

MR ELLIS PATIENT INFORMATION FOR INFORMED CONSENT

REVISION TOTAL KNEE REPLACEMENT

PROCEDURE: As you will be aware you're knee joint has already undergone a knee replacement either partial or complete. Unfortunately the knee replacement which has already been carried out is no longer working satisfactorily. As a result after discussion with Mr Ellis you have decided that revision knee surgery is now required. This involves removal of the original knee replacement which is no longer functioning well and exchange of this for a further knee replacement.

Revision knee replacement is a further surgical procedure for you, in which the original knee replacement he was removed which may result in damage to the surrounding bone and is then exchanged for a further usually more complex knee replacement in order to improve your knee function. This revision knee replacement is secured to the bone with cement.

You will be seen by Mr Ellis before the operation. He will take this opportunity to mark your leg with a pen to make sure the correct leg is operated on. If you have any further questions, this would be a good time to ask them.

An anaesthetic will be administered in theatre. This may be a general anaesthetic (where you will be asleep) or a local block (e.g. where you are awake but the area to be operated is completely numbed). You will have to chance to discuss this with the anaesthetist before you go to theatre

A tight inflatable band (a tourniquet) will usually be placed across the top of the thigh to limit the bleeding. Your skin will be cleaned with anti-septic solution and covered with clean towels (drapes). Mr Ellis will usually re-opened the original incision (a cut) down the middle of the knee. The knee capsule (the tough, gristle-like tissue around the knee) which is then visible can be cut and the knee cap (patella) pushed to one side. Sometimes in order to gain sufficient access he may need to divide the extensor tendon which straightens the knee. This is prepared at the end of the procedure but can make the power of straightening the knee particularly weak. Once the knee is open sufficiently Mr Ellis can remove the original components of your knee replacement which may require removal of some extra bone to provide a stable base into which the revision knee replacement can be cemented. Sometimes the under surface of the knee cap also requires replacement or exchange of the original knee cap replacement

Using measuring devices to determine the size and using additional stems within the bones if needed, the new artificial knee joints are cemented into position. The implants have a metal casing with a "polyethylene" bearing which sits on the tibia. A polyethylene button is occasionally placed on the underside of the knee cap.

When Mr Ellis is happy with the position and movements of the knee, the tissue and skin can be closed. This will be done with metal clips (skin staples). The clips will need to be removed and you will be provided with an appointment for this which is detailed on your operation note which will be given to you before your discharge.

Usually a drain is employed following your surgery which will be removed the next day. At the time of the surgery specimens will be taken from the tissue around your knee and sent for microbiological culture. This is to ensure that any infection in the original knee replacement is recognised and treated appropriately.

When you wake up, you will have a padded bandage around the knee. If you are in pain, please ask for pain killers. If you have pain, it is important that you tell somebody. It will assist your recovery if you take painkillers before the pain deteriorates to maximise their effect.

The following day an X-ray will be carried out and the physiotherapists will encourage you to exercise, stand and walk. It is important to do these

ALTERNATIVE PROCEDURE: Knee revision is usually performed when the pain from your original knee replacement is sufficiently severe for you to say that you are unable to manage given your ongoing symptoms. On occasions knee revision is required because the loosening of the original components are causing damage to the surrounding structures and on occasions because there is significant risk of infection in the joint. Usually in the case of infection the revision surgery would be carried out in 2 stages. The 1st to remove the infected implants and the 2nd stage carried out some months later once the infection has been eradicated. Mr Ellis has already decided for you based on your symptoms and investigations that a single stage revision can be carried out however there is always a possibility that when the knee replacement is opened surgically there is evidence of deep infection which may require conversion to a 2 stage revision. .

Other alternatives to surgery include living with your symptoms and taking increasing pain killers until the level of your symptoms warrant revision surgery. In the case of proven infection sometimes antibiotic suppression may be a possibility. Sometimes the use of a knee brace may be sufficient to keep your symptoms under control.,

Some of these alternatives may not be appropriate for you however you should discuss all possibilities with Mr Ellis

RISKS

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

COMMON: (2-5%)

Pain: the knee 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. Sometimes, pain will be a chronic problem & may be due to any of the other complications listed below, or, for no obvious reason. Rarely, some replaced knees can remain painful.

Bleeding: A blood transfusion or iron tablets may occasionally be required.



Rarely, the bleeding may form a blood clot or large bruise within the knee which may become painful and require an operation to remove it. DVT:(deep vein thrombosis) is a blood clot in a vein. The risks of developing a DVT are greater after any surgery (and especially bone surgery). DVT can pass in the blood stream and be deposited in the lungs (a pulmonary embolism – PE). This is a very serious condition which affects your breathing. The NICE guidelines will be followed to limit the risk of DVTs from forming. Mr Ellis' preference is for you to wear stockings on your legs which should be used for 6 weeks as well as using foot pumps to keep blood circulating around the leg. Starting to walk and moving early is one of the best ways to prevent blood clots from forming. You will also be prescribed Fragmin injections which are given daily into the tummy starting 10 hours following your surgery unless there is a contraindication to these..

Knee stiffness: may occur after the operation, especially if the knee is stiff before the surgery. Manipulation of the joint (under general anaesthetic) may be necessary

Prosthesis wear: With modern operating techniques and new implants, revision knee replacements last many years. In some cases, they fail earlier. The reason is often unknown. The plastic bearing is the most commonly worn away part

LESS COMMON: (1-2%)

Infection: You will be given antibiotics at the time of the operation and the procedure will also be performed in sterile conditions (theatre) with sterile equipment. Despite this infections still occur (1 to 2%). 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 and an operation to washout the joint may be necessary. In rare cases, the prostheses 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%)

PE: a Pulmonary embolism is the spread of a blood clot to the lungs and can affect your breathing. This can be fatal.

Altered leg length: the leg which has been operated upon, may appear shorter or longer than the other.

Altered wound healing: the wound may become red, thickened and painful (keloid scar) especially in Afro-Caribbeans.

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 knee brace

Nerve Damage: efforts are made to prevent this, however damage to the small nerves of the knee is a risk. This may cause temporary or permanent altered sensation around the knee. There may also be damage to the Peroneal Nerve, this may cause temporary or permanent weakness or altered sensation of the lower leg. Changed sensation to the outer half of the knee may be normal.

Bone Damage: bone may be broken when the prosthesis (false joint) is inserted. This



may require fixation, either at time or at a later operation.

Blood vessel damage: the vessels at the back of the knee may rarely be damaged. may require further surgery

Amputation: very rarely following revision surgery the revision knee replacement may not function correctly and give such significant ongoing pain that the only solution may be amputation of the limb.

Death: This very rare complication may occur after any major surgery and from any of the above.