

TENDINOPATHY

Tendons anchor muscles onto bones. When we contract a muscle, “load” is transmitted through the tendon. Tendons have to cope with a lot of load, and tendon pain (tendinopathy) is the tendon failing to cope with that load.

Sore tendons are a very common “overuse” sporting injury. Most commonly tendon pain comes on gradually after an increase in exercise load. This could be; adding extra sessions getting ready for a race, pre-season training having had some time off, or coming back to training after an injury. Or it may be a single hard session, like adding hill sprints or plyometrics at the end of training, or a tournament playing multiple games in a day.

For non-athletes: a long walk with extra hills, or getting a repetitive job done around the house, like painting or hammering. Quite often it’s from introducing novel exercise or movements.

The anatomy, biology, and physiology of tendon pain are complicated. We know when we see a tendon that’s been sore for a long time there is structural change to the tendon tissue. We know that even when the pain is gone the structural changes remain. We know that the extent of tendon damage does not necessarily correlate with pain. We often see tendons that look ugly on imaging, that don’t cause pain, and conversely, a very painful tendon can look good on a scan.

What is actually causing the pain is also complicated. Potentially some of the pain may come from the ingrowth of new nerve fibres (nociceptors / pain nerves) filling the degenerative tissue space. There may also be “central sensitisation” as the brain is overly “tuned-in” to feeling the pain messages from the tendon.

There are a number of treatment options for tendinopathy but the most beneficial are load management and mechanotherapy.

Load management essentially means controlling the activities that cause pain. Of the total volume of work that the tendon must cope with, I get patients to dial down the load by about a quarter, and stop the most aggravating activities, which are most likely the more demanding or explosive exercises: hopping, skipping, jumping, sprinting, hills, plyometrics. So usually, total rest isn’t required for a chronic tendon pain. Patients can keep going with their cardio and weights, but possibly trialling a lower impact, cross-training option, depending on how the tendon responds.

Mechanotherapy is essentially strengthening exercises. I like a graded strengthening program to increase the load bearing capacity of the tendon. I start with isometric exercise. Isometrics are great for reducing pain in the tendon. This can progress to slow/heavy exercises, progressing to more ballistic sport specific requirements.

Strengthening exercises are the best way to recover from tendinopathy but it can still be a frustratingly slow process. We expect a tendon that’s already been sore for more than a couple of weeks to take around 12 weeks of deliberate rehabilitation before it’s 100%. Tendinopathies are annoying because they tend to be a bit sore every day, maybe not sore enough to stop you doing anything, but they can stay sore for years if you don’t do a deliberate rehabilitation strengthening program to fix it. It can be a long, slow process of dedicated, diligent, patient, and persistent work. Please stick with it.

BE PATIENT – Tendons can take months to recover

BE DILIGENT WITH THE EXERCISES – That’s the most important factor