

# Major Trauma Discharge advice for adult patients who have undergone surgical fixation of a tibial plateau fracture

Aintree University Hospital **NHS**  
NHS Foundation Trust

Major Trauma Centre  
Lower Lane  
Liverpool L9 7AL  
Tel:0151-525-5980

## Where is my tibial plateau

The tibial plateau is the upper surface of the tibia or shin bone.



A fracture is commonly known as a break.

## How is it injured?

This type of injury is commonly seen from road traffic collisions and high speed sports. Injury pattern is seen from knees into dash board, pedestrians hit my car bonnet.

Fractures of the tibial plateau are considered quite serious as this upper surface of the bone contains structures which are critical to the knees functioning.

Hence, fractures of the tibial plateau are often associated with injuries to the [anterior cruciate ligament](#), collateral ligaments ([MCL](#) or [LCL](#)), [menisci](#) and [articular cartilage](#).

## Signs and Symptoms:

There is normally a recent history of trauma to the knee area followed by swelling and pain in the joint.

The patient may complain of stiffness of the knee and be unable to weight bear on the injured leg.

## Diagnosis

Tibial plateau fractures are firstly suspected during examination of the effected limb. An x-ray is then normally taken to show the fracture.

In some cases, where its felt a more detailed view of the fracture is need a CT scan will be performed which will give your treating team a 3D view of your fracture.

If the fracture is thought to have been associated with a ligament injury, then a MRI may be performed.

## Treatment

The ultimate goals of tibial plateau fracture treatment is to re-establish joint stability, alignment, while preserving full range of motion In such a case, painless knee function may be achieved and posttraumatic arthritis prevented.

Surgical management is normally offered for fractures that are open ( the skin and tissue over the break is open).

Fractures that are classified as unstable and or significantly displaced.  
Or fractures that involve the blood supply to you lower leg

## The Operation

Depending on the type of fracture and the skin condition, you may require more than one surgery.

If the fracture is open and unstable you may have initial surgery to wash out the wound and stabilize the fracture in a temporary external fixator.

This is common with major trauma patients as they have injured other parts of the leg and or other body parts.

Common surgical method used is open reduction and internal fixation (ORIF) using surgical plates and or screws.

In some cases your surgeon may use bone grafting to fill any bone deficits caused by the fracture.

Your surgeon may wish to manage your fracture in a Ilizarov external ring fixator.

## Brace Care

Nursing and therapy staff will go through how to look after your brace at home prior to your discharge.

## Therapy

You will receive exercise and weight bearing instructions from the therapy team before discharge or as an outpatient. Please ensure you follow these instructions as they have been designed to ensure you recover and rehabilitate after your injury.

Due to the nature of the injury, other injuries you may have sustained could limit your weight bearing and rehabilitation.

## Pain control

Painkillers will be prescribed for you for about 5 – 10 days. They may well cause constipation, so it is important to get plenty of fibre in your diet while you are recovering. Fresh fruit and vegetables will help to keep your bowels moving regularly.

## VTE (venous thrombo-embolism)

VTE is a collective term for 2 conditions:

- DVT (deep vein thrombosis) – this is a blood clot most commonly found in a deep vein that blocks the flow of blood.
- PE (Pulmonary embolism) – a potentially fatal complication where a

blood clot breaks free and travels to the lungs.

Whilst you are less mobile, the risk of VTE is higher.

VTE is a major health risk in the UK. Your consultant will discuss with you if intervention with anticoagulation (blood thinners) is required.

Things that you can do to prevent VTE:

- Mobilise as instructed by the consultant and therapy teams.
- Keep well hydrated – drink plenty of water.
- We strongly advise you not to smoke. This is a great opportunity to stop smoking. The ward staff or your GP can help you to access smoking cessation services.
- If you have been recommended anticoagulation therapy, please comply fully with the treatment for the duration of the course. Your Consultant, Pharmacist and Nursing team will speak to you re this.

## Symptoms

- Swelling – you may already have some swelling of the legs, but increase in swelling needs to be assessed.
- Calf tenderness and increased pain.
- Heat and redness in one or both legs.
- Unexplained shortness of breath.
- Chest pain when breathing in.

## It is important that you do not miss any of your follow up appointments

Your surgeon will inform you prior to discharge if you will require a follow up in our Major Trauma or Fracture clinic to ensure that your injury is healing and for us

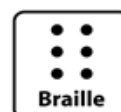
to also monitor how you as a whole are recovering from your injury.

Sometimes if a patient is out of the area it may be that you are referred back to your local hospital for further follow up.

### **Who do I contact if I have questions or concerns?**

- ✓ Major Trauma Nurse Coordinators:  
Contact Hospital switch board on 0151 525 5980 and ask switchboard to bleep 5428. This service is available 7 days a week from the hours of 8 am to 8 pm.
- ✓ Major trauma ward manager  
Vanessa Lownsborough (0151) 529 8278
- ✓ Nursing staff on Major Trauma Ward:  
Telephone number: 0151 529 6255
- ✓ During working hours 8am - 5pm  
Monday to Friday you can Contact the secretary and leave a message for the surgical team. 0151 529 4663
- ✓ If you think that your condition is serious then it is best to come straight to Aintree Accident & Emergency department\*.
- ✓ Seek advice from your GP.

**\*When you come to the hospital please bring this and any other relevant discharge documents that you may have been given at the time of discharge to help the A&E doctors to decide your management.**



### **If you require a special edition of this leaflet**

This leaflet is available in large print, Braille, on audio tape or disk and in other languages on request. Please contact:

**Tel No: 0151 529 2906**

**Email: [interpretationandtranslation@aintree.nhs.uk](mailto:interpretationandtranslation@aintree.nhs.uk)**