

**KNEE SURGERY : Initial post-operative rehabilitation**

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Procedure: \_\_\_\_\_

This handout describes details of the early post-operative care of your knee. The rehabilitation of your knee after surgery is essential for the success of your treatment. Your surgeon and physiotherapist will advise you on the specifics of your rehabilitation.

The main goals of rehabilitation in the first two weeks are:

- Diminish pain and inflammation
- Allow the surgical wounds to heal properly
- Commence appropriate exercises to avoid scarring and stiffness

**Control of pain and inflammation**

During the early post-op period, you will experience some discomfort in your knee. To control the pain and inflammation:

- ICE
  - Use a cold gel pack, or bag of crushed ice wrapped in a damp towel. Keep the dressings dry.
  - For the first few days, apply ice for **15 minutes every hour** over the front of the knee.
  - After the first few days, the frequency can be reduced to every 2-3 hours or so.
- MEDICATIONS
  - You have a prescription for pain relief. As the local anaesthetic begins to wear off, start taking the pain killers.
  - Don't wait for pain to get bad. It is easier to keep the pain at a low level than it is to get it back under control.

**Post-operative wound care**

Your wounds are covered with waterproof dressings, applied directly on the skin. Over this is a loose gauze and the outer tubigrip stocking. Discard the loose gauze dressing on day 1.

You may shower with the waterproof dressing on, then gently pat dry. The dressing may need to be changed 3-4 days after surgery as it can loosen, allowing water to get under it. Extra dressing will be provided.

To avoid getting the wounds wet do not swim, have a spa or bath until you have been given clearance.

*Out of town patients:* Your first follow up will be a phone consult with our clinic nurse. Please attend your GP or GP nurse the day before this appointment to get the wounds checked and sutures trimmed / removed.

Your next clinic appointment is: \_\_\_\_\_

Contact the clinic if you have a significant amount of **ongoing oozing** or **bleeding** after the first 24h, or if you have **worsening swelling and pain** in spite of resting, taking your painkillers and decreasing exercise intensity.

**Weight-bearing status:**

- Full, with crutches       Partial (10-15kg)       Touch)       None

If you are allowed full weight bearing, use the crutches until you can walk with a normal gait and no limp. This usually takes 5-10 days. If the knee becomes inflamed or sore, it is okay to go back to using the crutches for a few days.

**Mobilization Exercises:**

You can start your exercises within the first couple of days of your surgery. When doing exercises, perform all movements slowly and with good control and form. The exercises should not cause significant pain, but some post-exercise aching and fatigue is not unusual.

**1. Gravity extension**

Lying on your back, allow the knee to straighten out under the effect of gravity. Rest in this position for up to a minute each time.



**2. Seated passive knee flexion**

Start with the knee extended, supported by your good leg. Slowly lower your operated leg down, with the good leg controlling the speed of bending.

Do not push the bend past what is comfortable.

Use your good leg to bring your operated leg back up to the starting position.

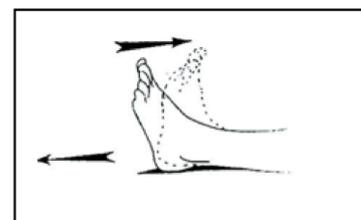


Maximum allowed motion:

0°       30°       60°       90°       120°       Full

**3. Ankle pumps**

Pump the ankles up and down to stimulate circulation in the leg. Keep going for about 20 seconds. Repeat at least 10 times per hour.



## Strengthening Exercises

*Four-way straight leg raises (10 reps per set, up to 3 sets as tolerated)*

### 1. Flexion:

Lying on your back, bend the uninvolved knee and put it on the floor. Tighten the quads to keep the knee straight, pull your toes back towards your head and smoothly lift your leg from the floor. Hold for several seconds and then lower. If you cannot keep your knee straight, use a strap around your foot, held in your hand to assist with the lifting.

### 2. Adduction:

Lying on your operated side. Put your upper foot on the floor in front of the lower leg. Slowly raise your lower leg towards the ceiling, hold for 3 seconds, then lower.

### 3. Abduction:

Lie with the operated side up, with the lower leg bent for balance. Straighten the operated leg by tightening the quads and then slowly lift it up to the side towards the ceiling. Hold for 3 seconds and then lower.



Flexion



Adduction



Abduction

## Manual Therapy

### Patellar Mobilization

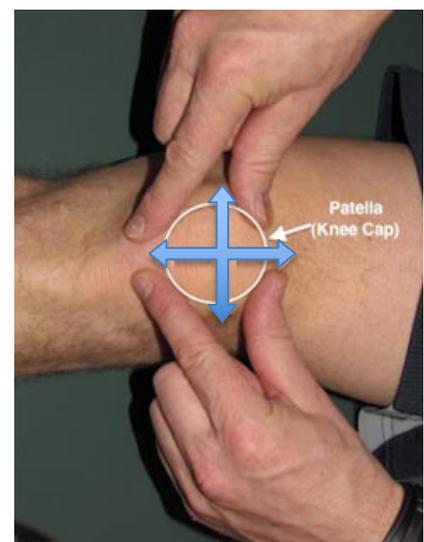
Good knee mobility depends on the patella (knee cap) sliding freely over the underlying joint. Patellar mobilisation exercises help prevent scar tissue formation.

Start these exercises on the second post-op day.

Grasp the patellar between the thumb and index finger of both hands. Slide the patellar towards the foot as far as it will comfortably go. Hold for 10 seconds and then release. Repeat 3 times.

Repeat the process in each of the other 3 directions shown.

Perform this series 2-3 times per day.



You can view video clips of most of the listed exercises by going to the MGH Sports Medicine website: [http://www.massgeneral.org/sports/protocols\\_therapy\\_videos.html](http://www.massgeneral.org/sports/protocols_therapy_videos.html)