

Patellar Tendinopathy



Patient Information

What is the Patellar Tendon?

The patellar tendon is fibrous tissue which originates from the bottom of the kneecap and attaches to the bony prominence at the top of the tibia. Its positioning allows the quadriceps (front of thigh muscles) to extend (straighten) the knee.

What is Patellar Tendinopathy?

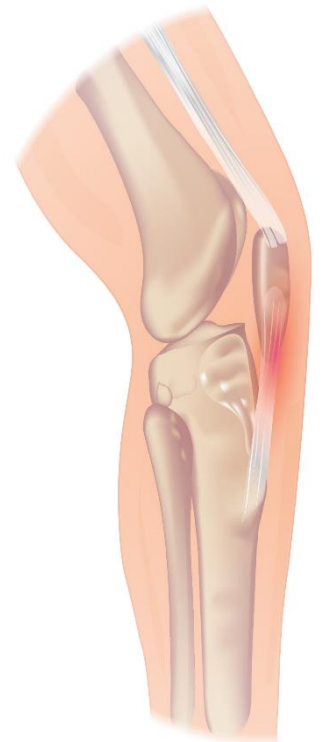
Patellar tendinopathy occurs when the tendon cannot cope with the demands placed upon it. This can lead to changes within the structure of the tendon, resulting in a loss of normal strength, this can lead to pain. It can affect anyone however it is more common in men than women, usually in younger people (commonly under 30). It is characterised by pain at the front of the knee that increases with activities that require storing and releasing energy in the quadriceps e.g. running and jumping, and as such it is usually seen in people who participate in sports.

What Causes Patellar Tendinopathy?

Patellar tendinopathy typically begins due to an overload of the tendon but can develop following a traumatic event such as a fall.



Some common factors which can cause an overload of the patella tendon are;

- Increase in training frequency/intensity.
- Starting a new sport or returning to a sport after some time off
- Sudden increase in body weight
- A change of footwear
- Training on hard surfaces which you are unaccustomed to



<https://injurymap.com/wp-content/uploads/2024/01/6.jpg>

Often you may not be able to identify a single factor, it may have occurred because of an accumulation of several small things.

<p>Working in partnership Great Western Hospitals NHS Foundation Trust Royal United Hospitals Bath NHS Foundation Trust Salisbury NHS Foundation Trust</p>	<p>Follow Wiltshire Health and Care on social media:</p> <p> Wiltshire Health and Care  @WiltsHC_NHS</p> <p>www.wiltshirehealthandcare.nhs.uk</p>
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What are the symptoms of Patellar Tendinopathy?

Symptoms usually appear gradually and can vary from person to person but may include.

- Pain localised to the front of the knee.
- Tenderness at the front of the knee and difficulty kneeling
- Pain at the start of activity/sport but symptoms improving once the tendon is warmed up with 'delayed pain' after the activity.
- Tendon may appear thicker than unaffected side.
- Pain/stiffness in the morning or after prolonged sitting
- Minor swelling at the front of the knee

How long will it last?

Recovery timelines will vary based on severity of symptoms, your engagement with rehabilitation and the level of sport you wish to return to. Typically, recovery is between 3-12 months with the longer recovery periods for people wishing to return to sports with high demands on the knee.

What can you do to help yourself?

Short term rest does not cure tendon issues but exercising into pain is also not helpful. Keeping up a walking programme that does not aggravate your symptoms may be worthwhile. Start with 10 minutes of walking and as your pain improves gradually increase your activity levels. You may need to temporarily reduce sporting activities, if they aggravate your pain.

Hot or Cold can be used to help pain. Use an ice pack wrapped in its cover or a damp tea towel for up to 15 minutes. Alternatively try using a wheat bag/hot water bottle wrapped in a towel/cover. Make sure to protect your skin with a towel and regularly check your skin to avoid any skin damage, as both can cause burns if used incorrectly.

Infrapatellar Straps sit just below the kneecap and apply pressure to the patella tendon, this is thought to alter the angle and direction of stress across the injured tendon. They have been found to be useful in reducing pain in people with patella tendinopathy.

Losing weight may be helpful if you have a high BMI. Speak to your GP or another Health Professional if you would like help and advice with this, or follow the link provided at the end of this leaflet. The following tool will help you to work out your BMI; <https://www.nhs.uk/live-well/healthy-weight/bmi-calculator/>

Exercises

Strengthening the muscles that straighten your knee may help to reduce your pain. Your physiotherapist can assess and guide you with a personally tailored exercise program. To get started now you may find the following exercises beneficial. The exercises become progressively difficult as you progress through exercises 1-6. Initially just focus on one or two exercises at a time and progress to the the next as symptoms allow. You may only be able to do a small amount at the start, but this will improve over time. A small increase in pain while exercising is okay as long as it goes away within 30 minutes and is not worse the next day. If you do get an increase in pain, don't worry, do fewer repetitions the next time or move back to an easier exercise.

1) Isometric Knee Extension

Sit on a chair in front of a wall with strong shoes on. Push your foot in to the wall. You will feel the muscles of your thigh working.

Do not do this if you have any foot/ankle problems and only if comfortable.

Aim to hold for 30-45 seconds and repeat 5 times. Try to do this exercise daily



2) Isometric 1/2 Wall Sit

Stand with your back resting against a wall and bend your knees to the 1/2 squat position hold the down position. If this is too irritable, try moving the toes forward slightly. This exercise will help to gently load the patella tendon.

Aim to hold for 30-45 seconds and repeat 5 times. Try to do this exercise daily



3) Isometric 1/2 Wall sit single leg

Stand with your back resting against a wall and bend your knee to the 1/2 squat position. If this is too irritable, try moving the toes forward slightly. Hold the down position.

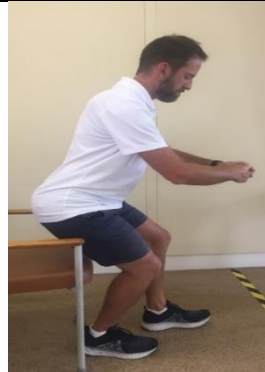
Aim to hold for 30-45 seconds and repeat 5 times. Try to do this exercise daily



4) Offset Squat

Stand with one foot slightly further forwards than the other. NOTE: Your back leg will be the one working the hardest. Try to do a slow small squat or touch your bottom on a chair and then return to a standing position.

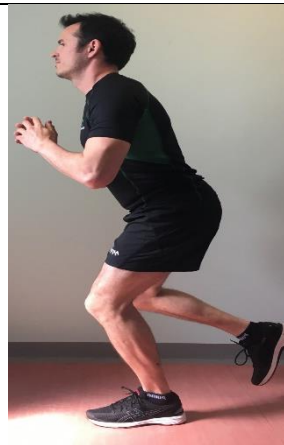
Aim for 3 sets of 10-12 repetitions. Try to do this exercise every other day.



6. Single leg squat

Stand on one leg and bend your knee to the 1/2 squat position. Make sure when you squat you keep the middle of your kneecap in line with the middle toes of your foot. Do not let your knee drift off to one side. Also keep your hips and pelvis level as you squat, so you go down in a straight line. Be careful not to slump forwards as you squat, maintain good posture.

Aim for 3 sets of 10-12 repetitions. Try to do this exercise every other day.



Further Information

If you would like to seek the advice of a physiotherapist, there are several options within Wiltshire. Please speak to your GP practice about the ways you can be referred. Alternatively, you can visit our website for further information on accessing our services.

<https://wiltshirehealthandcare.nhs.uk/physiotherapy/>

Other useful websites

<https://www.activewiltshire.org.uk/>

Here you will find information on improving your activity level and details of what is available in your local area.

<http://www.wiltshire.gov.uk/public-health-weight>

Here you will find information about weight management options in your local area.

[Health improvement coaches - Wiltshire Council](#)

Health Improvement Coaches work on a one to one basis to support behaviour change and improve health. They concentrate on behaviours associated with ill health including unhealthy eating often linked to obesity, stop or reduce smoking, sensible drinking, increasing physical activity, building confidence and motivation to change and boosting self-esteem, they also signpost and support clients to access other services and activities where appropriate.

Safeguarding

Wiltshire Health and Care (WHC) are committed to safeguarding and promoting the welfare of children, young people and adults at risk of abuse, including victims and survivors of domestic abuse. We expect all WHC staff to share this commitment and promote safeguarding by implementing WHC policies and procedures, act promptly on concerns and share information appropriately.

If you or your carer have any concerns regarding a child or adult's safety, please phone Wiltshire Safeguarding Team on 0300 456 0111 (Adult) or 0300 456 0108 (Child) (9am – 5pm Monday - Friday) or please call 999 if you feel they are in immediate danger.

Patient Advice and Liaison Service (PALS)

If you have any questions, or concerns, suggestions or compliments about our service, please speak to a member of staff.

This information sheet is available in other languages and formats. If you would like a copy, please contact us on 0300 123 7797 and whc.pals@nhs.net

Patient and Public Involvement

We value your opinions which will help us to further develop our services.

If you wish to provide feedback or get involved in our patient participation groups, please email the Patient and Public Involvement Officer at ask.wiltshirehealthandcare@nhs.net or telephone 01249 454386. Please scan the QR code below to access the Friends and Family Test survey.

