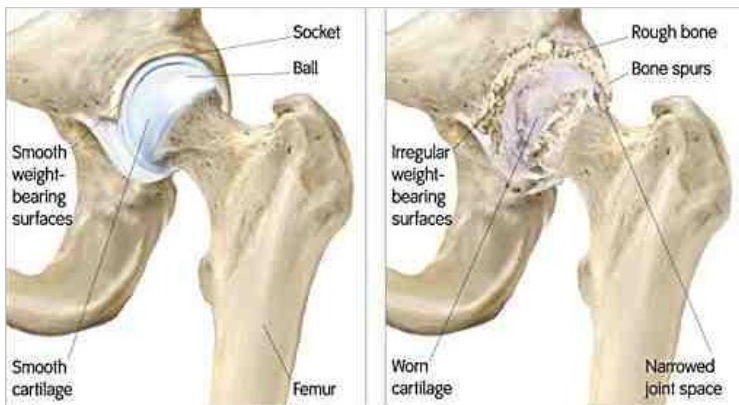


Total Hip Replacement

Why do I need a hip replacement?

Hip replacement is needed when hip is affected by osteoarthritis, a condition where hip joint becomes painful and stiff due to general wear and tear over the years. It is also done when the hip is affected by other type of arthritis such as Rheumatoid arthritis.



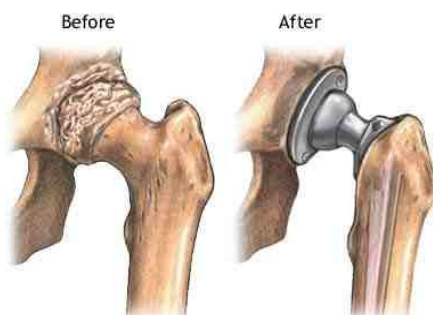
The primary aim of hip replacement is to reduce pain. The pain you may be experiencing may be in the groin and also in the knee region on the same side. This is due to the hip and knee sharing a common nerve. In addition you may also be suffering

from significant stiffness in the joint thus making day to day activities rather difficult. You may be experiencing pain at night. Often you will find the mornings are particularly difficult and the pain somewhat improves as the day progresses.

Not all hips with osteoarthritis need replacement. You will be tried on pain killers and anti-inflammatory medication in the first instance. You will also do some physiotherapy to improve the muscles around the hip joint and may also be tried with a walking aid.

What is the realistic expectation from a hip replacement?

Hip replacement should improve your pain immensely. The improvement in mobility is secondary to the improvement of underlying pain. However, you must be aware that no artificial joint will be as good as your previously healthy natural joint. Nonetheless, hip replacement is generally a very successful operation.



What happens before I get the operation?

You will be seen by a Nurse practitioner prior to surgery when all relevant tests are performed, such as blood and urine examination to ensure that you are not anaemic and that you are free of urinary infection. Your blood pressure and heart will be checked out and any other tests relevant to your health condition will be carried out.

You will be given an opportunity to discuss your hip replacement with the nurse practitioner and handle the prosthesis yourself. You may be asked if you are willing for the details of your operation to be entered into the National Joint Registry (NJR). The NJR collects data on hip and knee replacements in order to monitor the performance of joint implants. You will also be informed about patient controlled analgesia (PCA) where you press a button to give yourself a small dose of painkiller as and when necessary.



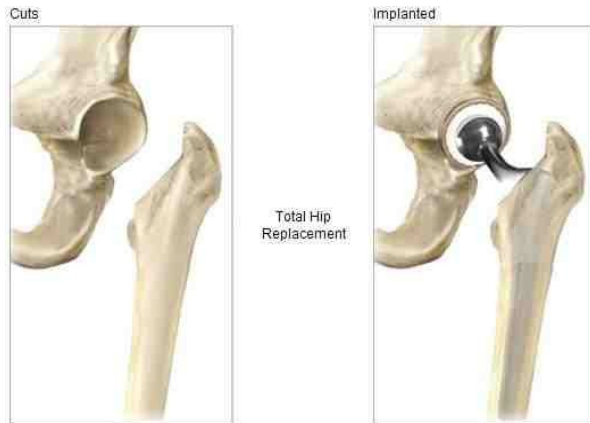
When do I go into the hospital for operation?

Depending on your health status you may go in either on the day of surgery or a day before. Your blood pressure and medications are checked again and you will be asked to sign the consent form for the surgery if you have not already done so.

What happens on the day of operation?

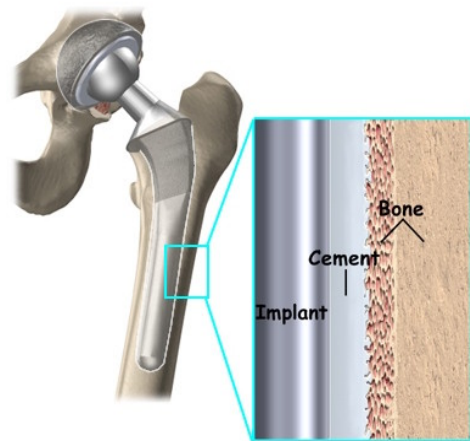
You will be given a medication which will calm your mood prior to going to theatre. The anaesthesia will be given in a separate room adjoining the operation theatre. Your anaesthetist will decide the most suitable type of anaesthesia for you. This may be general anaesthesia where you will be sent to sleep or regional whereupon you would receive an injection in the back which would render your lower half of the body numb. Should you were to receive regional anaesthesia, you will also be given some medication to drift you off to sleep during the procedure.

What is the new joint?



With total hip replacement a part of femur (thigh bone) is removed including the ball (head of femur) and is replaced by a prosthesis securely fixed to the remaining thigh bone. This is so fixed either with or without bone cement. The socket (acetabulum) is deepened and a shell (cup) is fixed so that it will couple (articulate) with the prosthesis in the femur.

Thus, your new hip joint is a ball and socket joint which is fixed to your bone by one of two means. Traditionally the prosthesis is fixed to the bone by using acrylic cement. Another way of fixing the prosthesis is relying on body tissue to achieve good bond between the metal and your bone. This happens over time and such new joints are known as un-cemented replacements.



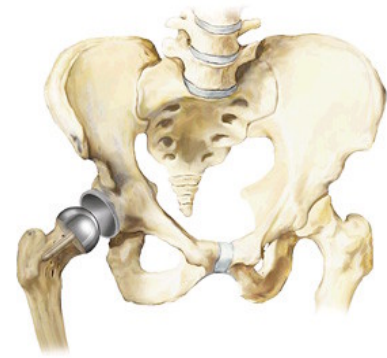
The replacement parts can be of different materials. The common type of replacement consists of metal ball moving in a plastic socket. For younger and more vigorous patients your surgeon may choose a 'metal on metal' or 'ceramic on ceramic' prosthesis. These bearings allow the surgeon to use bigger head prosthesis which allows a greater range of motion such as sporting activities without increasing the risk of dislocation.



There is yet another type of replacement called 'surface replacement', where the bone removal is conservative. Instead of removing the head of femur a metal cap is placed on the head of femur after due preparation. People who are young and very active are most benefited by this replacement. Recovery and return to sporting activities seem quicker with this replacement, however, the long term results are not as well validated as a total joint



replacement. There are a number of surface replacement hips available in the market and Birmingham MOM (metal on metal) is perhaps most widely known.



What happens after the operation?

You will be returned to the recovery area where you will be kept comfortable, warm and any pain controlled. You may find a pillow between legs to keep your new hip in place. This will be removed as you become more mobile and regain control of your muscles.

What happens in the first week?

Upon returning to the ward you may have fluids or blood if needed through a cannula in your arm. There may be one or two tubes acting as drains in your hip wound and they will be removed by 24 hours. You will also be given medication in the form of an injection to prevent clotting in the veins.

Physiotherapy will start with earnest from the first day after surgery. You will be helped to your feet and guided to take few steps. You will be able to start walking first using a frame and soon with elbow crutches or sticks. The physiotherapist will show how to go up and come down stairs, getting out of bed and other activities.

The occupational therapist will assess your physical capabilities and your circumstances at home when you are about to leave the hospital. You will be provided with additional gadgets such as a raised toilet seat and any other equipment you may require.

When can I leave hospital and what happens after?

You are usually sent home once you have shown your ability to climb stairs safely and the wound is looking healthy. Discharge takes place once your home adjustments and appliances are put in place. You should leave hospital by 5 days and you will be asked to come back for a clinic review anywhere between 6 and 12 weeks. District nurse will visit you at home and take out the stitches. Depending on the progress and your physical ability you may be given some physiotherapy either as an out patient or at home.

You can expect to drive by 6 weeks and get back to work at this stage.



However, if your job is a sedentary office based you may be able to get back earlier. Getting in and out of car can be difficult and it is important to sit sideways on the seat first and then swing both your legs around together. You may discard walking sticks by 4 weeks. You will be able to have sex after about 6 to 8 weeks but extreme positions best avoided.

Take regular exercise. Walking and swimming (avoid breaststroke) are ideal. Cycling may be difficult until about 12 weeks as getting on and off the cycle may be difficult. Golf and bowls after 12 weeks are fine but bending at hip more than 90 degrees is avoided. Within a year of operation you should have returned to all your normal activities.

How long do the hip replacements last?

Your new hip in this day and age should allow you pain-free function for many years. Over 80% of cemented hips last for 20 years or more. Hips which may fail will show pain especially when you start walking and as time goes on a dull constant pain may linger. Remember, modern day hip replacements function very well and last a long time.

What are the complications of hip replacement and what should I be aware of?

The risk of complications varies according to your general health and these will be discussed with you by your surgeon and nurse practitioner before surgery. Whilst it is important for you to be aware of the various complications one needs to remember that many thousands of hip replacements carried out every year with no adverse outcome.

The known complications of hip replacements are as follows:

Infection

Hip replacements are done in clean air theatre and with the use of antibiotics before surgery the risk of infection is greatly diminished.

Despite this, infection may set in the wound and if this happens the wound becomes red, hot and painful. You may need to be taken back to the operative theatre for a wound washout and it is possible to save the hip. If infection cannot be eradicated or controlled the hip may have to be removed as the artificial hip prevents the infection from clearing completely. Infection may set in later without any untoward signs with the surgical scar. Such hips may cause grumbling pain in the groin and walking becomes progressively difficult. Once the diagnosis is proved the hip replacement may need to be removed and a new one needs placing after getting rid of infection. The risk of troublesome infection is low and should not be more than 1 in 200 cases.

Blood clots

Hip replacement surgery can cause stagnation of blood in the veins and this can predispose to clot formation. This is referred to as Deep vein thrombosis (DVT). In a very small minority clot may get dislodged and travel up and get stuck in the lungs and this is referred to as pulmonary embolism (PE). This can be very serious and is often manifested by breathlessness or collapse and very rarely can be fatal. Following hip replacement if you were to develop calf swelling with pain or chest pain with breathlessness you should seek medical advice straight away. The risk of DVT and PE can be minimised by drugs which you will receive during your hospital stay.

Dislocation

Artificial hips can dislocate after all they are ball and socket joints. It happens due to a variety of reasons and sometimes occurs due to extreme positioning of the limb. Dislocated hips need an anaesthetic to be put back in and after a brief period of bed rest patients are mobilized. Should dislocations happen frequently surgery is often required to stabilize the joint.

Wear

All movable parts wear out in time. This happens in the car engine with valves and piston and likewise in the moving artificial hips. A lot of research has gone into making the problem of wear as little as possible. The wear is significantly more in metal on plastic joint (common variety) compared to 'metal on metal' or 'ceramic on ceramic' where the moving surfaces are harder. Wear in artificial hip releases certain particles which cause inflammation and may cause destruction of the bone around the hip. Such loss of bone can cause loosening and this may present as ever



increasing pain in the hip and difficulty with walking. Thus the patients after hip replacement are kept under surveillance for long periods of time with regular x-rays and if ever wear becomes problematic it would be dealt surgically before the bone loss becomes extensive.

What is new in hip replacement surgery?

New plastics and bio-materials are being developed to make wear less of an issue. Improvements in surface replacement are taking place to make surgical results more predictable.

Minimally invasive surgery (MIS) is a market driven concept where hip replacement is done through small incisions. In this country hip replacement is commonly done through an adequate length of incision ensuring that the muscles are not damaged by stretching them too much.

Computer Assisted Surgery (CAS) again is industry driven where a surgeon is dictated by a computer to align the prosthesis amongst other things. There was a flutter of interest in this briefly but for a routine hip replacement this is now considered unnecessary. Indeed the concept of MIS and CAS for hip replacement has not caught on to any significant degree and is fair to say that the interest in these have dwindled in recent years.