

# About Hip Resurfacing

## What is Hip Resurfacing?

Hip resurfacing is a type of hip replacement which replaces the two surfaces of the hip joint. The procedure is very bone conserving as the head of the femur is retained. Instead of removing the head completely, it is shaped to accept an anatomically sized metal sphere. The surface of the acetabulum (the socket) is replaced with a metal implant, which is fitted directly into the bone. There is no large stem to go down the central part of the femur as with a total hip replacement.

## Who is a candidate for Hip Resurfacing?

This operation is primarily intended for use in people who are in need of a hip replacement at a younger age, primarily under 55 years old.

People aged between 55 and 65 who are very active and otherwise fit may also be suitable and this will be determined by their bone quality.

Patients who have extreme deformity of either the head of the femur or the acetabulum due to arthritis of the hip unfortunately are not good candidates for this type of surgery.

## Why do I need a Hip Resurfacing?

- Stop your hip hurting
- Improve your mobility
- Improve your quality of life

## How can I reduce the risk of problems?

To minimise the risk of your new hip dislocating, you are advised to follow a few simple rules for the first six weeks.

Do not bend your new hip more than a right angle or 90. Especially when sitting down or getting up off your chair, your bed or the toilet. Do not bend far when putting on clothes or shoes. Do not bend down to the floor.

Do not cross your legs at knee or ankle (even when sleeping). If you normally sleep on your side, talk to your physiotherapist or occupational therapist about safe ways to do this.

Do not twist on the operated leg when standing or walking. Always pick up your leg to turn.

## How long will my new hip last?

Your new hip should work well for many years. In studies, at least seven in ten people find that their new hip lasts at least ten years. However, as this is a newer operation there are not many long term studies. Eventually, your hip will stop working properly through wear and tear. When this happens, you can have an operation to replace it.

## Possible complications

This is a very successful operation, but there are some risks associated with any procedure. For a hip replacement they include:

Anaesthetic – Modern anaesthetics are generally very safe. The anaesthetist will explain any particular risks to you.

Infection – There is a small risk of infection of the joint following the operation but you will be given antibiotics to help prevent this. If after you get home you notice fever, increased pain, swelling and redness around the wound, please phone contact our office.

Deep vein thrombosis (a blood clot in a leg vein) – You may have anti-coagulant medication and support stockings to help prevent it. A symptom of this may be an acute pain in your calf. Please contact us urgently.

Dislocation – The two parts of your hip can slip out of place (dislocate). This can happen because ligaments and muscles that normally keep your hip in position are disrupted during the operation. Therefore, your hip is at risk of dislocating until these structures become stronger. Dislocation is most likely to happen in the first six weeks after surgery. If this happens, you may need another operation to put the parts back together.

Please talk to Professor Haddad before your operation if you have concerns about possible risks. We hope the information provided has been of benefit to you. For further information please contact us on 0207 935 6083.

All patients will need a full blood count on day 1 and again days 4 and 7 if still in Hospital for thrombocytopenia although the incidents of HIT with low dose prophylaxis seems to be much lower than initially feared.

## **Metal on Metal**

You may be concerned that your hip is one of those that has created problems with metal ion production. These have led to several features in the press.

This is unlikely as we have very selectively undertaken hip resurfacing using the implant with the best track record (The Birmingham Hip Resurfacing or BHR) and have not electively performed any primary metal on metal hip replacements. We have instead favoured ceramic, oxidized zirconium and polyethylene bearings.

The term “metal-on-metal” refers to hip devices where both the ball and socket joint are made of a metal alloy (commonly Cobalt-Chrome). This bearing surface was considered superior in comparison to alternatives, mainly due to the metals durability allowing the implants to last longer. In addition the ball part of the device is larger making the joint more stable and less likely to dislocate.

However, despite these advantages, recent information has raised some concern with relation to the use of certain metal-on-metal hip devices. These concerns are centered on adverse reactions occurring in the body to excess metal wear particles. This has led to the recall of the Depuy ASR/ASR XL hip implants.

As with any hip device, when the two bearing surfaces of the ball and socket rub against each other gradual wear of these surfaces occur. This wear releases metal debris (ions and particles) which are normally broken down by the body's immune system, absorbed into the blood stream and filtered by the kidneys and released in the urine. However, in the case of certain metal-on-metal devices, excess wear occurs which can go onto cause both local and generalized / systemic reactions in some patients. These may present with symptoms such as pain and swelling around the hip joint and subsequent loosening of the implants. This process may be referred to as Metallosis, Adverse Reaction to Metal Debris (ARMDs) or Pseudotumours.

As a result, since 2010 the UK Medicines and Healthcare Regulatory Agency (MHRA) has issued a number of safety alerts advising that all patients who have received metal-on-metal hip implants are followed up. The follow-up process may vary from a simple questionnaire to more extensive investigations which include blood tests for raised metal ions/ Xrays and MRI scans. Where implant failure is identified, the treatment option of choice is a revision hip replacement to an alternative bearing surface.

Deep vein thrombosis (a blood clot in a leg vein) – You may have anti-coagulant medication and support stockings to help prevent it. A symptom of this may be an acute pain in your calf. Please contact us urgently.

Despite these concerns, there is still strong evidence in the literature to suggest that the overall incidence of this adverse metal reaction is low and that the vast majority of patients have not had any problems with their metal-on-metal hip implants.

Metal-on-metal hip resurfacing still remains a viable option in certain groups of individuals such as young fit active patients with large femoral heads and strong bone.

## Hip Resurfacing FAQ's

### **How do I know if I have a metal-on-metal hip replacement?**

The hospital at which the surgery was performed will have an accurate record of your operation and what implant was used. Most hospitals are in the process of following up their metal-on-metal patients and therefore may have already tried to contact you. If however, you have any concerns you may contact the surgeons secretary who performed the operation directly, or go via your GP.

### **Do these concerns relate to all metal-on-metal hip replacement devices?**

Yes – although there is evidence in literature that certain implant designs such as the Depuy ASR/ASR XL implants were more susceptible to failure than others. In addition to this, relatively speaking, more problems have been associated with large head metal-on-metal total hip replacements as compared with metal-on-metal hip resurfacings.

### **What worrying symptoms should I look out for?**

The most common symptom is onset of pain around the hip and groin. This may or may not be associated with swelling. It is important to note however, that these symptoms are not specific to an adverse metal reaction and therefore, further investigations may be required to diagnose the cause. Some patients have complained of generalized symptoms including lethargy and depression but the link to metal on metal implants has not been proven.

### **What follow-up should I be receiving after my metal-on-metal hip replacement?**

Most hospitals have already implemented a follow-up protocol of their metal-on-metal hip patients. The follow-up process varies depending on the hip implant design and your symptoms. Where patients are well this may entail a simple review in clinic. If, however, any specific concerns are raised then further investigation in the form of blood tests and Xrays may be required. This may be further followed up with MRI scans.

Certain metal-on-metal implants such as the ASR/ASR XL implants and large head total hip replacements are recommended to be followed up on an annual basis for the lifetime of the implant.

### **What will happen if there is evidence of failure of my hip replacement?**

The surgeon will discuss the cause of the wear and damage. If there is evidence of an adverse reaction to the metal and excess wear then ultimately revision surgery of the hip will be required to an alternative bearing surface.

**Is the metal-on-metal bearing still being used?**

Yes – although there has been a decline in the use of the bearing surface, there is still strong evidence in literature that certain implant designs (hip resurfacing in appropriate patients) in certain groups of individuals perform very well. Your consultant surgeon will be best able to advise you on this.

**What are the long term risks related to metal-on-metal hip replacements?**

The long term implications of metal-on-metal wear debris is unclear. There is published literature correlating raised metal ions with increased risk of genetic complication in animal studies. However, to date there has been no evidence of this in humans. In particular there is no evidence to suggest that raised metal ions following metal-on-metal hip replacements are associated with an increased risk of cancer.

**Where can I get more information on the subject?**

Probably the best source of information will be the consultant surgeon who has performed the hip replacement. In addition, the internet has a wide range of available resources to include patient forums.

Alternatively official websites that will provide up to date information include:

<http://www.mhra.gov.uk>

<http://www.boa.ac.uk>