Tameside and Glossop Integrated Care NHS Foundation Trust

Enhanced Recovery Programme

Trauma & Orthopaedics – Hip Fracture

Hip Fracture – Dynamic Hip Screw, Cannulated Screws, Nailing

Patient information Leaflet

Date: August 2018

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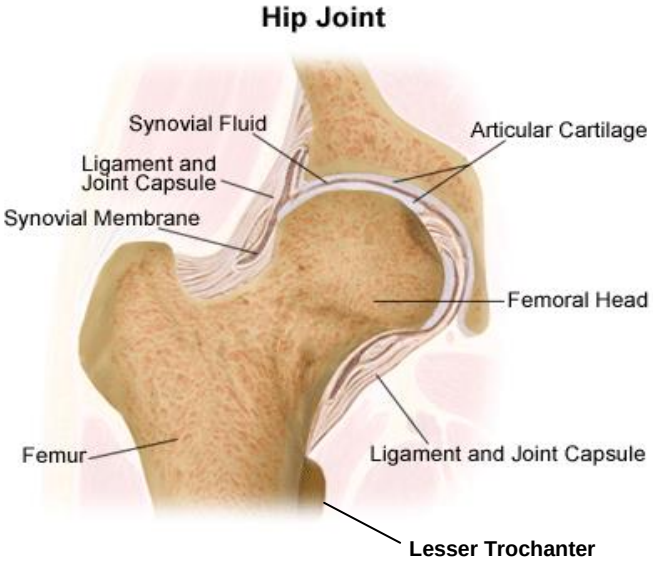
Introduction

Over 70,000 people in the UK suffer a fracture of the hip region every year. Hip fractures are most common in women, and are usually the result of a fall.

Anatomy of the Hip

The hip is known as a ball and socket joint. The ball or 'head' is found at the top of the femur or 'thigh bone', and fits into the acetabulum, the socket of your pelvis. To keep the hip joint stable it is surrounded by a very tough capsule, which also produces synovial fluid which lubricates the joint and aids movement.



What is a Hip Fracture?

A hip fracture is a crack or break in the bone between the top edge of the femoral head, and up to 5cm below the lesser trochanter. There are different types of fractures:

Intracapsular – This is when the fracture occurs within the joints capsule itself e.g. Head of the femur**.**

Extracapsular – This is where the break occurs outside the capsule e.g.Shaft of femur.

Non-displaced – This is where the broken bones have not moved and remain in the correct position.

Displaced – This is where the broken bones have moved and need to be put back into the right position.

Most people with a hip fracture need an operation to fix it. The aim of the operation is to reduce the fracture, align the bone fragments and hold them together in the correct position. The type of fracture you have and its exact location will determine what operation you need.

Diagnosing your Hip Fracture

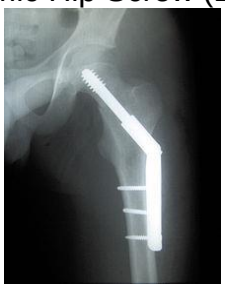
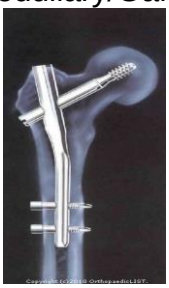
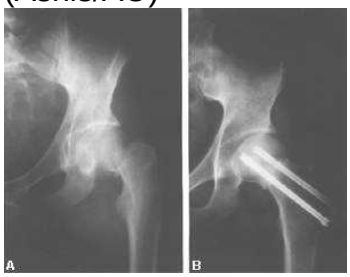
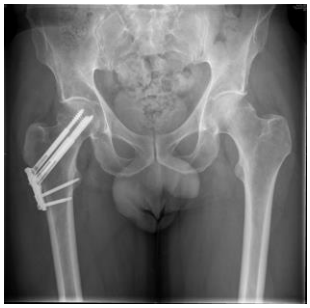
A suspected hip fracture is usually confirmed using x-rays. If the x-rays show nothing abnormal but your healthcare team remain concerned, you may be offered a magnetic resonance imaging (MRI) scan or computed tomography (CT) scan to confirm the fracture.

Treating your Hip Fracture

If you need an operation we aim to do this as soon after your admission as possible. The Doctor will talk to you about your operation and you will be asked to sign a consent form to confirm you agree to the surgery and understand what the Surgeon is planning to do.

Types of Operation

Your hip will be fixed using one of the following operations:

Name	***What it involves***	***Type of fracture treated***
Sliding hip screw/ Dynamic Hip Screw (DHS) 	This is a special metal screw attached to a plate; it holds the broken part of the thigh bone in place whilst it heals	Most trochanteric fractures
Intramedullary/Gamma nail 	This aligns and stabilises the fracture whilst it heals; it is inserted into the middle of the thigh bone for support	Sub-trochanteric fractures (extracapsular fractures that are further down the thigh bone)
Cannulated Screws (Asnis/AO) 	2 – 4 screws are used to hold the broken fragments in the correct position	Undisplaced intracapsular fractures only
Targan Telescrews 	Uses telescopic screws and side plate to stabilise the fracture. Can allow early weight bearing.	Stable intracapsular fractures.

Complications

- **Infection -** Following surgery you are at an increased risk of infection. You will therefore be given a short course of antibiotics to reduce this risk. It is also very important that you avoid disturbing the dressing or touching the wound.
- **Deep vein thrombosis (DVT)** - a DVT is a blood clot which usually forms in a leg vein, and can be caused by your poor mobility. You will therefore be given a course of Blood thinning or 'anticoagulant' medication for approximately 30-35 days.
- **Fracture non-union*** – In some cases the bone fragments of the fracture do not heal or join back together in the normal way.
- **Delayed union*** – occurs when the fracture takes longer to heal than expected.
- **Mal union*** – occurs when the bones do not heal in the correct position.
- **Avascular necrosis** – Can occur following an intra-capsular hip fracture, as the blood supply to the head of the femur may become damaged. Lack of blood causes the bone tissue to die, leading to problems such as chronic hip pain.
- **Pressure ulcers** - a pressure ulcer is an ulcerated area of skin caused by irritation and continuous pressure on part of your body. If you are not very mobile and are spending long periods in bed or in a chair, you are at increased risk of developing a pressure ulcer. It is therefore important that you change position and mobilise regularly.
- **A change in limb length*** – Sometimes there is a lengthening or shortening of the limb length, in the majority of cases this does not significantly affect your recovery.

*****Dependent on the severity of the complication, your consultant may decide that further surgery is required**.**

The Emergency Orthopaedic Unit

The Emergency Orthopaedic Unit accommodates patients undergoing emergency orthopaedic procedures. Male and female patients are nursed in separate areas.

The visiting times are 1pm to 4 pm and 6pm to 8:30 pm every day. The ward has a quiet period every day after lunch to allow patients to rest and so is closed to visitors during this time.

Please nominate one person to ring the ward with any enquiries as answering multiple phone calls greatly impacts on time Nurses could spend with patients. Please advise your family members that specific details of your condition cannot be discussed over the telephone.

Please try and have the following items brought in for you:

- Medications in their original packaging if possible.
- Day clothes- practical shoes/slippers which must have backs. Comfortable, loose clothing is recommended whilst in hospital- shorts, tracksuits or comfortable skirts are ideal.

- Nightclothes, dressing gown and slippers (practical and well fitting, mule type slippers are **not** safe for walking around the ward after your operation).
- Toiletries and towels (please note there are no facilities for washing patient's belongings in the hospital)

We advise that expensive jewellery, personal belongings and large amounts of money are NOT kept in hospital. We suggest that patients keep no more than £10 with them at any one time.

The Enhanced Recovery Programme

The Enhanced Recovery Programme aims to improve the experience and wellbeing of people who require surgery. The Enhanced Recovery promotes your health and wellbeing helping you to return to normal as soon as possible.

There is a great deal of research available on Enhanced Recovery After Surgery, which states that the sooner you get out of bed, begin to walk and start eating and drinking, the quicker the recovery.

With this new approach to care, recovery after surgery is more comfortable, easier and happens more quickly.

This approach involves:

- Pre-operative advice and information
- Carbohydrate rich drinks before surgery
- Tailored postoperative pain relief
- Early feeding after surgery
- Early mobilisation after surgery

These elements speed up recovery and reduce the possibility of complications such as chest infections and muscle wastage.

The Enhanced Recovery Programme aims where possible to ensure patients are involved in their own care. We ask that you play an active role in your recovery and work in partnership with all of the orthopaedic team to achieve this.

Staff involved

The Enhanced Recovery programme focuses on providing the highest quality care using a multidisiplinary approach, which means you may receive input and care from several different members of staff throughout your stay, for example:

- Your Consultant and his team of Doctors
- Ortho-geriatrician/medical doctors
- Trauma Nurse Coordinator
- Anaesthetist/ Theatre/Recovery Nurse
- Physiotherapist/ Occupational Therapist
- Ward Staff (Manager/Sister/Staff Nurses/Auxillaries)
- Casualty Staff (Doctors and Nurses)
- Discharge Co-ordinator/ Social Worker
- Dietician

They will regularly assess your medical needs, abilities and circumstances; and will get you as well as possible both before and after your surgery.

Diet and Pre Load

Research shows that if you are well nourished and hydrated before and after your surgery you will recover more quickly. You will be able to eat normally up to 6 hours before your operation and be allowed clear fluids up to 2 hours before surgery, unless otherwise directed. Clear fluids means water/black tea or coffee or cordial ***no milky drinks are allowed***.

Pre Load is a carbohydrate powder and may be given to you 2 hours prior to your operation. It is used to prevent dehydration and tiredness/weakness and can help you recover more quickly. It has a neutral taste when diluted in water.

After your surgery you should eat and drink as soon as you feel able, and try to continue to eat as normally as possible. This will help you in your recovery. If you have difficulty eating the nurses will monitor your intake, and refer you to a dietician.

Analgesia/Pain Relief

Before Surgery

You will be offered a local anaesthetic injection (Fascia Iliaca Block), which is given in your groin on the side of your injury. This should help to reduce your pain for up to 24 hours and can be repeated as necessary until you attend theatre. You will also be prescribed regular medication to control the pain, which will be prescribed according to your requirements. It is important that you inform staff if you are experiencing pain, which is not relieved by the medication provided. Severe pain on rare occasions could indicate a change in your condition and therefore should be reported to staff.

During and After Surgery

The majority of patients undergoing orthopaedic surgery, will receive either a general anaesthetic alone or sedation with a spinal to help ensure your pain is controlled during and following your surgery. A spinal is where a local anaesthetic drug is injected through a needle into the small of your back, to numb the nerves that supply the lower half of your body.

An anaesthetist may see you prior to your operation to discuss which is the best option for you.

After surgery, you will be provided with regular medication to control the pain, which will be prescribed according to your requirements. It is important that you inform staff if you are experiencing pain which is not relieved by the medication provided, as adjustments can be made. Severe pain on very rare occasions could indicate a problem with the surgery and therefore should be reported to staff.

Day Of Surgery

On the day of surgery you will have been fasted for 6 hours in preparation of your surgery and if appropriate given the Pre-load drink.

You will be assisted to have a full wash before putting your gown on. This ensures that your skin is as clean as possible prior to your surgery, assisting to help reduce the risk of wound infections.

A black arrow will be drawn on the leg to be operated on, in order to identify and assist in confirmation of the correct side of the operation.
The Trauma Coordinator or ward staff and escort staff will ask you some questions on what is called a ‘Pre Operative check list’, to ensure that you have been fully prepared for your operation.

You will be asked to confirm your signature on the consent form and whether you understand what the surgeon is planning to do and that you are aware of the potential risks and complications of the surgery.

You will then be transfered to theatre.

After Surgery

You will probably wake up in the recovery room, where you will be continually monitored. You will have oxygen and a drip in situ giving you fluid into your vein. You will also have a triangular wedge between your legs and 'flowtron boots' around your calves which inflate and deflate and are designed to reduce the occurence of blood clots in your legs (DVT's). You will also be given a small injection each day for 35 days which thins your blood and helps to reduce the risk of DVT's.

Once the Recovery Nurse is happy you are stable enough to return to the ward, your transfer back to the ward will be arranged. Sometimes after surgery it is necessary fro patients to go to a High Dependency Unit (HDU) for closer monitoring. Often this decision is planned and the Anaesthetist will have discussed this prior to surgery, however there are occasions when an unplanned transfer to HDU is required.

On return to the ward your nurse will closely monitor your vital signs, including:

- Blood Pressure
- Pulse
- Respirations and oxygen levels
- Temperature
- Urine output
- Concious level
- Nausea and Pain Scores

Your nurse will also need to regularly check your wound and assist you in the adjusting your position on a regular basis. Please be aware that these observations are important and staff will have to wake you in the night to continue to monitor you safely.

Blood tests and x-rays will be ordered in the days following your surgery by the team of Doctors on the ward, who will also review your progress on a daily basis.

Diet and Fluid

You can eat and drink as normal to your tolerance, we may monitor your intake to ensure you are eating and drinking enough to enable you to recover.

Sickness

Sometimes people experience feeling or being sick after an operation. If you do so, please inform the staff so they can give you some medication to help relieve this.

Post Operative Physiotherapy Information:

Exercises

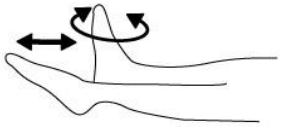
After your surgery it is important that you try to perform some circulatory and breathing exercises, which help to prevent blood clots and chest infections developing following surgery. These excercises will also improve the muscle strength in your legs. (Some patients can experience some muscle pain following surgery please advise your Nurse/Physio if this occurs.)

Deep breathing

- Take 4-6 deep breaths in and out**,** breathe in through your nose and out through your mouth.

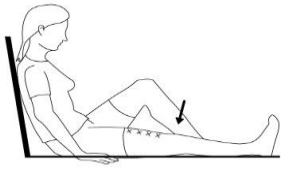
Calf Pumps

- Briskly move your feet up and down, and round in circles, from the ankles for 1 minute.



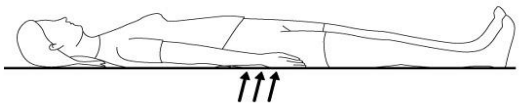
Static Quadriceps

- Lie on your back with your leg straight
- Tighten your thigh muscle and push the back of your knee down into the bed then pull your foot up towards you
- Hold for 5 seconds, relax
- Repeat x 10



Gluts Squeezes

- Tense/squeeze your buttocks
- Hold for 5 seconds, relax
- Repeat x 10



Rehabilitation

Rehabilitation starts in hospital and may also continue beyond your stay if required. Your Physiotherapist will talk to you about which operation you have had, whether there are any special rules you need to follow to protect your hip and how much weight you will be allowed to take through your operated leg when walking.

You will be expected to get up and out of bed usually within the first 24 hours after your surgery: the Physiotherapy team will help you to do so the first time; after that the Nursing staff will assist you into/out of bed each day.

The Rehabilitation team (Physiotherapists and Occupational Therapists) will try to see you daily to:

- Assist you to walk (initially with the help of a walking frame, potentially with crutches as you get stronger)
- Practice transferring to/from the bed/chair/toilet/etc (if you are struggling)
- Provide you with strengthening exercises to perform.
- Provide you with equipment to assist you at home with activities of daily living.

It is important that you try to practice what the Rehab Team teach you with the Nursing staff throughout the day.

Mobilisation:

Getting out of bed:
Your Physiotherapist will assist you to stand from the bed. You should get out on the operated side to avoid crossing your legs:

- Using your hands, push yourself to the edge of the bed
- Allow your leg to gently bend over the side of the bed as you come forward

Sit to stand:

- Slide your operated leg slightly forward
- Push up into the standing position, using your arms to assist you before reaching for your walking aid.

Walking:
Your Physiotherapist will tell you how much weight you can take through your operated leg. To begin with, you will use a walking frame, progressing to crutches if this is appropriate.

The correct sequence when walking is:

1. First move the walking aid forwards/in front.
2. Step forward with your operated leg
3. Step the unoperated leg forward until it is level with the other leg.

When turning **DO NOT TWIST YOUR HIP,** always step towards your unoperated side ensuring that you pick up your feet.

Sitting down:

- Always ensure you have turned and backed up to the chair/bed so that it is aligned behind you ie. never twist into the chair
- Let go of your walking aid
- Feel for the chair arms/mattress
- Slide the foot of your operated leg forwards as you slowly lower yourself down

Getting into bed:

- Sit on the edge of the bed
- With your hands beside you, push yourself back to sit far enough back on the bed so that the operated leg is supported
- Turn to position yourself on the bed

Start the following as directed by your Physiotherapist:

(Perform these 3 x daily in addition previous exercises)

Standing Hip Flexion:

- Hold onto something for support
- Lift your operated leg forwards, up and in front of you, bending at the hip and knee
  ***do not go past 90° degrees**
- Slowly lower down
- Repeat x 5-10

Standing Hip Extension:

- Hold onto something for support
- Tense your buttock
- Lift your operated leg up and backwards behind you, keeping the knee as straight as possible
- Slowly lower down
- Repeat x 5-10

Standing Hip Abduction:

- Hold onto something for support
- Tense your buttock
- Lift your operated leg up and sideways away from you, keeping the knee as straight as possible
- Slowly lower down
- Repeat x 5-10 **ensure the pelvis remains level i.e. do not 'tilt' the hip up**

Tackling Stairs/Steps:

If appropriate, before you go home you will be taught to use stairs safely.

Going up:

1. Hold onto the banister/handrail
2. Step up with your good/unoperated leg
3. Bring up your bad/operated leg, followed by your crutch if you are using one.

Going down:

1. If using a crutch, place it onto the step below, otherwise slide your hand down the banister/handrail.
2. Lower your bad/operated leg down first
3. Bring your good/un-operated leg onto the same step

Initially, you are advised to sleep on your back. After the clips have been removed from your wound, you may try sleeping on the operated side, if it is comfortable to do so.

Monitoring Your Progress

Day of Surgery	**Day 1**	**Day 2**	**Day 3**	**Day 4**	**Day 5**	**Day 6**	**Day 7**
Perform circulatory/ Deep Breathing Exercises Hourly	Perform circulatory/ Deep Breathing Exercises Hourly	Perform circulatory/ Deep Breathing Exercises When in bed	Perform circulatory/ Deep Breathing Exercises When in bed	Perform circulatory/ Deep Breathing Exercises When in bed	Perform circulatory/ Deep Breathing Exercises When in bed	Perform circulatory/ Deep Breathing Exercises When in bed	Perform circulatory/ Deep Breathing Exercises When in bed
	Sit out of bed with assistance 5-8 hours	Sit out of bed with assistance 6-8 hours	Sit out of bed with assistance 8 hours	Sit out of bed with assistance 8 hours	Sit out of bed with assistance 8 hours	Sit out of bed with assistance 8 hours	Sit out of bed with assistance 8 hours
	Progress to Zimmer Frame		**Progress to crutches**	**Perform Stair Assessment**	**Discharge***	**Discharge***	**Discharge***
		Perform Standing Exercises 5-10 repetitions X 2-3 daily	Perform Standing Exercises 5-10 repetitions X 2-3 daily	Perform Standing Exercises 5-10 repetitions X 2-3 daily	Perform Standing Exercises 5-10 repetitions X 2-3 daily	Perform Standing Exercises 5-10 repetitions X 2-3 daily	Perform Standing Exercises 5-10 repetitions X 2-3 daily
	Walk 3-5 metres with frame X 3-4	Walk 10 metres with frame X4	Walk 10 metres with elbow crutches X4	Walk 10-20 metres with elbow crutches X4	Walk 10-20 metres with elbow crutches X4	Walk 10-20 metres with elbow crutches X4	Walk 10-20 metres with elbow crutches X4
*** Length of stay is 5-7 days unless you require further investigations for other medical conditions.**							

Post Operative Occupational Therapy Information

To assist you to manage independently at home you will be assessed by the Occupational Therapist (OT) who may provide you with equipment. If any equipment is required it will be loaned to you, free of charge for as long as you need it.

Your OT can discuss bathing with you after your surgery.

If you have a shower over the bath, a shower board may be assessed for and provided. This depends on the shape of your bath and your ability to use the equipment safely without breaking the precautions.

If you have a shower cubicle avoid standing for too long

Domestic and Kitchen Tasks
Try to avoid the following:

- Standing for too long: take regular rest breaks, a stool or chair of the correct height may be used
- Avoid twisting or over reaching e.g. no hoovering.
- Remove all loose rugs and mats to avoid risk of trips or falls

Discharge

When your consultant thinks you are fit to leave the hospital, the healthcare/multi-disciplinery team will liaise with you (and your relatives/carers as appropriate) to plan your discharge.

There are a number of options for discharge depending on: how well you progress in the early post-operative phase, what your baseline ability was, what your weight-bearing status is and how much potential you have to further progress in the short-term.

A member of your Rehab team will discuss possible rehabilitation with you.

a) You may still need some rehabilitation as an *in-patient*, to help you to regain your independence and function before going home.

   If this is the case a referral will be completed and faxed to the community team, where you will be placed on the waiting list until a bed becomes available at one of the two rehabiliation centres: Shirehill and Grange View. You will be allocated a bed at whichever centre has an empty bed first. Your nurse will inform you when there is a bed available and they will also inform your next of kin.

   You can stay at the rehabilitation centre for up to 4 weeks, where you will be constantly assessed and independence encouraged. A discharge date will be agreed with you following your daily assessments and progress. You will be expected to get dressed on a daily basis.

b) You may have progressed enough to have further rehabilitation *at home*; if this is the case, a member of your Rehab team will discuss the options with you.

If There Is A Problem
If you have any questions do not hesitate to ask a ward therapist or the ward nurse.

Keeping family informed
Please share this information with your family members/ next of kin.

Useful Contacts

Below are several useful contact numbers you can call for advice:

Emergency Orthopaedic Unit	0161 922 6613	(24 hours)
Rosscare Equipment Service	0161 344 0482	(Mon-Fri 9am-4pm)
Go to Doc (GP service)	0161 785 0805	(out of hours)
Emergency Services	999	

You can also contact your own GP or District Nurses for advice.

Source of Good Practice

In compiling this information leaflet a number of recognised professional bodies including the Department of Health, NHS improvement - Enhanced Recovery, NHS Choices, Royal College of Anaesthetists have been used.

If you have any questions you want to ask, you can use this space below to remind you

If you have a visual impairment this leaflet can be made available in bigger print or on audiotape. If you require either of these options please contact the Patient Information Centre on 0161 922 5332

আপনি যদি এই তথ্য পড়তে বা বুঝতে না পারেন,তাহলে অনুগ্রহ করে এথনিক হেল্থ টিমের সাথে টেলিফোনে যোগাযোগ করুন 0161 331 5149/5150 এই নাম্বারে, তখন তারা আপনাকে সাহায্য করতে পারবে।

જો આપ આ માહિતી વાંચી કે સમજી શકો નહિ તો કૃપા કરી, એથનીક હેલ્થ ટીમનો 0161 331 5149/5150 નંબર પર સંપર્ક સાધો તેઓ આપને જરૂર મદદ કરશે.

اگر یہ معلومات پڑھ نہیں سکتے ہیں یا آپ کو اس کی سمجھ نہیں آتی ہے تو براہ مہربانی ایتھنک ہیلتھ ٹیم کے ساتھ ٹیلی فون نمبر 0161 331 5149/5150 پر رابطہ کریں تو وہ آپ کی مدد کر سکیں گے۔

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