

Anterior Muscle Sparing Total Hip Replacement

The Anterior Hip Replacement is a method of performing a hip replacement that potentially offers a number of advantages over the traditional methods of hip replacement surgery.

The anterior approach **DOES NOT CUT MUSCLES or TENDONS**. It is the only technique which follows intermuscular and internervous planes to reduce the risk of injury to muscles, tendons, vessels and nerves.

There are a number of potential benefits to not cutting muscle and tendons:

- **Decreased post-operative pain**
- **Quicker rehabilitation:** Rehabilitation starts the day of the operation. Standing up and walking with assistance can begin immediately.
- **Shorter hospital stay:** Many patients can go home 3 days after the operation with minimal pain and are walking comfortably.
- **Faster return to daily activities:** The Anterior technique allows you to return to daily activities in a shorter time frame. Depending on your general condition you may be driving in 8-10 days.

Other potential benefits to the Anterior approach include:

- **Small skin scar:** The skin incision is often shorter than with “conventional” surgery and so scar tissue is reduced.
- **Reduced risk of dislocation:** (separation of the hip ball and socket): By preserving the muscles around the hip, the stability of the hip is greatly improved. Also, the anterior approach allows Xray to be used during the surgery, allowing more accurate position of the components. The risk of dislocation is minimal, which means after the operation you will be able to sit and bend over with freedom and without the worry of dislocation.

Who needs a total hip replacement?

A total hip replacement is for patients who have severe pain and stiffness in the hip. The most common reason is arthritis. There are many causes of arthritis, but the most common ones include:

Osteoarthritis: Usually affects people above 50 years old, but can affect people who are younger.

It is essentially a 'Wear and Tear' process in your hip. Cartilage which covers the bones of your hip joint, femoral head (ball) and acetabulum (socket) is worn away, causing hip pain and stiffness.

Rheumatoid arthritis: Is an autoimmune disease in which a special membrane in your hip joint, called the synovial membrane becomes inflamed. This inflammation damages the joint cartilage.

Osteonecrosis: Your hip joint can be affected by a condition called osteonecrosis or 'bone death'. There are many possible reasons for osteonecrosis which include prolonged steroid use, alcohol abuse or genetics.



X-ray of the Pelvis
The Right Hip has been affected by Osteoarthritis

With almost 70 years of history, total hip replacement surgery is a very common and safe procedure for the treatment of severe osteoarthritis. The main benefits of a successful total hip replacement are:

- **Reduction in hip pain:** The pain will be rapidly and dramatically reduced. Usually eliminated.
- **Recovery of mobility:** Your hip will function with less effort, almost regaining your original mobility.
- **Improvement in quality of life:** Your everyday activities and social life will no longer be limited by pain and reduced mobility.

What to expect from hip replacement surgery?

It is important to understand what a hip replacement can and cannot do before deciding to undergo the operation. Most people who have the procedure, experience a dramatic reduction of hip pain and a significant improvement in movement, allowing them to better perform common activities of daily living.



However, there are certain things that you **should avoid** with a hip replacement, such as:

- jogging
- any high impact sports such as football.

How is a hip replacement performed?

Most people are admitted to hospital the same day as surgery. The anaesthetic team will see you and decide the type of anaesthetic that is best for you.

The different types of anaesthesia include:

- **General Anaesthetic.** This type of anaesthetic puts you to sleep during the whole procedure and a machine controls your breathing.
- **Spinal Anaesthetic.** An injection is placed into your back to numb your hip and legs. You will be awake during the procedure, however a sedative can be given to help you doze off.
- **Nerve Blocks.** This special injection is used to help with your pain after the operation and often used in conjunction with a general anaesthetic.

The operation usually takes 1 to 2 hours however, it can occasionally take a few hours. Your wound is approximately 10-15cms in length, depending on your shape and your hip anatomy, and is located directly in front of your hip. Your muscles are then carefully separated until your hip joint is exposed.

The arthritic femoral head (ball) is removed. This allows access to your acetabulum (socket) which is prepared for the new implant. The acetabular implant is secured into your hip joint socket. Your thigh bone (femur) is then prepared and your new femoral stem and ball is inserted. Your hip joint is then tested for stability, flexibility and size.

What is the hip replacement made of ?

They are made of surgical grade metal alloys (often chromium, cobalt or titanium), highly wear resistant plastic or ceramic. A hip replacement is composed of a number of parts:

- **Shell:** Medically called Acetabular Component. Made of titanium alloy and has a special surface coating which allows bone to grow into it for extra stability.
- **Liner:** The liner fits snugly into the socket to provide an ultra-smooth surface for the hip joint. It can be made of ceramic or plastic.
- **Ball:** The artificial ball component is smaller than



your normal hip ball. It is incredibly polished and perfectly round and smooth. It is usually made of ceramic or chromium cobalt.

- **Stem:** The stem fits snugly into your thigh bone (femur) to provide a stable structure for the ball. It is made of titanium. It either has a special coating which allows the bone to grow into it or is held in place with bone cement.

Preparing for surgery

Prior to your surgery date, your fitness will be assessed and all the necessary tests will be performed.

Appointments will be arranged for the following:

- Perioperative Physician (Dr Belinda Smith)
- Pre-Admission Hip Information Session

Tests that may be ordered for you include:

- Blood tests
- ECG
- Urine test

Preparing your skin. Your skin should **not** have any infection or irritation present before surgery. If either is present, please contact us.

Go see your dentist. We recommend treating significant dental diseases (including tooth extractions and periodontal work) before your operation. Routine dental procedures should be delayed until six months after surgery.

Medications. Before surgery, Dr Belinda Smith will advise you which medications you should stop or continue taking.

All complimentary and alternative medications should be stopped 2 weeks prior and not started until 2 weeks postoperatively unless otherwise recommended.

Get some help from your friends and family.

Although you will be able to walk with crutches or a walker soon after surgery, you will need some help for several weeks. We can also arrange for you to stay at the Rehabilitation Unit at St Vincent's East Melbourne, or at one of your choosing.



Home Planning. Most people do not need to make any special home modifications following hip replacement surgery. However, some preparation that you may want to consider.

- A stable chair for early recovery with a firm seat cushion (that allows your knees to remain lower than your hips), a firm back, and two arms
- A dressing stick, a sock aid and a long-handled shoe horn for putting on/taking off shoes and socks without excessively bending your new hip
- Removal of loose carpets and electrical cords from the areas where you walk in your home
- A reacher that will allow you to grab objects without excessive bending of your hips
- A raised toilet seat
- A stable shower chair for bathing
- A long-handled sponge and shower hose

Complications and how to help avoid problems after a Total Hip Replacement?

The complication rate following hip replacement surgery is **very low**. However, it is important to always understand the potential complications when considering any operation.

The risks for a total hip replacement include:

- **Joint infection:** Serious complication, occur in fewer than 1% of patients. The most common causes of infection after hip replacement surgery are from bacteria that enter from the skin. These bacteria can lodge around your prosthesis.
- **Uneven legs:** Many steps are taking to ensure that you leg lengths are equal, and usually the accuracy is within a few millimeters. Somethings though the difference may be more and a shoe raise may be needed after the surgery.
- **Heart attack and Strokes:** Major medical complications are rare but are important to consider especially if your health is poor.
- **Dislocation.** This is rare with the anterior approach.
- **Wear & Tear:** Over years the hip prosthesis will wear or may loosen. With modern advances in materials and techniques this risk is decreasing.
- **Revision surgery:** Most hip replacements are now expected to last over 20 years. When they have to be redone, it is called revision surgery.

- **Deep vein thrombosis (DVT):** Blood clots in the leg veins or pelvis are the **most common** complication of hip replacement surgery.

Prevention of Blood Clots in the Calf and Lungs (DVT / PE)

To prevent Deep Vein Thrombosis (DVT) and Pulmonary Emboli (PE), we encourage you to start walking as soon as possible after the operation. Special foot pumps are used to encourage circulation in the leg.

Most people will also be prescribed medication for 6 weeks. Most patients will either have Clexane injections or take Aspirin.

Post surgery 'warning signs' to look for

Warning signs of DVT

- Pain and tenderness in your calf
- Swelling of the lower leg, ankle and foot
- Skin that is red and warm

Warning signs that a blood clot has travelled to your lung (PE) include:

- Shortness of breath
- Chest pain, particularly with breathing

Warning signs of possible hip replacement infection are:

- Persistent fever (higher than 37.5°C)
- Shaking and chills.
- Increasing redness, tenderness, or swelling of the hip wound.
- Drainage from the hip wound.
- Increasing hip pain with both activity and rest.

Notify us IMMEDIATELY if you develop any of these warning signs.

Wound care

Looking after my wound. It is important to keep your wound as dry as possible. Most patients are discharged home with a waterproof dressing, which can be left on for showering. During the first 24 hours, it is normal to have some minor ooze. After being discharged home, there should be no discharge, redness or bleeding around the wound. If there is redness, discharge or foul odour, please let us know immediately.



Wound

When will my sutures be removed? Most of our patients will have absorbable stitches and glue, which do not require suture removal after surgery.

Diet

What should I eat and drink? There are usually no specific diet or extra vitamins/nutrients needed to recover from your operation. It is important to have a normal healthy balanced diet. Drink plenty of non-alcoholic fluids and keep up with fibre intake especially whilst taking pain relief. Avoid smoking.

Activity

What exercises should I do at home?

Physiotherapy and the exercises you perform at home are extremely important to achieve the best results after hip replacement. After returning home, most people will receive physiotherapy at home, as part of the postoperative care.

Avoiding Falls

A fall during the first few weeks after surgery can damage your new hip and may result in a need for more surgery.

Be careful on stairs. Stairs are a particular hazard until your hip is strong and mobile and you have regained your balance. You should use a walking aid such as a cane, crutches or a walker. Use the handrails on stairs or ask for someone to help you.

Special Precautions

One of the possible complications of hip replacement surgery is dislocation. Dislocation is most common during the first year after surgery but can also occur at any time. Sensible precautions should be taken after this:

- Do not force your hips into positions they could not do previously e.g. Yoga or Pilates
- Do not perform exercises or sports that are a potential falls risk.

Taking care of your new hip

Long term care of your total hip. Most hips will last many years. Over the years, you will be asked to fill out survey forms and have Xrays, so that we can monitor your hip replacement.

If you have any concerns whatsoever about your new hip, do not hesitate to contact us.

for more information

www.phongtran.com.au/anterior-hip-replacement

