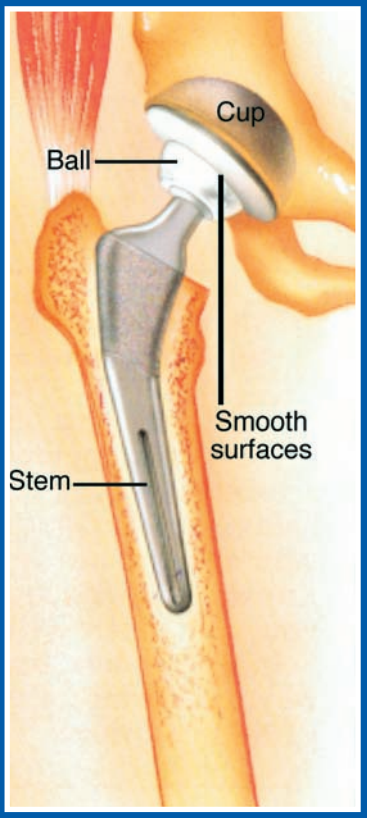
Total Hip Replacement Guide



CAPPAGH NATIONAL ORTHOPAEDIC HOSPITAL
Founded 1908
MERCY
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Total Hip Replacement Guide

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Introduction

Welcome to Cappagh

This booklet has been written to give you and your family a basic understanding of a total hip replacement operation, including things you should know about before the operation and after it happens. It is important, however, that you not alone understand the advantages but also the possible problems that can occur with this form of surgery.

Bear in mind that your Physiotherapist and Occupational Therapist play an important part in helping you achieve a good result.

Keep this booklet in a safe place as you should refer to it from time to time. If there is anything that you do not understand, please ask your Nurse, Surgeon or Therapist.

What is a Total Hip Replacement?

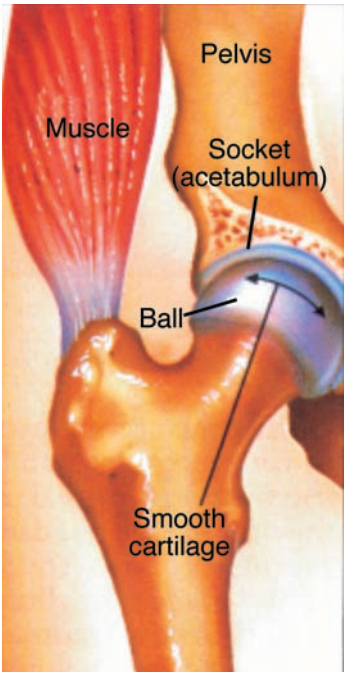
A total hip replacement is an operation designed to replace a hip joint which has been damaged, usually by arthritis. The hip joint is a ball and socket joint. The ball is formed by the head of the thigh bone (femur) and fits snugly into the socket (acetabulum) in the pelvis.

The surface of the bones in the joint are coated by a smooth and compressible substance known as gristle (or articular cartilage). Arthritis occurs when the articular cartilage wears away, exposing the underlying bone (figure 2). This causes roughening and distortion of the joint, resulting in painful and restricted movement. A limp will often develop and the leg may become wasted and shortened.

Understanding Hip Replacement

By understanding the anatomy of your hip, you can better understand how the recovery process works. Your hip is a ball-and-socket joint where the thighbone meets the pelvis. This joint is surrounded by cartilage, muscles and ligaments that allow it to move smoothly.

A Healthy Hip



In a healthy hip, smooth cartilage covers the ends of the thighbone, as well as the pelvis where it joins the thighbone. 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.

Figure 1

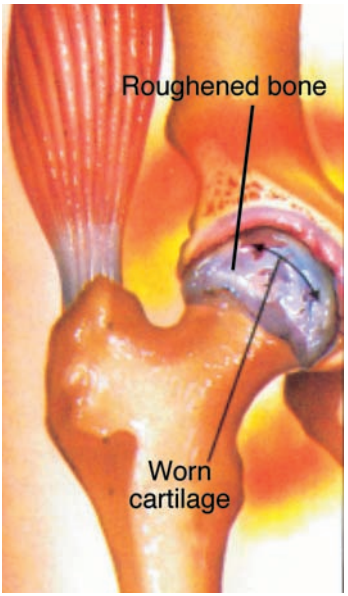
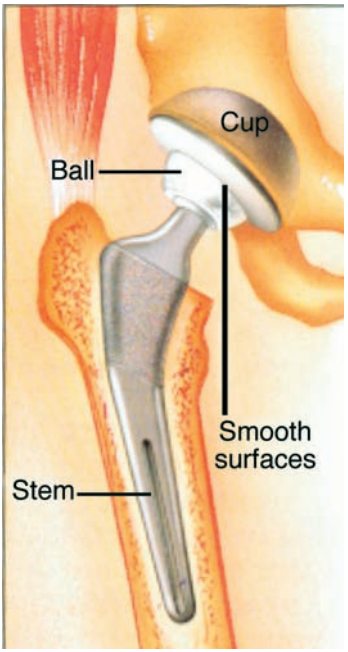


Figure 2

A Problem Hip

In a problem hip, the worn cartilage no longer serves as a cushion. As the roughened bones rub together, they become irregular, with a surface like sandpaper. The ball grinds in the socket when you move your leg, causing pain and stiffness.

Figure 3



A Prosthesis

An artificial ball replaces the head of the thighbone, and an artificial cup replaces the worn socket. A stem is inserted into the bone for stability. These parts connect to create your new artificial hip. All parts have smooth surfaces for comfortable movement once you have healed.

The total hip replacement operation replaces the worn head of the femur with a stainless steel ball mounted on a stem and re-lines the socket (acetabulum) with a cup made of a special plastic-polyethylene. These two components are usually fixed to the bone by a type of cement called methyl methacrylate. In special cases other types of stems (prostheses) may be used. This is at the discretion of your surgeon. This new joint aims to relieve pain, decrease stiffness and in most cases restores leg length and hence helps improve mobility.

Osteoarthritis of the hip is generally a disease of the older person, but may occur in younger people following rheumatoid arthritis, fractures of the hip and other rarer conditions.

Assessment

You may have to attend the Pre-Operative Assesment Clinic. This is not always necessary and will be decided upon by your surgeon. During this time your suitability for joint replacement will be assessed by a team of doctors and therapists. This will involve having some blood tests, x-rays and a full medical examination by a doctor. You will be seen by Physiotherapists who will introduce you to the exercises you will be required to do before and after your surgery and an Occupational Therapist will see you regarding safety requirements in your home.

Any anxieties you may have regarding your operation can hopefully be alleviated at this stage.

If you have a weight problem you should consult your General Practitioner with a view to losing some weight prior to surgery.

If everything regarding your health is satisfactory you will be called back for your hip replacement operation within a few weeks from the time of assessment.

Suitable Clothing & Footwear

All patients following joint replacement in Cappagh Hospital are encouraged to dress in their everyday clothing as soon as is practically possible.

We have found this promotes a feeling of well being and independence among our patients, encouraging them along the path of recovery and rehabilitation.

Footwear:

We would recommend comfortable lace up or slip-on shoes with low heels, flat if possible. Trainers or runners are ideal but not necessary.

We do not recommend old slippers or backless shoes.

Do not wear tight fitting footwear as the surgical leg/foot may experience some temporary swelling after surgery.

Clothing:

Loose, comfortable clothing is advised.

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 after the operation. These precautions apply in all situations including sitting and whilst moving in and out of bed or chair.

1. Do not cross your legs (fig. A).

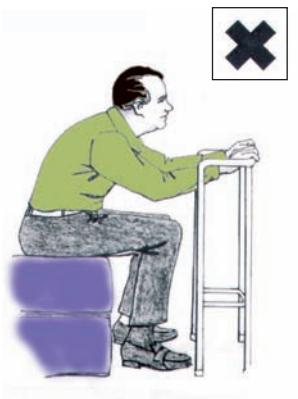
Operated legs must be always held out to the side away from the midline of the body.

2. Do not bend the operated hip excessively (fig. B).

i.e. not more than 90^0 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.

Fig. B Do not bend the operated hip excessively

3 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 and knee-caps pointing straight ahead.

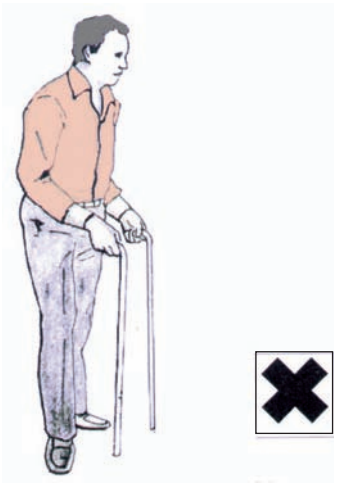


Fig. C Do not twist the operated leg in or out.

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 the abduction pillow between your legs.

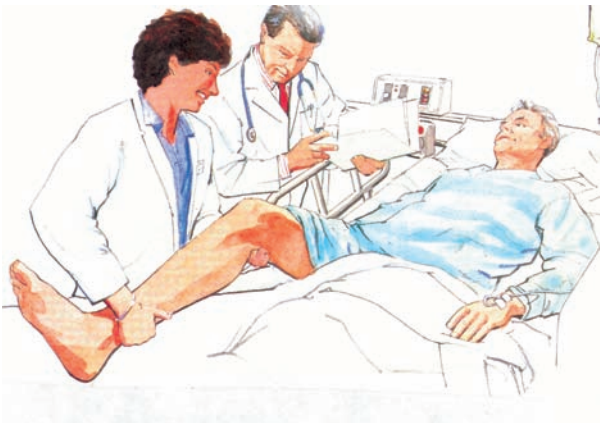
However, individual cases do vary and you will be advised by the hospital staff as to which way you should roll or lie.

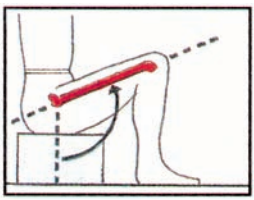
Fig. D Do not roll or lie on your side.

When a natural hip must be replaced, an orthopaedic surgeon uses a proshtesis (artificial hip joint). Like your own hip, the prosthesis is made of a ball and socket that fit together to form a smooth joint, so you can walk easily and without pain.

Different from your Natural Hip

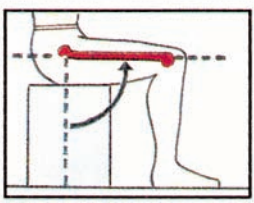
Your prosthesis has a limited safe range of motion and is likely to need special care until the soft tissue around your new hip has healed. By following the precautions advised by your surgeon - like avoiding bending your hip more than 90 degrees - you can keep your hip from sliding out of position **(dislocating).** Based on your condition and the type of prosthesis, your surgeon may also limit the amount of weight or pressure you can put on your operated leg.





Natural hip bend: greater than 90 degrees

A healthy hip can bend more than 90 degrees, allowing you to raise your knees to cross your legs.



New hip bend: up to 90 degrees

At first, your new hip has a limited range of motion. Don't bend it at an angle greater than 90 degrees.

Nursing

- Specialist nursing is provided on a 24 hour basis from admission through to discharge.

- Your nursing requirements will be assessed and specific nursing care will be implemented which will meet your needs before, during and after surgery.

- Before, during and after surgery we will closely monitor your pain level and provide prescribed pain relief which will make your post-operative recovery as comfortable and painfree as possible. This will aid your rehabilitation and mobility process. It is important that you inform your nurse or therapist/doctor of any pain you are experiencing.

- We will monitor your recovery and your progress and communicate with the various other professionals (both in the hospital and community) interested in your care. This will ensure that your discharge home will be as unproblematic as possible.

Physiotherapy

Before Surgery:

You will be seen by your physiotherapist before surgery.

They will advise you on exercises which should be started immediately following your hip replacement and for the first 3 days until you attend the physiotherapy gym for progressive treatment.

Bed Exercises:

(1) Deep breathing: These should be done regularly to prevent chest infection.

(2) Ankle pump exercises: Move feet up and down at the ankles. These should be done regularly to prevent risk of blood clot in the legs.

(3) Strengthening exercises

- Press the knee flat onto the bed by tightening the muscles on the front of the thigh. Hold for 3 seconds, relax, repeat 10-20 times.

- Squeeze your bottom muscles together. Hold for 3 seconds, relax, repeat 10-20 times.

Remember to keep the unoperated leg moving to prevent it from stiffening up.

Home Exercises

The following exercises are safe to perform at home, and can be continued until your new hip is as strong and flexible as your other hip.

Lying 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.
Repeat ___ times.

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

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

Your physiotherapist will advise on a suitable home exercise programme.

Walking with the physiotherapist

Once you have regained your balance and become accustomed to the upright position you will begin walking, usually 24 - 48 hours after the operation, with a walking frame or crutches to ease the weight on your "new" hip.

When walking with a frame move the walking frame forward first. Then move the operated leg and finally the unoperated leg.

Turning round can be to either side but you must prevent twisting or pivoting on your new hip. Therefore, **feet must be picked up at each step so that the operated leg is not placed too far in or out.**

As your confidence and leg control improves, you will progress to walking with sticks or crutches. You should practice with these until a satisfactory walking pattern is achieved.

Most people will manage with one or two walking sticks by the time hospital discharge occurs, unless there are associated problems with other joints. Your physiotherapist will assess these problems with you.

Figure E

Walking frame Crutches Walking sticks

Social Worker

The Social Worker in the hospital provides the following confidential services:

- (1) Advice and support for anyone whose social/emotional problems may be of concern to themselves or to their families in relation to their admission for orthopaedic surgery.

- (2) Assessment and advice for patients and their families in relation to hospitalisation and discharge.

- (3) Information on Social Welfare and Health benefits and entitlements.

These services are available to all patients. In some cases, your consultant or other hospital staff will refer you to the social worker. You are also welcome to call to the social worker's office or you may ask reception or the ward staff to contact the social worker for you.

Occupational Therapy

The O.T. will see you before surgery and will offer information and advice regarding care of the new joint. Your Occupational Therapist will discuss your personal circumstances with respect to home environment and independence in everyday activities.

The Occupational Therapist will recommend adaptive equipment if necessary, and demonstrate alternative methods of performing everyday tasks ensuring safety of your new hip joint.

The First Three Months

Bed

Ideally your bed should be firm and your hips should be higher than your knees when seated on the edge. A board underneath the mattress may help. If your bed is low, keep your operated leg straight in front of you. If you are concerned about the height of your bed, please discuss this with your Occupational Therapist.

In Bed

In hospital you will use an abduction pillow to keep your legs apart. This is not usually required at home, however a standard pillow can be used if necessary. It is not advisable to lie on either side in the early stages of recovery. A roll of blanket beside you may help you to stay on your back. You should discuss your individual case with a member of your rehabilitation team.

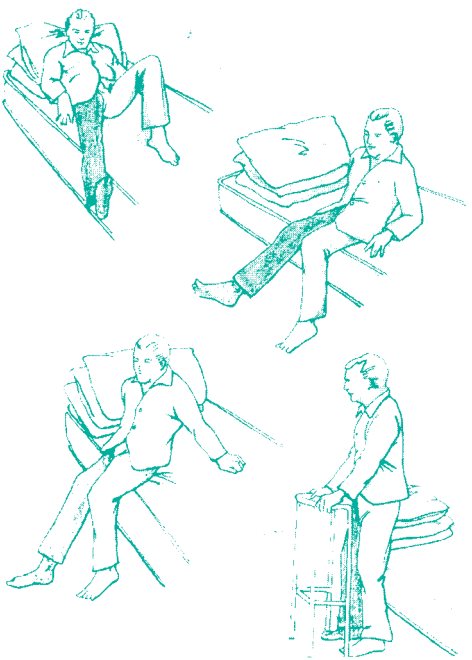
Getting In

Sit as far back on the edge of the bed as you can so that your operated leg is partially supported. Keep your body straight and don't twist your leg as you bring both legs into the bed. Be careful not to cross your legs.

Getting Out

Move to the edge of the bed. Pivot on your hips using your arms to help and swing your legs over the side. Sit on the edge of the bed with your operated leg straight out in front. Put on your footwear without bending forward. Push down with both hands on the side of the bed without leaning forward, in order to stand. Ensure your walking aids are correctly positioned.

Getting out of bed



Sitting Posture

Chair

Choose an upright chair with a firm seat and armrests. Ensure the seat allows your hips to stay higher than your knees. Sit up straight or lean backwards.

Sitting Down

Back up until the edge of the chair touches the back of your knee. Reach for the armrests. Keep your operated leg straight out in front and lower yourself without leaning forward. Sit, then slide, back in the chair.

Getting Up

Move to the front edge of the chair. Straighten your operated leg and put the unoperated leg under the chair. Correctly position your walking aids. Put both hands on the armrests. Push up with both arms and the unoperated leg. Don't lean forward. Get your balance before stepping away. Never pull yourself up using the sticks or walking aid, as these will be unstable.

Toilet

As most toilets may be too low, you may need a **raised toilet seat**. You should ensure that this is correctly fitted before use. To help avoid twisting or bending, keep the toilet paper within easy reach, or take some before you sit down. Turn your whole body around to flush.

Sitting Down

Back up until you can feel the toilet seat touch the back of your knee on your unoperated leg. Put your operated leg slightly forward. With one hand reach back to the toilet seat and slowly lower yourself onto the toilet. Let your operated leg slide forward and keep your weight on your unoperated leg.

Getting Up

When standing up, do not lean forward. Put weight through your unoperated leg.

Mastering Daily Activities

The Occupational Therapist will facilitate you in modifying your normal activities of daily living. Your therapist shows you how to use equipment that can minimise the amount of bending you need to do and gives you guidelines for home safety.

Bending

Do not bend from the hips to pick objects off the floor. Do not bend forward in bed to pull up clothes. An easireach will assist with many tasks.

Dressing

Comfortable, loose-fitting clothes are best. Gather what you need so they are within easy reach. Sit on the edge of the bed or on a high chair.

Underwear and trousers

Dress your operated leg first using easireach or long shoehorn. Be careful not to bend forward or lift your knee above your hip. To put on a dress or shirt, slip it over your head.

Socks and shoes

A sock aid and a long handled shoehorn enables you to put on and take off socks, stockings and shoes without bending at the hip. Elastic shoelaces turn your laced shoes into slip on shoes.

You must **not** attempt to put on or take off the anti-embolism (TED) stockings on your own.

Undressing

Remove trousers and underwear from your unoperated side first.

Washing

Use a suitable chair at the bathroom wash basin, or sit on the edge of the bed and have someone bring you a basin of water to be placed directly in front of you. Use long handled aids to wash and dry your feet or get assistance with this.

Showering

A shower in place over the bath is not suitable. A walk-in shower usually involves a step and should be negotiated with great care. A shower chair, grab rails and non-slip mat contribute to your safety.

Bathing

Do not sit in the bottom of the bath for at least three months, if you have existing bath aids, please discuss further with your Occupational Therapist.

Car

You are **not** allowed to drive until you receive specific permission from your Consultant/Doctor. You should sit in the front passenger seat. Getting into or out of a car can be difficult, so it is important to follow your hip precautions. Avoid long journeys as much as possible. Consider taking a stretch break after an hour's travel. The following guidelines will help.

Before getting in:

Your driver should bring a cushion/pillow and blanket to place on the seat to keep your hips above your knees, especially if the seat is low. Ensure you are on level ground. Your driver should also recline the back of the seat and move it as far back as it will go. Sit on a plastic bag to allow easier transferring in and out of the car.

Getting in:

Stand with your back to the car. Lower yourself, keeping your operated leg straight in front of you. Slide back into the centre of the seat. Let your driver assist your legs into the well of the car, keeping your knees lower than your hips. Do not twist.

Getting out:

Without twisting your body, lift your legs out of the car. Slide towards the edge of the seat. Stand up, keeping your operated leg out of the car. Slide towards the edge of the seat. Stand up, keeping your operated leg straight and in front of you. Steady yourself on your walking aids to get your balance.

Kitchen and Housekeeping

You may need to reorganise your kitchen so that the most frequently used items are between head and waist level when you are standing. Use a high chair or stool for lengthy chores. It is important to remember all your hip precautions when working in this area. You are likely to require help with shopping, meal preparation, cleaning and laundry from your spouse, relatives or friends.

Sports and Hobbies

If you are concerned about resuming any activities within the limits of your hip precautions, please discuss further with your Occupational Therapist or Physiotherapist.

Work

Your return to work will depend on the type of work you do. Do not plan to return to work too early after discharge as you will get overtired and may increase the chance of dislocation. Seek the advice of your consultant at your review appointment.

Becoming more aware of hazards in your home can help make your recovery easier and safer. Your home setting is different from the hospital so you should adopt the same techniques and precautions to your home environment.

- Move electrical cords and long phone lines out of the way.
- Store items within easy reach.
- Remove throw rugs.
- Watch out for children and pets.
- Watch out for water spills, bare bathroom tiles or slippery floors.
- Always think before you move.

Sexual Activity

Sex can usually be resumed at 8-10 weeks. Time should be allowed for the incision to heal and for the muscles and ligaments to begin the healing process.

You may generally resume sex when you feel physically and mentally ready and when you have a clear understanding of the precautions to be followed to protect your new joint.

It is common after most surgery to have a low desire for sex, especially if there is a lot of discomfort with pain and stiffness. Communication with your partner about practical positions as well as feelings is important. Sharing non-sexual acts of intimacy can also be important. If the side effects of your medication are having negative effects on sexual performance ask your doctor can it be changed.

Please ask your therapist for further information and advice.

Three - Six Months

At this stage you will have been x-rayed and reviewed by your consultant. By now you are likely to be driving, relying less on equipment and returning to a normal daily routine.

When resuming general household activities try to commence at a gentle pace and don't use excessive effort.

You will be offered a physiotherapy appointment three months after your operation. This is an opportunity for you to discuss any concerns you may have regarding your recovery and to receive advice on returning to normal activities.

Occupational Therapy Equipment Prescription

Please quote this form when seeing/contacting your local community occupational therapist.

Name: _____

Chair

Following your hip operation you must sit in a firm high chair with arms. When seated, chairs should allow

1. Hips to be higher than knees.
2. Back support.
3. Feet to be flat on the floor.
4. Arms to be supported by arm-rests. (Dining carver chair may be suitable).

Seat height _____

This sitting height applies to all situations, e.g. Bed, Chair, Toilet - you will require ——— inch RTS.

Small aids will be available from Cappagh Hospital O.T. Department

Produced by the
Occupational Therapy Department

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