The Royal Wolverhampton
NHS Trust

8 Plates / Epiphysiodesis

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 designed to provide information for patients undergoing epiphysiodesis surgery. It aims to explain what the surgery involves, the reasons it has been recommended, and the associated risks and benefits. Additionally, it outlines what to expect before, during, and after the procedure, as well as how you can prepare for it if you decide to proceed.

What is epiphysiodesis?

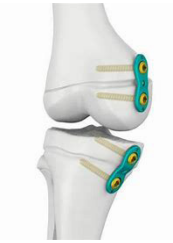
The leg grows in length because there is a growth plate (physis) at the top and bottom of both the thigh bone (femur) and the shin bone (tibia). These growth plates grow throughout childhood but will 'disappear' as you go through puberty and by the time you are 16-17y in boys or 14-15y in girls, you will be skeletally mature and there will be no physis left.

Epiphysiodesis is a technique used to permanently stop growth from one (or more) of the four growth plates in a limb to correct problems with leg length. It is commonly performed around the knee, in either the femur or tibia, and less commonly, at the hip joint level or at ankle joint level. It must be done before you have finished growing i.e. before skeletal maturity. The timing of the procedure depends on how much the difference is between your two leg lengths: the bigger the difference, the earlier the procedure takes place and /or the more growth plates we stop.

Growth can be prevented by disrupting the growth plate by drilling it and curetting it to damage the growth plate cartilage within the bone. This stops growth permanently.

Occasionally, it is difficult to predict the correct timing of the procedure, and it might be useful to perform a temporary procedure. In these cases, a small plate and screw system is inserted on each side of the bone to 'tether' growth for a while. The screws and plates can be removed to allow growth to continue when the correction has been achieved.

Often, a number of epiphysiodeses can be performed at the same time to achieve the desired correction.



Accreditation

www.czmeditech.en.made-in-china.com

What are the advantages of having an epiphysiodesis?

An epiphysiodesis is a relatively simple operation for your surgeon to perform with low risk. Scarring from an epiphysiodesis is usually small. Recovery time after surgery is quick and most children are day-cases or single night stays. The procedure of epiphysiodesis can significantly improve patient outcomes, enhancing mobility, reducing pain, and promoting overall well-being.

What are the disadvantages of having an epiphysiodesis?

It is an operation that requires being put to sleep and has general risks such as infection, pain and stiffness. The final result of the treatment takes time to be apparent: the shorter leg takes time to catch up with the longer leg, which has had part or all of its growth stopped.

What happens after my operation?

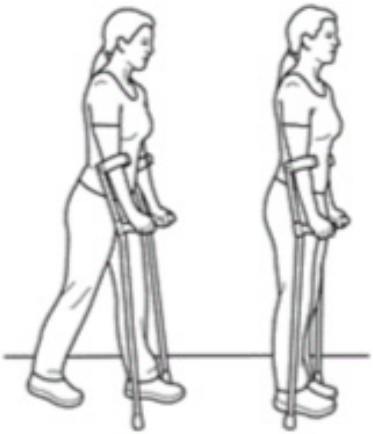
Following surgery, the bulky bandage can be removed after 48 hours, wounds should be checked at two weeks (either at clinic or with the GP practice nurse) and a clinic review usually scheduled between six and twelve weeks. You will normally be allowed to put weight through your leg(s) immediately after surgery and will be able to return to normal activities within two to three weeks. A referral to outpatient physiotherapy will be completed.

Painkillers

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.

Walking with crutches

You will be provided with a pair of crutches for use when walking. You may also be given a knee brace to wear for a period under your surgeon's discretion. 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.



1. Place your crutches forward.
2. Step your operated leg up to the crutches
3. Step forward with your non-operated leg.

Repeat.

Walking up stairs

Stand close to the stairs. Hold onto the handrail with one hand and the crutches with the other hand as shown in the picture. If you have another person with you, hand them your other crutch.

1. First take a step up with your non-operated leg
2. Then bring your operated leg up to the same step
3. Finally bring your crutch up onto the step

Walking down the stairs

Stand close to the stairs. Hold onto the handrail with one hand and the crutches with the other hand as shown in the picture. If you have another person with you, hand them your other crutch.

1. First put your crutch one step down.
2. Then take a step down with your operated leg.
3. Then take a step down with your non-operated leg, onto the same step as your operated leg.

Physiotherapy exercises

Following surgery, the physiotherapist will issue you exercises specific to your operation as it is important to start getting the knee 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 _____

©Physiotools

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 Hamstring Sets

Lie on your back with your legs bent. Slightly straighten one leg and place the heel of the leg against the floor.

Push the heel towards the floor as if trying to bend your knee further. No movement should occur, but the hamstring muscles should tense. Hold the tension for a moment and then relax.

Repeat ____ times.

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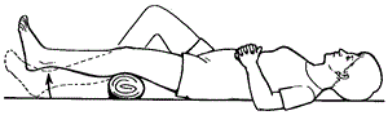
Isometric Knee Extension in Supine

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 _____inch roll under _____ knee
2. Raise heel off floor until knee is straight
3. Hold ____ seconds and slowly lower
4. _____ repetitions,

   _____ times per day

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Lying on your back with one leg straight and the other leg bent. (You can vary the exercise by having your foot pointing either upwards, inwards or outwards).

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.

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。

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