

# Physiotherapy after knee osteotomy

## Information for patients

This leaflet gives you advice and general information to help you get the best possible results from your operation. It is a guide only and the physiotherapy treatment you receive may vary depending on your circumstances.

Physiotherapy treatment consists of exercises and advice that you need to complete and follow every day at home. The exercises we ask you to do aim to help you improve and maintain the movement, strength and function of your knee joint.

If at any time during your rehabilitation you have difficulty following the advice or exercises within this leaflet, or you have any further questions, please contact the Orthopaedic Physiotherapy Team at Orpington Hospital on 01689 866255 or King's College Hospital (Denmark Hill) on 020 3299 2368 and ask to speak to one of the physiotherapists.

## **Pain control and ice**

You should expect a moderate amount of pain after surgery. Continue to take your pain relief medication as prescribed by your ward doctor when you are discharged home. It is important to keep your pain well controlled in order to complete your exercises and be able to walk regularly throughout the day.

After your operation, you may find it helpful to apply an ice pack for 15 to 20 minutes, every two hours, to help reduce swelling and offer temporary pain relief. Before using ice, ensure that you have full feeling in the leg and the knee (that is, no numbness). Do not apply the ice pack directly to your skin. Wrap it in a damp tea towel or pillowcase before putting it on your knee. Check your skin before, during and after you use an ice pack to ensure that you do not have any unexpected reactions. If you have any concerns, please seek medical advice.

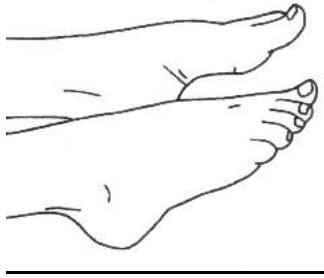
## **Reduce swelling**

It is normal to have swelling within the knee following surgery. This can take weeks to months to ease completely. Swelling can be reduced by elevating your leg (rest your lower leg on pillows or stool) so that your ankle is higher than your hip. It is important that full straightening of your knee is achieved as soon as possible, so do not put a pillow or similar underneath your knee when resting.

## **Exercises**

Physiotherapy plays an important role in your rehabilitation. You must follow the advice given to you by your physiotherapist and only do the exercises and activities that they advise you to do. Begin these exercises on the evening of your surgery. Aim to complete ten repetitions of each exercise at least three times a day until the outpatient physiotherapist reviews you. It is best to complete quality exercise, so if you are losing technique or tiring earlier than your tenth repetition, please complete as many exercises as you can while keeping good technique.

## 1) Ankles



Lie on your back (in bed) or sit.

Bend and straighten your ankles briskly. Keep your knees straight during the exercise to stretch your calf muscles.

Repeat ten times.

## 2) Static glutes



Lie on your back (in bed).

Squeeze your buttocks firmly together, hold this position for ten seconds, then relax.

Repeat ten times.

## 3) Static quads



Lie on your back (in bed) with your legs straight.

Pull your toes towards you, tighten your thigh muscle (quads) and push your knees firmly down against the bed, hold this position for ten seconds, then relax.

You can do these exercises on both legs at the same time.

Repeat ten times.

## 4) Knee flexion in lying



Lie on your back (in bed) with your legs straight.

Slowly slide your operated leg towards you to bend your knee.

Repeat ten times.

## 5) Straight leg raise



Lie on your back with the operated leg straight and the other leg bent.

Exercise your straight leg by pulling the toes up, straightening the knee and lifting the leg approximately 10cm off the bed. Hold for five seconds – slowly relax.

Repeat ten times.

## 6) Knee flexion in sitting



Sit on a chair with your feet on the floor.

Bend your operated knee as much as possible.

Repeat ten times.

## 7) Knee extension



Sit on a chair.

Straighten your operated knee. Make sure when you lift your foot you maintain your thigh on the chair. Keep the foot flexed towards you throughout the movement.

Hold for five seconds, then slowly relax your leg.

Repeat ten times.

## Walking after your surgery

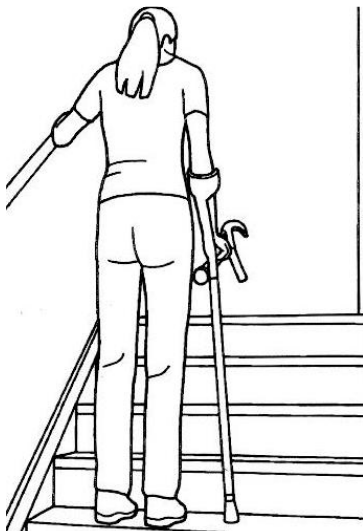
Your physiotherapist will provide you with an appropriate walking aid, usually crutches, after your surgery and teach you how to walk safely with them.

Full weight bearing mobility is normally encouraged on the operated leg in order to aid bone healing. You will need to use the crutches for the first two to six weeks, until the knee feels strong enough for you to walk unaided.

We instruct some people to partial weight bear (walk with only 50% of your weight on your operated leg) or to touch weight bear (walk with just your toes on the ground not taking more than 25% of your weight through the operated side). This means you must walk with your crutches at all times. Your consultant will decide this and your physiotherapist will guide you.

- Fully weight bearing
- Partial weight bearing  for..... weeks
- Touch weight bearing  for.....weeks
- Non weight bearing  for.....weeks

**Stairs** – Below is the recommended technique to use when going up and down stairs until your physiotherapist advises that you can progress.



### Walking up stairs

Stand close to the stairs.

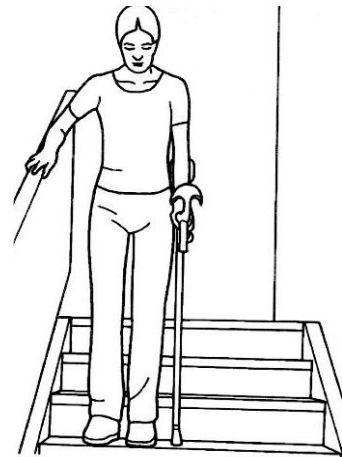
Hold onto the handrail with one hand and the crutch(es) with the other hand.

First, step up with your non-operated leg, then your operated leg and then bring your crutch up onto the step. Always go up one step at a time.

### **Walking down stairs**

Stand close to the stairs. Hold onto the handrail with one hand and the crutch/crutches with the other hand.

First, put your crutch down one step, and then take a step down with your operated leg. Then step down with your non-operated leg onto the same step as your operated leg. Always go down one step at a time.



### **Rehabilitation after operation**

- Occasionally, a brace is required following surgery.
- We usually discharge patients one to three days following surgery.
- Your ward physiotherapist will refer you to your local physiotherapy outpatient's department before your discharge.
- Discuss with your consultant when it is safe to return to driving.
- Patients can usually get back to office-based work six weeks after their osteotomy and manual work after 12 weeks.
- You should be aware that healing may take up to six months and it will take up to a year for you to feel the maximum benefit of the surgery.

### **PALS**

The Patient Advice and Liaison Service (PALS) is a service that offers support, information and assistance to patients, relatives and visitors. They can also provide help and advice if you have a concern or complaint that staff have not been able to resolve for you.

PALS at King's College Hospital, Denmark Hill, London SE5 9RS:

Tel: 020 3299 3601

Email: [kch-tr.palsdh@nhs.net](mailto:kch-tr.palsdh@nhs.net)

You can also contact us by using our online form at [www.kch.nhs.uk/contact/pals](http://www.kch.nhs.uk/contact/pals)

PALS at Princess Royal University Hospital, Farnborough Common, Orpington, Kent BR6 8ND

Tel: 01689 863252

Email: [kch-tr.palspruh@nhs.net](mailto:kch-tr.palspruh@nhs.net)

**If you would like the information in this leaflet in a different language or format, please contact PALS on 020 3299 1844.**