

The knee is the largest joint in the body and is made up of three bones, the lower end of the femur (thigh bone), the upper part of the tibia (shin bone) and the patella (kneecap). The surfaces where these bones meet are covered by articular cartilage, a smooth substance that cushions the bone surfaces and enables them to move easily. Traumatic and non-traumatic conditions can damage the articular cartilage and adjacent bones. The most common cause of joint damage is arthritis. Surgery may be indicated if your quality of life is affected by pain and/or limited knee function.

### **SURGICAL PROCEDURE**

Total knee replacement, also called total knee arthroplasty, is performed under general or regional anesthesia. The approach is how the surgeon can access the site to be operated on. A single incision is made at the anterior(front)aspect of the knee joint. The surgeon will replace the damaged articular cartilage and bones with artificial (prosthetic) parts. After that, the surgeon will bend and move your knee to ensure that it functions properly. The incision is closed, and dressings are placed on it. On average, total knee replacement procedures last about 1-3 hours.

#### **RECOVERY**

For most patients, knee arthroplasty provides pain relief, improved function and a better quality of life. Usually, patients will continue to require an assistive device (walker, crutches, or a cane) for 4-8 weeks after the surgery. Most people can resume their daily activities within 3-4 months. However, improvement in function can occur up to a year following surgery.

The majority of the patients will walk without a limp and will experience significant or complete pain relief at the end of the recovery process. After proper rehabilitation, patients are encouraged to engage in low-impact activities such as swimming, dancing, walking, cycling, etc. However, they should avoid high-impact activities such as running, football, skiing, and contact sports.

## **POSTOPERATIVE CARE**

#### **HOSPITAL STAY**

After recovering from the anesthetic which takes about an hour, you will be taken to the orthopaedic ward. You will likely wake up feeling tired and groggy. You will notice a large dressing over the knee. Medical staff will monitor your vital signs, pain level, and the need for medications. You will be given antibiotics and pain medication. It also may be prescribed medicine to prevent blood clots.

On the day of the surgery, you should be able to stand with help beside the bed and on the day after the surgery, you will begin to walk with the help of parallel bars and the physiotherapist. On the second postoperative day, you will generally start using crutches or a walker. Once you are able to manage well enough with the crutches or a walker to get in and out of bed and get to the bathroom and back, you will be discharged. Most patients will be ready for discharge on the 2nd or 3rd postoperative day.

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## AT HOME: ACTIVITY/ SELF-CARE

- Range of motion of your knee is extremely important.
- Right after surgery, it can be painful to bend the knee and most patients will have the natural tendency to keep it still. However, the pain will rapidly improve once the range of motion is established.
- Home exercises make up an important part of the recovery process. You should start them the day you get home (see attached sheet).
- Stiffness is a common complication and should be avoided by doing home exercises several times a day, managing pain and doing physical therapy.
- The knee must be fully extended at the end of the second week.
- You should be able to bend your knee at least 90 degrees at the end of the second week.
- Your foot and ankle may be swollen after surgery. You are encouraged to elevate and move your foot and ankle several times a day to reduce swelling.
- When lying down, elevation is achieved by placing pillows under the entire lower limb from the heel to the thigh. The heel should be higher than the knee and the knee higher than the hip. A slight bend at your knee is allowed.
- Do not place a pillow under the knee, it will be difficult to stretch it.
- Getting dressed first, put clothes on the operative side.
- Undressing first, remove clothes from the non-operative side.

#### **PAIN MANAGEMENT**

- Medication, limb elevation, ice therapy and mobilization are essential in pain management.
- The usual regimen we use is a combination of acetaminophen, anti-inflammatory drugs, and narcotics.
- Taking your pain medicine as prescribed by your surgeon regularly will help you manage your pain more effectively, even if you are in mild pain.
- Strong painkiller (hydromorphone, morphine, oxycodone, etc) has been prescribed, so don't wait until the pain is severe. Use strictly as prescribed by your doctor. Do not take an extra dose.
- In case of remaining pills, you should return them to the pharmacy. If it is not possible to do that, it is recommended to take medications out of the container, mix them with unpalatable substances, such as used coffee grounds, dirt or kitty litter, sealing in a plastic bag, and throwing in the trash.
- You can use a TENS (transcutaneous electrical nerve stimulation) unit please follow the manufacturer's directions.
- **IF HAVING A NERVE BLOCK**: it is important to start taking regular pain medication before the nerve block wears off ( see the Nerve Block HANDOUT for more information ).

#### **WOUND CARE/ SHOWER**

- You should keep the bandage that was placed on the day of the surgery.
- You can shower, but you must keep your dressings dry and covered. Waterproof bandages work well
  for this purpose.
- If non-absorbable sutures or staples are used, they will be removed at the 2 week postoperative visit.

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#### **BLOOD THINNERS**

• During your hospital stay should be given to you oral or injectable blood thinners. You will need them for at least 2-3 weeks after hospital discharge. Follow your doctor's prescription.

## **COLD THERAPY (ICE)**

- **DO NOT** use cold therapy if your nerve block is still in effect. You should wait until your function and normal sensation have returned (**IF HAVING A NERVE BLOCK**).
- The knee is the largest joint in the body. The ice pack must be large enough to cover the front area of the knee.
- You could apply ice for up to 15-20 minutes, remove it for an hour and repeat the application 6 to 8 times a day, always with one-hour intervals. Remember that you must put a thin towel between the ice/ice pack and your skin.
- If you are using a CRYO THERAPY UNIT please follow the manufacturer's directions.
- DO NOT SLEEP WITH ICE.

#### **PHYSIOTHERAPY**

- Physiotherapy will begin after your first follow-up with your surgeon.
- Our goal is to improve your mobility and strengthen the thigh muscles.
- In the meantime, you are encouraged to move your foot and ankle 4-5 times per day, at least 5-10 minutes at a time.

Our Physiotherapists at Footbridge work closely with your Surgeon and are very familiar with the post-op rehabilitation process. Typically, formal physiotherapy will begin after your first post-operative visit; if you'd like to do your physiotherapy at Footbridge it can be booked at that time.

There is often benefit to doing one or two pre-operative physiotherapy sessions to prepare for your surgery; if you'd like to schedule an appointment you can do so online or by calling Footbridge.

#### **WEIGHT BEARING**

- After the surgical procedure you will be weight-bearing as tolerated and you may use crutches or a walker for your comfort.
- Avoid long-distance walking for the first 2 weeks, even if you think you can do it without pain.

### **DRIVING**

• You should not drive for 2 months if it is your right leg that was operated on. If it was your left leg, you can drive a car with an automatic transmission as soon as you are comfortable and are not taking narcotics. You cannot drive a standard transmission for 2 months.

### **SEXUAL ACTIVITY**

• It is safe to resume normal sexual relations as soon as discomfort in the knee allows.

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#### **SLEEPING**

• At the beginning, it is recommended that you sleep on your back or on your non-operative side with two pillows between your knees.

#### RISKS

- Infection
- Stiffness
- Blood clots
- Nerve, blood vessel damage
- Loosening or wearing out of the prosthesis components
- Fractures near the prosthesis
- Other: depending on your medical condition

#### **INFECTION**

- Infection of the prosthetic components is a serious complication. You may need multiple surgical procedures, hospitalization and long-term antibiotic treatment.
- Be vigilant for breaks in the skin and minor infections (i.e.nail infections) in a limb that has had a
  joint replacement.
- Seek prompt medical attention for bacterial infections (especially abscessed teeth, urinary tract infections, skin infections, and pneumonia).
- Notify your doctor/dentist that you are a patient with an artificial joint when having any medical/ dental procedure or surgery. You may need prophylactic antibiotics.

It is common to have swelling and bruising around the wounds. The bruising changes colour over time from red to yellow or green and may go down the leg.

### **Contact Footbridge if:**

- Pain on your CALF, BACK OF KNEE, THIGH or GROIN.
- Increased swelling on the operated thigh, knee or leg.
- Body temperature above 38 Celsius/101 Fahrenheit.
- Increased warmth, redness, and swelling around the wound.
- Increased fluid leaking from the wound.

## **CALL 911** if:

- you have trouble breathing.
- you have chest pain.
- anyone noticed that you lost consciousness.

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