

Bwrdd Iechyd Prifysgol Aneurin Bevan University Health Board

# Patient Information Total Hip Replacement

Fracture & Orthopaedic Unit

This leaflet aims to give you information about hip replacements. We have outlined the main benefits, significant risks and potential complications and alternatives to the operation that you need to know about before making your decision.

If after reading this information you have any questions or anxieties, or want more detail about your planned surgery you should discuss these fully with your surgeon before agreeing to surgery.

#### Why is hip replacement recommended?

Total hip replacement is usually done for severe arthritic conditions. The surfaces of the ball and socket joint between your thigh bone and pelvis bone are no longer smooth. The bones surfaces are rough and the cartilage lining has worn away, this is what causes the pain and stiffness and affects your walking.

The operation is sometimes done for other problems such as hip fractures or when the bone of the hip ball dies (called a vascular necrosis).

#### What does the operation entail?

We make a cut along the side of your hip and thigh. The damaged bony socket is relined with an artificial socket made from special plastic, metal or ceramic.

In a **total hip replacement** we remove the damaged ball and replace it with a ball on a stem, which is fitted into your thigh bone.

At the end of the operation we close the skin with stitches, clips or glue. A wound drain may be used.

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There are many different types of artificial hips. Some are held in place with bone cement. In others, bone grows onto the surface of the metal implant. If you would like to know what we are going to use and the reason for the choice please ask.

# What are the benefits of the operation?

Following total hip replacement, the joint surfaces will again be smooth and will slide easily. This gives most patients excellent pain relief, an increased range of motion, and unlimited walking ability. You may be able to take part in physical activities which before surgery were impossible.

#### IT'S IMPORTANT TO REMEMBER THAT A HIP REPLACEMENT IS NOT THE SAME AS YOUR NATURAL HIP AND YOU WILL NEED TO TAKE CARE OF YOUR NEW HIP

# Are there any alternatives?

If the pain in your hip interferes with your life and the x-rays show that the joint is severely damaged, then you should think seriously about having your hip replaced.

Of course, it is up to you to make the decision about whether or not you want the surgery. Steroid injections are available but will not provide long-term pain relief. Physiotherapy can be helpful but will not reliably diminish the pain. If you choose not to have surgery then it is likely that the pain will become worse and make moving around more difficult over time.

# What are the significant risks and potential complications of hip replacement?

The vast majority of patients undergoing total hip replacement make an uneventful post-operative recovery and achieve excellent pain relief and recovery of mobility. However, as with all major operations, a hip replacement is associated with certain risks. The most significant risks are explained here along with the precautions you and your surgeon may take to reduce these risks.

# 1. Blood clots (known as venous thrombosis)

The development of blood clots in the leg veins is the most common complication of hip replacement surgery. The majority of such clots cause no symptoms, but they can be associated with the development of pain and swelling of the calf and thigh. In the long term this may be associated with the development of varicose veins. Occasionally part of a blood clot may break off and enter the blood vessels in the lungs (known as pulmonary embolus). This is a potentially dangerous situation that occurs in less than 2 in 100 patients. The risk of fatal pulmonary embolism is in the order of 1 in 200 hip replacements).

In order to reduce the risk of blood clots your surgeon may use blood thinning drugs, elasticised support stockings and pneumatic calf or foot pumps. You will also be encouraged to exercise your legs in bed at first and to walk as soon as possible after the surgery.

### 2. Infection

The risk of the hip becoming infected at the time of surgery is of the order of 1 in 100 hip replacements, although this may not become apparent for several years. To reduce the risk of infection you will be carefully examined to ensure there is no infection elsewhere in the body e.g. chest, teeth, urinary tract, skin). You will be given antibiotics before surgery and the operation will be carried out in a clean air enclosure in which the air is filtered to remove bacteria. Special operating suits may also be used.

The risk of infection is increased if you have rheumatoid arthritis, diabetes, are taking steroids or have infection elsewhere at the time of surgery (chest, teeth, bladder, skin). You should inform your surgeon if you suspect that you may have an infection anywhere in your body.

#### 3. Dislocation

A total hip replacement will be less stable than your own hip. The risk of dislocation in the first 6 months is of the order of 3-5 in 100 total hip replacements and then it decreases. The majority of hip dislocations can be treated by manually putting the hip back into place (known as manipulating the hip). This may require an anaesthetic. If the hip replacement remains unstable, then further surgery may be necessary.

To reduce the risk of dislocation, the physiotherapist and the nursing staff will advise you about the leg positions you must avoid.

#### 4. Nerve Damage

Damage to the nerves around the hip during hip replacement is rare (less than 1 in 200 hip replacements). The majority of such injuries are due to bruising or stretching of the nerve and usually fully recover within 6 months. The most common problem following such nerve injuries is numbness over the back of the foot and weakness in pulling the foot upwards.

# 5. Fracture

**Total hip replacement -** Significant fractures of the bones around the hip during a total hip replacement are rare, occurring in less than 1 in 100 cases. If such a fracture occurred it would normally be dealt with by your surgeon at the time of surgery. This may result in slower rehabilitation to protect your hip while the fracture heals. Occasionally, a second operation may be required.

# 6. Blood Vessel Damage

Damage to the blood vessels around the hip joint is very rare during hip replacement. If damage occurred, this would normally be dealt with by your surgeon at the time of the operation.

Because of bleeding during and after surgery, a blood transfusion may be required. In some cases it is possible to collect and re-infuse your own blood to reduce the need for donated blood. Bleeding is more likely if you regularly take blood thinning agents (**Warfarin, Aspirin, Clopridogrel, Ginko Biloba**) and you should inform your surgeon if you are taking any of these medications.

#### 7. Ectopic Bone Formation

Significant extra bone formation develops around the hip in less than 1 in 100 patients. It can cause the hip to be stiffer than expected. In cases of severe stiffness, surgical excision of the new bone and post-operative radiotherapy to prevent the bone forming again may be required.

# 8. Leg Length Discrepancy

One objective of a total hip replacement is to have legs of equal length at the end of the procedure. For anatomical and technical reasons this is not always possible and on occasions the leg may be deliberately lengthened to improve the stability and muscle function of the joint. A leg length difference is more likely if you start with significant shortening of the leg or have abnormal anatomy of the hip joint. A shoe raise may be required if the leg length difference post-operatively is more than 1cm.

#### 9. Other Medical Problems

As in all major operations, there is a small risk of heart attacks and strokes after hip replacement. The risk of death from such events is approximately 1 in 200 hip replacements.

#### 10. Persistent pain.

A small proportion of patients can be left with persistent pain around the hip despite surgery and post-operative rehabilitation. Your surgeon will attempt to find the source of the persistent pain, but in a small number of patients (approximately 1 in 100) no correctable cause can be found.

#### 11. Reaction to metal particles and metal ions.

Metal on metal bearings are used for some forms of total hip replacement. They are particularly suitable for young active patients as they are more hard-wearing than plastic bearings.

A small number of patients may have an allergic reaction to the metal used in the hip replacement. This can cause pain and swelling around the hip. If you develop such symptoms you surgeon will arrange further tests.

At present we estimate the risk of this allergic response to metal to be of the order of 1 in 1,000 cases, although it is much more common in women than men. In the rare event of a severe – reaction, damage to the muscles and bones can be caused and the joint may need to be changed.

IF YOU NOTICE ANY SYMPTOMS THAT CAUSE YOU CONCERN AROUND THE SITE OF YOUR SURGERY CONTACT: YOUR CONSULTANT'S SECRETARY – DURING WEEK DAYS OR NHS DIRECT AT ALL OTHER TIMES

> "This document is available in Welsh / Mae'r ddogfen hon ar gael yn Gymraeg".