



Your Complete Guide to Hip Replacement

Understanding new technologies for hip replacement

A PUBLICATION BY DRSTUARTMACKENZIE.COM.AU

TABLE OF CONTENTS

Hip problems	3
Anatomy of the hip	4
Causes of hip problems	5
First steps	6-7
Hip surgery	8
Hip surgery approaches	9
More on robotic-assisted surgery	10
How Dr Stuart performs robotic surgery	11
Your support system	12
After the surgery	13-14
Your rehabilitation	15
Maintaining your new hip	16

Hip Problems

The hip is the second largest joint in the body and one of the more commonly affected by arthritis and other joint diseases. It is the joint second most commonly requiring joint replacement surgery after the knee.

A properly functioning hip is critically important to maintaining an active and happy life. Hip disease affects many facets of life including walking, balance, sitting and sleeping.

The most common disease affecting the hip is osteoarthritis. In its early stages, it is common for osteoarthritis to have few or very mild symptoms. As the disease progresses, activities like walking, driving, and standing become challenging, painful, and very difficult. When it is severe, there is pain even at rest and it can affect sleep.

The most common cause of osteoarthritis of the hip is age-related wear and tear. It can also be due to the effects of childhood hip disease and previous injuries such as hip or pelvis fractures. Other problems that can lead to the need for hip replacement surgery include rheumatoid arthritis and avascular necrosis of the hip.

Hip disease can affect either one or both hips.

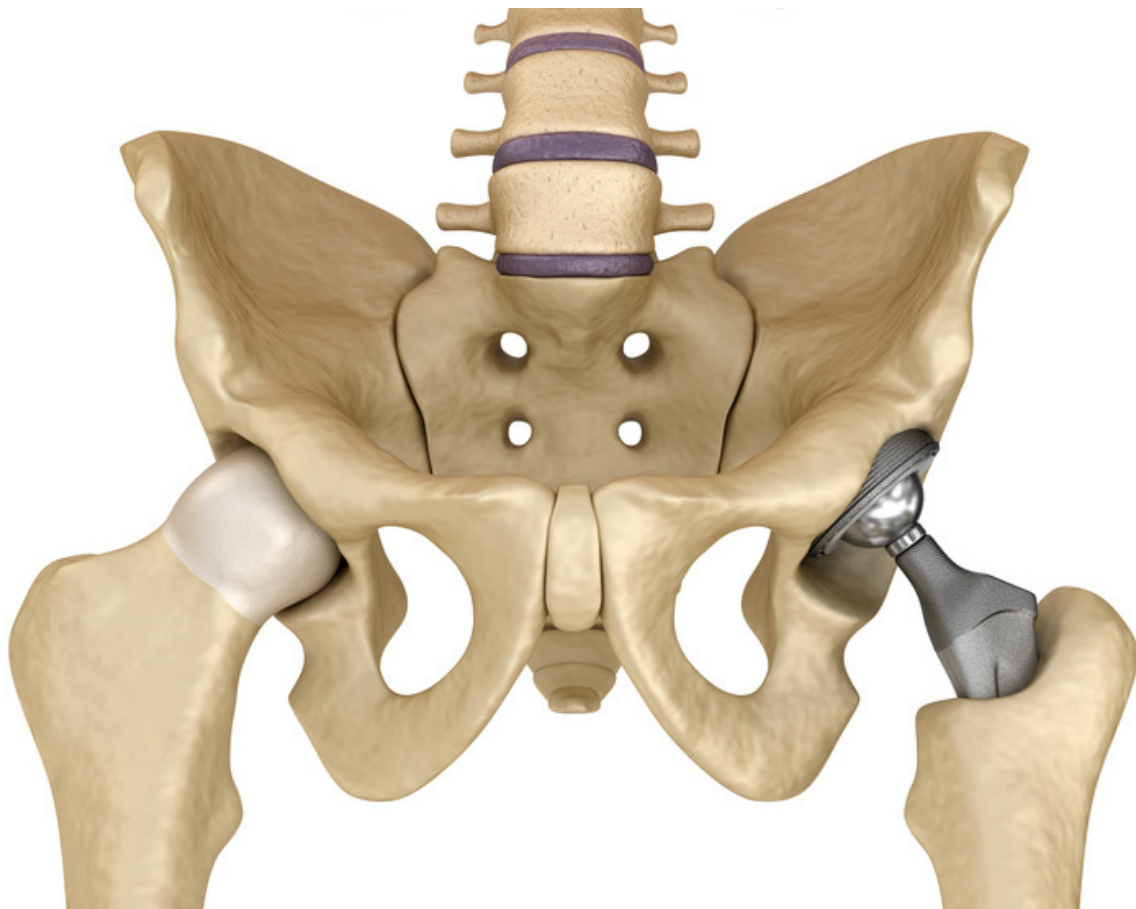


Anatomy of the Hip

The hip is a ball and socket joint made up of 2 bones. The femoral head is the ball and the acetabulum of the pelvis is the socket or cup. The surfaces of the ball and socket are covered in very smooth articular cartilage.

There is a ring of cartilage called the acetabular labrum around the rim of the socket to deepen it and provide a seal. There is a joint capsule that encloses the whole hip joint.

A number of different muscles attach to the bones around the hip and provide support and stability to the joint as well as allowing movement.



Causes of Hip Problems

Osteoarthritis

Osteoarthritis is the most common disease affecting the hip and the most common problem requiring hip replacement surgery. Osteoarthritis occurs when the smooth articular cartilage wears away leaving raw bone surfaces to rub against each other. It is the result of wear and tear of the joint and some people probably have a genetic predisposition to develop osteoarthritis.

Rheumatoid arthritis

Rheumatoid arthritis is an inflammatory disease that affects multiple joints throughout the body. It can cause damage to the bone and cartilage in any joint and commonly affects the hip.

Hip fractures

There are 2 ways in which hip fractures can lead to the need for hip replacement. Firstly, some types of hip fractures can need to be treated with hip replacement at the time of the fracture. Secondly, some fractures can lead to the development of osteoarthritis after the fracture has healed, sometimes many years later.

Avascular necrosis

Avascular necrosis is a common reason to need hip replacement surgery. Avascular necrosis occurs when the blood supply to the ball of the hip fails, causing part of the bone to die. Usually there is no known reason for avascular necrosis developing. Known causes of avascular necrosis include previous fractures and previous treatment with steroids.

Childhood hip disease

There are a number of childhood hip diseases that can lead to the need for hip replacement as an adult. The most common ones are developmental dysplasia where the hip socket doesn't form normally and slipped capital femoral epiphysis (SCFE), which is a type of fracture through the growth plate of the growing hip. These conditions often lead to the need for hip replacement in younger adults in their 30s and 40s.

First Steps

Who should I talk to about my hip problem?

The first step if you are having problems with your hip is to talk to your GP. They will assess your hip and usually get an x-ray. Based on their assessment they will decide if you need referral to an orthopaedic specialist.

What happens at the specialist consultation?

The specialist will examine you and look at your x-rays. They will then decide if further tests are needed or if there is enough information to recommend treatment.

Is this surgery safe? What are the risks?

All medical treatments have some risk involved. The risks of surgery are uncommon and may vary depending on your medical history and health. Your specialist will discuss the risks with you if surgery is recommended.

Will I be asleep during surgery?

There are a number of different ways of having an anaesthetic for surgery. Your anaesthetist will discuss this with you in detail but the majority of the time the patient is asleep during the surgery.

Will I feel pain after the surgery?

As with any operation there will be some pain after a hip replacement. This can usually be managed with medication. It is very common for patients the day after a hip replacement to say they have less pain than they did before the surgery.

How long does the surgery take?

The time the operation will take varies depending on the complexity of the operation, the type of prosthesis used and the approach the surgeon uses to get to the hip. Your surgeon will discuss this with you at the time of organising your operation.

First Steps

When can I go home?

The amount of time spent in hospital varies from patient to patient. You will be able to go home once you are comfortable and you are walking well enough to be safe at home. This is usually 4 or 5 days after the operation. Some patients need a little longer and may go to rehab for a short period for further recuperation.

How long will my new hip last?

There are a number of factors which influence how long a hip replacement lasts including the age and activity level of the patient and the type of hip replacement used. As a general rule there is a 95% chance your hip replacement will last longer than 10 years and it may last as long as 30 years or more.



Hip Surgery

The most common hip replacement surgery is a total hip replacement. This is when both the ball and socket of the hip are replaced. The vast majority of elective hip replacement surgery is total hip replacement.

Partial hip replacement, or hemiarthroplasty, is when only the ball side of the hip is replaced and the socket is left alone. This is done for certain types of hip fractures.

Redo, or revision, total hip replacement is when a hip replacement wears out or fails and needs to be re-done. This is generally technically more challenging surgery than doing a hip replacement for the first time.

If you need both hips replaced it is possible to do both at the same time although this is fairly uncommon. Most times the hips are done one at a time. The advantage of doing one at a time is that the recovery and rehabilitation is easier. Doing both hips together means that you only have to go through the recovery process once. Doing both hip replacements together is a significant stress on the body and may not be appropriate if you have other health problems.

Recently robotic technology has become available to help the surgeon during hip replacement surgery.



Hip Surgery Approaches

There are a number of different ways to access the hip for hip replacement surgery. These are referred to as approaches to hip replacement.

The most commonly used approach is the **posterior approach**. Recently the **direct anterior** approach has become popular. The **anterolateral or Hardinge approach** is also sometimes used.

All approaches to hip replacement surgery are able to achieve excellent results.

The direct anterior approach is a less invasive technique of approaching the hip joint. The direct anterior approach uses a plane between the muscles at the front of the hip rather than having to split muscles or remove them from the bone. A number of advantages of the direct anterior approach have been reported. These include faster recovery and lower risk of dislocation.

The direct anterior approach is suitable for many but not all patients having hip replacement surgery. Your surgeon will discuss with you what the appropriate approach is for your hip replacement.



More on Robotic-Assisted Surgery

Robotic surgery, or robot-assisted surgery, allows surgeons to perform complex procedures with more precision, flexibility and control than is possible with conventional techniques.

Robotic assisted orthopaedic surgery is an advanced and relatively new technique. During the operation the surgeon controls the robot to prepare the bone and for placement of the joint replacement implant. This is much more accurate than traditional methods of bone preparation and implant positioning.

Robotic assisted surgery can be used for hip replacement through either the posterior or direct anterior approach.

Is robotic surgery right for you?

Robotic surgery is not an option for everyone and is not available for all types of hip replacement. Not all surgeons perform robotic surgery and not all hospitals have the facilities to offer robotic surgery.

Talk with your surgeon about the benefits of robotic surgery, if it is available and suitable for you, and if they perform robotic surgery.

Did you know? Dr MacKenzie was the first surgeon to perform robotic assisted hip replacement surgery in Newcastle



How Dr Stuart Mackenzie works with robotics

“The first step is to obtain a CT scan a few weeks before the surgery. I then produce a 3D virtual model of the patient’s knee or hip. This allows me to see the patient’s anatomy and plan the best size and position of the implants for the individual patient’s anatomy.

At the time of the operation, further information is gathered during the surgery and the robotic surgical plan can be adjusted as required. Once the plan is finalised, I then use the robotic arm to help me prepare the bone to receive the prosthesis with the best possible fit.

Once the bone has been prepared, the robotic arm then also helps position the prosthesis with the greatest possible accuracy.”



Your Support System

At home, before the surgery

Before Hip replacement surgery the best thing you can do is keep as fit and active as possible. Seeing a physiotherapist or exercise physiologist can help maintain the best possible function leading up to your surgery.

It is also a good idea before your surgery to prepare for your recovery at home after the operation. If possible organise things so you won't have to go up or down stairs often. Prepare your home so it is easy to get around and remove trip hazards such as loose power cords or mats. If you live alone arrange for family and friends to be available to help you at home after the operation.

Having pre-cooked, frozen meals ready before you go into hospital is a good idea to make your life easier after the surgery.

At the hospital, after the surgery

After the operation you will have lots of help in the hospital from nurses and physios among others. You will likely be in hospital for about 4 or 5 days. Organising to have some family and friends come and visit you in hospital will make your stay more enjoyable and make it go faster.

At home, after the surgery

When you go home from hospital you will be able to walk but you will need walking aids such as crutches or a walking frame or sticks. You will need to have someone available to help you with everyday tasks such as preparing meals, shopping, washing and dressing.

It is a good idea to arrange for family or friends to be able to help with this. If you live alone it may be a good idea to arrange for someone to stay with you for a week or two or to arrange to stay with family or friends when you first leave hospital.

It is a good idea to have someone available who can drive you to any appointments or errands you need to drive to.

After the Surgery

Most people have an uncomplicated recovery from surgery. There will be some pain related to the operation but many patients find that the pain after hip replacement is not as bad as the pain that they had from their arthritis prior to the surgery. You will be given medication to help with pain both while you are in hospital and when you go home.

What happens after surgery?

Immediately after surgery you will go to recovery and then to the ward. On the morning after surgery a physiotherapist will get you out of bed and you will walk on your new hip for the first time.

When can I go home?

The average time in hospital after a hip replacement is 4 or 5 days. This varies from patient to patient. Most patients go straight home but some people go to rehab for a short period before going home.

How will I feel when I get home?

By the time you go home from hospital you will be safe to walk around by yourself. You will be given medication to control your pain. Many people are feeling better than they did before surgery by the time they go home.



After the Surgery

When can I return to driving and normal activity?

This varies from patient to patient. Most people are back to close to normal by three months following a hip replacement. The general rule for driving is 6 weeks but sometimes it may be possible to return to driving sooner, especially if your car is an automatic and the surgery is on your left hip.

When can I resume sexual intercourse?

Returning to sexual intercourse is variable and depends on the approach used for your surgery and your individual recovery. In most cases it will be safe by 6 weeks but there may be certain precautions so it is best to discuss this with your surgeon or physiotherapist.

When can I return to work?

Returning to work will depend on a number of factors including the type of work you do and how quickly you recover. Some people are ready to return to work after 6 weeks and most are able to return to work by 3 months.

When can I exercise again?

You will begin some exercise from the day after your surgery. When you get home it is a good idea to try to walk at least a little each day and to try to increase this a bit each day. Other activities will depend on your individual recovery and you should discuss it with your surgeon or physiotherapist before starting back at any other activity.



Your Rehabilitation

Rehabilitation will start the morning after surgery. The physiotherapist will get you up for your first walk. This will continue twice daily while you are in hospital. The majority of patients will be able to go home 4 or 5 days after a hip replacement but there is a small chance that you may need to go to a rehab ward for a period of more intensive rehab before you go home. If you do need to go to the rehab ward this can be arranged by the hospital after your surgery.

How often do I need to do my exercises at home?

The main exercise for rehab after a total hip replacement is walking. It is important to do a bit of walking each day and try to do a bit more each day.

The physiotherapist at the hospital may give you some other exercises to do at home as well. Generally you will be asked to do these 3 or 4 times a day.

Do I need to see a physiotherapist after I leave the hospital?

It is not mandatory to see a physiotherapist after you go home from hospital. However, working with a physiotherapist may help you to walk better sooner and help you get the best function out of your new hip sooner. They can also advise you when it is safe to start walking without crutches or a stick.

Do I need any special equipment?

When you go home from hospital you will probably need crutches or a walking frame to walk with. The physiotherapist will decide which is best for you and the hospital will be able to provide whatever is appropriate for you. Other equipment such as shower chairs or raised chairs is sometimes required. If any other equipment is required it will be organised for you while you are in hospital.

Do I need follow-up appointments?

You will need to follow up with your surgeon after you go home from hospital. The first follow up appointment is usually about 2 weeks after your surgery. This appointment is usually made for you before you go in to hospital to have the surgery.

Maintaining Your New Hip

Getting dressed

You may find it a bit awkward to dress after your hip replacement. It is a good idea to sit down to get dressed and to have someone available to help you.

Sitting down

It is best to avoid low chairs such as some lounges after your hip replacement. A chair with arms will make it easier to stand up than a chair without arms.

Bathing or showering

Having a shower will generally be easier than having a bath. It is preferable to use a stand-a-lone shower rather than a shower that is over a bath. If your shower is over the bath, the physio at the hospital will advise you on the safest way to get into and out of the shower and may give you a special shower seat to use.

Lying down and sleeping

After your hip replacement you can sleep however you are comfortable. If sleeping on your side during the first 6 weeks, it is recommended to have a pillow between your knees.





CALL DR. MACKENZIE TODAY

For a consultation and to discuss possible solutions to
any hip discomfort call **(02) 4963 3393**



Dr Stuart MacKenzie