

# Knee Injuries - help to manage at home

Physiotherapy & Occupational Therapy

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

- Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111
- Keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.

#### Introduction

The doctor has diagnosed you as having a fracture or a soft tissue injury. This information leaflet has been written to help you manage this injury at home. An appointment may also be arranged for you to see a physiotherapist.

#### Have you been told you have a fracture?

A fracture (or a break) is damage to a bone. This may be small chip of bone or a complete break through the bone.

#### How are fractures treated?

Fractures may be treated in a number of ways:

- Plaster cast
- Internal fixation is when the fracture is fixed with nails, plates, screws, or wires
- External fixation is when nails are placed into the bone with a metal plate outside to hold the bone still while the fracture heals
- Reduction in theatre the bone is put into a good position.
  This is often followed by one of the above treatments.

Some fractures are not treated in any of the ways outlined above. They may be managed with a tubular bandage, brace, or splint and you may be encouraged to begin exercising as soon as possible.

## Have you been told you have a soft tissue injury?

This includes sprains, strains, and bruises which affect the soft tissues of the body. Most commonly injured are the ligaments, muscles, tendons, and joint capsules. Following a fracture the soft tissues will also have been injured.

There is no set time for a fracture or a soft tissue injury to heal. The doctors, nurses, and physiotherapists will give you advice on what you can expect and what you should be doing. You should expect some swelling and discomfort for several weeks, particularly after you have been on your feet for long periods.

## How can I manage my injury at home?

The regime of protection, rest, ice, compression, and elevation is a simple and effective method of early treatment, particularly when swelling is present.

- Protection this may include walking aids, a brace or splint, or a tubular bandage
- Relative rest rest the affected area for the first few days, avoiding excessive activity, using any of the above supports you have been given
- Ice this is effective in reducing pain, inflammation, and swelling. Do not use if the area is numb, you have weeping or bleeding wounds, you are diabetic, or you have problems with your circulation.

There are two methods for using ice:

- Place ice in a bucket of water and place the affected area in the bucket for 15 – 20 minutes
- Wrap crushed ice / frozen peas in a damp tea towel to make an ice pack. Cover the affected area with oil to protect the skin and place the ice pack over the area for 15 – 20 minutes (10 minutes if this is a bony area).

If you have a burning sensation or notice any blistering, remove the ice immediately.

- Compression this is used to reduce swelling. If you have been given a tubular bandage wear this whenever the injured area is not elevated and always remove it before you go to bed
- Elevation this helps to reduce swelling and inflammation.
  Elevate the injured area as much as possible in the first few days, this should be done for at least 20 minutes every two hours.

Do not use compression when elevating the injured area.

For the first three days DO NOT apply heat, massage the injury, or drink alcohol as these activities may increase bleeding or swelling.

## Do I need a walking aid?

The physiotherapist will advise you on the most appropriate walking aid and teach you how to use it. Unless otherwise instructed and as you feel able, gradually increase the amount of weight you put through your leg, until you no longer need the walking aid.

When you no longer need the walking aid please return it to Fracture Clinic.

## Should I take pain relief?

Your doctor or pharmacist can advise on appropriate pain relief which, if taken regularly, can improve comfort and reduce muscle spasms. If your pain is well controlled you will manage exercises more easily which will aid recovery.

#### Can I drive?

Your doctor or physiotherapist will advise you when it is safe to return to driving. You must be in full control of the vehicle before attempting to drive again. You should not drive whilst wearing a cast, splint, or brace.

## Why exercise?

Early exercise can have a positive influence on tissue healing and reduce the potential for joint and soft tissue stiffness. Too much movement or the wrong type of exercise however may be harmful to tissue healing and it may cause inflammation which can increase your pain. If you are not sure if it is safe to do something please talk to your physiotherapist first.

## Exercises – to be completed 3-5 times a day

Lying or sitting. Bend and straighten your affected leg. Repeat 5-10 times.



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Lying or sitting with legs straight. Tighten your thigh muscle to push the affected knee straight. Hold 5 seconds. Repeat 10 times.



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Lying or sitting. Bend the unaffected leg and put your foot on the bed. Put a rolled towel under the affected knee. Exercise your affected leg by pulling your foot and toes up, tightening your thigh muscle and straightening the knee (keep knee on the towel). Hold 5 seconds. Repeat 5-10 times.



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Lying or sitting with the affected 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 5 seconds (ensure you keep the knee as straight as possible throughout the exercise). Repeat 5-10 times.



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Sit on a chair with the affected leg straight in front of you. Place your hands on your thigh just above the knee cap. Lean forwards keeping your back straight. Straighten your knee assisting the stretch with your hands. Hold 20 seconds. Repeat 5 times.



## Other exercises to progress to

Sitting with your arms crossed. Stand up and then sit down slowly on a chair, aiming to keep equal weight through both legs. (This can be made easier and more difficult by changing the height of the chair). Repeat 10 times.



Stand leaning with your back against a wall and your feet about 20 cm from the wall. Slowly slide down the wall to a comfortable bend of the hips and knees. Aim to keep equal weight through both legs and keep your knees in line with your toes. Return to starting position. Repeat 10 times.



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Lying on your back with knees bent and feet on the floor. Tighten your bottom muscles and lift your pelvis and lower back off the floor. Hold 5 seconds. Lower down slowly returning to starting position. Repeat 10 times.



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Lie on your side with your knees bent and affected leg on top. Tighten your buttocks. Lift your top knee as far as you can, without letting your pelvis rotate forward or back. Keep your feet together and back straight during the exercise. Repeat 10 times.



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Practice balancing on your affected leg (with support if required). When you can consistently maintain your balance for 30 seconds progress to:

- a) eyes closed
- b) standing on a pillow / cushion
- c) throwing and catching a ball

#### Regaining balance reactions helps to avoid re-injury

Stand in front of a step (with support if required). Step up with the injured leg leading and back down with the uninjured leg. Repeat 10 times.

Stand on the injured leg on a step facing





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down (with support if required). Slowly lower yourself by bending your knee as far as is comfortable. Return to starting position. Repeat 10 times.

Stand sideways on a step (with support if required) with one foot hanging over the edge of the step. Slowly bend your knee allowing your other foot to brush the floor. Repeat 10 times.



## Gradually

- Return to your normal activities
- Increase your walking distance
- Resume hobbies and sports.

If you are unsure of when to progress your exercises, or you have any concerns about your injury and you do not have a further appointment with the physiotherapy team, please contact the physiotherapy department on the telephone number below.

#### Contact details

Acute Trauma Physiotherapy Team

**Emergency Department** 

**New Cross Hospital** 

01902 307999 ext. 88536

The team is available Monday to Friday, 8.00am – 4.00pm. Outside of these hours please contact the Emergency Department or, if you have a fracture, the Fracture Clinic. For both of these options please ring 01902 307999 and ask the operator to put you through to the appropriate department.

#### **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.

Jeiqu 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 ਸਾਨੰ 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 informati.

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。

> Designed & Produced by the Department of Clinical Illustration, New Cross Hospital, Wolverhampton, WV10 0QP Tel: 01902 695377.