



## **OPERATION: Total Hip Replacement (Arthroplasty)**

**PROCEDURE:** The hip joint is a “ball and socket joint”. It is a very important joint as it allows a great deal of movement but is also weight-bearing. As a result of this, it is often prone to “wearing away”. This is a simplified reason as to why arthritis occurs. Arthritis can be a very painful disorder which may slow down your mobility/ walking or even stop you from sleeping.

A hip replacement is an operation which replaces the severely damaged hip bone with an artificial ball and socket that does the function of the natural joint. It may reduce the pain and help in walking and sleeping.

If you hold any x-rays, please bring them with you when you come into hospital.

You will be visited by your surgeon before the operation. If you have any questions, now might be a good time to ask them. The surgeon will mark on your leg with a felt pen. This is to make sure the correct leg is operated on.

An anaesthetic will be given in theatres. This may be a general anaesthetic (where you will be asleep) and/ or a regional block (e.g. where you are awake but the area to be operated is completely numbed) for example an injection into the spine. You must discuss this and the risks with the anaesthetist. If you have any allergies, please also tell them.

You will lie on the opposite side to the one being operated on. Your skin will be cleaned with antiseptic fluid and clean towels (drapes) will be wrapped around the hip.

The surgeon will make a cut (incision) using a surgical knife (scalpel). The exact location of the incision depends on your surgeon’s technique. The length of the incision also depends upon the surgeon and your leg

A cut is made through the fat and muscles which lie in the way of the hip bones. The top of the thigh bone (femur) which forms the neck and ball will be cut away. A replacement stem and ball can then be placed in the remaining thigh bone.

The socket part of the hip joint will also be drilled smooth. The surgeon will try and remove as much arthritic bone and make a smooth base for the new “cup”. In some cases, surgeons will use a special bone cement to hold the stem and/ or the cup in position. There are also different types of materials of implant to use. These can be made of different types of metals, polyethylene (like a plastic) or very tough ceramic.

When satisfied with the positions, the surgeon will close the wound. A drain may be used. This allows any collections of blood or fluid to drain out. The drain can be removed painlessly on the ward within a day or two.

The skin can finally be closed. Some surgeons use stitches, while others prefer metal clips (skin staples). Both methods are equally successful and come down to surgeon preference. When you wake up, you will feel sore around the hip, this is normal. You will be encouraged to start walking as soon as possible with the aid of the physiotherapists.

An X-ray and a blood test may be taken the next day.

**ALTERNATIVE PROCEDURE:** Total hip replacements are usually performed on patients suffering from severe arthritis (although there are other reasons). Most patients are above the age of 55yrs.

Other alternatives include – Losing weight,  
stopping strenuous exercises or work,  
Physiotherapy and gentle exercises,  
Medicines, such as anti-inflammatory drugs (ibuprofen  
or steroids),  
Using a stick or a crutch,

Some of the above are not appropriate if you want to regain as much physical activity as possible, but you should discuss all possibilities with your surgeon.

## RISKS

As with all procedures, this carries some risks and complications.

### **COMMON: (2-5%)**

#### Blood clots

a DVT (deep vein thrombosis) is a blood clot in a vein. These may present as red, painful and swollen legs (usually). The risks of a DVT are greater after any surgery (and especially bone surgery). Although not a problem themselves, a DVT can pass in the blood stream and be deposited in the lungs (a pulmonary embolism– PE). See later. This is a very serious condition which affects your breathing. Your doctors may give you medication through a needle to try and limit this risk of DVTs from forming. Some centres will also ask you to wear stockings on your legs, while others may use foot pumps to keep blood circulating around the leg. Starting to walk and getting moving is one of the best ways to prevent blood clots from forming.

#### Bleeding

This is usually small and can be stopped in the operation. However, large amounts of bleeding may need a blood transfusion or iron tablets. Rarely, the bleeding may form a blood clot or large bruise within the wound which may become painful & require an operation to remove it.

Pain: the hip will be sore after the operation. If you are in pain, it's

important to tell staff so that medicines can be given. Pain will improve with time. Rarely, pain will be a long term problem. This may be due to altered leg length or any of the other complications listed below, or sometimes, for no obvious reason.

Prosthesis wear/ loosening : Modern operating techniques and new implants, mean that most hip replacements last over 15 years. In some cases, this is significantly less. The reason is often unknown. Implants can wear from overuse. There is still debate as to which material is the strongest. The reason for loosening is also unknown. Sometimes it is secondary to infection. This may require removal of the implant and revision surgery.

Altered leg length: the leg which has been operated upon, may appear shorter or longer than the other. This rarely requires a further operation to correct the difference or shoe implants.

Joint dislocation: if this occurs, the joint can usually be put back into place without the need for surgery. Sometimes this is not possible, and an operation is required, followed by application of a hip brace or rarely if the hip keeps dislocating, a revision operation may be necessary.

LESS COMMON: (1-2%)

Infection: You will be given antibiotics just before and after the operation and procedure will also be performed in sterile conditions (theatre) with sterile equipment. Despite this there are still infections (1 to 2½%). The wound site may become red, hot and painful. There may also be a discharge of fluid or pus. This is usually treated with antibiotics, but an operation to washout the joint may be necessary. In rare cases, the implants may be removed and replaced at a later date. The infection can sometimes lead to sepsis (blood infection) and strong antibiotics are required.

RARE: (<1%)

Altered wound healing: the wound may become red, thickened and painful

(keloid scar) especially in Afro-Caribbean people. Massaging the scar with cream when it has healed may help.

**Nerve Damage:** efforts are made to prevent this, however damage to the nerves around the hip is a risk. This may cause temporary or permanent altered sensation along the leg. In particular, there may be damage to the Sciatic Nerve, this may cause temporary or permanent weakness or altered sensation of the leg.

**Bone Damage:** the thigh bone may be broken when the implant (metal replacement) is put in. This may require fixation, either at time or at a later operation.

**Blood vessel damage:** the vessels around the hip may rarely be damaged. This may require further surgery by the vascular surgeons.

**Pulmonary Embolism:** A PE is a consequence of a DVT. It is a blood clot that spreads to the lungs and can make breathing very difficult. A PE can be fatal.

**Death:** this rare complication can occur from any of the above complications.

