen please talk to the stroke team or to your GP. All patients are usually seen by their consultant at about 6 weeks after discharge and this is a very good time to ask questions.

### **Swallowing Problems**

Swallowing problems are very common in the first few days after a stroke and most improve. Swallowing is a bit like walking – a collection of muscles working together needing a lot of coordination. If there is poor coordination the patient is unable to swallow and food or fluids can enter the lungs. Swallowing issues are seen in larger strokes. Doctors use the term dysphagia to describe problems with swallowing. All patients are screened for swallowing difficulties immediately after admission and if unsafe not allowed to eat or drink until expert assessment by Speech and language therapists. Those with a poor swallow coughing when eating or drinking. The voice may be croaky or 'wet' sounding and there may be dribbling. It takes longer to eat a meal. Patients may need to keep having to swallow a lot to clear your throat. Sometimes it is not obvious that swallow

is poor and this can lead to silent aspiration. You will need an assessment with a trained professional to know that you are actually swallowing safely.



Swallowing problems do get better and most people are able to swallow safely again within the first few weeks. Only a small number of people have problems that last longer than this, and even fewer are left with permanent problems. Therapists may advise that you use thickening with your drinks with special powders to make them easier to swallow and eat soft food, like mashed potato, or pureed food, which is very smooth, like custard. Avoid hot things which are more difficult to swallow. Eat small amounts throughout the day, rather than three big meals. Your speech and language therapist will explain exactly

what foods are safe for you to eat and suggest any other changes that they think you should make.

If you're not getting enough food or water, your stroke team may talk to you about tube feeding through your nose. This means putting liquid food directly into your stomach through a tube. There's more about this in our booklet, *Life after stroke: problems with swallowing*.

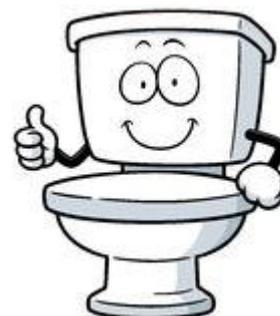
### **Continence Problems**

Continence is your ability to control your bladder and bowels. It's very common for people to have problems with this after a stroke, especially in the very early stages. There are a number of different reasons why you may have continence problems after a stroke. You may have problems with your bladder, bowels or both. If you have problems with both your bladder and bowels, this is known as double incontinence.

- The stroke may have damaged part of your brain that controls your bladder and bowels. It may be that
- You may be too drowsy that you may wet or soil yourself without realising it.
- You may not be able to get to the toilet in time.
- You may not be able to communicate to let others know that you need the toilet as well.
- Changes to your diet and immobility can cause constipation, which can lead to continence problems.
- Any mild continence problems before your stroke will be exacerbated by immobility

Generally, continence problems tend to be worst in the very early stages after stroke and will improve with time. Most people recover their control within the first few weeks and only in 15% will there be ongoing problems. There are a number of treatments that can help with continence problems. Your stroke team will complete an assessment with you to determine what exactly is the cause and look at ways to address this. Different actions include

- Stopping any medications that are exacerbating continence or causing dehydration
- Drink sufficient fluid to maintain hydration. Unless there is severe heart or kidney disease at least 8 glasses of water (or other drinks) per day is recommended.
- Mobilising the patient early and sitting the patient out
- Bladder training to teach the bladder to hold more urine for longer. This can help to you need to go to the toilet less often and give you more warning when you do
- Bowel training to learn how to delay bowel movements and improve your control over them
- Medication can help to reduce the amount of urine your body produces or control the urge to go to the toilet. It can also help to reduce movement in your bowels and improve your control
- Treating constipation, as this can sometimes cause continence problems



- Making changes to your diet, as this can help to improve constipation or diarrhoea

### **Visual Problems - Hemianopia**

Visual problems are common after stroke as a large part of the brain is concerned with vision. This may be exacerbated by any visual problems that preceded the stroke. If you had vision problems (such as cataracts or glaucoma) before your stroke, this can add to the way your vision is affected.



The commonest problem is a hemianopia. Most patients affected will have difficulty seeing to one side, usually the side that is also weak or has lost sensation. The problem is not in the eyes but the brain and both eyes will have visual loss to the same side. This can mean that the patient needs to 'scan' from right to left turning their head so that they can see all in front of them otherwise they may bump into obstacles. It means that unless it improves that patients will be unable to drive. This should be discussed with the doctors and therapists.

Sometimes a stroke at the back of the brain can lead to double vision. Covering the affected eye often helps but patients often feel disorientated and unsteady. Problems with vision can sometimes be missed, so if you think your vision may have changed after your stroke, talk to your doctor.

In some cases, we involve an orthoptist (an eye specialist) or ophthalmologist (a medical doctor who specialises in eye diseases) to assess vision and to see if any corrective measures can be taken. Using a plastic prism on a pair of glasses may help to widen the field of view. Prisms can sometimes help with eye movement problems as well, as can eye patches.

You can also learn compensation strategies to help you cope with or 'work around' your vision problems. If you have lost some of your visual field, for example, then with visual scanning training you can train yourself you to be more aware of your blind side and remind you to look towards it. Vision is very important for driving and those with a persisting visual loss will not be able to drive. If patients are keen to drive we can assess the vision formally using a special assessment called **perimetry**. We usually wait several months to allow as much improvements as possible before doing this as an outpatient.

### **Emotional / Mood problems**

It is normal to be frustrated and upset following a stroke. A stroke is sudden and shocking and affects every part of your life. Most people who have had a stroke will experience some kind of emotional change afterwards. Some patients go through a period of anger and many become more short tempered. With time however many patients adjust however everyone's experience of stroke is different. In those who are affected there is help but the patient needs to acknowledge that there is a problem. Ongoing problems such as depression or anxiety are very common after stroke and these can impact greatly on quality of life. Some have problems controlling their mood and emotions. This is known as emotionalism (or emotional lability). It can mean that you cry or laugh more, sometimes for no reason at all. Some people start to swear, when they hadn't used to before.

There are lots of treatments and therapies that can help with your emotions after a stroke. So the best thing to do is to speak to your doctor, who will be able to explain what's available. Talking can help and meeting others who have been through it before. Medication may also be able to help you with your emotions. Anti-depressants are drugs that affect the chemicals in your brain and lift your mood.

Anti-depressants don't cure emotional problems, but they can help with the symptoms and make life feel easier. They don't work for everyone and can also have side effects. So if it's something you decide to try, you'll need to persevere and work with your doctor to find what's best for you.

### **Personal/Sexual health**

Relationships can suffer after a stroke. The impact can often be complex and stroke can generate fear, anxieties and depression and altered mood. It can be a shock too for the partner. It can affect intimacy and close physical and sexual relationships. Over time many of the initial problems improve but the stroke team would encourage you or loved ones to talk to us about any specific difficulties. Talking can help and we can suggest medications and other support that can help. The message is to not suffer in silence and do not be embarrassed to ask us anything. Talk to the community stroke team, your consultant or stroke specialist nurses or members of the rehabilitation team. The GP will also be happy to support and advise.

### **Cognitive Issues: Problems with Memory and thinking**

After a stroke, patients can be impaired in their ability to process information, retain and remember information and they are unable to make decisions and unable to plan and carry out tasks. We will be looking for such issues and working with the patient to help them improve and to cope. They may see a neuropsychologist who can help with this

Problems with memory and thinking are very common after a stroke and most people will have some difficulties. Problems with concentration and memory are especially common. Every second you receive a huge amount of information from the world around you, which your brain has to understand, organise and keep. If the part of your brain that processes this information is damaged, this can cause a number of problems.

After a stroke, the brain is 'tired' and it's common to find it difficult to concentrate or remember certain things. You may also find it difficult to work out how to do something or know how to respond to what's going on around you. You may find you have no attention span to watch a programme on TV and you quickly lose interest. You may forget things you have been told. You may find it difficult to follow complex situations with lots of information coming in e.g. driving.

Problems with memory and thinking are usually worst during the worst few months after stroke, but they can and do get better. They're likely to improve very quickly over the first three months, as this is when your brain is at its most active, trying to repair itself. It's still possible for problems to improve after this, but you may find that it takes longer. Recovery tends to slow down, especially after six months but it really takes a year to see how things will be.

So treatment usually focuses on ways to cope with your problems, rather than 'fix' them. Things that help you to do this are known as compensation or coping strategies. This may involve using aids (such as writing in a diary or using labels and reminders) that can help you manage. Or it may involve learning mental techniques that can help you. The most important message is to give yourself time, avoid fatigue as much as possible.

### **Discharge from hospital**

When you are ready to leave hospital, your stroke team will work with you to agree what support you will need at home and put together a discharge plan. This will cover all the arrangements for your continued rehabilitation and care at home, including the community services that will be helping you and any aids or equipment you need. We have a local community stroke team for

Northamptonshire which allows you to receive the same rehabilitation care you would get in hospital at home. It is suitable for those who have potential to improve further to regain some form of functional improvement. Your social worker should work with you to arrange any practical help that you need at home. This could include carers coming in to help you get washed and dressed, or adaptations for your home. So they should complete a community care assessment with you to work out what help and support you need. Your social worker also needs to ensure that anyone who is helping to care for you gets the right support too. So any friends or family members that are providing unpaid support need to have a carer's assessment. These assessments should happen before you leave hospital, but sometimes they happen afterwards. When you have an assessment, be honest about your needs.

The kind of help that's available varies from area to area, but could include:

- advice about and help applying for financial support
- equipment or changes to your home to help with day-to-day life
- a place at a day centre
- a home help or care assistant
- home services such as meals on wheels and a laundry service
- respite care (such as a short stay in a care home or special centre to give carers a break).

### Medications that you may go home on

There are so many medications but these are the ones that we commonly use. Please ask staff if you have any questions about your medications. You can also discuss with your pharmacist or GP or the community stroke team. If you have had a haemorrhagic 'burst pipe' stroke we recommend avoiding blood thinners. **If we start these medications it is important that you see your GP to have a continued supply. Do not simply stop them without medical advice.** If you have any side effects please seek medical advice.

Aspirin 300 mg tablet once a day	Commonly used in those with an ischaemic 'blocked pipe stroke' as a blood thinner. Most patients will then switch to Clopidogrel.
Clopidogrel 75 mg tablet once a day	Commonly used in those with an ischaemic 'blocked pipe stroke' as a blood thinner. Very occasionally we give Aspirin and Clopidogrel at the same time.
Simvastatin, Atorvastatin "statins"	Commonly used in those with an ischaemic stroke to lower cholesterol and prevent strokes and heart disease
Dabigatran, Rivaroxaban, Apixaban, Warfarin	Powerful blood thinners used in those with used in those with an ischaemic 'blocked pipe stroke' who have atrial fibrillation.
Amlodipine	Blood pressure tablets used in all strokes where there is raised blood pressure. Your GP may increase the dose to lower the BP slowly.
Captopril, Ramipril, Lisinopril, Enalapril, Candesartan, Losartan	Blood pressure tablets used in all strokes where there is raised blood pressure. Your GP may increase the dose to lower the BP slowly.

### Medical Follow up

Almost all of our patients are seen in clinic approximately 6 weeks after discharge. If you are from North of the county that may be at Kettering or Corby. Otherwise we see the rest of the patients at Northampton General. They will be seen by usually the consultant who saw you first when you were

admitted or seen in A&E. We may organise some tests to be done before we see you – heart scans (Echocardiograms) or 24 hr tapes or MRI. At the 6 weeks review we can discuss tests, recovery, problems, medications, work and driving issues and any other issues. It is also wise in the interim to see your GP to discuss your stroke and its impact and any ongoing issues. If you fail to get an appointment please contact the consultant secretary (consultant name should be on front page) at NGH.

### **Your community stroke team**

If there are specific difficulties that can be helped with ongoing rehabilitation after hospital then the community stroke team will help you once you leave hospital. Many improvements will happen with time and the natural healing processes in the weeks and months following stroke. Like your hospital stroke team, your community team will be made up of different healthcare professionals, including: community stroke nurses, physiotherapists, speech and language therapists, occupational therapists, dietitians, and we hope to soon have some psychology input. Your community team will continue to work with you to assess your rehabilitation needs and check your progress against the goals that have been set for you whilst in hospital, as well as any subsequent goals that were agreed.

### **Reducing stroke risk**

#### **Healthy lifestyle**

Eating healthy is key and aiming to get your weight within the government’s targets. Moderation with alcohol to less than 14u per week. A diet rich in fruit and vegetables. Diet is also very important in those with diabetes. Smoking cessation is key and smoking is a big risk factor for stroke, heart disease and cancers. We would recommend nicotine replacement and e-cigarettes as a way to wean off cigarettes. Exercise is useful to give a sense of well-being but it also improves cholesterol and blood pressure and helps to prevent injuries.

#### **Driving**

You must not drive for at least 1 month (28 days) after a stroke or TIA. If you are unsure please talk with your doctor. To drive against DVLA medical advice is illegal and will invalidate your insurance. You may resume driving after 1 month if your doctor agrees. However if you are still having problems 1 month after the stroke then you do need to inform the DVLA who will ask your doctor to complete an assessment form. The exception is those who have a Bus, coach or lorry driver licence and they must always inform the DVLA regardless and not drive until they are given notice to do so. If unsure driving can usually be discussed at the 4-6 week follow up with your stroke doctor or with your GP. If you are still unsure do not drive and please ask us.



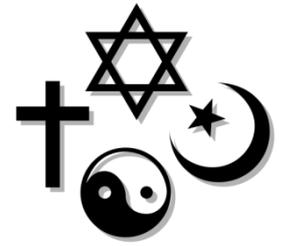
#### **Work**

Many of our younger stroke patients return to work. Some do so straight away. A TIA should not prevent working though it may stop driving for a month. For those with an established stroke return to work should be discussed with your own occupational health team and your employer and the community stroke team may also give advice. Where possible we recommend a slow staged return to work over several weeks or months. Please discuss with us.



## Chaplaincy

If you would like to speak to one of the hospital Chaplains please ask a member of staff to contact XXX. There is a Chaplain on-call day and night. If you would prefer to see your own faith leader, staff will be glad to help you do this. Services are held regularly in the hospital chapel, please ask your nurse for details.



## Reviewing the support, you need

Those who have had a stroke should have a review with someone at six weeks and six months and 12 months after their stroke. This is to make sure that you are continuing to receive the care and support you need. If you've not had one of these reviews you need to speak to your GP or someone in your community stroke team.

## Useful resources

Please use. Services are available for you and those involved in caring for you.

**Stroke Association** UK helpline 0303 3033 100 website <https://www.stroke.org.uk/>

**DVLA: Guidance on driving** <https://www.gov.uk/driving-medical-conditions>

- DVLA drivers' medical enquiries Telephone: 0300 790 6806 Monday to Friday, 8am to 5:30pm Saturday, 8am to 1pm
- Post Drivers' Medical Enquiries, DVLA, Swansea, SA99 1TU
- There is also an email service on their website

## Local Stroke Group Programme

### UK carers

[www.carers.org](http://www.carers.org) and [www.carersuk.org](http://www.carersuk.org)