

Anterior Muscle Sparing Total Hip Replacement

The Anterior Hip Replacement is a special way of performing a hip replacement that offers a number of advantages over the traditional method.

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.

These include:

- **Prevention of limping**
- **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.
- 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. 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.
- Less blood loss: Preservation of muscles and vessels potentially reduces blood loss, therefore transfusions are much less common. Early movement, means better circulation in the legs, potentially leading to less formation of blood clots.
- Small skin scar: The skin incision is often shorter than with "conventional" surgery and so scar tissue is reduced.
- 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.

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 cause 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 over 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.





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

- Regular high impact exercise.
- Contact 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 &/or combination 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 is usually 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 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 surgical stainless steel or titanium) and highly wear resistant articulations (plastic or ceramic). A hip joint is basically a ball and socket joint.

It is designed to replace and restore the normal anatomy and is composed of a number of parts;

- Shell: Medically called Acetabular Component.
 Made of a metal alloy (stainless steel or titanium) with a special surface coating that 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 plastic or ceramic.



- Ball: The artificial ball component is smaller than your normal hip ball. It is highly polished, perfectly round and smooth. It is usually made of metal or ceramic.
- **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 special bone cement.

Dr Fary will discuss these different types and which combination is best for you.



Preparing for surgery

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

Appointments will be arranged for the following:

- Physician
- Pre-Admission Hip Information Session

Tests that may be ordered for you include:

- Blood tests
- ECG
- Urine test
- CT/Xray (hip and pelvis)

Preparing your skin. Your skin should <u>not</u> have an infection or evidence of irritation present before surgery. If either is present or are concerned please contact us.





Go see your dentist. It is import to treat significant dental diseases and infections (including tooth extractions and periodontal work) before your operation. I recommend a dental check-up prior to surgery particularly as routine dental procedures should be delayed until six months after surgery.

Medications. Before surgery, your Physician 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; cooking, shopping, bathing, and laundry. We can arrange for an extended stay at the Rehabilitation Unit in Hospital if. A short stay in an extended-care facility during your recovery after surgery may also be arranged. You will not be discharged until you feel safe and confident to return home.

Home Planning. Most people do not need to make any permanent special home modifications following hip replacement surgery. However, the following list of items will make your return home easier during your recovery:

- Forearm crutches required
- 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
- Over Toilet seat
- A stable shower chair/shower stool for bathing
- A long-handled sponge and shower hose
- 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
- A Reaching aid that allows you to grab objects without excessive bending of your hips
- Firm pillows for your chairs, sofas and car that enables you to sit with your knees lower than your hips
- Removal of loose carpets and electrical cords from the areas where you walk in your home

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 (no matter how small the risk) when considering any operation.

Preventing Infection

The most common causes of infection after hip replacement surgery are from bacteria that enter the bloodstream during dental procedures, urinary tract infections, or skin infections. These bacteria can lodge around your prosthesis.

Future dental or surgical procedures may require antibiotic coverage.

*See our separate information sheet for more detail

The risks for a total hip replacement include:

- **Joint infection:** Serious complication, occur in fewer than 2% of patients.
- Heart attack and Strokes: Major medical complications are rare but are important to consider especially if your health is poor.
- Uneven legs: Leg-length inequality may occur
 or may appear worse after hip replacement.
 Your surgeon will take this into account during
 the operation in addition to other issues, including the stability and biomechanics of the hip.
 Some patients may feel more comfortable with
 a shoe lift after surgery for a period of time.
- 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. Having the operation done again 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. If you have been assessed to be at higher risk of DVT/PE, then you may be placed on Clexane injections instead. This threat is present any-time after your operation and lasts for several weeks after your surgery.





Post surgery 'Warning Signs' to look for; These include:

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.
- Nausea.
- 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. Should you not be able to contact us, it is imperative you go to the nearest **Emergency Department or Local Doctor.**

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 or seek medical attention.

Sutures & Skin Closure System Dressing (Prineo)

Most patients will have absorbable stitches covered with a special tape glued over (Prineo). The Prineo itself is protected by a waterproof dressing for 2 weeks. As Prineo is glued to the skin it does not fall off until the wound has completely healed. It can take 4 weeks to slowly peel off. The tags may be removed with nail scissors. It should be kept dry and NOT soaked or scrubbed. If pulled off forcefully it can damage or open the wound.

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 post-operative care. You will gradually be able to do more and more. It is important to be sensible and not overextend yourself beyond normal during the first 6 weeks as your body heals and incorporates the hip replacement.

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 you have regained your balance. You should use a walking aid such as a cane, crutches or a walker. Use 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
- Avoid sports or exercise that previously you were not confident with or at risk of falling.

Taking care of your new hip

Long term care of your total hip.

Your hip will last many years. Over this time you will be monitored and asked to complete surveys and have Xrays. This allows Dr Fary to ensure optimum survival for you and analyse your results so that we can continually improve outcomes for patients in the future.

Don't Forget.

- Lead a healthy and active life
- In-case of fever, throat inflammation, pulmonary inflammation or any infection, tell your doctor you have a hip implant.
- Undergo regular general check-ups.

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



