

YOUR GUIDE TO ARTICULAR SURFACE REPLACEMENT OF THE HIP JOINT

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SPECIAL INSTRUCTIONS

Every effort is made to minimise any risk or complications from occurring. However, like any other surgery they can occur, listed below are common signs and symptoms that may indicate a complication with your new joint.

Please contact your doctor should you feel that you may have a problem or are experiencing any of these signs and symptoms:

- **Fever of 101 degrees fahrenheit or 38.3 degrees celsius**
- **Unusual redness, heat or oozing at the wound site**
- **Trouble breathing or shortness of breath**
- **Increase in pain that is not relieved by medication**
- **Increase in pain or swelling in the calf**
- **Increase in swelling of the leg that is not relieved by elevation**



YOUR GUIDE TO ARTICULAR SURFACE REPLACEMENT OF THE HIP JOINT

The information in this booklet is designed to help you understand more about articular surface replacement of the hip joint. It is only intended to be a general guide and there will be variations from one hospital to another. It is therefore important that you discuss everything with your doctor





■ ANATOMY OF THE HIP JOINT

The hip joint is a 'ball and socket' joint. The hip joint allows movement to occur between the thigh bone (**Femur**), and the hip bone (**Pelvis**). The pelvis contains the 'socket' called the **acetabulum**. The ball shaped head of the femur fits into the acetabulum, forming a ball and socket joint which enables the leg to have a wide range of movements.

The outer surface of the femoral head and the inside surface of the acetabulum are covered with cartilage. The cartilage surface is a tough and very smooth material that allows the two surfaces to slide against one another during movement with ease.

You have every reason to expect to regain full use of your leg. However, this will take time. You should be able to return to normal activities again within a few months of the operation.

These may include driving, gardening and playing golf, but check with your doctor first. There will be a continual improvement throughout the first 12 months.

Once the operation has fully healed, many people can't tell they have an artificial joint.



■ AT HOME RECOVERING

Bending

DO NOT bend your operated leg excessively.

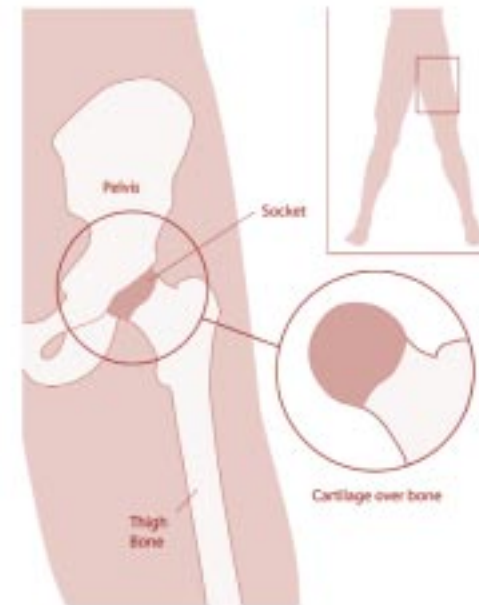


Instead, hold onto something solid, such as a table, window ledge or work surface and slide your operated leg out behind you, keeping it straight. You can then go down, bending the knee of the non-operated leg.



Envelopes of tough ligaments connect the pelvis and femur, covering the joint and stabilising it. The hip joint's movements are initiated and controlled by the thick muscles of the buttock at the back and the thick muscles of the joint's at the front.

A healthy hip joint will allow the leg to move freely within its range of motion, while supporting the upper body and absorbing the impact that results from activities such as walking and running.





CONDITIONS REQUIRING AN ARTICULAR SURFACE REPLACEMENT

There are a number of conditions that can result in a patient having to undergo an articular surface replacement surgery. Perhaps the most common condition is **osteoarthritis** that is commonly referred to as 'wear and tear arthritis'. Osteoarthritis can occur with no previous history of injury to the hip joint. The hip simply 'wears out'. There may be a genetic tendency in some people that increases their chances of developing osteoarthritis.

Avascular necrosis is another condition that could lead to articular surface replacement surgery. In this condition, the femoral head (ball) loses a portion of its blood supply and actually dies. This leads to collapse of the femoral head and degeneration of the hip joint. Avascular necrosis has been linked to alcoholism, fractures and dislocations of the hip, and long term cortisone treatment for other diseases.

AT HOME RECOVERING

General daily activities

Points to remember:

- **DO NOT** stand for long periods. You should try to spread your household chores evenly throughout the week and your daily activities throughout the day.
- Allow yourself plenty of time to rest.
- Avoid heavy activities for the first few weeks after leaving hospital, including using the vacuum cleaner.





■ AT HOME RECOVERING

Dressing your lower half

As a general rule, it is recommended that when dressing your lower half, you should dress the operated leg first.

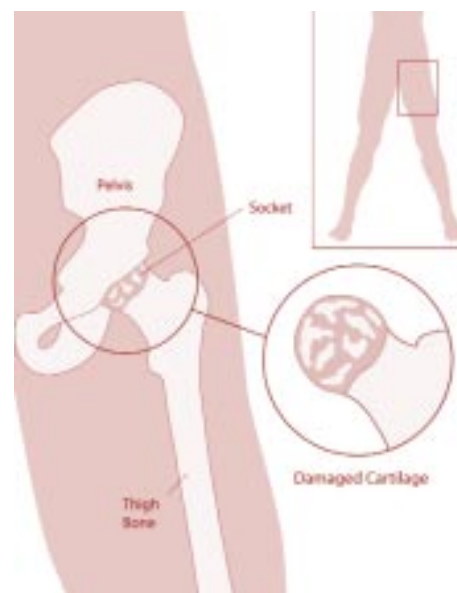
You **MUST NOT** bend forward excessively to reach the foot of your operated leg.

Instead, you will be shown how to use a long handled shoe horn and a sock aid to dress the operated leg.

The hook on the opposite end of the shoe horn, or your walking stick handle, can also be used to get pants and trousers over the foot on the operated leg.



Abnormalities of hip joint function may also result from some types of hip conditions that appear in childhood, such as **congenital dysplasia of the hip (CDH)**, which can lead to degeneration many years later. The mechanical abnormality leads to excessive wear and tear.





ARTICULAR SURFACE REPLACEMENT

There are a number of ways in which the pain in your hip can be relieved. These can include changes in lifestyle or taking pain relieving medications. Another option is an operation to replace the surfaces of your hip joint, known as articular surface replacement.

Articular surface replacement is usually recommended when the pain becomes so constant that it is limiting your everyday activities, and when you and your doctor agree that it is the best course of action.

ABOUT ARTICULAR SURFACE REPLACEMENT SURGERY

The aim of articular surface replacement surgery is to:

- Retain the natural anatomy of your hip as much as possible, whilst:
- Relieving your pain
- Correcting any deformities, for example CDH
- Restore any loss of function in your hip
- Improve your quality of life

Articular surface replacement surgery involves replacing the surfaces of the head of the femur (ball) and the acetabulum (socket) with man made components, called prostheses. The hip prostheses are designed to simulate the human anatomy as closely as possible.



DO NOT sit on the bottom of the bath



ALWAYS use the bath board

SHOWERING IN A CUBICLE

Step into the shower cubicle with your non-operated leg first and get into a position where you can operate the controls **WITHOUT TWISTING**. Wash the lower part of the legs and feet with an aid. It is recommended you use a chair in the shower and **SIT AT ALL TIMES**.



To get out, stand on the non-operated leg and lift the operated leg out of the shower first.



■ AT HOME RECOVERING

Bathing

Do not attempt to get in or out of a bath without using a bath board until advised by your therapist or surgeon.

Sit on the bath board fitted over the bath and lift your legs into the bath, one at a time. You should try to ensure that you keep the operated leg as straight as possible.



Wash the lower part of your legs and feet with a bath brush, towel or loofah.



DO NOT BEND TOO FAR

GETTING OUT IS THE REVERSE PROCEDURE

■ THE OPERATION



Step 1

After making the incision, the hip joint is exposed.



Step 2

Your surgeon will move the femoral head out of the acetabulum. This is so that the hip joint can be clearly seen and allow your surgeon complete access.



Step 3

The damaged surfaces of the femoral head and acetabulum are then removed and the underlying bone prepared to accept the prosthetic components.



Step 4

The femoral and acetabular components are then fixed to each respective bone.



Step 5

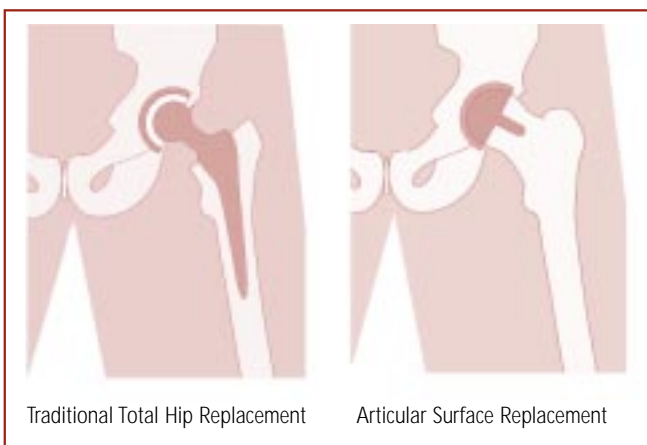
Once all the components of the articular surface replacement are in place, your surgeon will put the femoral head back into the acetabulum and check that the movements are full, smooth and stable.



COMPONENTS OF AN ARTICULAR SURFACE REPLACEMENT

Each hip prosthesis is made up of several parts:

1. The acetabular component or cup replaces the acetabulum. The acetabular component is made of a metal alloy outer shell with a highly polished internal surface.
2. The femoral component replaces the surface of the femoral head. The femoral component is a single piece made of metal alloy.



Traditional Total Hip Replacement

Articular Surface Replacement

5. Using your non-operated leg and your hands, push yourself backwards onto the driver's seat, keeping the operated leg straight in front.
6. Leaning backwards and pivoting on your bottom, slide your legs into the car. Be careful and do not rush, ensure that you keep the operated leg straight during the movement, until you are facing forwards.
7. Adjust yourself into a comfortable position.



GETTING OUT IS THE REVERSE PROCEDURE

The general rule for driving yourself, is that you are usually allowed to drive a car 6 - 8 weeks following your operation.

It is advised that you check with your therapist or surgeon on your individual case.



■ AT HOME RECOVERING

Getting in and out of a car

When getting into a car, both the passenger and the driver's seat should be moved back as far as possible. The backs of the seats should be reclined slightly.



1. Ensure you are on a level to start with and not too near the kerb.
2. Position yourself sideways onto the car, with the back of your legs against the sill.
3. Reach for the back of the seat with your left hand and the seat base with your right hand.
4. Put your operated leg out in front of you, with the knee straight and lower yourself onto the edge of the seat. It helps if you lean back slightly.

■ PREPARING YOURSELF FOR SURGERY

Articular Surface Replacement Surgery is a very successful procedure proven to be safe and effective. As with all surgery, there are a number of things which the hospital will ask you to do to ensure the operation is a success. If you have any questions or concerns, ask your doctor or hospital staff.

The following sections explain what you will be asked to do before you go into hospital, during your hospital stay and when at home recovering.

Acetabular Component



Femoral Component



BEFORE YOU GO INTO HOSPITAL

There are several things that you can do before your surgery to make your recovery easier and safer.

Commit to the success of your surgery

Working as a team, you, your physician, physiotherapist and your family must adopt a positive attitude toward the success of your surgery. Together, you will gain a clear understanding of the common goals and expectations of the procedure.

Remain as active as possible

Remaining active while waiting for your surgery is an important key to the success of your surgery. Studies have shown that the stronger and more flexible you are before your operation, the quicker you will recover and more flexible you will be after the operation. Gentle exercise such as walking, range of motion exercises and swimming can help you to stay strong and flexible. Seek your doctor's advice before beginning any exercise.



However, if you do not have a chair with arms, below is a suggestion on how to get on and off a chair without arms.



1. Position yourself sideways onto the chair, with the back of your legs touching its side. Support yourself with one hand on the back of the chair, place your operated leg out in front of you, keeping the knee as straight as possible and reach with the other hand for the seat of the chair.



2. Lower yourself into the seated position. With both hands on the seat of the chair, pivot on your bottom keeping the leg straight out in front until you are facing forwards.
3. Adjust yourself into a comfortable position.

GETTING UP IS THE REVERSE PROCEDURE.



■ AT HOME RECOVERING

Getting in and out of chairs

Initially, it would be ideal for you to sit in a firm, high chair with armrests when you arrive home.



1. Position yourself so that the backs of your legs are right up against the front of the chair.



2. Reach back for the arms of the chair, one hand at a time.



3. Slide your operated leg out in front, keeping the knee as straight as possible.



4. Sit down on the front of the seat, then move backwards until you are comfortable.



Stop smoking. If you have not already done so, it is suggested that you stop smoking at least four weeks before your surgery. This will help reduce the risk of complications during and after your surgery.

Make sure all infections are cleared up prior to the surgery. These include; tooth abscesses, bladder infections, infections such as leg ulcers, colds and the flu. This is because infections could spread through your body during the operation and infect your new replaced joint. Therefore you must notify your surgeon immediately if you are suspected or diagnosed with an infection, as they may have to reschedule your surgery.

You may also wish to consider how you will cope after the operation, for example, you may need help getting home, shopping, etc. Do discuss this with your doctor or a hospital staff member.



■ YOUR HOSPITAL STAY

You should be admitted to hospital in good time before your operation to allow time for you to settle in. You will be examined by your anaesthetist, checking your heart and chest. This is an opportunity for you to ask any questions before your operation.

On the day of your operation, it is usual that your doctor will ask you not to drink or eat anything. The area around your hip may be shaved to reduce the risk of infection.

An hour or so before the operation you may be given tablets or an injection to relax you. This is known as a **'pre-med'**. You will then be taken into the operating theatre where you will be given either a general anaesthetic or an epidural to have your operation.

The operation usually takes 1 - 2 hours to complete.

■ AT HOME RECOVERING

Upon returning home you will need help the first few weeks and should make arrangements for someone to shop for you and help you around the house.

You will need to continue taking your regular medications and continue exercising as directed by your physiotherapist and surgeon. Remaining active and practicing the prescribed exercises are the quickest ways to full recovery.





STAIRS

You will be taught to negotiate steps and stairs by your physiotherapist before leaving hospital - always using aids to support the operated leg.

The sequence is as follows:



1. When walking up stairs, you always put your non-operated leg up first, followed by your operated leg and walking aid together.



2. When walking down stairs, you need to put the operated leg and walking aid down first, then followed by your non-operated leg. This is often found to be daunting at first, but with patience and practice you will soon be confident.

Immediately after your operation you will be moved to the recovery room for close monitoring. You may have one or two drips in your arm to put fluid back into your body. When you wake up from surgery, your leg may be swollen and bruised and the muscles may be stiff and sore. Your new joint should not cause you any discomfort, but you may experience some pain from the surgical procedure itself. You will be given pain medications to take regularly whilst you are recovering.

When you are fully conscious, breathing well and your blood pressure and pulse are stable, you will be taken back to your ward. You may not feel like eating much at first, but it is important that you drink. The scar on the side of the hip should eventually fade to a thin white line.



During the next few days the drips will be removed. Your physiotherapist will visit you the day after your operation to commence you on your exercise programme and help you get back on your feet walking again. You may feel unstable and in pain at first, but you will be given a frame to help you walk with, then crutches or sticks, which you may need for four to six weeks after, depending on your surgeon's instructions.



Once you, your surgeon and physiotherapist are happy with your condition and mobility you will be discharged from hospital. The usual hospital stay for Articular Surface Replacement is usually three to seven days.



HIP PRECAUTIONS

AVOID THESE THREE POSITIONS

Your physiotherapist will go through these precautions with you. They are used to help protect your new hip from dislocating.



✗ Do not bend your hip more than 90 degrees



✗ Do not cross the operated leg across the midline of your body



✗ Do not roll or turn your operated leg inwards