

Epiphyseodesis ('8'plates) Information for young people

What is the knee joint?

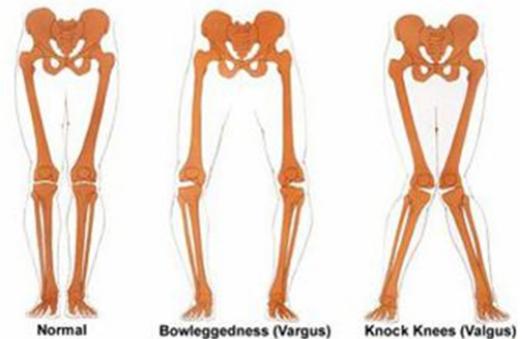
The knee is a very important joint in the body and consists of the thigh bone (femur) and two bones in the shin – the main one is the tibia and the smaller bone on the outside of the shin is the fibula. Your kneecap (patella) sits over the knee joint. The knee plays an extremely important role in supporting nearly the entire weight of the body and does this with the help of surrounding muscles, ligaments and cartilage.



Why I am having surgery?

Around your knee joint you have growth plates (epiphyseal plate) in your femur and tibia. These allow your bones to grow and for you to get taller. In some people, as they develop, deformities of the bone can occur for several reasons. This can cause your knee to point inwards (valgus) or outwards (varus) and can also mean that one leg is longer than the other. This can cause you pain and stop you from enjoying your usual activities.

To make your knee better your surgeon will perform an operation called an epiphyseodesis ('8' plates). Once you are asleep they will make a small cut on the side of your knee and insert a metal plate over the growth plate. This is held in place with screws. The plate stops your bone growing on one side of your knee and over time corrects the deformity as the opposite side of your knee continues to grow. If you are having this surgery because one leg is longer than the other you will have plates inserted on both sides of your knee. The plate will be removed once the deformity has been corrected, this is a much smaller operation.



Going home – What to expect after your surgery

Walking

Some children can get up and go home on the same day as their surgery. This will depend on how well you are feeling and what time you come back from theatre. You will be seen by the physiotherapist on the ward. They will teach you some exercises and help you to get up and out of bed for the first time. You will normally be allowed to walk on your leg but some children will be given crutches to help them if necessary. You will be shown how to walk up and down stairs safely if you would normally do so at home. It is very important that you try and get back to your normal routine as quickly as possible after your surgery.

Exercises

It is very important that you start to move your knee as soon as possible after your surgery. This will make sure that your knee stays nice and strong. You will be shown some exercises that you need to do regularly at home (at least 3 times a day) within your pain limits. You will also need



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to see a physiotherapist as an outpatient; this will be discussed with your parents before you go home.

Self care

It is important that you get back to your normal daily routine as soon as you can after your surgery. Some children need help initially (either from your parents or the nursing staff) to do things such as getting in and out of bed, getting washed and dressed and going to the bathroom etc. By the time you go home most children are able to complete their normal self care activities by themselves.

Pain relief

It is normal for your knee to hurt after your surgery. You will be given some medicine to help with the pain. It is important that you let your parents know if your knee hurts and to take your medicine as the nurses tell you too. You will be given some medicine to take home with you, if you run out then see your GP.

Ice

Ice can be helpful to reduce pain/swelling. It is important that you do not get the plasters on your knee wet so cover them with a plastic bag. Wrap a bag of ice/frozen peas in a damp towel and put it on your knee for 10-15 minutes. This can be repeated every 3-4 hours.

Wound care

After your surgery you will have a large bandage around your knee which can be taken off after 2 days. Under this you will have small plasters which need to stay on. Your wounds will need to be kept clean and dry. The nursing staff will provide your parents with more information about wound care when you go home.

Sleeping

It is important that you DO NOT sleep with a pillow or towel underneath your knee as this will stop you being able to fully straighten your knee and your recovery will take longer.

School

You are usually allowed to go back to school as soon as you feel able to and your pain is controlled. It is important that your parents discuss this with your teachers as some schools will not let you go back whilst you are using crutches. You can discuss this with your physiotherapist on the ward.

PE and sport

You will not be able to complete any impact activities (such as running, jumping, trampolining and contact games) for 6 weeks following your surgery. After this time you will be guided in what you are allowed to do by your physiotherapist.

If you have any questions or need any advice about your exercises then please contact the Physiotherapy Department between 8am - 4pm Monday to Friday on 0121 685 4120.

Instructions for after your surgery:

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Epiphyseodesis

Royal Orthopaedic Hospital NHS Foundation Trust
Royal Orthopaedic Hospital
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Lying on your back with legs straight.



Bend your ankles and push your knees down firmly against the bed. Hold
5 secs. - relax.

Repeat 10 times.

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Lying on your back. Place a rolled up towel under your operated knee.

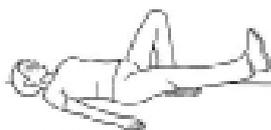


Tighten your thigh muscle and lift your heel off the bed by straightening
your knee (make sure you keep your thigh on the towel). Hold approx.
5 secs. and slowly relax.

Repeat 10 times.

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Lying on your back with your operated leg straight.



Lift your leg 20 cm off the bed. Hold approx 5 secs. - slowly relax.

Repeat 10 times.

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Lying on your back.



Bend and straighten your leg.

Repeat 10 times.

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Sit on a chair with your feet on the floor.

Bend your knee as much as possible.

Repeat 10 times.

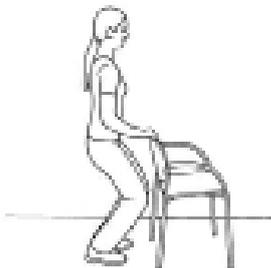


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Stand. Hold onto a solid support.

Bend your knee and lift your foot off the floor. Hold 5 secs.

Repeat 10 times.



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Stand holding onto a solid support.

Slowly crouch keeping your back straight and heels on the floor, your knees should come forward over your toes.

Repeat 10 times.

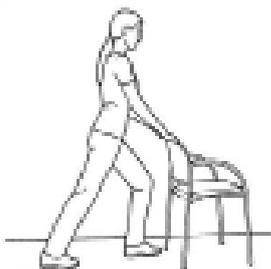


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Sit on a chair.

Pull your toes up, tighten your thigh muscle and straighten your knee. Hold approx. 5 secs. and slowly relax your leg.

Repeat 10 times.



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Stand in a walking position with the leg to be stretched straight behind you and the other leg bent in front of you. Hold onto a solid surface.

Lean your body forwards and down until you feel the stretching in the calf of the straight leg. Hold approx. 30 secs. - relax.

Repeat 3 times.

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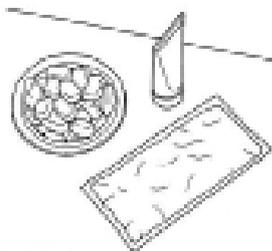


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Sitting on a chair, with the leg to be exercised supported on a chair as shown.

Let your leg straighten in this position. Hold 30 secs.

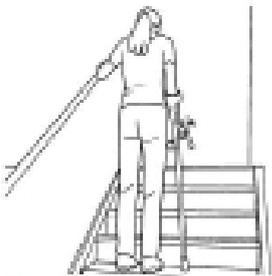
Repeat 3 times.



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Ice therapy.

Ice your knee for 20 minutes at a time. This can be repeated 3-4 times per day.



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Walking up stairs.

Hold onto the handrail with one hand and the crutch/crutches with the other hand.

Step up with your good leg followed by your operated leg onto the same step. Bring your crutches up last.

Always go one step at a time.



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Walking down stairs.

Hold onto the handrail with one hand and the crutch/crutches with the other hand.

Take your crutches down onto the step below. Step down with your operated leg and finally your good leg onto the same step.

Always go one step at a time.