What is tendinopathy?

Tendons are tough cord like structures which connect muscles to bones. Much like a rope, they are made up of many fibres which are arranged in a very specific and organised way to give them strength.

In some people repetitive activities and overuse can lead to tendon pain and difficulty with activities that load the tendon.

There is increasing evidence that overuse injuries to tendons aren’t just a result of the tendon becoming inflamed. Instead, the cells within the tendon become overstimulated leading to pain and some change in the tendon structure. This can lead to the tendon being less able to withstand loads placed on it.

This often results in a repetitive cycle of injury followed by poor quality healing which makes the tendon less efficient, thickened and painful. This is known as ‘tendinopathy’.

The causes of tendinopathy are not fully understood. Repetitive movements and over activity are thought to be common causes; however, less active people can also develop tendinopathy.

Some factors that could increase the risk of tendinopathy are:

- Unaccustomed activity
- Lack of flexibility or weakness in your muscles
- Incorrect equipment or poor technique
- Being overweight, particularly central (abdominal) obesity
- Having diabetes

What are the symptoms?

The symptoms of tendinopathy may differ from person to person. Common symptoms are:

- Pain, stiffness and loss of strength in the affected tendon
- Increased pain and stiffness during the night or when you get up in the morning
- A creaky sound (crepitus) when you use the tendon

Treatment

Treatment will differ depending on the stage of the problem but is mainly a combination of some rest to help the injured tendon heal, pain relief and exercise to improve muscle strength and flexibility.
**Relative Rest:** This is most important when you are first aware of pain or swelling, particularly if you notice the tendon is 'creaky'. Resting from painful activities at this stage could prevent a longer term problem developing. Attempting to identify any potential causes could also help to prevent any recurrence as can gradually returning to your normal activities not just going back to everything at once when you start to feel better.

**Pain-relieving medications:** Although most tendon problems occur without inflammation, ibuprofen can be helpful in the first week of a new episode of pain. Other over-the-counter pain relief such as paracetamol may be helpful, as may ice applied for ten minutes two or three times a day.

**Exercises:** Research shows that strengthening is one of the most effective ways to treat tendinopathy.

If you have a new onset of tendon pain then the best exercise to start with is isometric (static) exercise where, using the movement that hurts, you push against something that will not move away; or for patella or Achilles pain hold your bodyweight in the mid portion of the movement (half squat or heel raise). Try to hold for 10-30 seconds and do 2 to 5 of these in a row, 3 to 5 times a day. Try to increase the length of the holds as you feel better. It is okay if these exercises are uncomfortable; as long as you don't feel worse for more than 30 minutes after doing them.

**Recovery:** A new / first time onset of tendon pain may settle in a few days to a few weeks but a recurrent or chronic problem may take several months.

If the pain is settling then gradually return to your normal activities, a good way to monitor this is by assessing your response to these activities; if the pain stays at 5/10 (10 being the worst pain you can imagine) and you do not feel worse the day after the activity then it is fine to do this. If your pain level climbs above this or you feel worse the next day then your tendon is not ready for that activity level yet so stick to something easier for a few more days.

If you are not getting better or find you cannot get back to the activities you want to, then your GP can refer you to see a physiotherapist. They will be able to develop an exercise program for you to help strengthen your tendon and muscles and allow you to return to your activities. This may include Eccentric exercises which focus on the lowering portion of the exercise and can be particularly useful in treating tendon pain.

**How can I prevent a tendon injury from re-occurring?**

It is important to continue to exercise the tendon at maintenance level, normally 2 or 3 sessions a week. Also to remain mindful of possible causes if any have been identified; often a rapid change in use of your tendon or a very repetitive actions. Sometimes it is necessary to modify your activities or how you do them.

**What do I do if my symptoms do not improve?**

Some tendinopathies are resilient to treatment. If your condition does not significantly improve with 3 to 6 months of treatment then additional tests such as an MRI or ultrasound scan may be recommended. There are further treatment options in this case but most tendinopathies will improve with good rehabilitation and this is by far the safest and most reliable means to recover from tendon pain.