

Tibial Osteotomy

Paediatric Physiotherapy



The prevention of infection is a priority in all healthcare settings and everyone has a part to play.

- Please decontaminate your hands frequently using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, a cough or other respiratory symptoms, a temperature or an unexplained rash which could be infectious please do not visit the hospital or any other care facility. If your visit is essential then phone ahead to the department that you are visiting
- If you are unwell seek advice from 111 or your GP if required
- Help us to keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.



Care Colleagues
Collaboration Communities

The purpose of this leaflet

This leaflet has been created to provide information for patients having tibial osteotomy surgery.

It aims to help you understand what tibial osteotomy surgery is, why you have been offered it and what the risks and benefits are of having it. It also aims to help you understand what happens before, during and after the surgery and what you can do to prepare yourself for it, if you choose to have it.

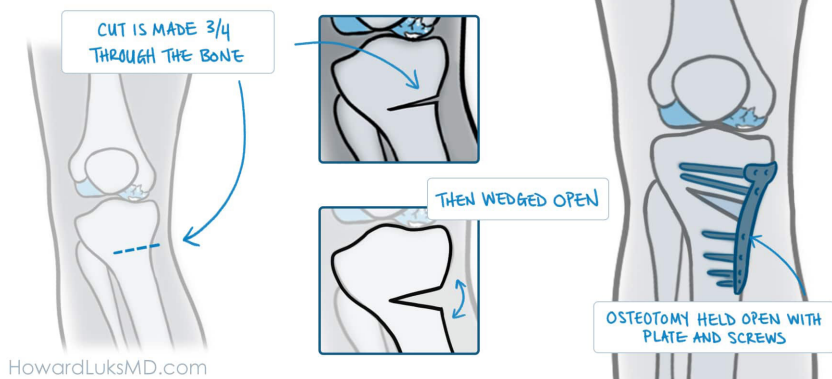
Reasons for surgery

Osteotomies are generally done to line up the bones correctly with the joints and restore normal alignment as well as relieving pain and improving function. Normally when we are walking or standing the weight goes through the centre of our knee. Some people however are born with knock knees causing the weight to be placed on the outside of the joint, or bowlegs causing the weight to be placed more on the inside of the joint. The change in alignment can cause pain due to the increased mechanical stress. When this happens more weight is taken by a specific part of the joint which can lead to more wear and malalignment.

What happens during surgery

Usually, surgery involves cutting the tibia (Shin bone). The alignment of the bone is adjusted by removing a wedge of bone to create a gap until it is correctly aligned. This position is then secured with metal screws and a plate which will hold the bones until they heal.

HIGH TIBIAL OSTEOTOMY



What happens after my surgery?

You will usually be seen by the physiotherapy team on the day of your surgery or the day after. Depending on your levels of mobility prior to surgery, you may require a zimmer frame or crutches to help you walk.

How much weight can I put through my operated leg?

To be filled in post-surgery (Physiotherapy to tick)

..... can:

- | | |
|--|--|
| ☐ fully weight bear | ☐ partial weight bear |
| ☐ toe-touch weight bear | ☐ non weight bear |

on their operated leg.

Pain relief

Following the procedure good pain management is one of the most important things you can do for your child. It is important for it to be given regularly at the appropriate times. Paracetamol and Ibuprofen may be given to you when you are discharged however, the doctors and nurses will guide you further.

Ice application

Applying ice regularly after surgery can help significantly reduce pain and swelling. Do not apply until indicated by your physiotherapist

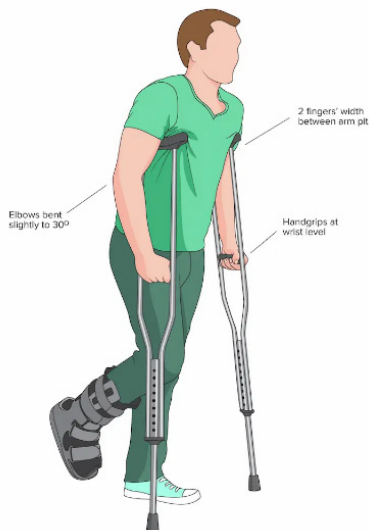
- Cover your knee with a tea towel to protect your skin
- Place a bag of ice/frozen peas over the area affected on your operated knee
- Leave in place for a maximum of **20 minutes**
- After removing the ice, do not re-apply again for at **least 40 minutes**

Beware

If you feel a burning sensation or pain, you should remove the ice and discontinue.

Walking with crutches

You will be provided with a pair of crutches for use when walking. You will be guided by a physiotherapist as to whether you can put weight through your leg or not. They will also guide you as to when you can discard the crutches. It is very important you follow the advice on how to use the crutches safely and avoid twisting or pivoting.



Accreditation

<https://williamslockephysio.co.za/how-to-use-crutches>

Non-weight bearing (NWB) means you should NOT put any weight through the affected leg when attempting to stand, walk, sit down or negotiate steps and stairs.

1. Stand up on the unaffected leg keeping your affected foot off the floor
2. Once in standing place both crutches one step in front of you, level with each other and bend the knee of your affected leg to ensure it stays off the ground
3. Take your body weight through your upper limb using the crutches
4. Hop forwards with your unaffected leg so that your body is level or just behind the crutches
5. Steady yourself and repeat

Stairs NWB

Going up

1. Stand close to the handrail and hold with one hand. Use one crutch in the other hand.
2. Keeping the crutch down and holding onto the rail, hop onto the step above taking full weight through your upper body.
3. Be mindful to keep your affected leg bent at the knee if able, to aid your balance.
4. Repeat.

Going Down

1. Stand close to the handrail and hold with one hand. Use one crutch in the other hand.
2. Place the crutch onto the step below, putting weight through the crutch and handrail to lower yourself down to the next step.
3. Be mindful to keep affected leg out in front (as shown in picture) to avoid catching your leg.



Accreditation

<https://www.aboutkidshealth.ca/healthaz/orthopaedics/musculoskeletal/crutches-how-to-use/?language=en#/>

Physiotherapy exercises

Following surgery, the physiotherapist will issue you exercises specific to your operation as it is important to start getting your leg moving post operatively. The exercises will be progressed, under guidance and you will be referred for continued physiotherapy as an out-patient. An appointment should be offered no longer than two weeks from the date of your surgery. **Please do not attempt any exercises other than the ones your physiotherapist tells you to do.**

All exercises should be completed a minimum of three times a day.

The Royal Wolverhampton NHS Trust, New Cross Hospital.

Provided for _____



Active Knee Flexion in Supine

Lie on your back, with legs straight.



Bend your affected knee to the prescribed range by sliding your heel towards your buttocks and return to the starting position.

Repeat ____ times.

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Isometric Knee Extension in Supine

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

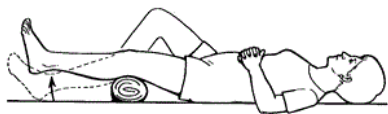


Bend the ankle of the straight leg and press the back of the knee against the floor using your front thigh muscles.

Hold the tension for 5 seconds and then relax.

Repeat ____ times.

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1. Lie on your back with roll/towel under your affected knee
2. Raise heel off floor until knee is straight
3. Hold ____ seconds and slowly lower
4. ____ repetitions

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Lying on your back with one leg straight and the other leg bent.

Exercise your straight leg by pulling the toes up, straightening the knee and lifting the leg 20 cm off the bed. Hold approx 5 secs. - slowly relax.

Repeat ____ times with both legs.

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Contact details

If you have any questions around your outpatient appointment or have not received confirmation of an appointment within two weeks of your discharge, please contact the Physiotherapy/ Occupational therapy admin team on **01902 446290**.

English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਭਾਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

Traditional Chinese

如果您需要以其他方式了解信息，如易读或其他语种，请告诉我们。

如果您需要口译人员或帮助，请告诉我们。