

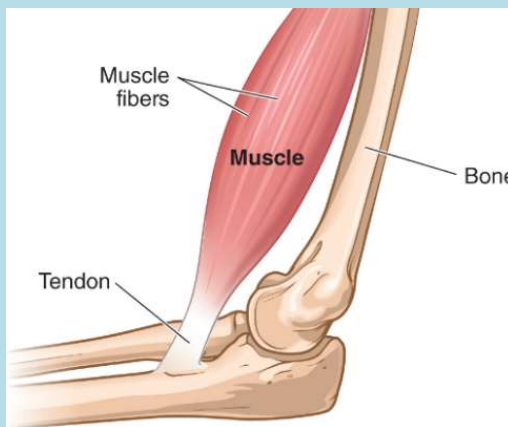
TENDON RELATED PAIN (Version 9)

Your clinician has diagnosed you with tendon related pain. This leaflet will help you understand, manage and recover from this common condition. Typical symptoms include: pain, felt when starting an activity, often eases but then can increase if continued or when finished. The area will also often feel stiff first thing in the morning or after a period of inactivity.

Tendon related pain is common and can affect most areas of the body. Different names can include tendonitis, tendonosis, tendinopathy and are often used with the location e.g. Achilles tendonitis. All these terms essentially mean the same thing and simply reflect the increasing knowledge gained over the decades. The good news is that the condition is often not serious and something that can recover as outlined in this leaflet.

There is an action plan at the end of this leaflet

Take home message: it is a common condition with a variety of names all essentially meaning the same thing. You can get better. Ask the physiotherapist if you have any questions.



What is a tendon?

Bones, muscles and joints work together in a coordinated way to move. Tendons and ligaments play an important role in this: tendons are stiff rope-like structures that connect the winch-like muscle to the bone, pulling to move or support a joint. Ligaments are similar but connect directly between bones. As tendons are stiff and thick, they take time to adapt to new activities and demands.

Take home message: tendons are strong and their function is to move. Tendons need time to adapt to new or an increase in activity. Be regular and patient with training, gradually building up over time.

What is a tendon's function?

Tendons can have a variety of jobs. When moving a leg, some muscles and tendons store and release energy like an elastic band, allowing us to walk, run and jump using the calf and thigh muscles. Other muscles and tendons hold the body in line and guide movement forwards, like the sides of the hip or ankle. They can also maintain positions whilst carrying out activities, for example holding our arm and wrist

stable whilst writing or maintaining height whilst pegging out washing.

Take home message: tendons are involved in movement or holding positions, they need to be used and worked in a variety of ways to keep them healthy and resilient.



What keeps a tendon healthy?

As tendons are involved in movement, being active is an important part of keeping tendons happy and healthy. Although tendons like doing things they are used to, they struggle to maintain health with long periods of inactivity (we call this underloading) or suddenly doing more than they are used to (overloading).

Take home message: prolonged resting is not good for general health or for tendon health. Tendons stay healthy by using them regularly and can work better by gradually using them more over time.

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How does a tendon age?

It is normal for any structure to change as we get older. This is easily seen on the outside of our body with painless grey hair and wrinkles. A normal healthy tendon can be thickened or have small tears without being painful or affecting its function. If we keep regular physical activity as part of our daily life, the tendon remains healthy as it ages.

Take home message: becoming and staying active at any age helps tendons gain and remain healthy and work well regardless of age.

Is lifestyle important?

In a word, **yes**. A broad range of life conditions and choices can influence recovery. Pre-existing health conditions can slow down recovery, for example: diabetes, thyroid changes and some types of medication. Smoking will slow recovery also. A healthy varied diet, low in processed foods, regular activity

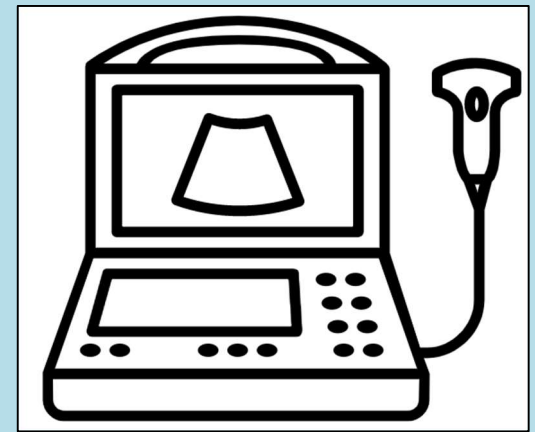
and being a healthy weight can speed recovery. Lifestyle may need to be considered if pain persists, returns, or different areas are involved. Making small improvements in lifestyle can significantly improve recovery and reduce the likelihood of suffering in the future. Tendon related pain can be triggered by life changes, including: a sudden increase/decrease in activity levels, stress, illness or the menopause.

Take home message: lifestyle can play a part in recovery. Small improvements can speed recovery. Ask the physiotherapist if you have any questions.

Does the area need a scan or X-Ray?

Generally, **no**. Tendon related pain is a “clinical diagnosis”, i.e. one that is made in clinic with you and the physiotherapist, taking a careful history and testing the area. Routine scanning of the area is therefore not required. Occasionally it can be useful to get more information especially if there has been trauma or the area does not work fully.

We often see scuffs, marks, calluses and wrinkles on our skin through use as we adapt to our surroundings throughout life. These changes are normal and generally not painful. This also happens on the inside with our bones, joints, tendons and muscles.



Tendon related pain can happen when a scan is normal, whilst a thickened, scuffed looking tendon can work perfectly without pain. Scanning can view the tendon and surrounding tissues but not the pain system and therefore generally does not help the management and treatment of tendon related pain. Scanning is also limited in predicting how likely you are to get better. Image findings often remain unchanged when people are better.

Studies show that some people struggle to get better following scanning. It is thought that medical terms and explanations can sometimes be confusing, causing worry and a feeling of vulnerability. This can affect behaviour and may lead to too much rest, being inconsistent with a training plan and delay getting back to normal activities, all slowing recovery.

Take home message: routine scanning is not required as the diagnosis is made in clinic. Scanning can often lead to more worry and a delay to recovery.





Why does pain happen?

Our knowledge and the meaning of pain has significantly improved over the last few decades. It was once thought that pain was due to tissue damage, but this is not always the case. Research shows that pain is not well associated with damage at all. For example, a tiny paper cut on a fingertip can be very painful, especially if juice gets in it, yet there is minimal damage to the area. A few days later the cut often looks the same, yet little or no pain is felt. Something else is going on: we have a separate pain system.

Take home message: pain is not always associated with damage, and soreness is often a normal part of resuming activities and using the area. Confidence and moving your body normally are key aspects of calming your pain system, maintaining health and speeding up recovery.

The pain system

We now know that the pain system connects into other systems in our body and mind, gathering information from our skin, tendons, joints and muscles. Pain can affect many aspects of our body, including heart rate, breathing rate, blood pressure and stress levels. There are multiple steps in this process, but it happens fast; it must as it is designed to keep us safe. However, pain sensations are a basic communication tool, like an alarm bell or a baby's cry. Bells and babies are good at signaling problems, just not *what* the problem could be and more importantly *what* we need to do about it.

Take home message: like a baby crying, pain can help alert us to a problem, but not what the problem is or what to do about it. The pain system is set up to keep us safe but is not always very good at knowing when its job is finished. This is often felt as ongoing sensitivity and soreness.



Senses and experience

Luckily, we have our senses. Sight, smell, touch, taste and hearing give us information to help us make sense of where we are and whether there are any potential hazards or dangers. Comparing this with previous experiences helps to predict the future and guide actions to keep us safe. New experiences can update our knowledge for next time. Knowing to withdraw your hand away from juice before it gets in a new cut makes sense. This safety behaviour is appropriate but only when the cut is new. Still withdrawing a hand weeks after the cut has gone would be overcautious.

Take home message: think about what is happening. If danger exists, safety behaviours can briefly be appropriate. However, being overcautious and using safety behaviours for a long time and during normal activities or avoiding activities may slow recovery.





reflecting on whether training is regular, at the right level and whether normal use has been resumed may help explain this lack of recovery. (See action plan)

Take home message: movement, exercise and activity are the gold standard treatments, including returning to normal activities, sport and hobbies. Physiotherapists can help guide you and provide a programme for recovery, although patience is important as the process can take time.



How long will it take to get better?

All individuals respond differently and this is normal, so, this is not an easy question to answer. Often this depends on lifestyle factors and choices, how regularly a programme is carried out and how hesitant a person is. Studies show if we worry about pain or a diagnosis then our recovery may be slower. Focusing and working on the solution will help you get better sooner. Do not expect to get better within a few weeks or by the first review with your physiotherapist. It can take 3-12 months for tendon related pain to recover.

Take home message: The people around you, including your physiotherapist, can support you but they cannot do it for you. It is up to you. Regular training, building gradually over time and using the area normally is key. Be patient for results to be felt, this will happen!

What is the best treatment?

Not everyone needs to be seen by a physiotherapist. Some people get better on their own, usually when resting is brief, and normal use and activities are resumed. Extended rest can make the area less used to movement and activity, making it difficult and sore to resume normal use of the area. Getting back to normal regular activities, even if initially sore, will significantly increase your chances of getting better even without further help and guidance.

Movement, exercise and activity give the best possible outcome in the medium and long term. This includes returning to normal activities, sport and hobbies. Physiotherapists specialise in the management of tendon related pain and will answer any questions, helping you form a programme to get better.

Free exercise programmes often work well, however, some people need tailored programmes. Success relies on being regular, and building up the use of the area and region. Some people do not get better even with a sensible programme. If so, then staying calm and

ACTION PLAN: (Top tips that will increase your likelihood of getting better)

Tick box ✓

- If you have any questions following reading this information, please ask the physiotherapist.
- Identify if you are not using the painful area normally, such as compensating or favouring a different area.
 - Gradually start to get back to normal use. It is ok for this to be sore initially, this will reduce in time.
- Identify things that you can't do at the moment and that you want to get back to.
 - Turn "can'ts into cans" by doing small amounts regularly and gradually build up the amount over time.
- Identify specific movements and activities that bring back the health and performance of the area.
 - Practice regularly, this will help to reduce pain in time and reduce the likelihood of future issues.
- The training programme should be meaningful, but it is ok for it to be sore as you are training a sore area.
 - This means challenging ("worked" feeling is achieved) yet repeatable (can do it day in; day out)
 - Keep your training programme a regular part of weekly life, aiming to increase as it becomes easier.

My notes:

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