

KNEE SPRAINS

This information is for patients who have been told by a medical professional that they have a sprained knee and not any other form of knee injury.

A knee sprain occurs when there is injury to one or more of the knee ligaments. There are four knee ligaments and together they hold the knee joint in place providing knee support and stability. When a knee ligament is injured, there is immediate pain and swelling and consequently the stability and thus function of the knee joint is affected. The degree of instability and loss of function is dependent upon on the severity of knee ligament injury; some knee sprains are more severe than others.

Knee sprains commonly occur when the knee is twisted or it gives way underneath the patient when changing direction suddenly. This causes the knee ligaments to stretch and or possibly tear resulting in pain and swelling. Severe pain and swelling can limit knee function (movement), coordination, balance (proprioception) and therefore weight bearing ability.

Once diagnosed with a knee sprain, rehabilitation can begin immediately. The aim of treatment is to control the pain, reduce the swelling and introduce early knee mobilisation, thus allowing for the damaged ligament to heal and return to normal function. Depending upon the severity of the knee sprain, it can take up to several weeks for it to settle down.

TREATMENT

In the first 24-48 hours, the **RICE** protocol is followed

Rest – keep off the knee until weight bearing is tolerable, however the knee should be kept moving as pain allows (see exercises below)

Ice – ice the knee at least three times a day

Compression – elastic bandage (tubigrip) from above the knee to the toes will help reduce the swelling. Keep the bandage on during the day and take it off whilst sleeping at night.

Elevation – whenever you are sitting try and rest the leg on a stool.

As soon as it is comfortable gentle knee exercises should be encouraged. Early knee exercises will encourage knee function and proprioception recovery and thus facilitate ligament healing.

Exercise 1 – Quadriceps training exercise

Straight leg raise.

Lie on your back with your knee straight. Raise your leg straight up and hold for 5 seconds and then slowly lower. Repeat 10-20 times.



Exercise 2 – Hamstring training exercise

Kick backs.

Stand up straight, hold onto something for support. Lift your foot of the floor and bring it towards your buttock as far as you can. Hold for 5 seconds and slowly return. Repeat 10-20 times.



Exercise 3 – quadriceps, hamstrings and buttocks
Bridging

Lie on your back with your knees bent and feet flat on the floor. Lift your bottom off the floor and hold for 5 seconds and then slowly return. Repeat 10-20 times



Exercise 4 – functional exercise

Sit to Stand

Sit on a chair. Lean forwards, lift your bottom and stand up straight and then sit back down.



Exercise 5 – balance retraining (proprioception)

One leg standing

Lift up your good leg and stand one leg as long as you can





If the pain and swelling does not begin to settle or you are unable to perform the above exercises. You may have a more serious knee sprain and may need a more intensive rehabilitation program. Such things may include a greater rest period with potential temporary plaster cast immobilisation or physiotherapy. All of which can be assessed and organised by your GP.