Fractured Neck of Femur

Trauma and Orthopaedics

Patient Information
Fractured Neck of Femur

Introduction
This leaflet has been designed to help you, the patient, and your relatives have a better understanding of the type of injury you have sustained and the operation you require.

During your stay in hospital if you or your next of kin have any questions please do not hesitate to ask the ward sister and their nursing team.

What is a Fractured Neck of Femur (NOF)?
A fractured neck of femur is when the top part of the hip bone becomes broken.

This type of fracture will require an operation to repair the break and there are three types of operation available, namely:

- Hemiarthroplasty
- Dynamic Hip Screw
- Intramedullary Nail

The operation you have will depend on the type of fracture you have sustained.

Hip Fractures – Why do we operate?
Almost all patients with hip fractures benefit from surgery. This is because the broken bone at the top of the femur takes a long time to heal (frequently not healing at all). It is not possible to immobilise the bone for long enough in the right position to allow healing without surgery.

The aim of the surgery is to get you back on your feet and home safely as soon as possible.
Hip Fractures – Which operation?

There are two main types of hip fracture:

- **Intracapsular**

In this injury the ball on the top of the femur has broken off at its junction with the narrow neck of the upper thigh bone.

Occasionally it is possible to fix the ball back, but it is usually removed and replaced with a hemiarthroplasty. The socket part of the hip joint is undamaged and therefore not disturbed.
- **Extracapsular**

| In this case the thigh bone is broken at the junction between the neck and shaft (intratrochanteric region). Surgery involves replacing the bones in the correct position, fixing together with a screw and plate (Dynamic Hip Screw), or with a nail down the middle of the bone (Intradmedullary Nail).
| Extracapsular Fracture

| Dynamic Hip Screw | Intradmedullary Nail |
| Dynamic Hip Screw | Intramedullary rod fixation |
Hip Fractures – Complications of surgery

It must be appreciated that a hip fracture in an elderly patient is a very serious injury and, even in the absence of any specific complications, this injury may result in permanent deterioration in general health and worsening of any co-existing medical conditions.

Pre-Operatively (before your operation)

On arrival at the Accident & Emergency Department you will have been X-rayed and an intravenous infusion (IVI, otherwise known as a drip) will have been commenced. This is to ensure that you are not dehydrated before you go to theatre. Further investigations required are blood tests and an ECG (tracing of your heart). You may also require a urinary catheter; this enables us to monitor your urine output closely. A urinary catheter may also be required if you have a lot of pain and are unable to use a bedpan or urinal bottle.

As an emergency admission you will be put on the 'trauma' list, which is for emergency cases requiring an operation. Whether you have your operation in the morning or the afternoon will depend on when there is space available on the theatre list. Our aim is for you to go to theatre within 24-36 hours after admission. However, your operation may be delayed if you have an underlying medical condition that requires treatment.

During your stay you will be cared for by the orthopaedic team. You will be reviewed by the medical consultant prior to your surgery to ensure that you are as fit as possible for your surgery.
Some patients require a blood transfusion or iron supplements, either before or after an operation. The blood tests that are carried out will determine whether or not you are anaemic.

Please note that there is always the possibility of your operation being postponed if a more urgent case is admitted, or the anaesthetist / medical consultant may feel that you require other treatment to ensure that you are fit enough to have an anaesthetic.

**An anaesthetist will see you prior to your surgery, so that he / she can determine if you are fit for surgery.**

**Your Anaesthetic**

Spinal anaesthesia or general anaesthetics are often used during hip fracture surgery. A spinal anaesthetic is when a local anaesthetic drug is injected through a needle into the small of your back to numb the nerves from your waist downwards for three to four hours. This may be combined with sedation to help relax you during the operation and to help position you comfortably for the spinal injection.

You may be given a general anaesthetic instead. This is an anaesthetic where you are unconscious during the operation. This may be accompanied by a nerve block such as a fascia-iliaca block. This injection numbs the nerves around the hip for 16-24 hours after the operation and so helps reduce the amount of strong painkillers you require after the operation.

The anaesthetist will see you before the operation to assess you medically and will discuss the type of anaesthetic he / she would recommend and will be able to answer any questions you have about your anaesthetic.
Post-Operatively (after your operation)

After the operation there is a possibility that you may become confused and disorientated. This confusion tends to be short lived. When you return to the ward after your operation you will have oxygen in place, usually via a nasal tube under each nostril. This will remain in place for 24-48 hours and will ensure that you receive a good oxygen supply to your body.

Your wound will be monitored and dressed as required.

You will have an intravenous infusion (IVI, otherwise known as a drip) and a urinary catheter. Your IVI will be removed as soon as you are drinking adequately. You will be offered supplementary drinks pre and post operatively.

Your catheter will be removed two days after your operation; it is usually removed at night as most people pass urine first thing in the morning.

It is very important that you start to walk as soon as possible. This helps with healing and will prevent any further complications, for example chest infections and pressure sores (bedsores).

To reduce the risk of developing a deep vein thrombosis (DVT), which are clots in your legs, you will be given an injection each evening, however this injection does not eliminate the risk of you developing a clot. You will also have a pair of compression stockings and / or calf pumps which will be applied to your calves whilst in bed; these massage your calves to improve circulation.

There is a possibility that, due to painkillers and lack of mobility, you may become constipated. This is quite normal and you will be offered laxatives to rectify this.
Once on the ward, your pain will be controlled with regular painkillers. The nurse will keep you comfortable by helping you change position in bed. Your pain will be monitored by the nursing and medical teams.

It is important that you inform the nurse looking after you if you have pain.

**Possible complications**

**Infection:**
Antibiotics are given routinely to reduce the incidence of this serious complication. If an infection occurs around a hemiarthroplasty, the prosthesis may have to be removed and the patient left without a hip joint (girdlestone operation). In this case you will need a shoe raise to aid walking and your walking distance will be limited.

**Failure of the wound healing:**
This can be due to poor state of health and general frailty of some hip fracture patients; a further hip operation may be necessary.

**Failure of the bone healing:**
In some cases the bone is not hard enough to allow the prosthesis or fixation device to obtain a secure hold; this often results in the shortening or angulation of the leg.

**Dislocation of a hip prosthesis:**
This is a rare complication that requires manipulation under anaesthetic and occasionally, a short period on traction before resuming mobilisation.
Chest infections and heart problems:
These are common but serious medical complications following hip fractures. After your operation, you will be seen routinely by the medical team to minimise your risk of developing these complications.

What is the prognosis (outlook) after a hip fracture?
A fractured hip is both a life changing and a life threatening condition. Your prognosis will depend to some extent on how fit you were before you broke your hip. However, even for the fittest of people, a hip fracture can mean that you do not regain your full mobility afterwards. Some people may also have persistent pain in their hip area after a fracture. If you were less fit when you broke your hip, you may find that after a hip fracture, it becomes difficult for you to live independently.

Some people need extra care when they move back home after a hip fracture. Others may need to move into a residential or nursing home so that they can get the extra care with mobility that they need. For these reasons, fracturing a hip is something that many people fear as they get older.

Resuscitation
This information is applicable both pre and post operatively.
Due to the seriousness of this injury, we feel the patient and / or family should be made aware of cardio-pulmonary resuscitation (CPR).
Cardio-pulmonary arrest means that a person's heart and breathing stop. It is sometimes possible to restart the heart with emergency treatment called CPR.

It is appreciated that this is a very difficult and traumatic time. However, the doctor or senior nurse should discuss CPR with the patient and/or family. If, however, the patient is already ill, has a complex medical condition, is frail and elderly, near to the end of their life, it may not be beneficial, when their heart and breathing stop, to revive them. In this case, restarting the heart and breathing may do more harm than good, prolonging, pain and or suffering.

Bone Health

‘Brittle bone’ (osteoporosis) treatment

If you are an elderly person who has broken your hip, you may be suffering from a condition known as osteoporosis or brittle bones.

This is very common especially if you are female and you may be referred for a special scan known as a DEXA scan to confirm this. However, more commonly, if you are over the age of 75 years, you will be treated for this condition without the need of a DEXA scan as it is extremely common in this age group.

There are many potential treatments for osteoporosis but commonly a group of drugs called bisphosphonates are used, of which Alendronic Acid is the commonest. You will also be given calcium and vitamin D supplements to help strengthen your bones further. Alendronic acid is taken once a week. It is very important that you take this medication on an empty stomach first thing in the morning and be upright (sitting or standing) for at
least half an hour to minimise the side effects and improve effectiveness.

Generally, bisphosphonates are given for a duration of 5 years after which your need for the medication will need to be reviewed. This is to prevent potential long term side effects, which may include the risk of atypical thigh bone fractures. This is often done by your GP. Other more common side effects may include indigestion, headache, constipation or diarrhoea – please refer to the product leaflet for a comprehensive list of side effects. If you experience intolerable side effects, please consult your GP as he/she may be able to suggest an alternative. Stopping these drugs prematurely may mean you are at an increased risk of future fractures.

You may be prescribed other drugs such as Strontium, Denosumab, Zoledronic acid or Teriparatide for the treatment of your osteoporosis if you are unable to tolerate bisphosphonates or the treatment was deemed ineffective. In these circumstances, we will discuss this with you or your family.

Mobility and Rehabilitation

Your mobility will be supervised by physiotherapists and nurses.

On the first day after your operation you will be assisted to get out of bed and sit in a chair. You will be helped and taught how to walk with a Zimmer frame. We will continue to help you walk, on a daily basis, until you regain your confidence.

It is very beneficial and helpful for relatives to bring in outdoor clothes so that, you get dressed during the day as part of your rehabilitation. As soon as the doctor, nurse, physiotherapist, occupational therapist (multi-disciplinary team) are happy with
your progress you will be discharged, either to your own home or a nursing or residential home depending on how well you recover. In the event of the latter, the decision will be made in full consultation with you and your family.

As part of your rehabilitation you might be considered to continue your rehabilitation within your own home supported by the Supportive Discharge Programme. The aim of Supportive Discharge Programme (SDP) is to provide a greater proportion of your rehabilitation within your home setting rather than in hospital. It is not suitable for everyone however it has been found that patients can achieve better outcomes from rehabilitating at home rather than in a hospital.

In some cases you may require a little more time in hospital before your discharge for further rehabilitation. This may require you to be transferred to a different hospital such as Ashford, Woking or Walton. Again, we will do this in full consultation with you and your family and will be arranged via our ward nursing teams.

**Exercises for Fractured Neck of Femur**

These exercises will improve your muscle strength, range of movement, and prevent circulation problems. It is up to you to practice your exercises to get the most out of your hip.

1. Sitting upright in the chair or bed, take a slow deep breath in through your nose and out through your mouth. Try to get the air to the bottom of your lungs.

   Repeat 3 times every hour to help prevent a chest infection.
2. In the chair or bed move both ankles up and down. Repeat as often as possible.

3. On the bed squeeze your buttocks firmly together. Hold approximately for 5 seconds and then relax.

4. On the bed lying on your back or sitting up, pull your ankles towards you and push the back of your knee into the bed. Hold approximately for 5 seconds and then relax.

5. On the bed, slide foot of operated leg up towards you and down slowly.

Repeat …… times a day [to be filled in by your physiotherapist]

6. On the bed, slide the operated leg out to the side and back, keeping your knee straight and foot pointing to the ceiling.

Repeat …… times a day [to be filled in by your physiotherapist]
Standing Exercises

The following exercises will help muscles recover fully. These should be done …… times a day after discharge from hospital [to be filled in by your physiotherapist].

1. Stand upright holding onto a firm surface e.g. kitchen worktop. Lift your leg sideways keeping your toes facing forwards and then bring it back to the middle. Keep your body straight through the exercise.

Repeat …… times

2. Stand upright holding onto a firm surface e.g. kitchen worktop. Lift your leg backwards off the floor, keeping your knee straight. Do not lean forwards.

Repeat …… times

3. Stand upright holding onto a firm surface e.g. kitchen worktop. Lift your leg off the floor, bending your knee, then lower your leg back to the floor.

Repeat …… times

Your physiotherapist will ensure you have an exercise regime prior to your discharge.
Discharge Advice

Swelling
It is not uncommon to have swollen ankles for at least 3 months following your surgery. You are advised to rest in bed for 1-2 hours in the afternoon to help reduce the swelling.

If your calf becomes swollen and tense to touch, it may be a sign that you have developed a DVT. It is important that you contact your GP urgently or attend the Accident & Emergency Department for further advice and treatment.

Painkillers
Only take the tablets you were given on discharge. As the pain eases, these should gradually be reduced. If you require any help or information regarding your medication on discharge, please contact your GP.

Stitches/clips
These will be removed 14 days after the operation by either your practice nurse or district nurse or if you remain in hospital by a nurse on the ward.

Exercise
Do continue your exercise regime as taught to you by your physiotherapist, and gradually increase the number of times you repeat each exercise as soon as you feel comfortable to do so.

Do go for short walks regularly. Try to slowly increase the amount you are doing each day. The amount you do will not damage your hip, but might tire you out at first.
Why a National Hip Fracture Database?
And why information about your care is important.

Hip fracture is a common injury, and caring for patients with hip fracture is an important part of the work of the NHS.

This hospital takes part in the National Hip Fracture Database (NHFD), which has been set up to improve the care of patients who have broken a hip.

Information gathered about care in hospital and about recovery afterwards enables us to measure the quality of that care and helps us to improve the services we provide.

Reports based on NHFD data are made to our clinical staff to assist them in improving care here. NHFD national reports show how different hospitals compare, thus helping to improve standards of care nationally.

So, information about your care and progress is important, and will be collected during your hospital stay. And, because your progress after you leave hospital matters to us, you may be contacted later about how you are getting on.

All information collected is confidential, and no information is ever made public about you or about any other patient. All NHFD information is stored, transferred and analysed securely – both in this hospital and within the national database – in keeping with the provisions of the Data Protection Act (1998). Participation is, of course, voluntary; and you are free, if you so wish, not to take
part - tell your doctor if you do not wish to participate. However, the more people take part, the more helpful NHFD will be in improving care.

NHFD is supported by the National Clinical Audit Support Programme, a division of the Information Centre for Health and Social Care.

More details are available at: www.nhfd.co.uk

Follow up phone calls:
As part of the NHFD we conduct follow up phone calls, these are done 30 days after admission to hospital with your broken hip. We will ask you or care home about your mobility and if you are still taking the bone protection medication you were prescribed whilst you were in hospital. We will make the calls as briefly as possible in order not to inconvenience you too much.

General Advice
If you develop pain in your calf or chest, or your wound becomes, red, hot and / or oozes, please come to the Accident and Emergency Department or contact your GP urgently.

Visiting Times / Ward Facilities

Visiting is restricted so please consult the ward staff to confirm appropriate times.

If you need to visit outside visiting hours please speak to the Ward Sister or nurse in charge.
Swan ward has two wings they have their own direct telephone lines:

- 01932 723221
- 01932 723220

Relatives are very welcome and encouraged to participate in all aspects of care, but we would request that only one member of the family phones at all times for information, then passes this on to other relatives.

Further Information

Further information may be obtained by logging on to our website www.nhsdirect.co.uk (Click on Health Encyclopaedia > Alphabetical index (f for femur)

Further Information

We endeavour to provide an excellent service at all times, but should you have any concerns please, in the first instance, raise these with the Matron, Senior Nurse or Manager on duty. If they cannot resolve your concern, please contact our Patient Advice and Liaison Service (PALS) on 01932 723553 or email pals@asph.nhs.uk. If you remain concerned, PALS can also advise upon how to make a formal complaint.

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We can provide interpreters for a variety of languages, information in larger print or other formats (e.g. audio) - please call us on 01932 723553.

To use the Text Relay service, prefix all numbers with 18001.

Ashford and St. Peter's Hospitals
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