

# Hip Fracture Information



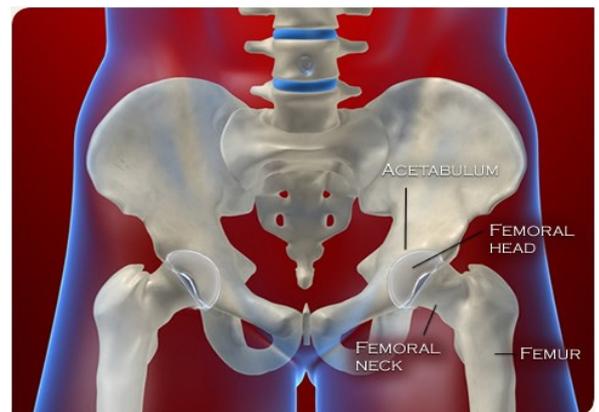
**A guide for patients following  
surgery**

**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 .

## **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’**

A hip fracture is a serious injury, and patients, on average, take between 7 and 30 days in hospital to rehabilitate. This will commence in Altnagelvin but when you are medically stable you can be transferred to your local hospital to complete your rehabilitation/ or if you are able you will go home.

## 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 may receive extra fluids through a drip.

A fractured hip is usually painful. You will be offered painkillers. 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.

**If you are on Anticoagulation ('blood thinning') Medications such as Warfarin, Rivaroxaban and Apixaban your surgery maybe delayed due to the risks of bleeding.**

Most hip fractures require surgery to fix or replace the broken bone, and we aim to operate within 48 hours of your admission to hospital. However at busier times the operation list will run in chronological order. 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 an injection under your skin, to minimise this risk.

All patients admitted into the unit will have an MRSA screen carried out on admission this is to ensure appropriate treatment and placement in the ward and reduce risk of infection to you and other patients.

## **Information for Patients and relatives– Trauma Orthopaedic Unit**

The ward manager wears a red uniform. Her photograph and photographs of the deputy ward sisters are located on the information board on the ward.

The staff work in teams allocated to different parts of the ward, so not all staff members will know you or your relative. If you wish to enquire about your relative ask to speak to the nurse on duty in the team responsible for their care or the nurse in charge.

### **Telephone**

Relatives can phone the ward to make enquires, please nominate one family member to call the ward. The telephone numbers:

**Ward 2 is 028 71 611120                      Ward 5 is 028 71 611205.**

We kindly ask you to avoid ringing at busy times such as nursing handover , ward rounds and protected mealtimes. Times to avoid are 7.30am-10.00 am, 12 midday -12.30, 5pm-5.30 pm and 7.30pm -9pm.

### **Visiting times**

Visiting times are 3pm-4 pm and 7 pm -8.30 pm

### **Flowers**

Flowers are not allowed on the orthopaedic unit.

### **Patient property**

Should be kept to a minimum, patients require pyjamas / nightdress and 'closed in' well fitting shoes,. (this type of shoe reduces the risks of falls and encourages safe mobilisation). It is advised that patient do not have large sums of money on the ward with them and any valuables brought to the ward are kept at the patient own risk.

### **Caring for your relative who has dementia.**

We endeavour to be a 'Dementia Friendly Ward' and have recliner chairs for a relative wishing to stay overnight,. We do our best to comfort your relative, but if we are unable to keep them content, we may telephone the next of kin, and ask them to come to the ward to help reduce their anxiety. We use a purple folder system which highlights to all staff members that this patient has a diagnosis of dementia.

## Before Your Operation

### Trauma Coordinator

During your admission you will meet the Trauma coordinators, they are a team of nurses who liaise with the surgeons, medical, nursing and theatre staff during your pre-operative stage organising your surgery.

### 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).

### Analgesia/ Pain Relief

Regular pain relief will be prescribed, usually this is a combination of paracetamol and OPIOIDS given regularly with extra doses of 'break through' analgesia prescribed. The opioids are only given for a short term basis.

### Consent

Your doctor will explain your proposed operation to you, and ask you to sign a consent form. For patients who are not able to provide consent, surgery will be performed in your best interest, in consultation with your family.

### Fasting

It is vital when you go for your operation that you have an empty stomach. You must not eat anything from 12 midnight prior to your surgery. However you are allowed **WATER** until 7am the morning of surgery, you may have additional fluids through a drip. The nurses will inform you when you are to be fasting.

## Your Medical Needs

A Consultant specialising in medicine (an 'ortho physician') 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:**

### 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. To try to prevent clots developing during your admission and for 28 days post surgery you will be given blood thinning injections and you may be asked to wear stocking or have pumps applied to your lower legs to promote circulation.

## Mortality:

Suffering a fractured hip is a major health event and up to 8% 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 Ortho-physician to manage medical complications and advise on appropriate treatment.

### **Bone cement implantation syndrome**

Can occur during surgery, it usually happens within minutes of the cement being inserted into the bone, the anaesthetist will closely monitor your vital signs to observe for reactions.

### **Trendelenburg gait**

A muscle on your hip, the gluteus medius muscle, often weakens significantly after surgery which causes an abnormal gait. This gait abnormality is called a trendelenburg gait. Many patients will present with this gait after hip surgery to reduce weight bearing through a sore hip. If this walking pattern continues, the hip muscles responsible for hip stability stay weak and do not strengthen normally.

### **Dislocation/Loosening:**

The metalwork might become loose or your hip may dislocate after the surgery. If this happens you may require a further operation.

### **Intra-operative fractures**

Depending on the condition of your bones Intra-operative fractures can occur while the surgeon is preparing you bone for the new implant or fixation, patients with osteoporosis are more at risk of sustain intra operative fractures

### **Trochanteric bursitis**

Is a common disorder that affects the (lateral) side of the hip or hips. Bursitis is the swelling of the bursa, a small fluid sac that releases fluid to allow for smooth motion between bones, tendons, ligaments and muscles. The human body has many of bursae that serve prevent or decrease friction between two surfaces that move in opposite directions. When the bursa becomes inflamed or swollen, problems arise. It will hurt when the bursa needs to move across a bone. Treatment may include physical therapy, adjunctive measures such as rest and application of ice, administration of nonsteroidal anti-inflammatory drugs (NSAIDs),

### **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.

### **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.

### **Leg Length**

The operation can result in different leg lengths. Usually, the feeling of leg length difference settles, but if not, it can be corrected by using a shoe raise.

### **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. It is important to reposition frequently.

### **Confusion/Delirium:**

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 delirium 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 (D.H.S) 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 / nurses 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, some patients may need a blood transfusion.

## 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. It is important that you take regular pain relief so that you are able to move comfortably.

## **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. There is a protected mealtimes policy that means patients should not be interrupted by staff or go off the ward for investigation during mealtimes

## **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.

## **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.

- Selecting appropriate mobility aids to assist you,.
- 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 on-going input from Community / Outpatient Physiotherapy when you leave hospital.

## 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.

### Occupational Therapist

You do not routinely need to be seen by an Occupational Therapist, however if the nursing staff feel you need to be assessed this will be organised. The Occupational Therapist will then work with you to reach a level of function that will enable you to continue to perform essential activities of daily living such as- washing, dressing, transferring in/out of bed and on/off your toilet and chair.

## 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

#### **Static Quads**

Pull your toes up towards your face, brace the knee and tighten thigh muscles. Hold for 5 seconds,.

#### **Repeat 10**

times.



#### **Knee Bracing exercises**

Lie on your back. Bend one leg and put your foot on the bed. Place a cushion under the other knee. Exercise your straight leg by pulling your foot and toes up, tightening your thigh muscle and straightening the knee (keep your knee on the cushion). Hold for approximately five seconds and slowly relax.

#### **Repeat 10 times.**



### Hip Abduction

Lie on your back with a sliding board under your leg. Bring your leg to the side and then back to mid position.

**Repeat 10 times**



### Hip flexion

Lie on your back with a sliding board under your leg. Bend and straighten your hip and knee by sliding your foot up and down the board. If you have had a hip replacement Do not bend hip beyond 90 degrees.

**Repeat 10 times.**



### Knee Extension

Sit on a chair. Pull your toes up, tighten your thigh muscle and straighten your knee. Hold for approximately five seconds and slowly relax your leg.

**Repeat 10 times, regularly throughout the day**



### Hip Extension

Stand straight, holding on to a chair. Bring your leg backwards, keeping your knee straight. Do not lean forwards.

**Repeat 10 times, regularly throughout the day.**



### Hip Flexion

Stand straight. Hold onto a support. Bend your hip and knee up in front of you.

If you have had a hip replacement Do not bend further than 90 degrees.

**Repeat 10 times, regularly throughout the day.**



### Hip Abduction

Stand straight holding on to a support. Lift your leg sideways and bring it back, keeping your trunk straight throughout the exercise.

**Repeat 10 times, regularly throughout the day**



## Ongoing Rehabilitation

Altnagelvin Hospital is an acute setting where your surgery takes place. Following surgery most people require a period of rehabilitation, working with physiotherapists and occupational therapists to promote independence with mobility and activities of daily life. Within the unit there are many discharge pathways, depending on your requirements and your home location will determine which pathway is available to you. The Multi disciplinary team who have been managing your care will discuss, discharge plans with yourself and/or your family to arrange the most appropriate placement for your ongoing rehabilitation. Once you are ready for discharge you may be referred to the community rehabilitation team or the Physiotherapy out patient department where you can continue your physiotherapy.

## 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. Staff 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 helps to nominate one 'spokesperson' to make enquiries and to feedback to other relatives.

## **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 risk of further falls. To avoid further falls we recommend that you have your hearing and vision checked regularly and avoid consuming excessive amounts of alcohol/caffeine.

## **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. It is recommended for bone healing that you avoid smoking.

## **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. A nurse from the department will carry out telephone reviews throughout the year to monitor your progression. 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 . 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.

Before you can go home your wound must be healing properly. You should be able to walk short distances on a walking aid and if necessary the Physiotherapist will carry out step / stair practice.

you should be able to walk short distances on a zimmer frame/ crutches, you will be able to go up/ down stairs if needed.

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

### Wound care advise

- Keep your wound clean and dry
- Do not tamper with your dressing
- Take pain relief as required
- Carry out exercises as shown
- Eat a well balanced diet and drink plenty of fluids

### Signs of Infection

- Increased discomfort/ swelling/ Burning under the dressing
- Redness spreading through hip or leg
- Pus coming through the dressing
- Feeling unwell/ flu like symptoms or sweating
- Offensive smell
- High temperature

Report any signs of infection to the ward you where discharged from.

**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 Altnagelvin Area Hospital**

**If you have any concerns please contact:  
Aisling McCloskey Fracture Outcomes Nurse  
028 71 345171 ext 214058**

**Or outside working hours please contact  
The Trauma Orthopaedic Ward  
028 71 611120**

**Or  
The Elective Orthopaedic Ward  
028 71 611205**

**Ask to speak to the Nurse in Charge**