



Patellofemoral Dislocations

Information for patients
Physiotherapy



WHAT IS A PATELLOFEMORAL DISLOCATION?

The patellofemoral joint makes up part of the knee joint. This joint is where your patella (kneecap) and your femur (thigh bone) meet at the front of your knee. Your kneecap sits in a groove at the end of your thigh bone. A patellofemoral dislocation is a knee injury where the kneecap shifts out of this groove, often damaging surrounding soft tissues.

WHAT CAUSES A PATELLOFEMORAL DISLOCATION?

A patellofemoral dislocation can be caused by either a contact or non-contact incident.

Contact - this involves a sudden direct force on the kneecap.

Non-contact- this usually happens when your foot is planted on the ground, your knee is bent and your thigh is twisted inwards.

You may also be more likely to dislocate if you were born with a slightly higher knee cap or if the groove where your knee cap sits, is shallower.

PAIN MANAGEMENT

After your dislocation, it is normal to experience some pain and swelling. We would advise you to take Pain-killers for your pain. These can be bought over the counter. If you feel these are not helping enough with your pain, you should speak to your doctor about other options.

P.O.L.I.C.E PRINCIPLES (PROTECT AND OPTIMALLY LOAD/ICE/ COMPRESSION/ELEVATE)

Initially, you should take some rest from activities which give you pain. We would advise you try and weight bear (this means put weight on your knee joint) as much as you can tolerate. A clinician may provide you with a supportive brace to wear to begin with. Your physiotherapist will guide you through improving on your walking and returning to your normal activities.

Ice may be initially used for reducing pain and swelling. Be wary of ice burns – don't apply ice directly to your skin, wrap an ice pack in a clean, damp tea towel before applying. Avoid leaving the ice on your skin for too long, 10-20 minutes is usually adequate.

Compression and elevation are helpful for reducing inflammation (this means redness, pain and swelling). This can be done by keeping your leg raised on a pillow and compressed by wrapping a bandage around it. Do not make the bandage too tight and do not wear tubi-grip or any compression bandage in bed at night.

Analgesia is also known as pain relief, and can be an important part in helping you manage your symptoms. If you feel your current pain relievers are not helping your pain or you are experiencing any side effects from your medication, please seek advice from your GP or pharmacist.

Progress through the following phases when you are pain free and you don't have any fatigue (this means extreme tiredness) doing the required repetitions. If you feel any pain when you're doing the exercises STOP immediately and seek medical advice.

REHABILITATION - EARLY PHASE

This phase focuses on improving your joint's range of movement and strengthening muscles around the knee to help with walking/balance.

Exercise 1

Lie on your back with both legs out straight to begin. Slowly bend the injured leg by sliding your heel on the bed towards your hip. Then slowly straighten the knee by sliding the heel back down the bed. Keep the knee in line with the foot throughout the exercise.



Repeat the exercise 10 times and do 3 sets per day.

Exercise 2 - Isometric knee extension

Sitting on your bed with the affected leg straight and other bent, place a rolled-up towel underneath your knee (straight leg). Press the back of your knee into the towel, bringing your ankle and toes up and towards you. You should feel this in the muscles at the front of your thigh. Hold for 5 seconds and then relax for a few seconds.



Do this 10 times and do 3 sets per day

INTERMEDIATE PHASE

This phase is designed to develop muscle strength in the knee region and improve stability and balance.

Exercise 3 - Isolated knee extension

Sit on a chair, with your back pressed against it and your knees at a 90-degree angle. Fully straighten the affected knee by squeezing the thigh muscles, whilst keeping the back of your leg on the chair. Return your foot to the ground and then repeat the movement.



Do this 6-8 times and do 4 sets per day (you can do one or both legs).

Exercise 4 - Glute bridge

Lie on your bed, or the floor with both knees bent and feet flat. Push your heels into the floor to raise your hips up, whilst squeezing the muscles in your bottom. Slowly bring hips back to the floor and relax for a few seconds.



Do this 10 times and do 3 sets per day taking a short rest between sets.

ADVANCED PHASE

This phase focuses on functional exercises and improving dynamic stability.

Exercise 5 - Squat

Stand tall with feet hip width apart looking ahead. Bend your knees and push your hips back as if going to sit down, you don't need to go too far. Reaching your arms forwards will help maintain your balance. Keep your heels on the floor and make sure your knees stay in line with your middle toes. Do not let your knees go beyond the tips of your toes. Slowly straighten your knees keeping the weight through your heels.



Repeat 10 times x 3 sets, every second day. You can make this exercise harder by squatting lower and gradually increasing to 15.

Exercise 6 - Lunge

Start with your feet together, bring your knee up and forward, exaggerating a walking movement, then place your foot on the ground with your front and rear knee at a 90-degree angle to the floor. Once in that position, push with the front leg to stand back on both feet to the original starting position.



Do this 6-8 times alternating between each leg for x 4 sets. Rest for 90 seconds between sets. Try this exercise every second day.

Exercise 7- Side steps

Stand with both feet together and knees slightly bent. With the leading foot step out to the side, reaching out as far as you can whilst maintaining control of your leg. Once your leading foot is on the ground, bring your following foot back beside it so both feet are together.

Do this 10 times and do 3 sets (5 repetitions on each leg per set.) Rest for 90 seconds between sets. Try this exercise every second day.



Proprioceptive Exercise

The Star Excursion Balance Exercise requires balance, strength, flexibility and proprioception: four key elements required by the knee in daily life. Stand as if you are in the centre of a clock, on your affected leg. With your other leg, reach your toe as far out as you can towards each number while facing towards 12 at all times. Try not to touch the ground with reaching foot.



Repeat for 30 seconds each leg x 3 times per day.

If you find any of the above exercises make your symptoms worse, please stop and seek advice from a health professional

CONFIDENTIALITY AND THE USE OF PATIENT INFORMATION

NHS Lanarkshire take care to ensure your personal information is only accessible to authorised people. Our staff have a legal and contractual duty to keep personal health information secure, and confidential. In order to find out more about current data protection legislation and how we process your information, please visit the Data Protection Notice on our website at www.nhslanarkshire.scot.nhs.uk or ask a member of staff for a copy of our Data Protection Notice.



HELP AND SUPPORT

If your symptoms continue to worsen or do not show signs of improvement after a period of 6-12 weeks of following the advice above, a self-referral to physiotherapy can be made on our website: <https://www.nhslanarkshire.scot.nhs.uk/services/physiotherapy-msk/> or via your GP.

NHS Lanarkshire - for local services and the latest health news visit www.nhslanarkshire.scot.nhs.uk
NHS Lanarkshire General
Enquiry Line: 0300 30 30 243



www.careopinion.org.uk

NHS inform - The national health information service for Scotland.
www.nhsinform.co.uk
Tel No: 0800 22 44 88

If you need this information in another language or format, please e-mail: Translation.
Services@lanarkshire.scot.nhs.uk

Pub. date:	August 2021
Review date:	August 2023
Issue No:	01
Department:	Physiotherapy
Clinical lead:	

PIL.PATDIS.21_16907.L