

Paul D Maitino DO FAOAO Hip Knee Shoulder & sports medicine Oklahoma City OK

Paul D Maitino DO FAOAO Hip Knee Shoulder & sports medicine Oklahoma City OK

Total Hip Replacement

- [Introduction](#)
- [Arthritis](#)
- [Indications](#)
- [Benefits](#)
- [Pre-operation](#)
- [Day of your surgery](#)
- [Surgical Procedure](#)
- [Post-operative](#)
- [Special Precautions](#)
- [Risks and Complications](#)
- [Summary](#)

Find out more about Total Hip Replacement with the following link

- [Launch Movie](#)

Introduction

Hip replacement has become necessary for your arthritic hip: this is one of the most effective operations known and should give you many years of freedom from pain.

Once you have arthritis which has not responded to conservative treatment, you may well be a candidate for total hip replacement surgery.

Arthritis

Arthritis is a general term covering numerous conditions where the joint surface (cartilage) wears out. The joint surface is covered by a smooth articular surface that allows pain free movement in the joint. This surface can wear out for a number of reasons, often the definite cause is not known. When the articular cartilage wears out, the bone ends rub on one another and cause pain. There are numerous conditions that can cause arthritis and often the exact cause is never known. In general, but not always, it affects people as they get older (Osteoarthritis).

Other causes include

- Childhood disorders e.g., dislocated hip, Perthe's disease, slipped epiphysis etc.
- Growth abnormalities of the hip (such as a shallow socket) may lead to premature arthritis
- Trauma (fracture)
- Increased stress e.g., overuse, overweight, etc.
- Avascular necrosis (loss of blood supply)
- Infection
- Connective tissue disorders
- Inactive lifestyle- e.g., Obesity, as additional weight puts extra force through your joints which can lead to arthritis over a period of time
- Inflammation e.g., Rheumatoid arthritis

In an Arthritic Hip

- The cartilage lining is thinner than normal or completely absent
- The degree of cartilage damage and inflammation varies with the type and stage of arthritis
- The capsule of the arthritic hip is swollen
- The joint space is narrowed and irregular in outline; this can be seen in an X-ray image
- Bone spurs or excessive bone can also build up around the edges of the joint
- The combinations of these factors make the arthritic hip stiff and limit activities due to pain or fatigue

Diagnosis

The diagnosis of osteoarthritis is made on history, physical examination & X-rays. There is no blood test to diagnose Osteoarthritis (wear & tear arthritis)

Indications

THR is indicated for arthritis of the hip that has failed to respond to conservative (non-operative) treatment.

You should consider a THR when you have

- Arthritis confirmed on X-ray
- Pain not responding to analgesics or anti-inflammatories
- Limitations of activities of daily living including your leisure activities, sport or work
- Pain keeping you awake at night
- Stiffness in the hip making mobility difficult

Benefits

Prior to surgery you will usually have tried some simple treatments such as simple analgesics, weight loss, anti-inflammatory medications, modification of your activities, walking sticks, physiotherapy.

The decision to proceed with THR surgery is a cooperative one between you, your

surgeon, family and your local doctor. Benefits of surgery include

- Reduced hip pain
- Increased mobility and movement
- Correction of deformity
- Equalization of leg length (not guaranteed)
- Increased leg strength
- Improved quality of life, ability to return to normal activities
- Enables you to sleep without pain

Pre-operation

- Your surgeon will send you for routine blood tests and any other investigations required prior to your surgery
- You will be asked to undertake a general medical check-up with a physician
- You should have any other medical, surgical or dental problems attended to prior to your surgery
- Make arrangements around the house prior to surgery
- Cease aspirin or anti-inflammatory medications 10 days prior to surgery as they can cause bleeding
- Cease any naturopathic or herbal medications 10 days before surgery
- Stop smoking as long as possible prior to surgery

Day of your surgery

- You will be admitted to hospital usually on the day of your surgery
- Further tests may be required on admission
- You will meet the nurses and answer some questions for the hospital records
- You will meet your anaesthetist, who will ask you a few questions
- You will be given hospital clothes to change into and have a shower prior to surgery
- The operation site will be shaved and cleaned
- Approximately 30 mins prior to surgery, you will be transferred to the operating theatre

Surgical Procedure

An incision is made over the hip to expose the hip joint

The acetabulum (socket) is prepared using a special instrument called a reamer. The acetabular component is then inserted into the socket. This is sometimes reinforced with screws or occasionally cemented. A liner which can be made of plastic, metal or ceramic material is then placed inside the acetabular component.

The femur (thigh bone) is then prepared. The femoral head which is arthritic is cut off and the bone prepared using special instruments, to exactly fit the new metal femoral component. The femoral component is then inserted into the femur. This may be press fit relying on bone to grow into it or cemented depending on a number of factors such as bone quality and surgeon's preference.

The real femoral head component is then placed on the femoral stem. This can be made of metal or ceramic.

The hip is then reduced again, for the last time.

The muscles and soft tissues are then closed carefully.

Post operative

You will wake up in the recovery room with a number of monitors to record your vitals. (Blood pressure, Pulse, Oxygen saturation, temperature, etc.) You will have a dressing on your hip and drains coming out of your wound.

Post-operative X-rays will be performed in recovery.

Once you are stable and awake you will be taken back to the ward.

You will have one or two drips in your arm for fluid and pain relief. This will be explained to you by your anaesthetist.

On the day following surgery, your drains will usually be removed and you will be allowed to sit out of bed or walk depending on your surgeons preference. Pain is normal but if you are in a lot of pain, inform your nurse.

You will be able to put all your weight on your hip and your Physiotherapist will help you with the post-op hip exercises.

You will be discharged to go home or a rehabilitation hospital approximately 5-7 days depending on your pain and help at home.

Sutures are usually dissolvable but if not are removed at about 10 days.

A post-operative visit will be arranged prior to your discharge.

You will be advised about how to walk with crutches for two weeks following surgery and then using walking aids for another four to six weeks.

Post-op precautions

Remember this is an artificial hip and must be treated with care.

AVOID THE COMBINED MOVEMENT OF BENDING YOUR HIP AND TURNING YOUR FOOT IN. This can cause DISLOCATION. Other precautions to avoid dislocation are

- You should sleep with a pillow between your legs for 6 weeks. Avoid crossing your legs and bending your hip past a right angle
- Avoid low chairs
- Avoid bending over to pick things up. Grabbers are helpful as are shoe horns or slip on shoes
- Elevated toilet seat helpful
- You can shower once the wound has healed
- You can apply Vitamin E or moisturizing cream into the wound once the wound has healed
- If you have increasing redness or swelling in the wound or temperatures over 100.5° you

should call your doctor

- If you are having any procedures such as dental work or any other surgery you should take antibiotics before and after to prevent infection in your new prosthesis. Consult your surgeon for details
- Your hip replacement may go off in a metal detector at the airport

Risks and complications

As with any major surgery, there are potential risks involved. The decision to proceed with the surgery is made because the advantages of surgery outweigh the potential disadvantages.

It is important that you are informed of these risks before the surgery takes place.

Complications can be medical (general) or specific to the hip

Medical Complications include those of the anesthetic and your general well being. Almost any medical condition can occur so this list is not complete.

Complications include

- Allergic reactions to medications
- Blood loss requiring transfusion with its low risk of disease transmission
- Heart attacks, strokes, kidney failure, pneumonia, bladder infections
- Complications from nerve blocks such as infection or nerve damage
- Serious medical problems can lead to ongoing health concerns, prolonged hospitalization or rarely death

Specific complications include

Infection

Infection can occur with any operation. In the hip this can be superficial or deep. Infection rates are approximately 1%, if it occurs it can be treated with antibiotics but may require further surgery. Very rarely your hip may need to be removed to eradicate infection.

Dislocation

This means the hip comes out of its socket. Precautions need to be taken with your new hip forever. If a dislocation occurs it needs to be put back into place with an anaesthetic. Rarely this becomes a recurrent problem needing further surgery.

Blood clots (Deep Venous Thrombosis)

These can form in the calf muscles and can travel to the lung (Pulmonary embolism). These can occasionally be serious and even life threatening. If you get calf pain or shortness of breath at any stage, you should notify your surgeon.

Damage to nerves or blood vessels

Also rare but can lead to weakness and loss of sensation in part of the leg. Damage to blood vessels may require further surgery if bleeding is ongoing.

Wound irritation

Your scar can be sensitive or have a surrounding area of numbness. This normally decreases over time and does not lead to any problems with your new joint.

Leg length inequality

It is very difficult to make the leg exactly the same length as the other one. Occasionally the leg is deliberately lengthened to make the hip stable during surgery. There are some occasions when it is simply not possible to match the leg lengths. All leg length inequalities can be treated by a simple shoe raise on the shorter side.

Wear

All joints eventually wear out. The more active you are, the quicker this will occur. In general 80-90% of hip replacements survive 15-20 years.

Failure to relieve pain

Very rare but may occur especially if some pain is coming from other areas such as the spine.

Unsightly or thickened scar

Limp due to muscle weakness

Fractures (break) of the femur (thigh bone) or pelvis (hipbone)

This is also rare but can occur during or after surgery. This may prolong your recovery, or require further surgery. Discuss your concerns thoroughly with your orthopaedic surgeon prior to surgery.

Summary

Surgery is not a pleasant prospect for anyone, but for some people with arthritis, it could mean the difference between leading a normal life or putting up with a debilitating condition. Surgery can be regarded as part of your treatment plan- it may help to restore function to your damaged joints as well as relieve pain.