

# TOTAL KNEE REPLACEMENT

*Knee Clinic*  
SPIKE ERASMUS

## WHAT IS A TOTAL KNEE REPLACEMENT?

In your knee the joint surface, or so called articular cartilage, is totally worn away with the result that you are walking bone on bone. Typically this causes pain and restricted function with weight bearing activities like walking, standing and getting up and at times even pain at rest. With a knee replacement the worn surfaces of the upper leg (femur) are replaced with a metal surface of 9 mm and the lower leg (tibia) and kneecap (patella) with polyethylene, a hard type of plastic also 9mm thick. To do this a thin part of the joint surface has to be removed to make space for the 9 mm linings as the original worn away surface was only 4 mm and the new artificial joint surface should sit at the same level.

In our practice, based on 30 years of experience with more than 6,000 knee replacements, we expect the prosthesis to last for 20-25 years and even longer. If necessary it is possible to redo a knee replacement although that is not the aim.

## INDICATIONS FOR A KNEE REPLACEMENT

The reasons for replacing the knee is a worn joint surface resulting in function loss and pain. We can determine the degree of wear with a clinical and radiological examination but believe that you are in the best position to decide, according to your level of impairment and pain, when it should be done. From our point of view it is never urgent. A replaced knee should allow you to walk and hike as much as you want, play golf and social double tennis; you will be able to run but we recommend that running be restricted to running away as it places high loads on the replaced joint.

## THE PROSTHESIS

We use three different prostheses, all of them have a good international track record and also a good record in our practice over a long time.

## POSSIBLE COMPLICATIONS

As with all surgical procedures there is a possibility of developing a complication following knee replacement surgery. In our practice, spanning a period over 30 years and more than 6,000 replacements, the incidence of complications is five in a thousand (0,5%) We are specifically concerned about infections (0,3%), restricted range of motion (0.1%) and systemic complications (0,1%).

## PRE-OPERATIVE

To reduce the possibility of complications we ask a pathologist to do the following examinations for us two weeks preoperatively, full blood count, urea and electrolytes, urine examination and a nose swab. You should report any septic lesion such as ingrown toenails, tooth abscess etc. to us as they may need treatment before we can do a knee replacement. If indicated we might ask the anaesthetist to evaluate you two weeks or more before the surgery and if necessary he may refer you to a specialist physician or cardiologist.

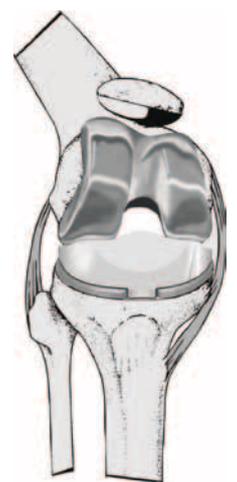
## MEDICATION

We would like you to stop the use of anti-inflammatory drugs (Celebrex, Voltaren, Brufen, etc.) at least 3 days preoperatively as their use increases the risk of bleeding. Platelet inhibitors like Disprin, Plavix etc should be stopped 10 days before surgery. However in some cases it may be necessary to continue with these medications notwithstanding the surgery and in that case you should contact us before stopping the medication.

If you are on warfarin it should be stopped 4 days before surgery and replaced by other medication such as heparin (Clexane, Fraxiparine)

Women should stop hormone therapy at least a week preoperatively and not take it till at least 2 weeks after surgery. Continue the rest of your medication as usual.

If you take a regular drink it is important that you carry on as before in both frequency and volume, it will accelerate your recovery and decrease the use of sedative medicine. The hospital does not provide drinks, please bring your own supply.



## THE OPERATION

Normally you would be admitted to hospital the afternoon before your surgery. This allows us time to do special X-rays for surgical planning, give the anaesthetist adequate time to properly evaluate you and allow time for skin preparation.

The surgery is usually performed under local anaesthetic, if you wish you can be totally awake but most patients prefer to have sedation which makes them unaware of the theatre and the surgery. This type of anaesthetic decreases the possibility of infection and blood clots, and on top of that the patient feels much better than after general anaesthetic.

We use the most sophisticated and newest method in knee replacement surgery called kinematic replacement. With the aid of a proper clinical examination, special preoperative X-rays, preoperative planning and a very specific surgical technique we are able to implant the knee according to your specific knee ligaments and natural alignment. This technique allows for faster rehabilitation and a better long term functional outcome. This is in contrast to results that have been obtained with so called patient specific instrumentation where the planning is outsourced to a third party who has never seen or examined the patient; the result is that the surgeon has very little control over the procedure he is performing. In complicated cases we use computer assisted surgery (CAS) which still allows us to personally, with the help of a computer, control the surgical procedure

On the day of surgery we will encourage you out of bed and allow you to walk around the bed taking full weight on the operated leg. The next day we will continue with further mobilization. With a single knee replacement, the expected hospital stay is 3-4 days and with bilateral replacements 4-5 days.

## FIRST FEW WEEKS AT HOME

On discharge the hospital pharmacy will supply you with the necessary medication; this will include medication to prevent blood clots (Xarelto, Ecotrin), an anti-inflammatory (Arcoxia, Vimovo or similar), analgesics (Tramacet, Synaleve or similar) and a sleeping tablet (Amitriptyline, Stilnox or similar)

From the day of surgery you can walk full weight bearing on the operated leg. In the beginning it is easier to use two crutches or even a walking frame. As soon as you feel comfortable and safe you can use one crutch and then no support. The period of using crutches differ from patient to patient and varies from one day to four weeks, there is no fixed timeframe and crutches should be used as necessary.

On discharge you should be self-sufficient; you would be able to dress, take a shower and make a cup of tea. You can drive a car as soon as you feel confident to do so; on average this varies between 2-4 weeks. We will give you an exercise program which you can continue at home and in most cases, this is sufficient. However if you do not progress or feel unsure about your knee you can be assisted by a physiotherapist. You can expect the knee to be warm and swollen for at least 6-12 weeks after the surgery.

## LONG-TERM

We would expect that you will be able to walk well within 4-6 weeks after the surgery. It is important to realise that complete healing is a slow process which will continue for up to 18 months. In the long term we expect that you will become unaware of your knee

You will probably be aware of some clicking in your knee, this is normal and caused by the metal hitting the hard plastic

You will have a numb feeling on the outside of the scar, this cannot be prevented but will slowly decrease although a small area may be permanently numb.

Long haul, international flights should preferably be avoided for the first three months after surgery; local flights are not a problem. The prosthesis will trigger metal detectors at the airport, wear loose fitting clothes allowing you to show the scar to security.

Should you develop any septic area or tooth abscess, it is important to have it seen to and take the necessary antibiotics. We recommend the following; Cepalexin (Keflex), Cephadrine (Cefril), Amoxicillin (Amoxil, Augmentin), – if you are allergic to Penicillin you can use Clindamycin (Dalacin C). Please inform any treating physician, dentist, anaesthetist or surgeon that you have had a knee replacement

We would suggest that no injection or aspiration be performed on your knee except by an orthopaedic surgeon