Lancashire Teaching Hospitals
NHS Foundation Trust

Information for patients and carers

Meniscal Injury of the Knee

This leaflet is designed to help you understand your injury and how to manage it. It is important to remember that your injury is specific to you and this information is a guide only and should not be substituted for care from a healthcare professional.

What is a normal knee?

The knee consists of two joints; one joint connects the thigh bone (femur) to the shin bone (tibia), the other connects the knee cap (patella) to a groove within the lower part of the thigh bone. Whilst supporting the weight of the body, the main movements of the knee include bending and straightening, however it also provides a small amount of rotation.

There are several structures within the knee joint, these include:

Bones which support the knee

Muscles which create movement at the knee

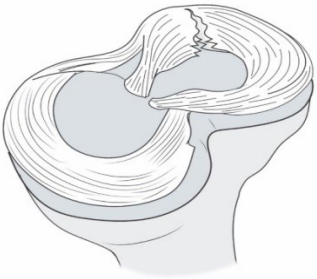
Ligaments which help to stabilise the knee

Cartilage which protects the bones and allows for smooth movements of the knee

What is a meniscal tear?

The menisci are two C-shaped cartilages that sit on the top of the shin bone (tibia). Their purpose is to protect the thigh bone (femur) and tibia from stresses placed on the knee when bending, standing, walking, running or jumping. A meniscal tear typically occurs following trauma or as a result of a long period of degeneration – for example twisting while getting up from a chair may be enough to cause a tear.

Symptoms of a meniscal tear include; feeling as though your knee is locked, your knee giving way when standing or walking, discomfort when twisting or straightening the knee, and reduced range of movement caused by stiffness, swelling and pain in the knee.



Do I need surgery?

The outer third of the meniscus has a good blood supply. A tear in this "red" zone will usually heal on its own. If your symptoms do not persist and you have no locking or swelling of the knee, your Physiotherapist may recommend non-surgical treatment. Many meniscal injuries are managed this way and will not need any further investigations or surgery. Full recovery can take 6-12 weeks.
The inner two-thirds have a reduced blood supply. Tears in this "white" zone cannot heal.

If symptoms persist and your injury does not respond to non-surgical treatment, surgery may be required to trim or repair the damaged meniscus. If this is the case you will be referred to Orthopaedics for an MRI scan to determine the size, type and location of the injury.

Steroid Injection

If pain and swelling persists and surgery is not indicated your doctor may inject a corticosteroid medication into your knee joint.

Conservative (non-surgical) Treatment.

Immediately after your injury following the RICE protocol is effective for injuries. RICE stands for Rest, Ice, Compression and Elevation.

- **Rest**. Take a break from the activity that caused the injury.
- You might need to use crutches to avoid putting full weight on your leg.
- **Ice**. Use cold packs for 20 minutes at a time, several times a day. Do not apply ice directly to the skin.
- **Compression**. To prevent additional swelling and blood loss, wear an elastic compression bandage / tubigrip
- **Elevation**. To reduce swelling, recline when you rest, and put your leg up higher than your heart.

Nonsteroidal anti-inflammatory drugs (NSAIDs) such as Ibuprofen, and Naproxen can help to reduce pain and swelling. Please read the information in the pack carefully and consult your GP or Pharmacist for alternatives if you are not able to take these medications.

Physiotherapy

Exercises are important whether or not you go on to have surgery. Exercise has been shown to improve knee function and reduce pain and non- operative treatment is often successful especially with degenerative tears.

Initially the exercises will be designed to improve your range of movement, initiate muscle activity and control pain and swelling.

Your Physiotherapist will then guide you through exercises of increasing intensity, focusing on improving strength, endurance, and stability to enable your safe return to your usual sports / activities.

To reduce your risk of further injury, it is very important that you follow the guidance of your Physiotherapist before progressing your exercises and returning to your usual activities/ sports.

Some early range of movement, strength and stability exercises follow on the next page.

Stage 1 Exercises:

1. **Static Quads -**Pull your toes up towards you. Tense your thigh muscle and try to straighten your knee and hold for 10 seconds. Repeat x 5

2. **Straight leg raise-** Keeping your knee straight and your toes pulled up towards you lift your leg off the bed and slowly lower it back down Repeat x 10

3. **Inner range quads** - Sitting with your legs out straight put a rolled up towel under your knee. Tense your thigh muscles and lift your foot off the floor or bed. Hold for 5 seconds and slowly lower down. Repeat x 10

4. **Knee bends -** Bend and straighten your knee trying to get as much movement in each direction as possible x 5

5 **Single leg balance-** Practice trying to stand and balance on your injured leg. Aim to increase the amount of time you can balance for. Repeat this regularly throughout the day

6 **Knee Extension -** Sitting on a chair with your knee bent, slowly straighten the knee and hold for 5 seconds and then slowly lower the leg down. Repeat x 10.

Stage 2 Exercises:

1. **Sit to stand-** Try to get up from sitting without using your hands- lean forwards with your weight over your feet and stand up and then return slowly to sitting. Repeat x 10

2. **Bridge-** Lying on your back with knees bent and feet flat on the floor. Tense your bottom muscles and lift your bottom off the floor, hold for 5 seconds and slowly lower back down. Repeat x 10

3. **Step ups**- lead with injured leg and step up and down on a step

4. **Single leg balance -** Progress balance exercise to trying to stand on 1 leg on a cushion or folded up towel.

Contact details

Should you require further advice or information please telephone:

Chorley Physiotherapy Outpatients Department	**01257 245755**
Royal Preston Physiotherapy Outpatients Department	**01772 522376**

Sources of further information

www.lancsteachinghospitals.nhs.uk
www.nhs.uk
www.accessable.co.uk
www.patient.co.uk

All our patient information leaflets are available on our website for patients to access and download:

www.lancsteachinghospitals.nhs.uk/patient-information-leaflets

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If you want to stop smoking, you can also contact the Quit Squad Freephone 0800 328 6297.

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If you want to stop smoking, you can also contact Smoke free Lancashire on Freephone **08081962638**

Please ask a member of staff if you would like help in understanding this information.
This information can be made available in large print, audio, Braille and in other languages.

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