

Total Knee Replacement

THE OPERATION

As has been explained to you, you have developed a condition in your knee which has progressed to such a stage that the only reasonable management for it is to replace your knee. This is a serious orthopaedic operation and as such you should be fully aware of the operation and any possible problems that are commonly associated with it.

A knee replacement means that a part of the lower end of the thigh bone and a part of the upper end of the lower leg bone is removed. The part of the leg that is removed is the surface of the knee joint. We commonly also need to remove part of the surface of the knee cap, though this is variable depending on the condition of the knee cap at the time of the surgery. Once the joint surfaces are removed, a metal plate is applied to the end of the thigh bone and top of the lower leg bone. This is generally held with cement, though on occasions screws are used. A piece of plastic is then inserted between the metal ends to act as a bearing surface. If the back of the knee cap needs to be resurfaced, then this is done with plastic. The metal and plastic components that are used are engineered with precision and very high quality materials are used.

PRE-OPERATION

On occasions you may be asked to see a specialist physician, or perhaps even then an anaesthetist if there are specific problems with your general health. You should especially remember to inform your surgeon and your anaesthetist about any allergies you have to drugs or any problems with previous anaesthetics that you may have had. You must also inform your surgeon, as the date of the operation comes closer, of any skin infections, urinary tract infections or respiratory tract infections that you may have developed between the time that you were last seen by your surgeon and the operation date.

DAY OF OPERATION

You will generally come into hospital the day before the operation. You will be given a bed and you will be able to rest to ensure you are relaxed and not too anxious prior to surgery. Various blood tests will be performed. These tests are to determine your blood group and to arrange for a cross match so that we can have blood available should you require a blood transfusion. Other tests may be necessary depending on any other medical conditions that you may have. A shave of the skin may be necessary and the limb is usually painted with Betadine solution and wrapped in a sterile dressing. Your anaesthetist will see you pre-operatively and discuss the anaesthetic. You will then be transported to the operating theatre. You will generally be in the operating complex for about three hours or so.

When the operation is completed you will notice that your leg is heavily bandaged and that two drains are exiting from beneath the bandage. Depending on the type of anaesthetic that you have had, you may not be able to move or feel your legs. This

is completely normal and will wear off over a few hours. When you are transported back to your room you will be given regular pain relief and your leg will be elevated a little in order to limit swelling, you will also be placed on a machine which passively moves the knee for you. After the anaesthetic has worn off, you will be encouraged to wriggle your toes and move your ankle in order to improve the circulation in the calf, thus avoid a blood clot. The knee is generally very painful for the first 24 hours or so. During this period of time a blood transfusion may be required. At the 24 hour mark the drains and drip are removed and a blood test is performed. About this time you will then be mobilised and, if the knee components have been cemented in, you will be allowed to fully weight bear using a hopper frame. You will also be placed on a machine which passively moves the knee for you. Over the next few days the physiotherapy may be intensive. Your stay in hospital after surgery is variable with the majority of the patients leaving after five to seven days, but some patients require up to ten days or longer. Hopefully your knee will have a range of movement between 0 and 90 degrees. The clips or sutures are removed generally between day ten and fourteen.

FOLLOW UP

It is generally wise to follow up a total joint replacement for a long period of time as it is early intervention that can often solve a problem before it gets too bad. For this reason, you will generally be asked to return to see me at six weeks, three months, twelve months and then each twelve months after the surgery.

X-rays of the knee are generally taken at two yearly intervals. If, however, there are problems with the surgery the follow up will be a lot more frequent.

COMPLICATIONS

It must be remembered that total joint replacement surgery is almost always performed on the older population and, as such, the risks of surgery are greater because of pre-existing medical problems in the elderly people. Total joint surgery is a very serious operation. There is a very low incidence of serious complications, though the older person is at risk of having a heart attack, or perhaps a stroke in the immediate post-operative period. Perhaps the major complication which is a little more common after a joint replacement is a blood clot. If a blood clot passes into the lungs, this can have very severe consequences and may result in death. If you have had a previous blood clot, then we take very active precautions in order to prevent a further blood clot. We generally ask a specialist physician to help with this, as a routine we use blood thinning medication until you are fully mobile. The other major complication to consider is infection. Infection can occur either early in the post-operative period or it can occur months or years later. We take precautions in the post-operative period with some intravenous antibiotics in order to prevent infection and we also ask you to be covered throughout the rest of your life when having a dental procedure or certain other operative procedures. This will be discussed with you in due course. Other major complications to consider when contemplating this surgery include failure of the total joint replacement, intraoperative fracture and inadvertent damage to nearby nerves and vessels. There are several other minor complications which are generally self limiting.

COSTS

You should be fully aware of any costs that may be generated by agreeing to undergo a total knee replacement. Our receptionist is able to give you an up to date estimate of the various costs. The major costs involved are the seven to ten days hospitalisation and the cost of the prosthesis itself. There is a gap to consider between the medical fees charged and the Medicare rebate. There are also fees for the pathology tests and the post-operative physiotherapy. It is important to discuss the various costs as soon as possible. The medical fees charged also cover the post-operative follow up for a three month period.

SUMMARY

In general terms, a total knee replacement is a very satisfactory operation and is one that has been recommended for your particular condition. It is important that you weigh up in your own mind the risks as they have been explained with the potential benefits of the procedure. In general terms, the operation would not have been recommended unless it was thought that the benefits exceeded the risks. Should any of these points need further discussion, please contact your surgeon before the operation.