

Tibial plateau fracture

Physiotherapy information for patients, relatives and carers

This information sheet aims to provide you with general information about your time in hospital and help you get the best possible results after your fracture and surgical or non-surgical management. If you have any other questions or concerns, please do not hesitate to speak to the team caring for you.

Date:

Name:

Weight bearing status:

Confirming your identity

Before you have a treatment or procedure, our staff will ask you your name and date of birth and check your ID band. If you do not have an ID band we will also ask you to confirm your address. If we do not ask these questions, then please ask us to check. Ensuring your safety is our primary concern.

Introduction

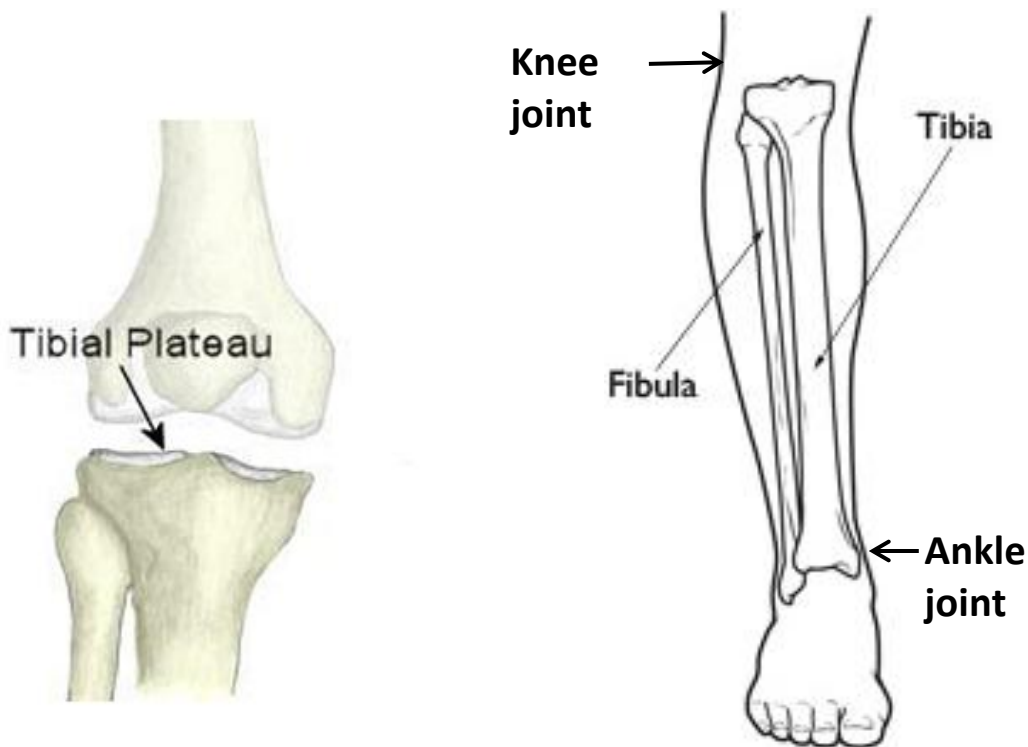
The aim of this booklet is to provide you with some general information about your time in hospital and to help you get the best possible result after your fracture and surgery.

This is only intended as a guide, and the information given may vary depending on your circumstances. After your fracture you will need to be careful how you treat your leg as it takes time for the fracture to heal. You will need to follow the advice given to you by your physiotherapist and surgeon.

Physiotherapy largely consists of advice and exercises that should be completed daily at home. The exercises aim to maintain or improve the movement, strength and function of your leg. It is your responsibility to continue these at home once demonstrated by a physiotherapist.

If at any point during your rehabilitation you have difficulty following our advice, or the exercises your physiotherapist has given you, please phone the relevant contact number on page 10 of this booklet and ask to speak to one of the physiotherapists.

Anatomy



A tibial plateau is the top surface of the tibia (shinbone). It forms the knee joint with the thighbone (femur) above it. A tibial plateau fracture means you have broken the bone in this area. There may also be damage to the surrounding muscles, skin, ligaments and nerves. When you walk, you put weight through the tibial plateau so you may find it affects your mobility.

Management of the fracture

After a review of your tibial plateau fracture, the surgeon will determine if it is going to be treated with or without surgery. This will be discussed with you by your surgeon.

A doctor will consider several factors when deciding your treatment, these include:

- the cause of your injury
- your overall health and pre-existing medical conditions
- the severity of your injury
- the amount of damage to your soft tissues (muscles, skin, nerves, ligaments)
- your function and activities before the injury

Non-surgical treatment

Your surgeon will advise you if your leg will need to be placed into either a brace or a cast. This will support your knee, stop you moving it, and will allow the fracture to heal. If the decision is to use a brace you will be taught how to manage it (see below).

Surgical treatment

During surgery the surgeon makes a cut to realign the broken bone using metal plates or screws to hold it in place so it can heal (see picture). The common term for this is an open reduction and internal fixation (ORIF).



After your operation

Pain management

Pain is to be expected after a fracture and an operation. In the first few days after your operation, you must take regular pain relief to take part in physiotherapy and regain your independence. There are many types of pain relief available – the doctors will advise which is best for you.

If you do not have a plaster cast or heavy dressing, using an ice pack may give temporary relief from any discomfort and swelling. You can make an ice pack by putting ice cubes in a plastic bag and wrapping this in a damp cloth. This can be applied to the affected area for 10 to 15 minutes at a time. You must be careful not to get the wound or dressing wet. Please do not place ice directly onto skin – it must be covered.

It is important to check the skin during and after using the ice pack. If the skin remains discoloured after the removal of the ice pack, or you develop any sudden and severe increases in pain, loss of feeling in the skin, ice burns (change in colour and/or broken skin) or wheals (a raised, itchy area of skin), stop using the ice pack and seek medical advice.

Complications

If you develop any changes in sensation, severe pain and/or swelling to the area, discoloration or oozing of the wound when you are on the ward or back at home, please alert a member of the medical team, seek medical advice from your GP or call 111.

Therapy assessment

You will be assessed by a therapist, who will advise you on an exercise program and help you out of bed, into a chair and, if you can, to walk using an aid such as a walking frame or elbow crutches.

Weight bearing status: This refers to how much of your body weight you are allowed to put through your affected leg and is decided by your surgeon. You can find your weight bearing status on the front of this booklet. Your physiotherapist will go through this with you when assessing you.

Walking aids: The physiotherapist will provide you with a suitable walking aid such as a frame or crutches. They will teach you how to use your aid/s to help you to regain your independence as much as possible.

Advice on positioning: It is important to keep your leg lifted when resting, so that your ankle is higher than your hip. This position can help to reduce the swelling. Always rest with the knee in a straight position to maintain muscle length. Your physiotherapist will advise you on where to place the pillows to keep your leg lifted.

Knee brace (only if needed and prescribed by your surgeon)

You may need to wear a knee 'range of movement' (ROM) brace for 6 weeks after the surgery or if you are managed conservatively (without surgery).

The brace will be fitted and set into the right position by your surgeon or physiotherapist before you are discharged from hospital. **Do not change the settings.** The physiotherapist will tell you how much you can bend your knee.

If you need to wear a knee brace, follow the instructions below when putting it on and taking it off. Please note there are different types of braces and yours might look slightly different.

It is important that you regularly check the condition of your skin and seek medical advice if you notice that the skin underneath the knee brace is newly painful or irritated. When washing your leg and checking your skin, keep your leg supported and do not bend your knee. Replace the knee brace immediately afterwards once the skin is dry.

To take your knee brace off:



Lie on the bed so there is no weight placed through your leg and your knee is supported.

Undo each strap by unclipping as shown.

To put your knee brace on:



Lay your brace out flat, ideally on a bed, so your knee is supported.

Slide your leg onto the knee brace.

Position the knee brace so that the dials are either side of your knee and the widest part of the brace is behind your thigh.

Secure the straps using the clips and tighten to stop the brace sliding down the leg when standing.

Make sure the brace is not too tight – you should be able to slide a finger under the straps.



Subsequent days

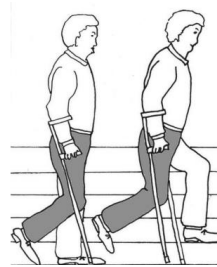
Your physiotherapist will progress your exercises and mobility with the aim of helping you become independently mobile again. They will practice going up and down stairs with you if necessary.

Stairs

If you have stairs at home, your physiotherapist will teach you how to go up and down the stairs. Always use a stair rail or banister if possible. If you have any weight bearing restrictions, your physiotherapist will teach you the correct technique for going up and down the stairs.

Going up

1. Non-operated leg
2. Operated leg
3. Crutch or stick



Going down (the opposite applies)

1. Crutch or stick
2. Operated leg
3. Non-operated leg



If you are worried about managing the stairs at home, please discuss this with your physiotherapist and occupational therapist.

Leaving hospital

After your surgery, when you are medically well, the team of doctors, nurses and therapists will plan your return home with you. The physiotherapist will help you set goals that identify what you need to achieve to go home. They will give you advice to help you plan for a safe discharge from hospital. If you need any equipment or help at home this will also be organised before your discharge.

Rehabilitation after leaving hospital

If you need any additional physiotherapy, your physiotherapist will arrange appropriate follow-up physiotherapy for you when you leave hospital. This will either be at your home or in your local physiotherapy department. This will be discussed with you.

Exercises

These exercises aim to:




- improve movement and muscle strength.
- prevent joint stiffness.
- prevent muscle tightness.

- increase or maintain circulation




You may find it helpful to time your pain medication with your exercises so you can get the most out of the exercises.



If you have a ROM brace, only complete the exercises within your brace restrictions as prescribed by your surgeon.

Please complete the exercises that have been marked by your physiotherapist three times a day on your affected leg. Repeat each exercise 10 times unless stated by your physiotherapist.

	Exercise	Instructions
<input type="checkbox"/>		<p>1. Ankle pumps</p> <p>Lying or sitting with your back supported, move your ankles up and down.</p> <p>Repeat 10 times every hour. This exercise will help the circulation in your legs.</p>
<input type="checkbox"/>	 	<p>2. Ankle inversion and eversion</p> <p>Lie on your back with your legs straight.</p> <p>Slowly move your ankle so the sole of your foot faces inwards (big toe towards your head).</p> <p>Slowly move the ankle so the sole of the foot faces outwards (little toe towards your head).</p>

<div data-bbox="156 203 258 280" data-label="Image"> </div>	<div data-bbox="284 309 831 604" data-label="Image"> </div>	<p>3. Static quads</p> <p>Lie on your back with your legs straight.</p> <p>Push your knee into the bed by tightening your thigh muscle while pulling your toes towards you.</p> <p>Hold for 5 to 10 seconds.</p> <p>Relax.</p>
<div data-bbox="156 967 258 1043" data-label="Image"> </div>	<div data-bbox="284 1019 892 1485" data-label="Image"> </div>	<p>4. Inner range quads</p> <p>Place a rolled pillow or towel under your knee.</p> <p>Pull your toes towards you.</p> <p>Push your thigh into the blanket and slowly lift your foot to straighten your knee. Hold for 5 to 10 seconds.</p> <p>Relax.</p>

<input data-bbox="159 201 255 280" type="checkbox"/>		<p>5. Knee flexion</p> <p>Lie on your back with your legs straight.</p> <p>Slowly slide your heel towards you to bend your knee as far as you can, then straighten your leg.</p>
<input data-bbox="159 705 255 784" type="checkbox"/>		<p>6. Straight leg raise</p> <p>Lie on your back with your legs straight.</p> <p>Pull your toes towards you and lock your knee straight.</p> <p>Keeping your knee straight slowly lift your foot 10 cm. Hold for 5 seconds, then slowly lower your leg to the bed.</p> <p>Relax.</p>
<input data-bbox="159 1523 255 1601" type="checkbox"/>		<p>7. Long arc quads</p> <p>Sit in an upright chair with both feet on the floor.</p> <p>Pull your toes up towards you and slowly lift your foot to straighten your knee, then slowly bend your leg and lower your foot to the floor.</p>

<input type="checkbox"/>		<p>8. Lying abduction and adduction</p> <p>Lying on your back, gently move your operated leg out to the side and then return it slowly back to the middle.</p>
<input type="checkbox"/>		<p>9. Gastroc stretch</p> <p>Sit up in bed with your leg straight. Use a rolled up towel wrapped around the base of your foot.</p> <p>Slowly pull the towel towards you until you can feel a stretch, keeping your knee straight. Hold for 30 seconds and then relax.</p>

Useful contacts

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| • Inpatient Orthopaedics (King's College Hospital) | 020 3299 2368 |
| • Inpatient Orthopaedics (Princess Royal University Hospital) | 01689 864632 |
| • Outpatient Physiotherapy (King's College Hospital) | 020 3299 8220 |
| • Outpatient Physiotherapy (Beckenham Beacon) | 01689 866660 |

MyChart

Our MyChart app and website lets you securely access parts of your health record with us, giving you more control over your care. To sign up or for help, call us on 020 3299 4618 or email kings.mychart@nhs.net. Visit www.kch.nhs.uk/mychart to find out more.

Sharing your information

King's College Hospital NHS Foundation Trust has partnered with Guy's and St Thomas' NHS Foundation Trust through the King's Health Partners Academic Health Sciences Centre. We are working together to give our patients the best possible care, so you might find we invite you for appointments at Guy's or St Thomas' hospitals. King's College Hospital and Guy's and St Thomas' NHS Foundation Trusts share an electronic patient record system, which means information about your health record can

be accessed safely and securely by health and care staff at both Trusts. For more information visit www.kch.nhs.uk.

Care provided by students

We provide clinical training where our students get practical experience by treating patients. Please tell your doctor or nurse if you do not want students to be involved in your care. Your treatment will not be affected by your decision.

PALS

The Patient Advice and Liaison Service (PALS) is a service that offers support, information and assistance to patients, relatives and visitors. They can also provide help and advice if you have a concern or complaint that staff have not been able to resolve for you. They can also pass on praise or thanks to our teams.

Tel: 020 3299 4618

Email: kings.pals@nhs.net

If you would like the information in this leaflet in a different language or format, please contact our Interpreting and Accessible Communication Support on 020 3299 4618 or email kings.access@nhs.net