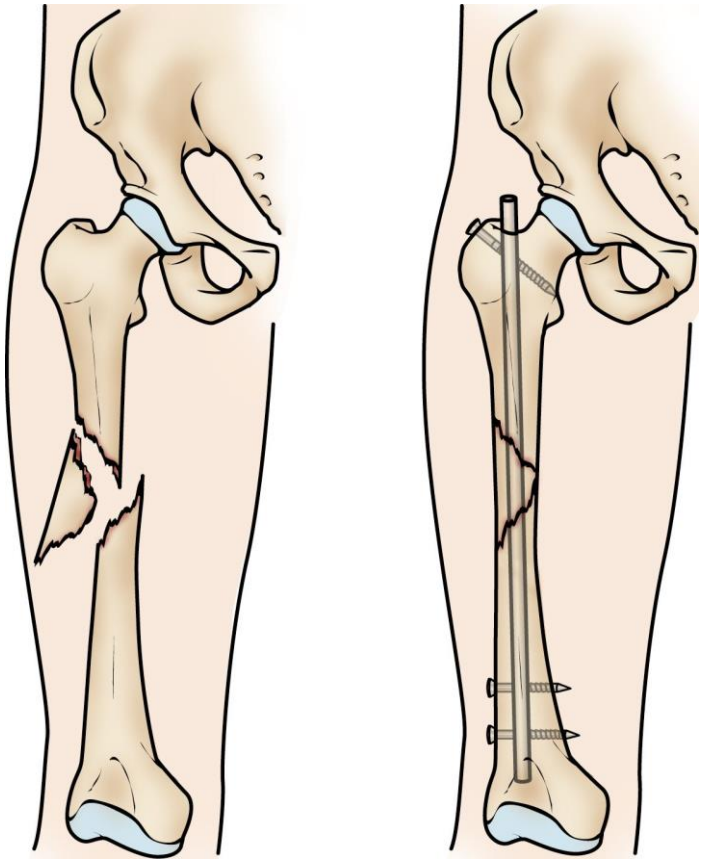
ST. JAMES'S HOSPITAL
DUBLIN . IRELAND



A Patient's Guide to Hip Surgery (Intramedullary nail)

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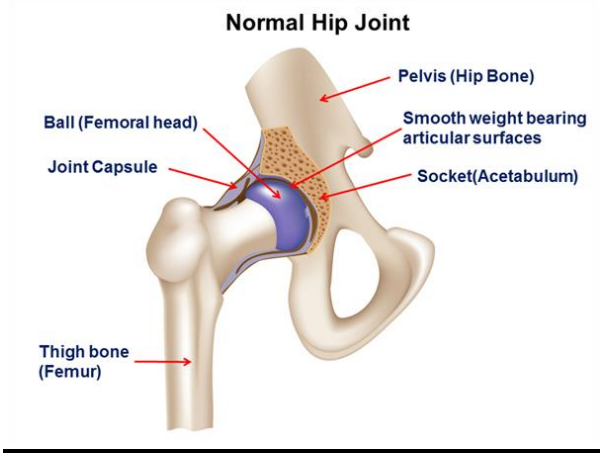
Introduction

During your stay in St. James's Hospital you will be cared for by a multi-disciplinary team made up of doctors, nursing staff, care assistants, physiotherapists, occupational therapist and if needed a social worker.

This leaflet aims to answer your questions about having surgery for a hip fracture. It explains the benefits and risks, as well as what you can expect when you come into hospital and after your surgery. What to expect after surgery, your rehabilitation and how to continue your successful recovery at home.

As a team our overall goal is to ensure that you have the best possible experience during your hospital stay and have the best possible outcome from your hip surgery. If you have any further questions, please speak to a doctor or nurse or any of the therapy staff caring for you.

Anatomy of the Hip

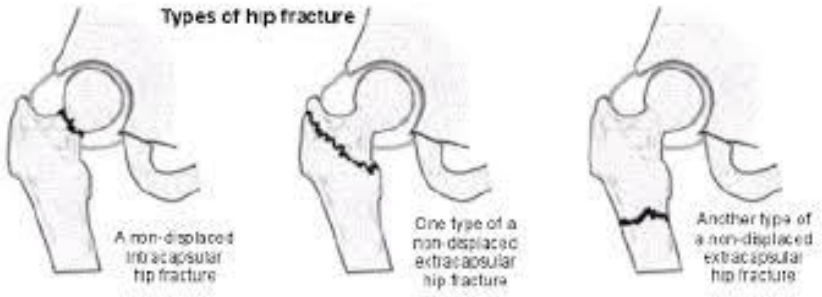


A Healthy Hip:

The hip is a ball and socket joint. The ball is formed by the head of the thigh bone (femur) and fits snugly into the socket (acetabulum) in the pelvis. In a healthy hip, the surfaces are covered by a smooth substance known as articular cartilage or gristle. This allows the ball to glide easily inside the socket. When the surrounding muscles support your weight and the joint moves smoothly, you can walk painlessly.

A Fractured Hip:

The hip can break inside the capsule (an intracapsular fracture) or outside the capsule (an extracapsular fracture). You have a subtrochanteric fracture (3rd diagram), meaning that you have broken your hip outside the capsule along the thigh bone (femur). In order to stabilise the femur, a long nail will need to be inserted.



Fracture inside the capsule Fracture outside the capsule Fracture at top of the thigh bone

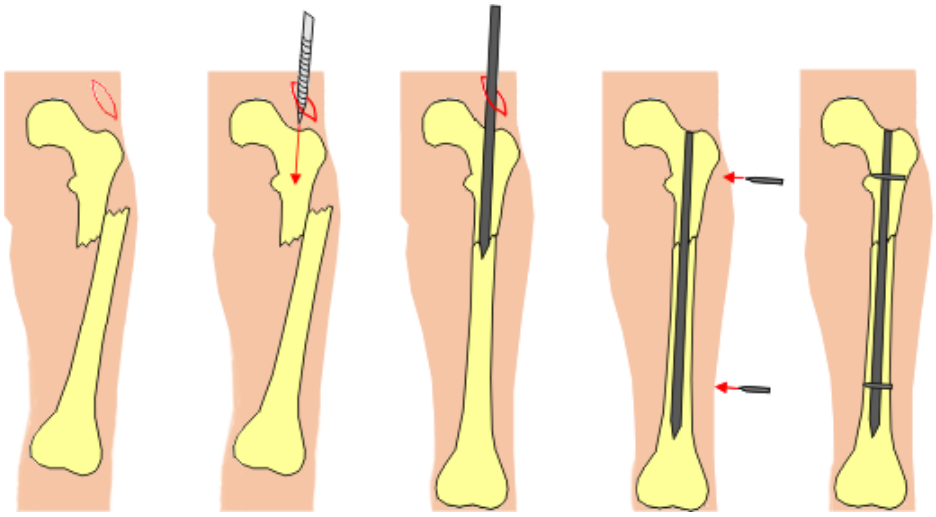
Intramedullary Nail Surgery

Your surgeon has advised that you need an operation to insert an intramedullary nail (IM nail) because of where your fracture is, as well as your general health and level of mobility. The surgeon will discuss it with you in more detail before the operation and give you the opportunity to ask questions.

Having surgery will relieve pain and improve mobility allowing you to get back on your feet quicker.

What happens during an intramedullary nail insertion operation?

A cut will be made at the top of your thigh and another cut just above your knee on the inside of your thigh, to allow the surgeon to fix the fracture. Your fracture will be fixed by placing a long nail inside the thigh bone (the femur) from the hip joint down, close to your knee joint (please see the picture below). Smaller nails will be used to keep it in place.



Intramedullary nail insertion following femur fracture.

The day after your surgery

After breakfast, the nurses will help you to have a wash. The doctor will review you and may need to take a blood sample.

The day after your surgery you will be seen by physiotherapists. It is up to you to take responsibility for your rehabilitation. The physiotherapists will work with you to get moving. They will see you the following morning and practice sitting you on the edge of the bed and standing. Most people stand up, walk with a frame and sit out in a chair on the first day. You should aim to sit out of bed for a few hours on the first day after your surgery. The nurses will help you back into bed.

From the second day onwards, the physiotherapists will assess your progress daily and set goals with you for your ongoing rehabilitation. Remember, your goals will vary depending on what you were able to do before your operation.

Common activities:

- Walking on the ward (with a frame or crutches as necessary).
- Getting from your bed to the chair or toilet independently.
- Using the bathroom facilities.
- Climbing a few steps or stairs.

What you can do to speed up your recovery

- Take your pain medication. It is very important that your pain is well controlled so that you can actively participate in therapy. Always consider what your pain will be like when you are moving, not just when you are lying still. If you feel the pain will affect your ability to move, you must let your nurse know so that they can give you additional pain medication.
- Clothing and footwear. Please ask your family/friends to bring in supportive slippers or flat shoes, day clothes, toiletries and any hearing aids or glasses that you normally use. This will help you get back to normal more quickly.

Physiotherapy

The aims of physiotherapy post surgery are:

- To restore independence by being able to walk by yourself with a walking aid and be able to use the stairs
- To regain movement, strength and control around the hip
- To encourage return to normal activities such as work and all your usual hobbies

Exercises

Before being allowed to get out of bed for the first time, it is important to do the following exercises. The exercises will promote recovery by helping muscle healing and aid in developing strong muscles around your new hip. Below are some of the benefits of these exercises:

- Minimise the risk of blood clot formation
- Strengthen muscles and keep joints mobile
- Prepare the operated leg for normal walking technique

1. Take 3-4 deep breaths, in through your nose and out through your mouth.
2. With your knees straight, move your feet up and down at the ankles x 20 times (ankle pumps)
3. Tighten your thigh and buttock muscles and hold for 3 seconds before slowly releasing- repeat x 10 times

Your physiotherapist will advise you of hip exercises that are to be practised post operatively, both in lying and in standing, to build up the muscles around the hip joint and ensure that the affected joints do not become stiff post-surgery. These exercises should be performed within a comfortable range and should not lead to excessive pain or discomfort.

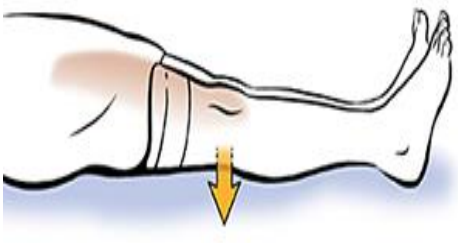
Hip Exercise Programme

As discussed earlier in the booklet, it is advisable that you do exercises before, as well as after surgery, in order to ensure that your body is in the best possible shape it can be prior to having your surgery. Below are some examples of exercises you can do.

1. **Ankle Pumps**

Lying on your back or sitting in a chair, move your ankle up and down as shown in the picture. This exercise is also good for your circulation.

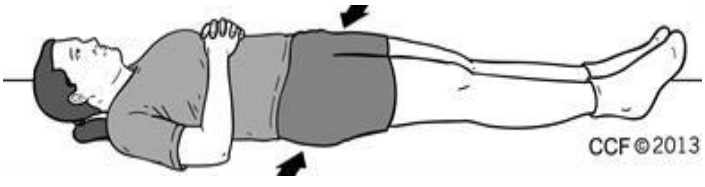
2. **Quadriceps Sets**



Lying on your back with your legs straight, squeeze the muscles at the front of your thigh by trying to push the back of your knee down into the bed. Hold for 5 seconds and repeat 10 times.

3. **Gluteal Sets**

Lying on your back or sitting in a chair, squeeze the muscles in your bottom together. Hold for 5 seconds and repeat 10 times



4. **Inner Range Quadriceps**

Place a towel at the back of the knee of the operated leg. Push the back of the knee into the towel to straighten the leg and lift

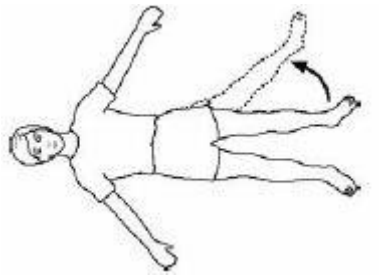
the heel up off the bed. Hold the contraction for 5 seconds. Slowly return to starting position. Repeat 10 times.

5. **Active Hip and Knee Flexion**

Lying flat on your back with your legs straight and toes pointed towards the ceiling. Keep the heel in contact with the bed and bend your hip & knee. *Ensure it is not beyond 90 degrees hip flexion.* Return to starting position. Repeat 10 times.

6. **Active Abduction**

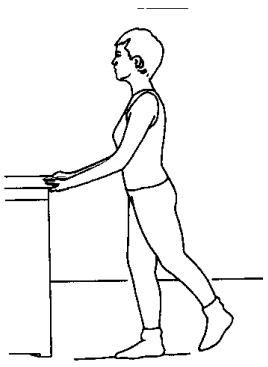
Lie on your back, start with legs together. Your operated leg out to the side, then back to mid position. Do not cross your legs. Repeat 10 times.



7. **Active Abduction in Standing**

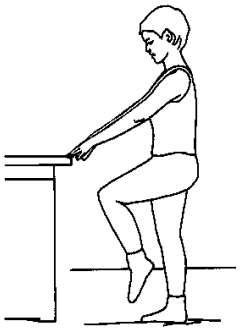
Point toes forward. Bring the operated leg away from the body in standing. Return to starting position. Repeat 10 times.

8. **Active Extension in Standing**



Step your operated leg backwards. Try to keep your back and knee straight. Return your foot to the start position. Repeat 10 times.

9. **Active Flexion in Standing**
   Lift your operated leg in front of you. Ensure not to bring your knee higher than the level of your hip. Keep back straight. Return your foot to the floor. Repeat 10 times.



Walking

After an uncomplicated surgery, you will be encouraged to put your full weight through the operated leg when using a frame or crutches for support. When walking with a frame, move the walking frame first, then move the operated leg and finally the unoperated leg. Turning round can to be either side but you must not twist or pivot on your operated hip. Therefore, you must step around so that the operated leg is not placed too far in or out. As your confidence and leg strength improves, you will progress to walking with sticks or crutches. You should practice with these until a satisfactory walking pattern is achieved.

Rehabilitation

Over the days following your surgery, you will continue with your rehab on the ward. This involves increasing the distance you are walking, increasing the strength in your hip, progressing from a frame to crutches if you are able as well as increasing your independence with getting in and out of bed and performing your personal care on the ward.

You will also need to practice the stairs if you will need to use them on discharge.

<u>Sitting and getting in and out of chairs:</u>

Sitting down:

- The back of your legs must touch the chair before sitting.
- Leave the crutches or frame aside.
- Reach both hands back to feel the arm of the chair.
- In the early post- operative days, as you sit down, slide your operated leg forward straight out in front of you and sit into the chair.
- To move back in the chair, slide your bottom back.

Getting out of a chair:

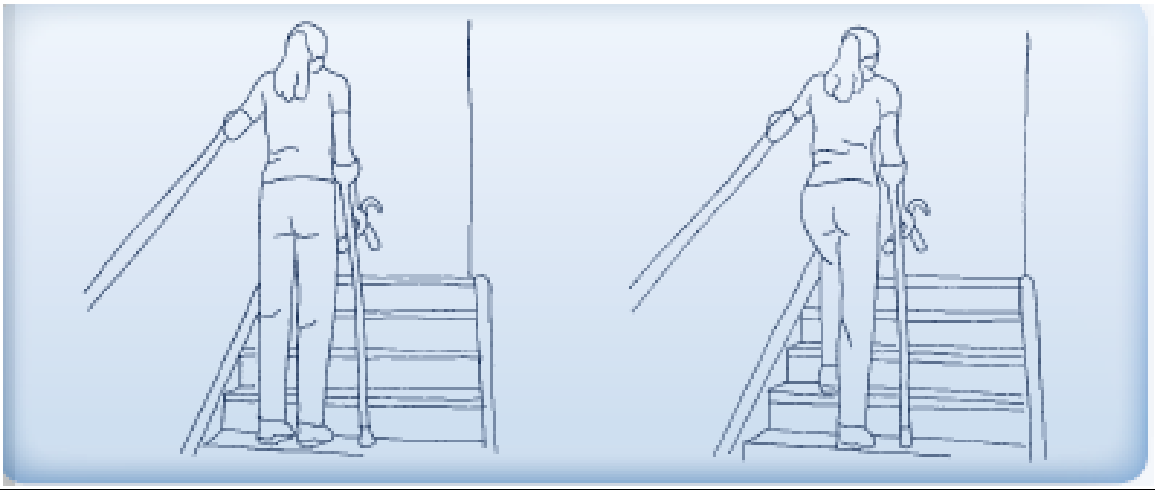
- Move out to the edge of the seat.
- Position your walking aid correctly.
- Push down on the arms of the chair with your hands and lean on your un-operated leg to stand up.
- Straighten up and grip your walking aids.
- Never pull yourself up using the walking aids as these will be unstable.

Stairs:

Going Up: Step up with the good leg first, then with the operated leg (and finally the crutch if necessary).

Going Down: Lead with the crutch first (if necessary), then step down with the operated leg and follow with the good leg.

Just Remember: Good Leg To Heaven, Bad Leg To Hell!



Car Transfers

Getting into car – move seat back as far as possible, stand with your back to the car and lower yourself down slowly onto the seat with your operated leg slightly out in front of you. Twist your bottom and swing your legs into the car.

Getting out of the car – reverse of getting into the car, ensuring the operated leg is out in front of you before you stand.

Discharge Planning

Discharge planning begins from the moment you come into the hospital for your surgery. If possible, the goal would be that you would be discharged straight home from hospital, usually within one to two weeks after your surgery. However, if this is not possible, for example if you are still needing assistance to walk or perform daily activities that cannot be provided at home or if you live alone and will not be able to manage, you will be given the opportunity to go to convalescence, where you will have more time to recover. Examples of where you could go for convalescence in Dublin include the Kiltipper, Kilcock and St Lukes Hospital.

Some patients may require more rehabilitation. Depending on your needs, MISA (Mercer's Institute for Successful Ageing) and The Orthopaedic Hospital in Clontarf are two options. Your doctors and therapists will discuss your best option for recovery with you when appropriate.

Your road to recovery will not end when you are discharged from hospital. When you leave the hospital, you will most likely be walking with a frame or elbow crutches, and you may require some help with your daily activities such as washing, dressing and meal preparation. Your therapists will discuss ongoing rehabilitation plans with you before you go home. Full recovery may take many months but the quickest part of your recovery will be in the first six to twelve weeks after your operation.

Potential Complications

The vast majority of patients do not experience any complications after hip surgery. This table includes complications that could potentially occur and gives suggestions on how you can minimise the risk of developing them

Complication	Signs and Symptoms	Examples of how you can minimise the risk
Blood Clots	Pain and/or redness in your calf and leg unrelated to your incision Increased swelling of your thigh, calf, ankle or foot Increased skin temperature	Exercising and staying active Blood thinners (if prescribed by your Doctor only) Compression stockings
Pulmonary Embolism (when a blood clot travels to the lungs from elsewhere)	Shortness of breath and chest pain or pain when breathing	Blood thinners (if prescribed by your doctor) Exercise and staying active Compression stockings
Infection	Increased pain and redness around wound Any unusual drainage from your surgical wound, particularly if very discoloured	Letting your doctor know you have had a total hip replacement as you may need antibiotics
Constipation	Difficulty or inability to move your bowels daily	We will prescribe laxatives and, as necessary. We recommend you stay active, eat a balanced diet and drink water.
Delirium	Varies from person to person: Confusion, withdrawn, quiet, agitated, and aggressive.	We will help this by monitoring you closely; re-orientating you regularly and ensuring pain, constipation and infection are treated quickly.