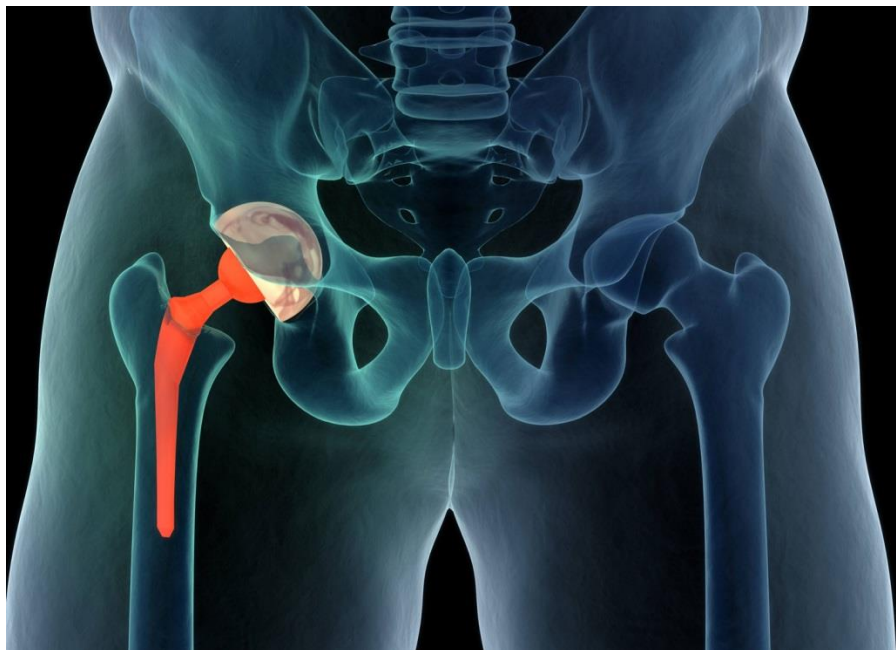


# **A Patient's Guide to Total Hip Replacement**



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## **Introduction**

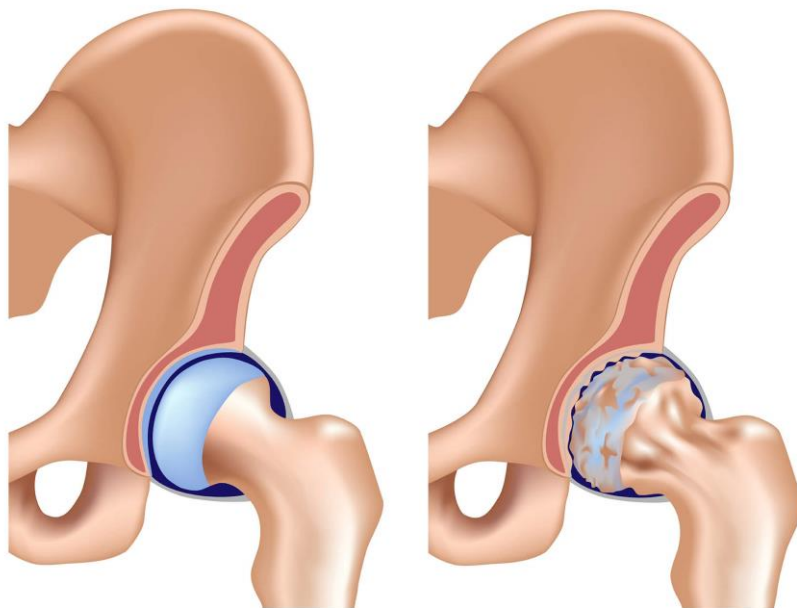
During your stay in St. James's Hospital you will be cared for by a multi-disciplinary team made up of doctors, nursing staff, care assistants, physiotherapists, occupational therapist and if needed a social worker.

The aim of this information booklet is to inform you

1. How best to prepare for your surgery
2. What to expect before, during and after surgery and during your hospital stay
3. What to expect 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 replacement surgery.

## **Anatomy of the Hip**



Healthy hip joint

Osteoarthritis

### **A Healthy Hip:**

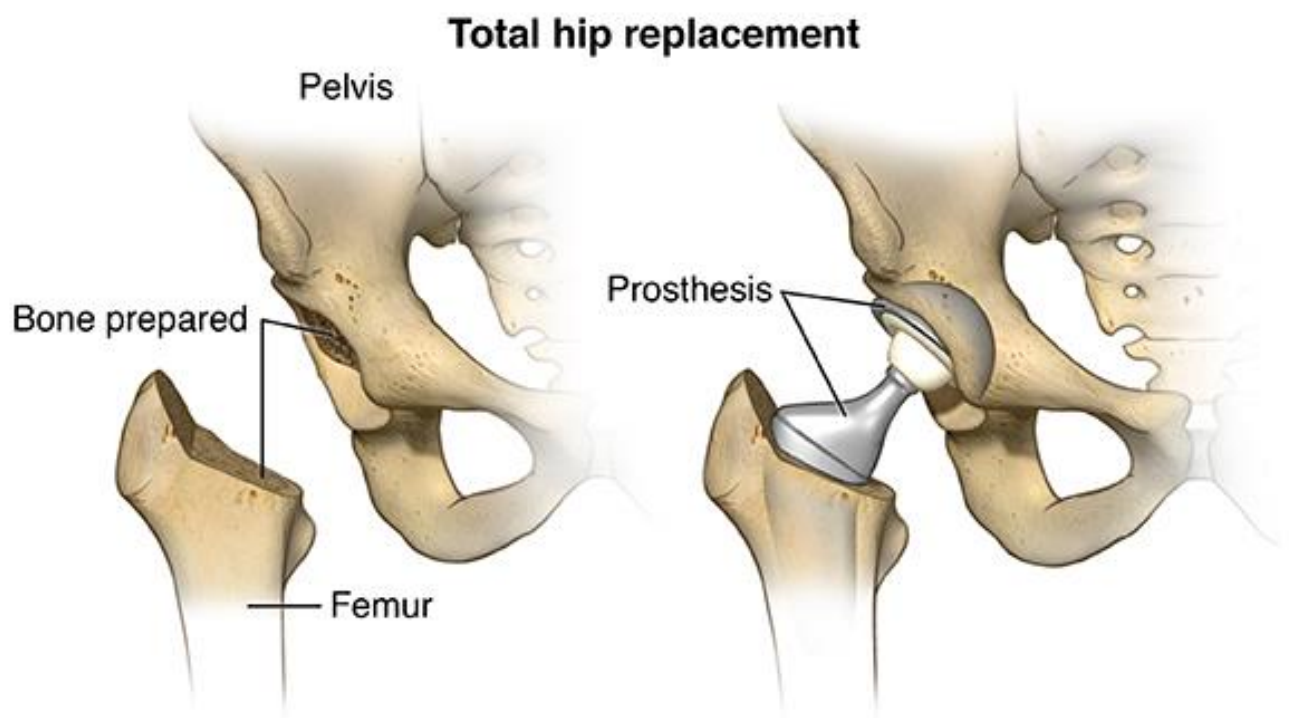
The hip is a ball and socket joint. The ball is formed by the head of the thigh bone (femur) and fits snugly into the socket (acetabulum) in the pelvis. In a healthy hip, the surfaces are covered by a smooth substance known as articular cartilage or gristle. This allows the ball to glide easily inside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

### **A Problem Hip:**

When someone develops arthritis in their hip, part or all of the cartilage may wear away, exposing the underlying bone, causing roughening of the joint surfaces. This can lead to stiffness and pain because the ball grinds in the socket when you move your leg. A limp will often develop and the leg may become thinner due to wasting of the muscles and may become shorter.

## **What is a Total Hip Replacement?**

A total hip replacement (THR) is an operation designed to replace a hip joint which has been damaged by arthritis. A THR replaces the worn head of the femur with a metal ball on a stem and relines the socket (acetabulum) with a cup made of special plastic or metal. In special cases, other types of stems (prostheses) may be used. This is at the discretion of your surgeon. A THR is principally designed to relieve pain and restore joint movement. It will also aim to correct the shortening effect of arthritis.



## **Preparing for Surgery**

### **Exercise**

Exercising in the lead up to your surgery will help to improve your strength, range of motion and endurance as well as help you to lose weight if necessary. Ensuring that your body is prepared for the surgery in this way will help lead to a successful outcome and recovery.

Please see the exercises at the back of this booklet for some ideas.

### **Diet and Nutrition**

Healthy eating before your surgery will aid the healing process in the post-operative period. Examples of this include the following:

- Drinking water to ensure you stay hydrated.
- Eating fibre rich foods to avoid constipation which can sometimes be caused by pain medications (e.g. broccoli, whole wheat pasta and breads, peas, beans)
- Eating foods that are rich in iron (e.g. lean red meats, dark green leafy vegetables)
- Eating foods that are high in vitamin C to help your body absorb iron (e.g. citrus fruits, tomatoes)
- Ensuring that you are getting enough calcium in your diet to keep your bones strong (e.g. milk, cheese, yoghurt).



### **Smoking**

Smoking puts you at an increased risk of respiratory complications post-operatively as well as slowing recovery and increasing risk of infections and blood clots. If possible, it is advised that you try to quit at least a few weeks prior to surgery. Talk to your Doctor about smoking cessation services if you need help with this process.

## **Alcohol**

Please be honest with your team when asked about how much or if you consume alcohol. This information is important in order to assess your risk for alcohol withdrawal and other alcohol-related complications.

## **Diabetes**

If you have diabetes it is very important to manage your blood sugar levels before surgery to help reduce risk of complications after surgery.

## **Medications**

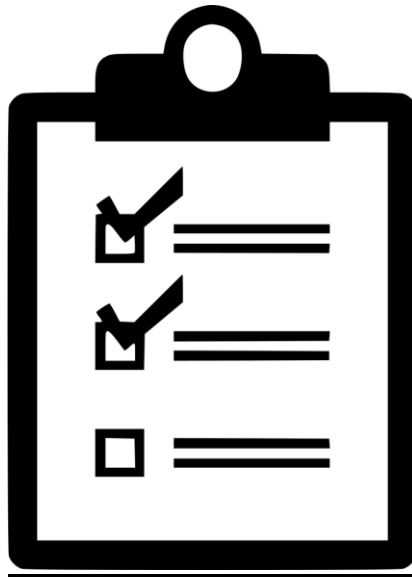
Some medications thin your blood and increase the risk of bleeding during/after surgery or may interfere with healing. These include medications that contain anti-inflammatories, aspirin, warfarin or arthritis medications. If you are taking any of these, discuss them with your surgeon/doctor prior to surgery to check whether they need to be stopped.

## **Preparing your Home Prior to Surgery**

It is important to be aware of and remove any potential hazards that may increase your risk of falls, prior to the surgery. These include:

- moving electrical cords and phone lines out of the way
- storing items within easy reach in the kitchen and bathroom for example (i.e. moving things from lower presses into higher ones)
- removing rugs which could cause you to trip
- being cautious around pets and young children
- being cautious with slippery floors and any potential spills of liquid

## **What to Bring to the Hospital with You**



- ☐ Loose, comfortable clothes for after your surgery – tops, tracksuit or tracksuit bottoms
- ☐ Undergarments
- ☐ Socks and comfortable runners or shoes suitable for walking in
- ☐ Personal toiletries
- ☐ Glasses (if required)
- ☐ Hearing aids and batteries (if required)
- ☐ List of current medications
- ☐ Mobile phone and list of important contact numbers
- ☐ Medical Card (if you have one)

\*Do not bring valuables if possible\*

## **Pain Management**

Pain is a normal part of recovery after any operation. It can be well managed with medications, special pain management and ice. The pain will naturally reduce as your wound heals and with regular use of painkillers. It is important to keep your pain well controlled so you can mobilise comfortably, engage with your physiotherapy exercises and resume normal activities after your surgery. If you have pain, it is advisable that you take regular pain relief as prescribed by your Doctor and not to wait until the pain is severe. Ensure that you have allowed enough time for your pain relief to begin working prior to your physiotherapy review or before going for a walk (usually 30-40 minutes). If you feel that your pain relief is not adequate enough, please talk to your Doctor who may be able to alter your prescription.

## **Hip Precautions**

In order to prevent dislocation (ball slipping out of socket) post-surgery, certain precautions are necessary. There are four basic movements which must be avoided for 12 weeks post operatively. These precautions apply in all situations including sitting and whilst moving in and out of bed or chair.

1. **Do not bend the operated hip excessively** (i.e. not more than 90deg) by:

- a. Bending the knee of the operated leg too high towards the chest
- b. Leaning too far forward

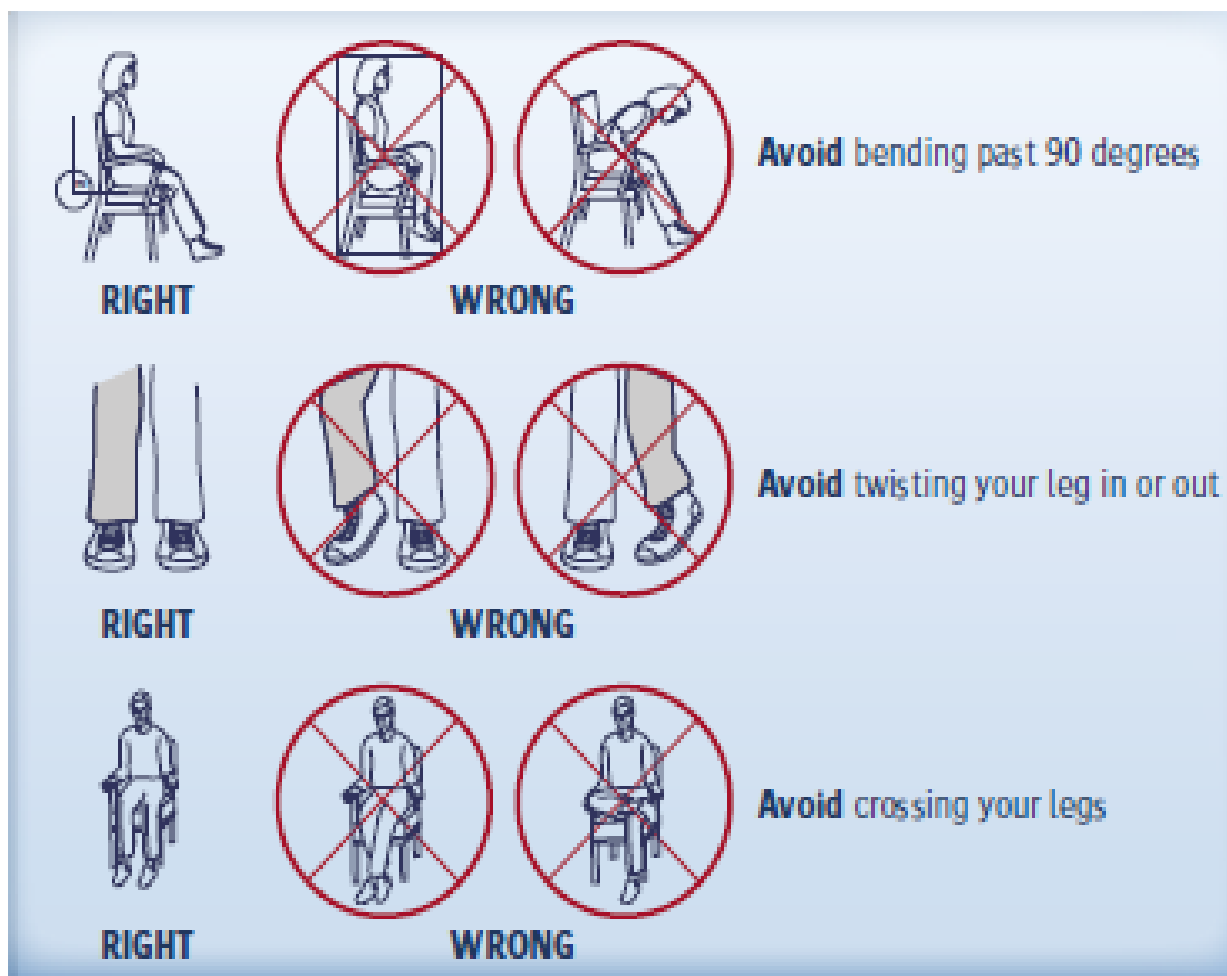
Your knees should be lower than your hip when seated.

2. **Do not twist the operated leg in or out**

Likewise do not twist your body on your leg, i.e. by reaching too far across your body. When walking or turning you should always keep your toes pointing straight ahead.

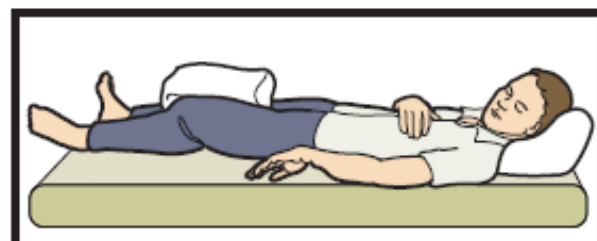
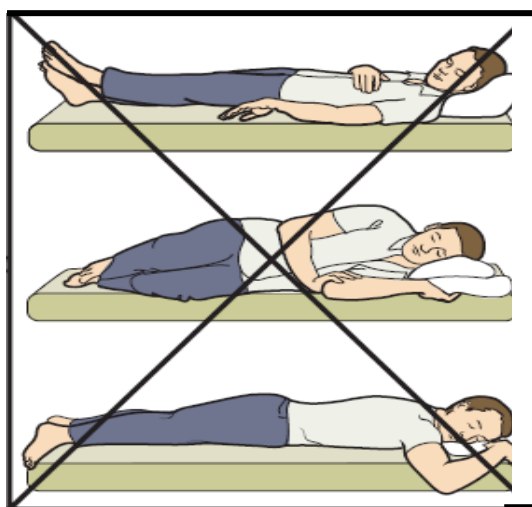
3. **Do not cross your legs**

Operated legs must be always held out to the side away from the midline of the body.



4. Do not roll or lie on your side

It is not advisable to lie on either side in the early stages of recovery. You will be nursed on your back with an abduction pillow between your legs.



## **Physiotherapy**

The aims of physiotherapy post THR 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**

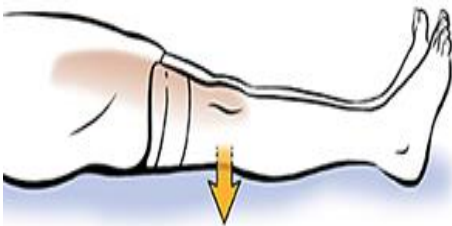
As discussed earlier in the booklet, it is advisable that you do exercises before, as well as after surgery, in order to ensure that your body is in the best possible shape it can be prior to having your surgery. Below are some examples of exercises you can do.

### **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.



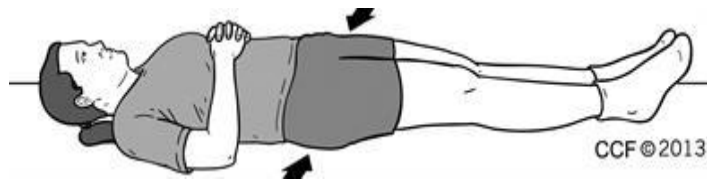
### **2. Quadriceps Sets**



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.

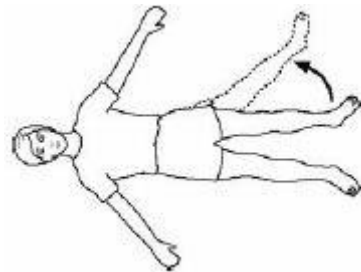
### 5. Active Hip and Knee Flexion

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.



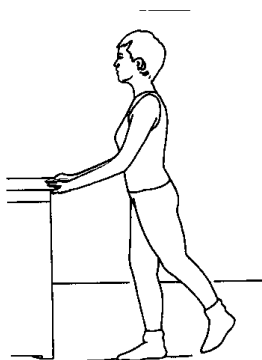
### 7. Active Abduction in Standing

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



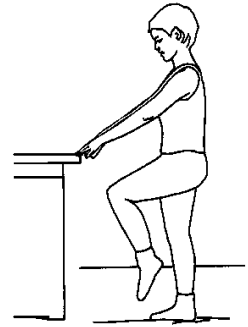
### 8. Active Extension in Standing

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.



\*\*\* It is important that you complete only the exercises taught to you by your physiotherapist\*\*\*

### Walking

After an uncomplicated THR, 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 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.

Walking frame



Crutches



Walking sticks



## **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.

### **Sitting and getting in and out of chairs:**

#### **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.

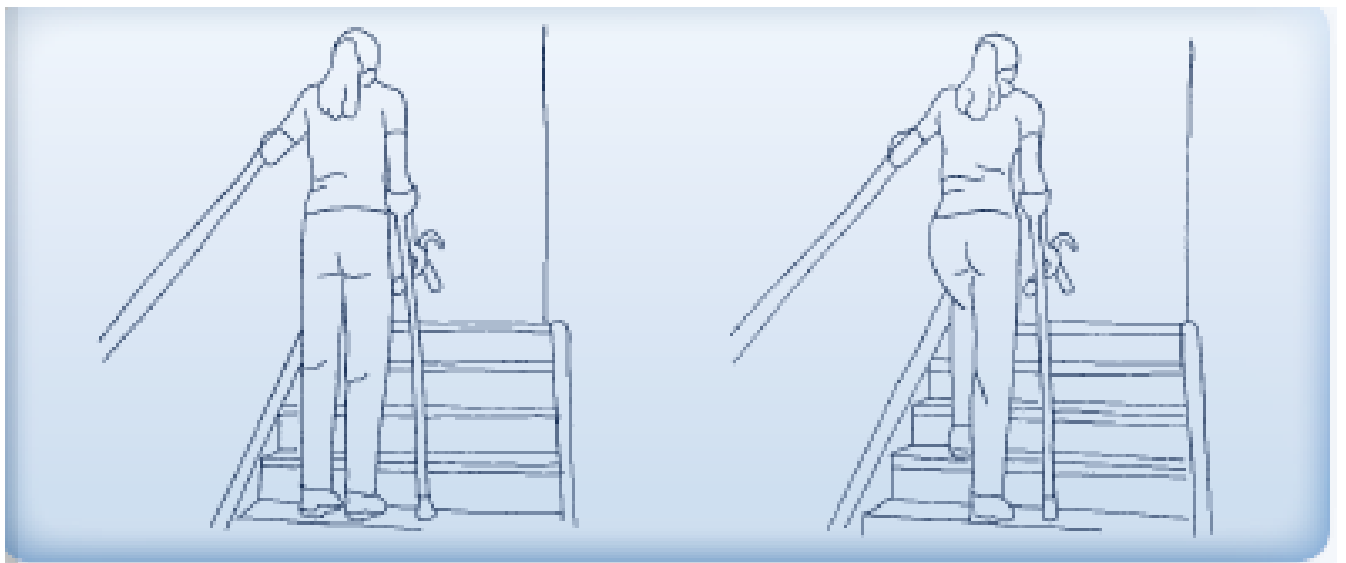


### **Stairs:**

**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 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 Clontarf, Kiltipper, Kilcock and St Lukes.

## **Potential Complications**

The vast majority of patients do not experience any complications after a Total Hip Replacement. The table below 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
Dislocation		Abide by the hip precautions outlined earlier in the booklet

In general patients do very well at home following total hip replacement. However, if you experience any of the symptoms described above, it is important that you seek medical advice promptly.