

Physiotherapy – Orthopaedics

Tibial tubercle osteotomy (TTO)

This information is for patients following a tibial tubercle osteotomy / distalisation. The operation aims to stabilise your patella (kneecap) and prevent more episodes of dislocation. It is also used to treat various forms of anterior knee pain (patello-femoral pain syndrome).

What to expect afterwards

Pain and swelling

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 a few hours. You will 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.



Patient Information

Wound

You will have an incision at the front of the knee, over the tibial tubercle. If you have stitches, you will be given instructions for their removal at your GP surgery. They will also give you the information about general wound care.

Exercises

The success of your operation will often 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 post op

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**

Patient Information

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.**

Patient Information

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 knee to straighten in this position for 2 minutes. As your knee becomes more comfortable build up the time towards 10 minutes.

Patient Information

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 so 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.**

Patella (kneecap) glides



Sit on the edge of a chair with your leg out straight, heel on the floor and your muscles relaxed.

Hold your kneecap. Push the kneecap:

- towards your other knee
- outwards away from the other knee

You may hear or feel the kneecap click or clunk - this is normal and safe. The glides may be difficult initially due to swelling and the wound dressings. Keep your leg relaxed and make sure that you are moving your kneecap not just your skin.

Repeat 10 times in each direction.

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.

If you have a hinged knee brace, please refer to the 'Your hinged knee brace' leaflet for details.

Patient Information

Discharge

You will usually be able to go home as soon as you are fit and well 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

Mr Shah 024 7696 5096

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.

The Trust operates a smoke free policy.

Patient Information

Did we get it right?

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Document History

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