



Physicians SA  
&  
Surgeons SA

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## **KNEE REPLACEMENT PATIENT INFORMATION SHEET**

### **ABOUT KNEE REPLACEMENT**

Your knee joint is made up by the ends of your thigh bone (femur) and shin bone (tibia). These normally glide over each other easily because they are covered by smooth cartilage. If your cartilage is damaged by injury or worn away by arthritis, for example, it can make your joint painful and stiff.

A new knee joint usually improves mobility and reduces pain, although your new knee will not be able to bend quite as far as a normal knee joint. Depending on the condition of your knee joint, you may have part, or all, of your knee joint replaced. A total knee replacement is more common. Artificial knee parts can be made of metal and/or plastic. A knee replacement generally lasts for up to 15 years but can last as long as 25 years.

### **WHAT ARE THE ALTERNATIVES?**

Surgery is usually recommended only if non-surgical treatments, such as physiotherapy and exercise, taking medicines or using physical aids like a walking stick, no longer help to reduce pain or improve mobility. If you do require surgery, your surgeon will explain your options to you. Alternative surgical procedures include:

- **arthroscopy** – where limited surgical procedures are performed to improve knee movement using a thin, telescope instrument called an arthroscope to guide the surgery. This procedure is only used if the knee damage isn't too severe
- **osteotomy** – where the leg bones are cut and re-set.

You may have already had these procedures before your knee replacement.

### **PREPARING FOR A KNEE REPLACEMENT**

When you meet the surgeon carrying out your procedure to discuss your care, the details may differ from what is described here as it will be designed to meet your individual needs. Your surgeon will explain how to prepare for your operation. For example if you smoke you will be asked to stop, as smoking increases your risk of getting a chest and wound infection, which can slow your recovery.

The doctors may also temporarily stop some of your other medications or change them until your surgery is complete (for example your pain killers may be replaced with ones that do not interfere with the anti-blood clotting drugs that may be given to you for the surgery). You will also be given antibiotics at the time of surgery and for a short period after it to prevent infections. The operation usually requires a hospital stay of 7 to 10 days and it's done under general anaesthesia.

This means you will be asleep during the operation. Alternatively you may prefer to have the surgery under spinal or epidural anaesthesia. This completely blocks feeling from your waist down and you will stay awake during the operation. If you're having a general anaesthetic, you will be asked to follow fasting instructions. This means not eating or drinking, typically for about six hours before a general anaesthetic. However, it's important to follow your anaesthetist's advice.

At the hospital, the nurse may check your heart rate and blood pressure, test your urine and blood, and arrange for x-rays of your knee and/or chest also to check your general health. Your surgeon will discuss with you what will happen before, during and after your procedure, and any pain you might experience. This is your opportunity to understand what will happen, and you can help yourself by preparing questions to ask about the risks, benefits and any alternatives to the procedure. This will help you to be informed, so you can give your consent for the procedure to go ahead, which you may be asked to do by signing a consent form.

You may also be asked to give your consent to have your name on the National Joint Replacement Register, which is used to follow up the safety, durability and effectiveness of joint replacements and implants. You may be asked to wear a compression stocking on the unaffected leg to help prevent blood clots forming in your veins (deep vein thrombosis, DVT) during the operation. You may need to have an injection of an anti-clotting medicine called heparin as well as, or instead of, stockings.

*“Cure Sometimes, Treat Often, Comfort Always”*

## WHAT HAPPENS DURING A KNEE REPLACEMENT?

A knee replacement usually takes between two to four hours. Your surgeon will make a single cut (10 to 30 cm long) down the front of your knee, and will move your kneecap to one side to reach the knee joint. They will remove the worn or damaged surfaces from both the end of your thigh bone and the top of your shin bone. At this point the anterior cruciate ligament (ACL) is usually removed and sometimes the posterior cruciate ligament (PCL).

For support, your surgeon won't remove your collateral ligaments. He or she will shape the surfaces of your thigh and shin bones to fit the artificial knee joint and then fit the new joint over both bones. Sometimes the back of your kneecap is replaced with a plastic part. This is called patellar resurfacing.

After your surgeon has fitted the new joint, the wound is closed with stitches or clips and covered with a dressing. Your surgeon will tightly bandage your knee to help minimise swelling.

## WHAT TO EXPECT FOLLOWING SURGERY

You will need to rest until the effects of the anaesthetic have passed. You may not be able to feel or move your legs for several hours after an epidural anaesthetic. You may need pain relief to help with any discomfort as the anaesthetic wears off.

For the first day or so, you may have an intermittent compression pump attached to special pads on your lower legs. By inflating the pads, the pump encourages healthy blood flow and helps to prevent DVT. You may also have a compression stocking on your unaffected leg. This helps to maintain circulation.

A physiotherapist (a specialist in movement and mobility) will usually guide you daily through exercises to help your recovery. You will be in hospital until you can walk safely with the aid of sticks or crutches. When you're ready to go home, you will need to arrange for someone to drive you. Your nurse will give you some advice about caring for your knee and a date for a follow-up appointment before you go home.

## ACTIVITIES AFTER KNEE REPLACEMENT

After having a knee replacement, you may expect your lifestyle to be a lot like it was before surgery— but without the pain. In many ways, you are right, but returning to your everyday activities takes time. Being an active participant in the healing process can help you get there sooner and ensure a more successful outcome.

Even though you will be able to resume most activities, you may have to avoid doing things that place excessive stress on your "new" knee, such as participating in high-impact sports like jogging. The suggestions here will help you enjoy your new knee while you safely resume your daily activities.

## HOSPITAL DISCHARGE

Your hospital stay will typically last from 1 to 4 days, depending on the speed of your recovery. Before you are discharged from the hospital, you will need to accomplish several goals, such as:

- Getting in and out of bed by yourself.
- Having acceptable pain control.
- Being able to eat, drink, and use the bathroom.
- Walking with an assistive device (a cane, walker, or crutches) on a level surface and being able to climb up and down two or three stairs.
- Being able to perform the prescribed home exercises.
- Understanding any knee precautions you may have been given to prevent injury and ensure proper healing.

If you are not able to accomplish these goals, it may be unsafe for you to go directly home after discharge. If this is the case, you may be temporarily transferred to a rehabilitation or skilled nursing center.

When you are discharged, your healthcare team will provide you with information to support your recovery at home. Although the complication rate after total knee replacement is low, when complications occur they can prolong or limit full recovery. Hospital staff will discuss possible complications, and review with you the warning signs of an infection or a blood clot.

### *Warning Signs of Infection*

- Persistent fever (higher than 100 degrees)
- Shaking chills
- Increasing redness, tenderness or swelling of your wound
- Drainage of your wound
- Increasing pain with both activity and rest

### ***Warning Signs of a Blood Clot***

- Pain in your leg or calf unrelated to your incision
- Tenderness or redness above or below your knee
- Increasing swelling of your calf, ankle or foot

In very rare cases, a blood clot may travel to your lungs and become life-threatening. Signs that a blood clot has traveled to your lungs include:

- Shortness of breath
- Sudden onset of chest pain
- Localized chest pain with coughing

Notify your doctor if you develop any of the above signs.

### **RECOVERY AT HOME**

You will need some help at home for several days to several weeks after discharge. Before your surgery, arrange for a friend, family member or caregiver to provide help at home.

### **PREPARING YOUR HOME**

The following tips can make your homecoming more comfortable, and can be addressed before your surgery. Place items that you use frequently within easy reach:



- Rearrange furniture so you can maneuver with a cane, walker, or crutches. You may temporarily change rooms (make the living room your bedroom, for example) to avoid using the stairs.
- Remove any throw rugs or area rugs that could cause you to slip. Securely fasten electrical cords around the perimeter of the room.
- Get a good chair—one that is firm with a higher-than-average seat and has a footstool for intermittent leg elevation.
- Install a shower chair, gripping bar, and raised toilet seat in the bathroom.
- Use assistive devices such as a long-handled shoehorn, a long-handled sponge, and a grabbing tool or reacher to avoid bending over too far.

### **WOUND CARE**

During your recovery at home, follow these guidelines to take care of your wound and prevent infection:

- Keep the wound area clean and dry. A dressing will be applied in the hospital and should be changed as necessary. Ask for instructions on how to change the dressing before you leave the hospital.
- Follow your doctor's instructions on how long to wait before you shower or bathe.
- Notify your doctor immediately if the wound appears red or begins to drain. This could be a sign of infection.

### ***Swelling***

Mild to moderate swelling is normal for the first 3 to 6 months after surgery. To reduce swelling, elevate your leg slightly and apply ice. Wearing compression stockings may also help reduce swelling.

Notify your doctor if you experience new or severe swelling, since this may be the warning sign of a blood clot.

### ***Medication***

Take all medications as directed by your doctor. Home medications may include narcotic and non-narcotic pain pills, oral or injectable blood thinners, stool softeners, and anti-nausea medications.

Be sure to talk to your doctor about all your medications—even over-the-counter drugs, supplements and vitamins. Your doctor will tell you which over-the-counter medicines are safe to take while using prescription pain medication.

It is especially important to prevent any bacterial infections from developing in your artificial joint. Your doctor may advise you to take antibiotics whenever there is the increased possibility of a bacterial infection, such as when you have dental work performed.

Be sure to talk to your doctor before you have any dental work done and notify your dentist that you have had a knee replacement. You may also wish to carry a medical alert card so that, if an emergency arises, medical personnel will know that you have an artificial joint.

## ***Diet***

By the time you go home from the hospital, you should be eating a normal diet. Your doctor may recommend that you take iron and vitamin supplements. You may also be advised to avoid supplements that include vitamin K and foods rich in vitamin K if you are taking certain blood thinner medications, such as warfarin (Coumadin).

Foods rich in vitamin K include broccoli, cauliflower, brussels sprouts, liver, green beans, garbanzo beans, lentils, soybeans, soybean oil, spinach, kale, lettuce, turnip greens, cabbage, and onions. Continue to drink plenty of fluids, but try to limit coffee intake and avoid alcohol. You should continue to watch your weight to avoid putting more stress on the joint.

## **RESUMING NORMAL ACTIVITIES**

Once you get home, you should stay active. The key is to not do too much, too soon. While you can expect some good days and some bad days, you should notice a gradual improvement over time. Generally, the following guidelines will apply:

### ***Driving***

In most cases, it is safe to resume driving when you are no longer taking narcotic pain medication, and when your strength and reflexes have returned to a more normal state. Your doctor will help you determine when it is safe to resume driving.

### ***Sexual Activity***

Please consult your doctor about how soon you can safely resume sexual activity. Depending on your condition, you may be able to resume sexual activity within several weeks after surgery.

### ***Sleeping Positions***

You can safely sleep on your back, on either side, or on your stomach.

### ***Return to Work***

Depending on the type of activities you do on the job and the speed of your recovery, it may be several weeks before you are able to return to work. Your doctor will advise you when it is safe to resume your normal work activities.

## **SPORTS AND EXERCISE**

Continue to do the exercises prescribed by your physical therapist for at least 2 months after surgery. In some cases, your doctor may recommend riding a stationary bicycle to help maintain muscle tone and keep your knee flexible. When riding, try to achieve the maximum degree of bending and straightening possible.

As soon as your doctor gives you the go-ahead, you can return to many of the sports activities you enjoyed before your knee replacement.

- Walk as much as you would like, but remember that walking is no substitute for the exercises prescribed by your doctor and physical therapist.
- Swimming is an excellent low-impact activity after a total knee replacement; you can begin as soon as the sutures have been removed and the wound is healed.
- In general, lower impact fitness activities such as golfing, bicycling, and light tennis will help increase the longevity of your knee and are preferable over high-impact activities such as jogging, racquetball and skiing.

## **AIR TRAVEL**

Pressure changes and immobility may cause your knee joint to swell, especially if it is just healing. Ask your doctor before you travel on an airplane.

When going through security, be aware that the sensitivity of metal detectors varies and your artificial joint may cause an alarm.

Tell the screener about your artificial joint before going through the metal detector. You may also wish to carry a medical alert card to show to the airport screener.