PATELLOFEMORAL REPLACEMENT(Kneecap joint)

PATIENT INFORMATION

The following information is to help you understand what is going to happen when you have a patellofemoral replacement (kneecap joint). It is only a guide and some aspects will vary according to the individual. Should there be anything that is not clear or you wish to discuss anything in more detail then please discuss this with me.



XRay view of a replaced patellofemoral joint. The kneecap is replaced with a plastic button and the other side of the joint is replaced with metal (white on XRay)

Pre-operatively

The decision to undergo this procedure would have been made based on symptoms such as pain, stiffness, deformity, swelling, instability or a combination of these. These are all features of degeneration or osteoarthritis.

The aim of the surgery is to diminish, if not, eliminate the above symptoms.

<u>Admission</u> – Usually this takes place the night before the operation. The nurses will take a medical history from you and carry out the routine preparation on admission. If necessary the knee area will be shaved.

All usual medications should be taken prior to the surgery unless you have specifically been advised otherwise. You should be starved from the previous night at 12pm. A small sip of water will be acceptable to take your usual medications.

NB If you have any XRays please bring them with you.

On the day of surgery

- You will be seen briefly by your consultant where last minute questions can be answered. Your leg will be marked and consent will be taken for the operation.
- The anaesthetist will also see you and the anaesthetic procedure will be

discussed. He/she may mention the fact that you will be given an injection in the groin to ease the pain in the leg post-operatively. This will be done after you have been anaesthetised. It is similar to a dental injection that causes numbness but can take from a few hours to even a whole day to subside.

- Any anaesthetic concerns can be discussed at this point.
- You will be taken to theatre soon afterwards, where the anaesthetic will be administered, usually by injection.
- Sometimes the anaesthetist will deem it necessary to do a "spinal" anaesthetic. You would then be awake or sedated during the procedure. This may be done when there is an anaesthetic/medical risk, or if it is preferred by either you or the anaesthetist

During the operation

- Routine antibiotics will be given to you, and three more doses postoperatively, eight hours apart.
- The operation takes about 1 hour.

Post-operatively

- You will wake up in the recovery area quite soon after the operation, but you will still feel quite groggy.
- There will be a white stocking and thick padding on the operated leg and there may be 2 drains exiting the top of the stocking.
- You will be kept in the recovery area for about ½ hr and then you will be taken up to your room in the ward.
- You will spend the night in the high care unit. Your leg may also be placed onto a machine called "CPM", or continuous passive motion, which moves/bends the leg slowly. Most patients find this quite soothing.

Some general points:

- The white TED stockings play a role in preventing DVT or deep vein thrombosis (clots in the leg veins). They also reduce swelling by compressing the knee. You will be asked to continue to wear both stockings for 2 weeks and then the one on the operated leg for another 4 weeks.
- Blood thinning Injections will be given under the skin while in hospital. This will need to be continued post-operatively at home for a total of 10 days, you will be shown how to do this in the ward.
- Thereafter Aspirin will be prescribed for a period of 4 weeks (unless you have allergies or sensitivities) This also thins the blood slightly to play a role in reducing DVT.

Day 1 -7

 Mobilisation will begin on day one. It will start with bed to chair transferring, then walking with a zimmer frame. You will transfer to crutches as soon as the physiotherapist in the ward thinks it is appropriate.

- You will be asked to keep your leg up as much as possible, except when specifically doing your exercises. This reduces swelling.
- The padding will be removed after 48 hours, where after icing can be applied to the knee intermittently, to also reduce swelling.
- Pain control is usually achieved with strong medication (morphine/pethidine) over the first 24-48 hours. Tablets can usually manage to control the pain thereafter. There is some individual variation though.

Discharge (usually between 2-4 days)

The following should have been achieved prior to your discharge:

- Adequate pain control
- Mobility should be such that you are independent on crutches.
- There should be no problems with the wound, like bleeding or infection. This will be assessed prior to your discharge.
- You will be given a pamphlet by the hospital staff explaining what to do with the dressings. It will also contain some general information and advice as well as the contact details for the clinic or me in case you have any problems.
- You will be asked to make an appointment with me for about 2 weeks post-op.
- Physiotherapy should be arranged within the first week post discharge. Usually your physiotherapist decides how often you need to attend but please remember that a lot depends on you. You will be shown enough exercises and things to do to keep you busy with your program of "self help physiotherapy" at home.

Expectations

- Between 2-6 weeks, you should be off the crutches, and walking reasonably normally
- You should be able to straighten your knee properly within a few days, and your knee bending (flexion) should reach its maximum by about 6 weeks. Remember if you had more than about 130deg of bending ability prior to the operation you may lose some of this ability due to the scarring caused by the surgery and the mechanical restrictions of the prosthesis. The usual amount of bend that most patients achieve is about 90-130deg.
- You can expect to have a swollen and warm knee for up to 6 months, or sometimes even 1 year post-operatively. This is due to ongoing inflammation in the knee which takes a long time to subside.
- You may feel or even hear the occasional click coming from the knee during certain movements. This is caused by the prosthetic components knocking against each other and is quite normal unless your knee becomes very loose and unstable.
- While most severe pre-operative symptoms are much improved, some patients may still be aware of the occasional ache/pain that limits certain activities and that may require occasional painkillers.

- Improvement can be expected up to about 1 year, after which things usually reach a plateau.
- Non-impact gym activities can usually be commenced at about 6 weeks.
 These include cycling, swimming and some muscle toning exercises.
- Golf activities can usually be resumed by about 3 months, commencing with the use of a buggy initially, then over the next few months to full golf activity.
- You should be able to walk for about 1 km comfortably after about 6 weeks.
- I would not recommend any impact, contact or twisting and turning sports, as they will loosen the prosthesis prematurely.

Remember

- Any prolonged activity will flare the knee up. It should be elevated and iced in this situation, and the activity level should be modified for the next time.
- If you are worried please contact me

Results

- failure can be caused by the other areas of the knee degenerating, resulting in the need for a conversion to a total knee replacement.
- Another cause of failure is loosening of the prosthesis which occurs over time.
- Other causes of failure are:
 - Infection (this may cause early failure)
 - Fractures (uncommon and due to trauma)
 - Breakages of metal or plastic (rare)
 - Malalignment of the prosthesis. This may occur spontaneously and is very rare. (like a house subsiding)
 - Instability, where the soft tissues surrounding the knee are lax and the knee feels unstable.

IT IS ADVISABLE NOT TO UNDERTAKE ANY LONG HAUL AIR TRAVEL FOR 6 WEEKS POST SURGERY (SHORT HAUL – 4 WEEKS). THERE IS A RISK OF DVT (DEEP VEIN THROMBOSIS – CLOTS IN THE VEINS OF THE LEG). PLEASE DISCUSS THESE ISSUES WITH ME IF YOU INTEND TO TRAVEL.

If air travel is essential, then certain precautions are necessary:

1. You may be given "blood thinning" injections around the time of your flights – we will discuss this.

The most important factor that causes DVT is immobility – This results in inadequate venous blood flow to the heart, resulting in

possible clots forming in the calf veins. The following may help to enhance the blood flow to the heart

- 2. during the flights I recommend TED stockings these are compressive medical stockings, which may empty out the deep veins in the calf, resulting in less clot formation
- 3. it is recommended that you do calf pumping exercises during the flight, as often as possible.
- 4. It is also recommended that you get up and stretch, as well as walk up and down the isle of the aircraft as often as possible.
- 5. limit alcohol intake and drink a lot of water. Dehydration plays a role also