

Hip Fracture Programme

A guide for patients following surgery



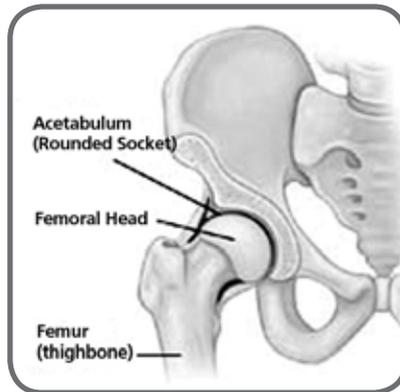
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This guide is designed to help you understand more about your injury, and the rehabilitation you will receive. It has been created by doctors, nurses, physiotherapists, occupational therapists, and social workers, who will work with you, whilst you are in hospital, to achieve your goals and plan your discharge.

This guide aims to answer some of the questions you, or your family and friends, may have but please do not hesitate to ask ward staff should you have any more.

Hip Anatomy

Your hip is a ball and socket joint, located where your thigh bone (femur) meets your pelvis (acetabulum). When you break your hip, it is referred to as a hip fracture, a proximal femoral fracture, or a **'fractured neck of femur'**.



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A hip fracture is a serious injury, and patients, on average, take between 7 and 30 days in hospital to rehabilitate.

Your Admission

You are likely to have arrived at hospital via the Accident and Emergency Department, where you will have an X-Ray to confirm that you have broken your hip. The doctors will take a sample of your blood, and may connect you to a heart monitor. You are also likely to need extra fluids through a drip.

A fractured hip is usually painful, and your pain levels will be assessed. You will be offered painkillers, and the doctors may give you a nerve blocking injection in the groin to ease the discomfort. It is important for you to tell the nurses or doctors if you are still in pain.

Following the Accident and Emergency Department, you will be moved to a ward. The nurses will need to ask you questions about your general health and home situation. It is important that you tell them about any regular medications you take, and any allergies.

Most hip fractures require surgery to fix or replace the broken bone, and we aim to operate within 36 hours of your admission to hospital.

You will be on bed rest until your operation. As patients on bed rest are at greater risk of developing a blood clot, or 'deep vein thrombosis' (DVT), in their leg, you will receive preventative interventions, often a heparin injection under your skin, to minimise this risk.

Before Your Operation

Exercises

To minimise the risk of blood clots and chest infections, whilst you await your operation, we recommend you do the following exercises at least three times per day:

1. To assist good circulation.

Move both ankles and toes up and down ten times.

2. To keep your chest clear.

Take a deep breath in and hold for three seconds before exhaling. Repeat four times. Cough, if needed afterwards, to clear any phlegm.

Anaesthetic

You will usually be seen by an anaesthetist before your operation to discuss the types of anaesthetic most suitable for you. This may be a **general anaesthetic** (asleep during the operation) or a **spinal** (awake during the operation but numb from the waist down to prevent pain).

Consent

Your doctor will explain your proposed operation to you, and ask you to sign a consent form. For patients who are unable to provide consent, surgery will be performed in your best interests, in consultation with your family.

'Nil By Mouth'

It is vital when you go for your operation that you have an empty stomach. You must not eat or drink anything for several hours before your operation. You will be allowed two carbohydrate drinks, provided by the nurses, in the early hours of the day of your operation. The nurses will offer you regular assistance with mouthwashes to rinse out and freshen your mouth during this period, and you may have additional fluids through a drip.

The nurses will inform you when you are to be 'nil by mouth'.

Your Other Medical Needs

A Consultant specialising in elderly care (an 'orthogeriatrician') will also aim to see you within 72 hours of admission to assess your overall health needs in detail. They will supervise your rehabilitation, assess your risk of future fractures and falls, and may recommend changes to your medication to reduce these risks. If so, they will inform your GP of these changes when you leave hospital.

Risks of Surgery

All operations carry some risk, and these will be discussed in full with you when you are asked to sign your consent form. The key risks are outlined below:

Mortality: Suffering a fractured hip is a major health event and up to 10% of patients die within 30 days, mainly due to pre-existing medical conditions and declining health leading up to the fracture. We have the expertise of a Consultant Orthogeriatrician to manage medical complications and advise on appropriate treatment.

Heart Attack or Stroke: The strain of the operation can cause a heart attack or stroke during, or in the first few days after, the operation.

Thromboembolism: Blood clots may develop in the veins of your leg during or after surgery. This can be fatal but is extremely uncommon. The risk is greater if you are female, overweight, have varicose veins, high blood pressure or heart disease.

Dislocation/Loosening: the metalwork might come loose or your hip may dislocate at a later stage after the surgery. If this happens you may require a further operation.

Wound Infection: Sometimes the wound is slow to heal, and a small number of patients will develop an infection. High standards of hygiene reduce this risk, and all patients receive antibiotics immediately before the operation, but infections

cannot always be prevented. As smoking significantly impairs wound healing, patients who smoke will be encouraged to quit. If an infection does not respond to treatment, it may be necessary to undergo further surgery. High standards of hygiene reduce this risk but infections cannot always be prevented.

Chest Infection: There is a small risk of developing a chest infection after surgery. This risk increases if you already have a history of chest problems or are a smoker. You may need antibiotics and chest physiotherapy.

Pressure sores: A pressure sore is an ulcerated area of skin caused by irritation and continuous pressure on part of your body. Patients are at increased risk of developing pressure sores following surgery due to reduced mobility, and/or undernourishment. The risk of pressure sores is reassessed daily and pressure relieving mattresses, or other devices, are used for those at high risk. All patients are encouraged to take nutritional supplements to boost their nutrition and reduce the risk of pressure sores.

Confusion: Acute confusion or delirium can occur in up to 50% of patients after a hip fracture. We monitor patients and try to address problems that increase this risk promptly e.g. pain, constipation, infection. There is no specific treatment but reminding patients where they are, what has happened and ensuring they have their glasses and hearing aids helps to shorten episodes. Agitation can be reduced by having carers and family members present. Most will resolve with time.

Your Operation

There are several different operations to repair or replace a fractured neck of femur (see below). The type of operation your surgeon chooses will depend on the exact location of the fracture, and whether the blood supply to the bone has been disrupted.

Operation Date.....

Hemiarthroplasty

A 'hemiarthroplasty' is a partial hip replacement, in which the surgeon replaces the broken half of the hip with an artificial ball. The socket portion is left alone. It is used for those fractures which occur near the hip joint.



Total Hip Replacement

A 'total hip replacement' is similar to a hemiarthroplasty, but involves the surgeon replacing both the ball and socket portions of the hip joint with artificial implants.



Sliding Screw

A sliding hip screw is a screw inserted into the head of femur to bridge the broken hip bones whilst they heal. This screw is held in place by a metal plate, secured onto the side of the femur by several smaller screws. It is used for those fractures further away from the hip joint.



Intramedullary Nail



An intramedullary nail consists of a metal rod, which is inserted down the middle cavity of the thigh bone and held in place with screws. This metal work will stay in place permanently, even once the fracture has healed. It is used for fractures further away from the hip joint, particularly those down the thigh bone.



Screw fixation



With screws, the surgeon will fix the fracture with individual screws, usually two or three, placed through the neck of femur to secure the broken bones as they heal.



After Your Operation

Immediately after your operation you will be taken to the Recovery Unit. When the doctors are happy you will be transferred back to one of our orthopaedic wards. The nurses will regularly check your blood pressure, pulse and temperature. You will also have a blood sample checked, and may need a blood transfusion.

Nutrition: It is quite common for people to lose their appetite whilst in hospital, but eating as well as possible will help you to recover more quickly and regain your strength. Your nutritional status will be assessed by nurses to determine if you need extra advice or food supplements, and we routinely prescribe protein supplement drinks to help with healing and recovery.

Constipation: Strong painkillers, limited mobility and reduced appetite, can all contribute to constipation following a hip operation. This is quite normal, but you should inform the nursing staff if your bowels have not moved or you feel uncomfortable. Your bladder and bowel function will be monitored by the nursing staff and you may be offered laxatives if necessary.

Mobilisation: Early movement and exercise promote recovery from your hip operation, and help reduce stiffness and pain. You will begin rehabilitation with the physiotherapist, using an appropriate mobility aid, the day following your operation (even if it is the weekend). It is important that you take regular pain relief so that you are able to move comfortably.

Locally, we have found it helpful to categorise patients, using our experience, information about pre-injury health/activity status, and progress in the first few days following surgery, to estimate discharge dates in advance (see below). This helps to give you a better idea of how long you are likely to stay in hospital, how staff can work more effectively to help you achieve appropriate mobility goals, and to coordinate any support services that you may need on discharge.

Patient Categories:

Green: Typically, these patients were fit and independent before breaking their hip, with a good level of mobility, needing minimal help at home, and no memory problems. We would expect these patients to be mobilising short distances with the physiotherapists within two days of surgery, and would aim to discharge these patients within 10 days.

Amber: Typically these patients have some pre-existing health conditions, possibly mild memory problems, and required some help with domestic/personal tasks before breaking their hip. They may have needed to use a mobility aid before admission. We would aim for them to be transferring out of bed within two days

of surgery, and would aim to discharge these patients within 21 days of surgery.

Red: Typically these patients have a significant past medical history, with some problems with memory, and limited mobility. They will already be having help at home e.g. carers 3 x day. They may require a hoist to get out of bed initially, and may not have been out of bed at all within two days of surgery. We would aim to discharge these patients within 28 days of surgery, although if the patient has been admitted from a nursing home, this will be sooner.

Long Term Outcome

We aim to get patients back to their previous level of function, and back to where they were living before admission. However, this is not always possible, and in some instances, we may need to consider alternative accommodation, such as residential or nursing home care. Staff will involve patients and families in these discussions if this is the case.

Rehabilitation

Following your surgery, you will require assistance with mobility and everyday tasks. We run a multidisciplinary rehabilitation programme, and you may encounter the following members of staff:

Physiotherapist

Physiotherapists will work with you to help you achieve your optimum level of mobility ahead of discharge. This will involve helping you out of bed on the first day after your operation, selecting appropriate mobility aids to assist you, and teaching you exercises for you to practice independently to improve strength and movement.

Once you are able to walk short distances, the Physiotherapists will encourage nursing staff to assist you in between

physiotherapy sessions e.g. walking to the bathroom to help improve confidence, strength and stamina. If it is appropriate, the Physiotherapist may discuss a referral for ongoing input from Community Physiotherapists when you leave hospital.

Occupational Therapist

Occupational Therapists look at how you manage everyday tasks, such as washing, dressing and meal preparation. They will discuss how you normally manage these tasks, and can provide advice on how to cope following your surgery. The Occupational Therapist (OT) will also consider the level of support you may need on discharge and whether your family are able to assist. They may suggest additional support when you leave hospital, and will work with the community therapy teams or Social Worker to plan your discharge.

The OT will give you a form requesting a family member or friend measure your furniture at home (e.g. bed, toilet, armchair) and will recreate these heights on the ward to check that you can manage. In some cases the OT may need to arrange the provision of equipment to assist you on your return home. It may be necessary to visit your home to assist discharge planning.

Social Worker

You may need help at home when you are discharged from hospital. If so, a Social Worker will be involved in your discharge plans, and will talk to you about arranging support. They can provide advice about whether you will have to pay for this support, and if so, how much.

Exercises

It is important that you only do the exercises that your physiotherapist recommends. Once your physiotherapist is happy that you are performing an exercise correctly, they will tick the box next to each exercise that you should continue with independently.

Bed Exercises

Knee Bracing (Static Quadriceps)



Pull your toes up towards your face, brace the knee and tighten thigh muscles. Imagine that you are trying to squash a tennis ball under your knee.

Hold for 5 seconds, repeat 10 times.

This exercise helps you to regain control of your leg muscles ready for standing and walking.

Hip Slide



With a sliding sheet under the operated leg, slide your foot slowly up and down the sheet.

Work to bend your hip and knee.

DO NOT BEND YOUR HIP MORE THAN 90 DEGREES.



With the sliding sheet in position, slide your leg gently out to the side and back.

These exercises help to increase the range of movement in your new hip joint, and strengthen the muscles around the hip in preparation for walking.

Bridging



Lying on your back with knees bent and feet flat on the bed. Tense your tummy muscles and squeeze your buttocks together and lift your bottom off the bed. Try to hold the lift for 5 seconds. Return to starting position.

This exercise helps to strengthen your core muscles and helps stabilise your pelvis during walking.

Chair Exercises

Knee Extension



Sitting in a chair lift your leg from the bent position until your knee is as straight as can be.

Hold for 5 seconds. Slowly lower your foot to the floor. Repeat 10 times.

This exercise works your thigh muscle throughout its range.

Hip Extension



Sitting, place your hands on the arms of the chair. Practice lifting your bottom off the seat and moving to the back of the chair).

Hip Flexion



Sitting with your feet on the floor. Try and lift your operated foot off the floor, moving the knee towards the ceiling. Lift as high as pain allows/is comfortable, then lower your foot back to the floor).

DO NOT BEND YOUR HIP MORE THAN 90 DEGREES

Standing Exercises

Hip Extension



Standing holding on to a firm support, with the affected leg straight. Take the leg out behind you with the foot facing forwards. This will only be a very small movement. Try to stand up tall, do not bend at the waist or knee.

This exercise helps to strengthen muscles around your bottom which often become weak in hip patients. Strengthening these muscles will help to improve your walking pattern.

Hip abduction



Holding on to a firm support, with your feet facing forwards. Squeeze the muscles in your bottom and lift the affected leg out to the side with the knee straight.

The muscles around your hip and bottom are important to keep your pelvis stable whilst walking and standing. This exercise will help to strengthen these muscles.

Mini squats



Standing as above, slowly bend and then straighten your knees, sticking your bottom out behind you. Try not to let your knees move in front of your feet and remember not to bend more than 90 degrees at the hip.

This exercise works all the major muscles in your buttocks and legs.

Ongoing Rehabilitation

Following a hip fracture most people will require a period of rehabilitation, working with physiotherapists and occupational therapists to promote independence with mobility and activities of daily life.

Within the Brunel building there is a 33 bedded unit specialising in hip fracture patients. This is located on level 2 at gate 25B. Ideally you will move to this unit as soon as medically and physically well enough following your operations, and stay here for the majority of your rehab pathway.

Alternatively there are other in-patient rehabilitation options (e.g. rehab centres or specific rehab beds within care home in the Bristol area).

Your ward physiotherapist and OT will liaise with the discharge facilitator, yourselves and your family as appropriate to advise on the most appropriate setting for your ongoing rehabilitation.

Once it is appropriate and safe for you to be discharged from hospital you may be referred to the community rehabilitation team who can continue your physiotherapy and OT treatment.

Staff, Communication and Confidentiality

Our staff will endeavour to provide you with all the information you need. However, if you are unsure about anything, please do not hesitate to ask. The team recognises that communication with family and friends is important when someone is in hospital. To preserve confidentiality, permission will always be sought from the patient first. Whilst the ward doctors and therapists are happy to talk to relatives there will be times when this is not possible because of the needs of other patients on the ward. If relatives wish to speak to a member of the team, and they are not available, then please make an appointment via the ward receptionist or Nurse in Charge. It would be helpful

to nominate one 'spokesperson' to make enquiries and to feed back to other relatives, so that we can spend more time with the patients.

Falls Risk Reduction

Most people break their hip as a result of a fall. Falls affect many older people. As a team we undertake assessments to try and reduce your risk of further falls. Some patients will be referred on for further fall prevention exercise groups after discharge from hospital.

Bone Health

Having sustained a broken hip, we will also assess you to see if you need long-term bone strengthening treatment to reduce the risk of further fractures. For some patients, usually those under 75 years old, we will need to arrange a DEXA bone scan, when you have recovered from your fracture, to see if long-term treatment is necessary. We will talk to you about this in further detail if it is relevant. For patients over 75 years we often recommend treatment without the need to do a scan as the likelihood of osteoporosis is so high. Treatment is usually calcium, vitamin D supplements, and medication to reduce bone loss e.g. bisphosphonate tablets.

National Hip Fracture Database

This hospital takes part in the National Hip Fracture Database (NHFD), which has been set up to improve the service for patients with fractured neck of femurs. Information collected is confidential and anonymous. If you do not wish for your information to be stored please let a member of staff know.

Leaving Hospital

We hope you will only need to stay with us for a short period of time and the ward team will be working with you to make arrangements for your discharge as soon as you can manage essential tasks safely. You may require support at home from carers, or from the intermediate care team (a team of nurses and therapists who provide skilled care in the community setting), and if so this will be discussed with you. Your discharge needs may change as you improve on the ward, and this will be discussed with you at the time.

Once discharged from hospital, it is important you continue with your hip exercises regularly, and take pain relief if needed. You should look to gradually return to your normal daily activities as you feel able.

If you experience any increased pain, or are having difficulties managing to cope with your everyday activities once at home, we suggest you contact your GP for advice.

Please note: The information provided in this booklet presents the recommended best practice based on the clinical experience of the multidisciplinary trauma team at North Bristol NHS Trust.

NHS Constitution. Information on your rights and responsibilities.
Available at www.nhs.uk/aboutnhs/constitution

**PATIENT
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www.nbt.nhs.uk/oplanned

If you or the individual you are caring for need support reading this leaflet please ask a member of staff for advice.

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