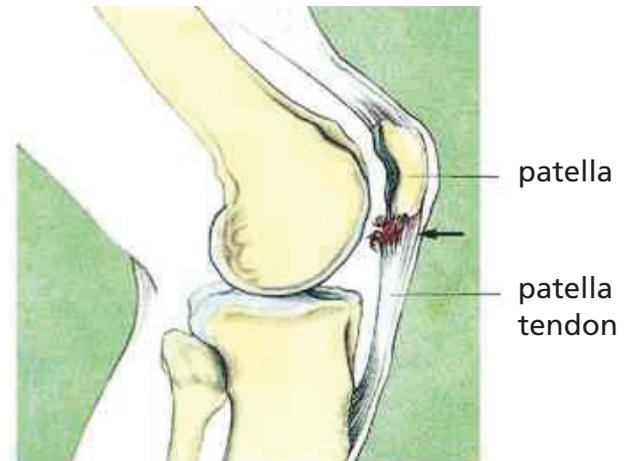


Patella Tendinopathy - Jumper's Knee

What is patella tendinopathy?

The patella tendon is located just below the knee cap (the patella). It is a continuation of the muscles on the front of the thigh (the quadriceps) that pass over the knee cap and insert onto the front of the shin bone (the tibia). The thigh muscles act to straighten (extend) the knee joint and are used in all activities on your feet, but particularly things like running, jumping and going up and down stairs or hills. Microscopic damage to the structure of the tendon can lead to it becoming painful and developing a condition known as tendinopathy.



What causes patella tendinopathy?

Patella tendinopathy is a condition that causes pain, swelling, stiffness and weakness of the patella tendon. It is thought to be caused by repeated tiny injuries (known as microtrauma) to the tendon. These build up over time and a tendinopathy can develop.

There are a number of factors that can cause or put you at greater risk of developing patella tendinopathy such as:

- Recent injuries
- Age / gender / genetics
- Reduced muscle strength
- Reduced ankle flexibility
- Poor foot position / footwear
- Weight gain due to layoff / holiday
- Training errors or change in training technique i.e. type / frequency / intensity

What are the symptoms of patella tendinopathy?

- Patella tendinopathy usually comes on gradually but can start with a bang or knock to the knee.
- There is pain in the tendon which is worsened by activity.
- The tendon may feel sore to touch.
- Often the tendon feels very stiff first thing in the morning.
- The affected tendon may appear thickened in comparison to the unaffected side.

What treatments can help?

- You may need to reduce or rest from the activity that aggravates your pain.
- Ice can be used to help decrease pain, or your GP might prescribe painkillers.
- You should avoid suddenly increasing the intensity of exercise or sports training; try to increase gradually so your body can adapt to the new demands you are putting on it.
- Make sure you wear the correct footwear; supportive shoes or trainers with plenty of shock absorption will help protect your knees.

Exercise

If your symptoms do not ease with simple treatments like relative rest, painkillers and ice, you may need to try exercises to strengthen the patella tendon. Exercises to strengthen the patella tendon can be helpful in reducing pain, however the recovery period can take several months. There is a guide to specific exercises on the next page, though you may require more

specialist advice from a physiotherapist if you are struggling with pain management or are finding these exercises difficult.

Occasionally patella tendinopathy does not respond to treatment and if your symptoms are persisting, despite appropriate treatment, you might need a referral to a specialist sports medicine doctor.

Rehabilitation exercises for patella tendinopathy

1] Isometric double leg squat



- Hold double leg ski squat mid range for 40-60 seconds.
- 3-4 reps, 2-3 times per day every day.
- If this becomes easy then progress to exercise below.

2] Double leg squat on the floor including concentric and eccentric phase

- Taking approximately 3 seconds to lower and 3 seconds to raise back up.
- 4 sets of 15 reps with 2 minutes rest in between sets.
- To be done 3 times a week.

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If you would like to talk to someone outside the service contact the **Patient Experience Team** on **0113 220 8585**, Monday to Friday 9.30am to 4.30pm or email lch.pet@nhs.net

We can make this information available in Braille, large print, audio or other languages on request.

Pain should be no more than 5 out of 10 in severity during exercise. If it's more than this, then reduce the number or repetitions or revert back to exercise 1.

If this exercise feels easy then you can progress to holding weights or wear a back pack with weights inside to make the exercise harder. In turn reduce the repetitions as you increase the amount of weight used, i.e. 10 reps instead of 15 reps if holding heavier weights.

Leeds Community Healthcare NHS Trust accept no responsibility for pain or injury resulting from the use of these information sheets. If you experience an increase in your pain that does not settle, or any other adverse symptoms, please contact your GP or physiotherapist before continuing with the exercises.