

Complications of Total Hip Replacement

Hip replacement surgery is generally safe, but as with any surgery, complications can occur. More than 90 percent of patients undergoing hip replacement surgery have minimal to no complications, and of the complications that do arise, almost all can be successfully treated.

Some of the more common complications include:

DVT and PE. Blood clots in the veins of the legs:

Blood clots and migration of the clot to the lungs are a common complication of hip replacement surgery. As long as the clots remain in the legs, they are relatively a minor problem. Occasionally they dislodge and travel through the heart to the lungs (pulmonary embolism). This is potentially serious, since (very rarely) death can result from embolism. Blood clots may be suspected if you develop pain and swelling in your calf or thigh.

Several measures may be used to reduce the possibility of blood clots including:

- i. Blood thinning medications
- ii. Elastic stockings
- iii. Exercise to increase blood flow
- iv. Calf compressors that inflate with air to compress the muscle in the legs

Infection 1 %: A bacterial infection of the hip joint. This is the most devastating complication and is fortunately uncommon. If infection cannot be eradicated by antibiotics, removal of the components may be required.

Dislocation of the hip replacement (1 to 2%): After the hip replacement surgery, some movements or positions may put too much strain on your new hip and cause the ball to slip from its socket. This risk is highest in the first 3 months after surgery because the joint capsules and soft tissue have not completely healed. Certain positions should be avoided to minimise the chance of dislocation of your new hip while it heals. These restrictions are known as hip precautions. Your physiotherapist will discuss this further with you after your operation.

If a dislocation happens, the hip needs to be relocated with full muscle relaxation, this is usually done under an anaesthetic in hospital. The hip joint that dislocates repeatedly may require revision of one or more of the components (see attached hip precautions).

The length of the leg may be changed (20%):

Limb length discrepancies of up to 2cm are relatively common in the general population and the majority are asymptomatic. If too much leg lengthening occurs following a total hip replacement the patient may require a heel raise for the other leg.

Numbness around the surgical scar

Injury to the arteries or nerves of the leg (Nerve Injury risk: 0.3%, Vascular injury: 0.2%):

Although every effort is usually made to avoid these problems the nerves may be cut, cauterized or stretched.

Blood loss

Heterotrophic Ossification: Extra bone formation where bone is not normally present

Fracture of the femur: Can occur during or after the hip replacement

Loosening of the prosthesis from the bone: Is the most important long-term problem. How long the bond will last depends on a number of factors

Wear of the Plastic Polyethylene Socket

Residual pain and stiffness can occur: In virtually all cases, hip replacement will make a significant improvement in your pain and mobility.

Prosthesis breakage

Mechanical problems: Stiffness, squeaking, dislocation.

Anaesthetic complications

Death (02%)

Other rare and improbable events: eg Allergy to the metal parts (ALVA)

Direct Anterior Approach Total Hip Replacement

The Anterior Approach is increasingly becoming the standard approach for Total Hip Replacement

The direct anterior approach to total hip replacement is the new alternative to hip replacement surgery which was traditionally done through the posterior approach.

The benefit of this procedure lies in the fact that it allows the surgery to be done through a small incision and accessing the diseased hip through an internervous plane between muscles and avoid dissecting or detaching muscles around the hip joint. As a result, there is less tissue dissection and trauma to muscles, resulting in a quicker recovery.

It is a minimally invasive approach that, unlike more traditional hip replacements, requires no muscle detachment or splitting. It offers patients the benefits of less pain, faster recovery and improved mobility with a quicker return to unassisted ambulation.



As its name suggests, the direct anterior approach (DAA) to the hip is from the front of the thigh with the patient supine (on their back) and accessing the hip joint between the Tensor Fascia Lata and the Sartorius muscles. This is facilitated using a specialised traction table. Multiple studies have demonstrated the benefits of the (DAA) due to its muscle preservation. These studies have shown more rapid recovery of hip function, early return to normal gait and a lower dislocation rate. Other benefits of the DAA include improvement in acetabular component positioning, leg-length equality and offset restoration through the use of intraoperative fluoroscopy/Xray.



Benefits of Direct Anterior Hip Replacement

- Less invasive: Allows access to the joint without detaching any muscle
- Smaller incision (av. 10cm)
- Less blood loss
- More accurate component placement through the use of intraoperative Xray's.
- Lower dislocation rate
- Reduced postoperative pain and analgesic requirement
- Quicker recovery and shorter hospital stay
- Faster rehabilitation and quicker return to normal gait
- Fewer post-operative restrictions. No hip precautions required

Dr Fred Nough is an Australian trained Orthopaedic Surgeon specialising in minimally invasive joint replacement Surgery and Sports injuries. Please contact Dr Nough for more information on the Direct Anterior Approach Hip Replacement.

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Total Hip Replacement

After the Procedure

You may stay in the hospital for three to seven days.

- The first night you will be confined to bed with a wedge-shaped pillow between your legs to keep the new hip joint in place
- If you are having trouble urinating, a tube will be placed in your bladder.
- Normally you will begin physical therapy the day after surgery, and within days you can walk with a walker or a cane
- Your bloods are taken routinely after surgery.
- Unless instructed otherwise by your surgeon, you will be able to put your weight on the operated leg
- You will initially start walking with a frame and as you continue to recover, gradually progress to a walking stick
- Walking aids can be discarded 2 to 4 weeks after your operation.

After three to seven days of hospital care, you will be sent either home or to a rehabilitation center. This will depend on how quickly your new hip heals and on your ability to get around and perform your daily activities.

Returning to work after Hip Replacement

You will be able to return to work within 3 to 4 weeks for desk jobs. People with physical jobs such as labourers, may need to be off for 10 to 12 weeks before they are able to meet the demands of their job.

You may resume driving 6 weeks after surgery .

Activities After Total Hip Replacement

Hip replacement surgery allows patients to maintain an active lifestyle in greater comfort and without pain.

After your surgery, you may be permitted to play golf, walk, swim, ride a bike and dance. You will also be able to go back to activities such as Yoga and Pilates, with some restrictions, to ensure safe range of movements during those activities. More strenuous sports such as tennis or running, jumping or contact sports are discouraged after hip replacement surgery.



Implant components



Implanted



Total Hip Replacement Surgery

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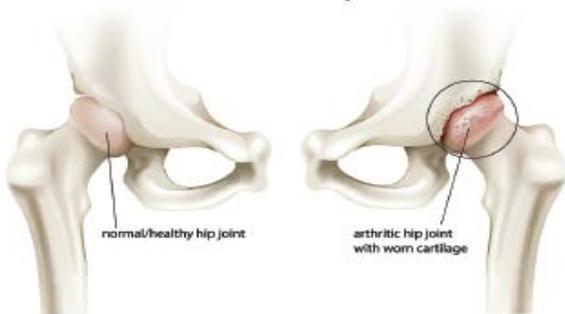
Total hip replacement is one of the most successful Orthopaedic procedures performed today. It is a highly effective operation at relieving pain caused by arthritis and restoring hip mobility and strength. It will allow you to maintain an active lifestyle in greater comfort and without the burden of joint pain and stiffness.

Total hip replacement is considered when you have tried and failed more conservative treatments, yet you continue to have significant pain, stiffness, or problems with the function of your hip

Non Surgical treatments of hip arthritis include:

- Weight loss or maintenance of a healthy weight
- Physical therapy and Hydrotherapy
- Use of an assistive device such as a cane or a walker
- Pain-relieving medications
- Glucocorticoid (steroid injection into the painful joint)

Arthritis of the Hip Joint



The Procedure

The operation takes between 1 and 2 hours.

A general or regional (epidural or spinal) anaesthetic is used. The hip can be approached through an incision from the front, side or the back.

The damaged and arthritic femoral head is removed and replaced with a prosthetic component. Bone cement is sometimes used to secure the femoral prosthesis to the bone.

The damaged cartilage part of the socket (acetabulum) is removed using specialised instruments and replaced with a metal socket. Screws may be used sometimes to secure the metal socket into the pelvis.



You may benefit from a total hip replacement if you have any of the following:

- Hip pain that limits your usual activities such as walking, shopping, bending or constant hip pain at rest during the day, or pain that wakes you up at night
- Joint stiffness in the hip that affects moving or lifting your leg
- You find no improvement of the pain with physical therapy, pain medication or the use of mobility aids



Pre-op



Post-op

There are a variety of types of prosthetic surfaces, including metal ball and plastic socket (metal -on-plastic), metal-on-metal, and ceramic-on-ceramic. Each surface has unique advantages (this can be discussed prior to surgery).

The hip is relocated and carried through a range of motions to test how well it re-approximates normal motion and how stable it is to resisting dislocation.



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