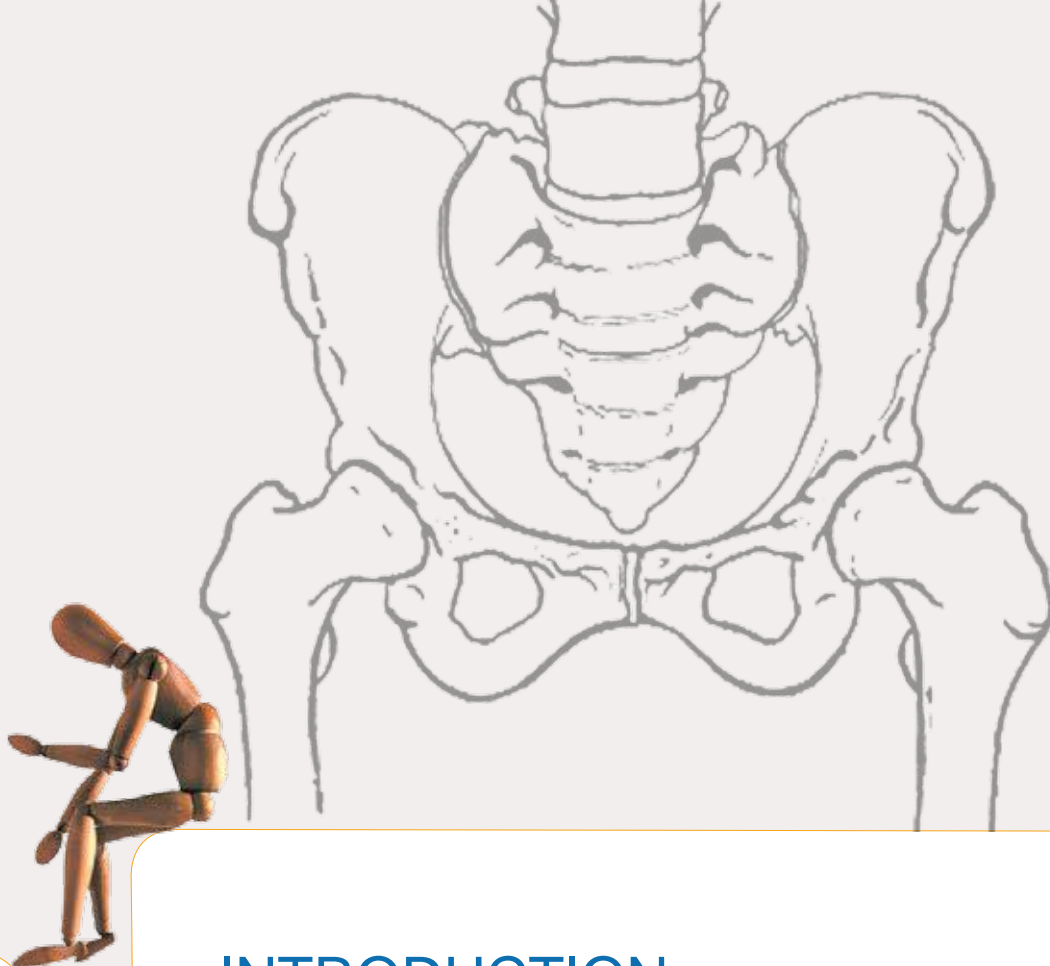


HIP REPLACEMENT

SURGERY INFORMATION

Anatomy of the **Hip Joint**



INTRODUCTION

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

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, very smooth material that allows the two surfaces to slide against one another during movement with ease.

Hip joint replacement surgery involves replacing 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.

There are many different designs of hip prosthesis available and your surgeon will choose the one considered most suitable for you. However, the final decision may need to be made during the time of your operation.

COMPONENTS OF A HIP REPLACEMENT

Each hip prosthesis is made up of several parts:

1. The acetabular component or cup replaces the acetabulum. The acetabular component can either be made of a metal alloy outer shell with a fitted plastic, metal or ceramic liner or it can be made of a one plastic component.



2. The femoral component replaces the femoral head. The femoral component can be a single or a two piece design. The single piece is made of metal alloy, while the two piece design consists of the femoral stem, made of metal alloy and the femoral head that attaches to the stem which can be made of either ceramic or metal alloy. This is known as a modular prosthesis. Envelopes of tough ligaments connect the pelvis and femur, covering the joint and stabilising it. The hip joints' movements are initiated and controlled by the thick muscles of the buttock at the back and the thick muscles of the thigh 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 A Hip Replacement

There are a number of conditions that can result in a patient having to undergo hip 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.

Treatment Options

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 your hip joint. Replacing the hip joint 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.



Avascular necrosis is another condition that could lead to hip 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. Abnormalities of the hip joint function resulting from **trauma to the hip, fracture of the hip**, and some types of hip conditions that appear in childhood, such as **congenital dysplasia of the hip (CDH)** can lead to degeneration many years later. The mechanical abnormality leads to excessive wear and tear.

The aim of hip replacement surgery is to:

- Relieve your pain.
- Correct any deformity for example, leg length inequality.
- Restore any loss of function in your hip.
- Improve your quality of life.

ABOUT HIP REPLACEMENT SURGERY



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 newly replaced joint.

Therefore you must notify your surgeon immediately if you are suspected or diagnosed with an infection, as they may have to reschedule (postpone) 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.

- You may be put on 24 hrs liquid diet prior to surgery
- The operation usually takes 1-2 hours to complete

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 will 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 your anaesthetic and have your operation.

Immediately after your operation you will be moved to the recovery room for close monitoring. You will 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, may be 12 hrs / 24 hrs or 48 hrs you will be taken back to your ward. You probable won't feel much like eating 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 day exercise programme and help you get back on your feet walking again. Your 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 hip joint replacement is usually 7-10 days or 12 days.



Preparing Yourself For Surgery

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

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.

Commit to the success of your surgery

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





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.

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.



SPECIAL INSTRUCTIONS

Every effort is made to minimise any risk or complications from occurring. However, like any other surgery – they may 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