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ने सुवातु उत्तमे ची लेउ वै उं विरुषा वरवे इस निसर उे देन वरवे: 01932 723553

اگر آپ اس کا اردو زبان میں ترجمہ چاہتے ہیں، تو براہ کرم اس فون نمبر 01932 723553 پر رابطہ کریں

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यदि आपको अनुवाद की ज़रूरत है तो कृपया इस नंबर पर फोन करें: 01932 723553

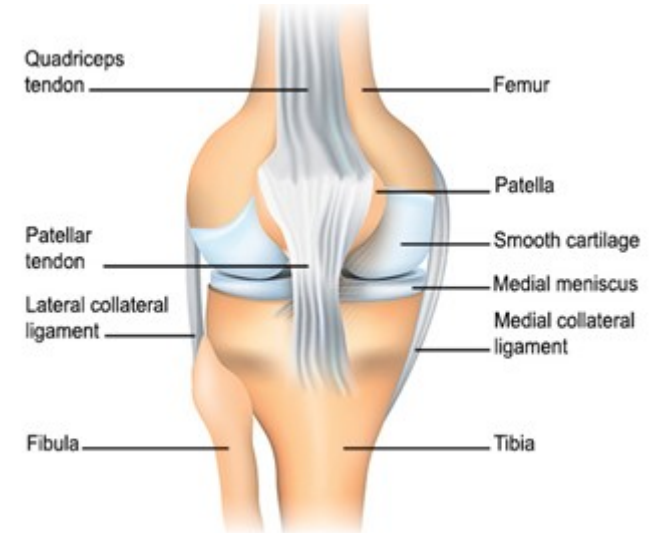
Jeżeli chcemy, aby te informacje w innym języku, proszę zadzwonić 01932 723553

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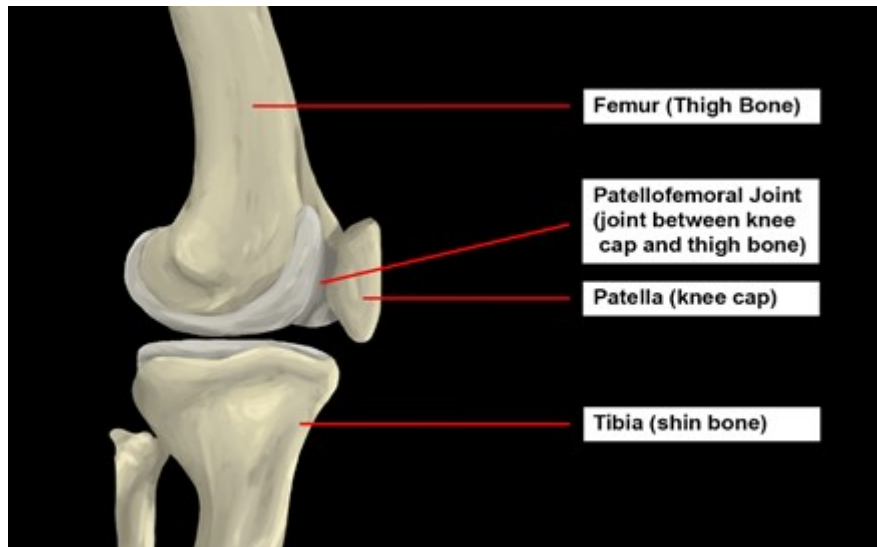
Patellofemoral Pain (PFP) Physiotherapy Department



What is Patellofemoral Pain?

Patellofemoral Pain (PFP) is defined as pain around or behind the kneecap (patella), which is aggravated by at least one activity that overloads the patellofemoral joint (PFJ) during weight bearing with the knee in bent position such as, squatting, stairs, walking, jog / running and jumping. It is a common condition in both physically active and sedentary individuals (due to sustained sitting with bent knees). PFP is experienced by up to 28% of young adolescents and 24% of older individuals (over age 50).

Sometimes you may hear this condition being called anterior knee pain, chondromalacia patellae or patellofemoral disorder.



- If you are over the age of 65, or at risk of falls, you should incorporate physical activity to improve balance and co-ordination at least 2 days per week.

If you are keen to join a gym or leisure centre at a discounted rate, you can discuss the 'Exercise Referral Scheme' with your GP or other healthcare professional.

Further Information

We endeavour to provide an excellent service at all times, but should you have any concerns please, in the first instance, raise these with the Matron, Senior Nurse or Manager on duty.

If they cannot resolve your concern, please contact our Patient Experience Team on 01932 723553 or email asp-tr.patient.advice@nhs.net. If you remain concerned, the team can also advise upon how to make a formal complaint.

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- Look after your psychological well-being
 - Visit <https://www.nhs.uk/mental-health/> or <https://www.healthysurrey.org.uk/mental-wellbeing> for support.
 - If you are feeling anxious or low in mood and feel you would benefit from counselling or cognitive behavioural therapy, you can self-refer to Mind Matters at <https://www.mindmattersnhs.co.uk/>.
 - If you are feeling lonely, anxious, are recently bereaved, or are looking for employment, ask your GP or healthcare professional about local social prescribing services.
 - If you live in Surrey Heath, Spelthorne, or East Surrey, you can self-refer yourself to social prescribing services on <https://www.connecttosupportsurrey.org.uk/>

- Meet physical activity guidelines
 - Complete at least 150 minutes of moderate intensity activity per week, or 75 minutes of vigorous intensity activity per week, alongside 2 days per week of strengthening activities. Moderate intensity activity can include brisk walking or riding a bike, whilst vigorous activity can include running or skipping. Make sure the exercises are tolerable and comfortable to follow, if pain becomes intolerable then reduce or eliminate the painful exercises.

What are the signs and symptoms?

- Pain on squatting (this is evident in 80% of cases) or coming downstairs
- Pain on rising from sitting and/or straightening knee following sitting
- Pain on sustained sitting with knees bent (cinema sign)
- Clicking and grinding (crepitus) of the PFJ during knee bending movements
- Tenderness on feeling around the patella
- Swelling around the patella

Some people get clicking and or grinding noise when they bend or extend their knee. This does not mean you are causing damage to your knee.

What causes people to have PFP?

1. Muscle weakness/ tightness in quadriceps, gluteal and hip muscles.
2. Inactivity (having a sedentary lifestyle)
3. Past injuries: Anterior cruciate ligament reconstruction (ACLR) increases the risk of patellofemoral OA.
4. Repetitive overload of the PFJ through activity e.g. running, climbing and step aerobics, without allowing adequate recovery between sessions or having the tolerance to the load applied initially.
5. Unsupportive footwear such as high heels or very flat shoes.
6. Being Overweight.

How to self-manage my PFP?

Change Your Activity Level

Pacing activities involves breaking larger tasks into smaller, more manageable tasks and/or doing them more slowly to ease the knee pain. It is recommended to pace yourself rather than stopping all forms of movement and exercises as stopping all activity would lead to weakness in muscles which would make the knee pain worse.

It is important to modify activities or exercises which causes pain rather than stopping it.

Footwear and Taping

It is advisable to wear good supportive footwear which can help with pain. Taping has a temporary short-term relief from pain.

Ice Therapy

Ice can be helpful for short term pain relief, and you can use this method before or after exercise. You can use a bag of frozen vegetables, or an ice pack wrapped in a tea towel. Leave over the painful area for a maximum of 15 minutes. This can be repeated up to four times per day.

- Visit <https://www.healthysurrey.org.uk/nutrition-and-physical-activity> for nutrition and weight management advice.
- If you feel you could benefit from losing weight, you can download the free NHS 12-week Weight Loss Plan on <https://www.nhs.uk/better-health/lose-weight/>

- Stop smoking
 - Visit <https://www.nhs.uk/live-well/quit-smoking/> for support.
 - You can self-refer to One You Surrey for individualized smoking cessation support at: <https://oneyousurrey.org.uk/programmes/stop-smoking/>

- Limit your alcohol intake
 - Visit <https://www.nhs.uk/live-well/alcohol-advice/> for support.
 - You can find a local alcohol addiction support service at: <https://www.nhs.uk/nhs-services/find-alcohol-addiction-support-services/>

Healthy living

Your rehabilitation program will be an important part of helping you to manage and improve your pain. In addition to this, it is important to think about your other lifestyle choices. Good lifestyle choices can help you to get the most out of your rehabilitation plan, aid your recovery, and can have a very positive impact on your general overall health.

- Sleep
 - Poor sleep has been shown to increase the risk of injury and affect healing.
 - Maintain regular sleep hours (try to go to bed and wake up at the same time every day).
 - Avoid napping where possible.
 - Avoid digital screens, alcohol, and caffeine before bed.
 - Have a dark, quiet, and cool sleeping environment.
 - Avoid sleeping with pets on the bed.
 - If you are lying awake unable to sleep, get up and do something relaxing before returning to bed.
 - You can access guided relaxation videos to help you relax before bed on the ASPH Physiotherapy YouTube 'Relaxation' playlist.
- Eat a balanced diet and maintain a healthy weight
 - Visit <https://www.nhs.uk/live-well/eat-well/> for support with food choices.

Should my exercises / activities be pain-free?

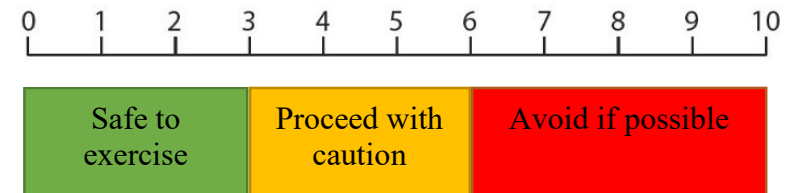
Generally, it is acceptable to complete exercises even if they are uncomfortable. There is some evidence to show that, in the short term, exercising into pain can be more beneficial than pain-free exercise.

It is important to remember that hurt does not equal harm; exercises that are tolerably painful are not causing damage to your knee, but rather stressing sensitive structures. However, it is still essential to respect pain to avoid significant flare-ups – the traffic light system is a helpful guide:

Green light: 0-3/10 pain during the activity, no change in symptoms in following 24h - trial a small progression next session.

Orange light: 4-6/10 pain during the activity, slight increase in symptoms in the hour following the activity and back to normal within 24h - consider reducing or maintaining the intensity until it is at a green light level.

Red light: Over 6/10 pain during the activity with increase in symptoms that takes over 24h to settle - reduce the intensity next session until it is back to orange or green.



Similarly, you can resonate same with your daily tasks/ activities as well and follow this system.

Exercises for self-management

The goal is to have pain free (tolerable) exercises. Achieving muscle fatigue is good but only if not reproducing your PFP pain. Therefore, following an appropriate progressive exercise programme, with good technique, will give you the best opportunity to adhere to your physiotherapy rehabilitation with the aim to optimise your outcomes.

Level 1

Active Straight Leg Raise - Sets:3 / Repetition:8-12

Lying on your back with one leg flexed and the other extended, lift your heel off the ground (keeping your knee in extension). Lift your heel 10-15cm and hold following the recommendations. Do not arch the lower back while you lift your leg.



Listen to your 24-hour response to activity and make small changes appropriately.



How long will it take?

Most people will have noticeable improvement in their pain and function after 6-12 weeks and can take up to 3 months to see benefits of exercise (if nil improvements after 6-12 weeks, may require ongoing physiotherapy assessment). X-rays or Scans (imaging) for the diagnosis is not routinely completed as changes in the joint can be seen both in people with or without PFP. From medical history and examining your knee is enough for us to make the diagnosis and start physiotherapy management.

In addition, having stress could also have some impact in pain and recovery as well.

Squat with or without dumb bell- Sets:3 / Repetition:10-15

Hold free weights in your hands on your sides or without weights. Place your feet shoulder-width apart.

Lower until your thighs are parallel to the ground by pushing your hips backward and flexing your knees.

Keep your chest up and back neutral for the duration of the movement.

Keep your heels planted on the ground and your knees aligned with your ankles.



Adhere to appropriate loading

Please slowly increase the load through your knee during your rehab, plus monitoring your daily activities. If you experience a rapid increase in discomfort that is often due to sudden overload on your knee which can result in an increase in your symptoms. Pacing your activity better often leads to better results.

Hip abduction - Sets:3 / Repetition:8-12 (without pillow higher change on overloading glut tendon)

Lay on your side with your head supported and lower leg bent. Lift the top leg up to about 30 degrees, keeping the foot parallel to the ground and the thigh aligned with the body (do not move it forward as you lift).



Level 2

Strengthening quadriceps - Sets:3 / Repetition:8-12

Sit straight in a chair with or without weight tied around your ankle. Lift your foot as high as you can so as to straighten your knee as much as possible. Lower your leg slowly and repeat. Make sure the weight you add should make the exercise tolerable.



Hip abduction - Sets:3 / Repetition:8-12

Anchor one end of a band on the side opposite of the working leg at ankle height and loop the other end around the ankle. Stand straight and elevate the leg directly on the side, keeping the knee straight, hips levelled and pelvis stable. Return to the starting position and repeat. Place the band in front of the supporting leg for safety.



Wall Squat: Sets: 3/ Hold 3-5secs / Repetitions 8-12

Squat down against a wall, stopping the motion when your knees are bent to a comfortable angle. Keep your back flat against the wall and hold the position for the prescribed amount of time.



Level 3

Split squat medial knee pull - Sets:3 / Repetition:10-15

Start in a split squat position and a band around your front knee exerting an inside pull. The band should be attached on the inside at knee height.

Bend the knees to lower your body keeping the front knee aligned over the foot resisting against the pull of the band.

