



# **Physiotherapy - Orthopaedics**

# High tibial osteotomy (HTO) / distal femoral osteotomy (DFO)

This information is for patients who have had a femoral or tibial osteotomy. The operation corrects the alignment of your leg by cutting through the bone, changing the angle, and then holding it with a plate and screws.

The operation is performed when there is early degeneration in one side of the knee to slow down the wear and 'buy time' for the knee. It is also performed in certain ligament injuries.

# Pain and swelling management

A nerve block may be used during the operation. This means that immediately afterwards, your knee and leg may feel heavy and numb. This can last for a few hours. You will also be given painkillers after the operation - please take them as you are advised.

It is likely that you will have some discomfort for several weeks after the surgery. Taking your painkillers regularly for the first few weeks will make you feel more comfortable and allow you to do your exercises.

When you go home, you will be able to take the "cuff" part of your cryotherapy device with you. Make sure this is full of water before you leave. It can then be placed in the fridge or freezer for an hour and used as a cold pack for 20 minutes.



### Wound

You will have an incision over either your thigh or shin, close to your knee. If you have stitches, you will be given instructions by the nursing staff for their removal at your GP surgery. They will also give you information about general wound care.

### **Exercises**

The success of your operation will usually depend on the amount of effort you are prepared to put into your rehabilitation.

Although your knee may feel sore after the operation, it is important that you start completing the exercises to build up the muscles around your knee, and to regain the range of movement after the surgery.

Before being discharged, you will be seen by a physiotherapist who will explain the exercises you need to do.

It is essential that you do the recommended exercises **3 times per day** or you may not make a full recovery. You may experience some discomfort whilst completing the exercises - this is normal.

# Prevention exercises – to prevent chest infections and blood clots after your operation

# Deep breathing exercise

Take a deep breath in through your nose, hold for a couple of seconds and then breathe out through your mouth. Repeat this 3 times. **Complete these hourly.** 

## Foot and ankle exercise





Move your ankles up and down quickly for 10 seconds. Then complete circles one way for 10 seconds and circles the other way for 10 seconds.

## Complete these hourly.

# Static glutes



Squeeze your buttocks together and hold for 10 seconds.

Try to make sure the thighs stay relaxed and only your bottom muscles are working. **Repeat 10 times.** 

# Early exercises Static quadriceps (knee bracing) exercise



Lie on your back. Straighten your knee and tighten the muscle on the front of your thigh. Hold the contraction for 10 seconds. **Repeat 10 times.** 

# **Heel prop**



Rest your heel on a rolled towel or 2 pillows so that your knee is not supported and there is a gap between your calf and the bed. Allow your knee to straighten in this position for 2 minutes. As your knee becomes more comfortable, build up the time towards 10 minutes.

### Active assisted knee flexion and extension





Lie or sit on the bed with your leg extended out in front of you. Place a plastic bag, or something to help your foot slide, underneath your heel. Using your hands to support around your thigh, bend your knee by drawing your heel towards your bottom. Fully straighten your knee after each repetition. **Repeat 10 times.** 

You can also complete this exercise in the chair.

# Static hamstrings



This exercise can be sore initially. If you struggle with it, try again after 1 week.

Lie on your back with your knee slightly bent. Push down firmly into the bed with your heel. Hold for 5 seconds. **Repeat 10 times.** 

## **Mobilisation**

The amount of weight you can put through your operated leg is decided by your surgeon.

Your physiotherapist will teach you to walk with elbow crutches as requested by your surgeon. Crutches are normally used for at least 6 weeks.

# **Discharge**

You will usually be able to go home the day after your operation. You will need to arrange for someone to drive you home and you should try to have a responsible adult to stay with you for the first 24 hours.

Physiotherapy is essential after the operation, and you will be contacted with an urgent outpatient physiotherapy appointment after your discharge. If you have not heard from outpatient physiotherapy within 1 week, please contact the department.

If you have any concerns about your wounds between therapy appointments, please contact your surgeon's secretary.

Mr Thompson 024 7696 5097
Professor Metcalfe 024 7696 5064
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Mr Smith 024 7696 5080
Mr Ramoutar 024 7696 5095

## **Further information**

If you have any queries or concerns about physiotherapy, please contact: Rugby Physiotherapy Orthopaedic Department Telephone: 01788 663054 University Hospital Coventry and Warwickshire Telephone: 024 7696 6013

The Trust has access to interpreting and translation services. If you need this information in another language or format, please contact our therapy department and we will do our best to meet your needs.

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#### **Document History**

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