

# About Revision Hip Replacement

## **Why do I need a Revision Hip Replacement?**

The most common cause appears to be loosening of the cement used to fix the artificial socket into the hip bone. As the socket loosens progressively, it starts to rub on or abrade the bone into which it had been fixed. This constant rubbing has an affect much like sandpaper which cause dissolution of bone slowly over a period of time. Just as the cement surrounding the socket component becomes loose with time, so can the cement placed around the femoral component.

The progression of the problem is as described above. Also, once the implant loosens, it can place abnormal stresses both on the bone as well on the implant itself leading to bone loss in the first instance and breakage of the component in the second.

An infection- deep within the hip joint and in and around the components can be the cause of the failure. This is a particularly difficult problem to deal with both from the point of view of the surgeon as well as from the perspective of the patient. Usually though not always, the hip components are securely fixed but may have to be removed to clear up the infection.

Repeated hip dislocation may necessitate a revision operation. A single dislocation particularly in the first few weeks after the primary hip replacement is not necessarily a problem and often remedies itself after the hip is put back providing of course that there are no recurrences.

The hip may be unstable because there is not enough tension or tightness in the muscles and ligaments around the artificial replacement. This lack of tissue tension can make it easy for the hip to pop out.

Development of bone defects or patches of bone loss even though the components are securely fixed shows up on a routine X-Ray.

This occurs because of the body's reaction to particles generated from wear and tear of the hip replacement bearing. The damage to the bone will continue progressively unless the bearing is renewed this can result in weakening the bone and causing a fracture (a break in the bone) or cause the components to loosen.

In a situation such as this, the earlier a remedial intervention is carried out the better as that may help preserve the patient's bone stock and make the redo operation technically easier.

Pain and disability are not relieved through medication and lifestyle changes.

## **Revision Hip Replacement**

There is little doubt that revision hip surgery is generally much more involved and complicated than a primary (first time) hip replacement operation. Overall, it is a more lengthy operation and associated with a higher level of risk.

Patients generally take longer to get over this type of surgery. It is however, crucial to understand that while the primary hip replacement operation is a fairly standard and predictable procedure, the revisions vary from patient to patient.

In fact it is hard to see two patients with exactly the same problem hip. The implication therefore is that solutions for patients who have failed hip replacements have to be tailored individually.

### **Factors to consider regarding Revision Hip Surgery**

There are a number of factors to be taken into account when planning the surgery for the patient and these include:

What is the cause of the hip failure in the first place?

Is there an infection in the hip?

Which of the hip replacement components have failed and need to be changed?

What has been the consequence of the failure of the components? For example, is there bone loss?

Is the remaining bone stock enough to anchor the new replacement components? If there is significant bone loss then how is that to be made up or circumvented?

How have the implants been fixed in the first place? Has cement been used or not?

Can the implants be removed without causing damage to the bone and soft tissues?

What is the make and model of the hip in place? Are the “matching” components still available from the manufacturers and how long ahead of the surgery do those components need to be ordered in?

Is it necessary to use non standard components to deal with the patient’s particular situation?

What implants and from which manufacturer would be most suitable?

### **General precautions**

The hip replacement that you have had is an artificial joint. It is therefore important that you take necessary precautions to prevent complications. Listed below are some precautions to be taken particularly in the first 6-8 weeks are. Your physiotherapist will discuss these and others with you in greater detail prior to your discharge from hospital as well as during your follow up visits post surgery.

- Contact your doctor if you notice any redness, leaking fluid or have an increased pain in the operated area
- Do not bend the hip more than a right angle as this could cause the hip to dislocate or pop out of the joint.
- Avoid low chairs and toilet seats.
- Do not bend down to the floor to pick up objects.
- Do not force the hip to bend to reach your toes such as to clip your toe nails or put on your stockings.
- Do not twist the hip.
- Do not cross your legs.
- Do not lie on your side for the first 6 weeks.
- In the longer term, there is a small risk of spread of infection to the hip should you have an infection anywhere else in the body, if you are undergoing an operation, internal examination or even dental work.

Remember to inform your doctor/dentist, if you need to undergo an operation, internal examination or even dental so that they can consider putting you on antibiotics as preventative a measure.

### **Risks of Revision Hip Surgery**

Change in the length of the leg – Revision surgery can result in changes in your leg length. The risk is probably higher than with primary surgery because often the quality of the soft tissues and the bone available to work with is not the same as in the case of the primary surgery. Usually the discrepancy is small and a shoe raise on the shorter side is all that is required.

Thrombosis – As revision surgery is more prolonged and the state of the soft tissues and bone often not as good as when first time surgery is carried out, patients undergoing revision surgery are at a high risk of thrombosis. Patients undergoing this type of surgery may not be as mobile as

the patients having first time surgery. This factor too may contribute to the higher risk of blood clot formation.

Dislocation – The risk of dislocation after revision surgery is higher than after primary surgery, probably five times or so or about five in a hundred. As the risk is highest in the first few weeks after the surgery, it is for this reason that patients are advised not to lie on their side, to not bend their hip more than a right angle such as when sitting in a low chair or attempting to bend to the floor or reach for their toes. Also, crossing your legs or twisting of your hip could cause a dislocation and should be avoided.

Infection – This remains one of the more serious complications. In order to reduce the risk of infection, patients are given antibiotics routinely into the vein just prior to the surgery and for two doses after.

Nerve injury – Rarely, the sciatic nerve may get injured. In the unfortunate situation when the injury does occur, it usually involves only a portion of the sciatic nerve and is reversible. In other words, a substantial recovery occurs with time in the majority of patients.

Fracture of the thigh bone – The word ‘fracture’ is a technical term for a break in the bone. A fracture of the thigh bone is a risk during the operation and certainly more so that at the time of primary surgery. This is again due to the soft tissue and bone quality. The tissue can be quite hard, inflexible and stuck down and the bone quality in terms of strength, poor.

Loosening of the artificial hip – As with primary hip replacement surgery, there can be no guarantee that the revised hip will last a life time. Revision hips can loosen just as the primary ones.

As with primary surgery, it is important for patients to have regular check ups after the operation to pick up any signs of failure so that the problem can be dealt with earlier and more easily than would be the case if the hip replacement was left loose for a long period. This is because a loose hip replacement can cause “silent” i.e. (without producing pain) or other symptoms, damage to the bones into which it is anchored. This progressive damage can remain unknown to the patient and may be discovered only during a chance x-ray for an unrelated reason or only after the bone cracks and becomes painful. Occasionally a revision operation is undertaken based upon the X-rays alone even though the patient may not be experiencing any symptoms.

Please talk to Profesor 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.