

What is causing my groin pain?

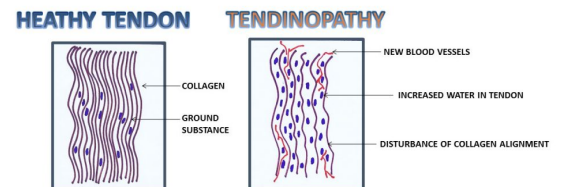


OVENS VALLEY
PHYSIO & PILATES

- The most common cause of pain on the inner thigh up to the pubic bone/groin is **adductor muscle related**
- Other causes can be related to hip joint, hip flexor muscles, abdominal muscles or lower back referred
- Adductor related issues are common in people who participate in running and running based, change of direction sports such as football or soccer.

What is tendinopathy?

Tendons are tensile structures in our body that attach muscles to bone. Their role is to transfer the force generated by muscles to act on the bone and create movement. Just like our muscles, tendons respond to load. If you go to the gym and do strength training your muscles will get bigger and **if you load tendons they will become stronger and more resilient to high level forces.**

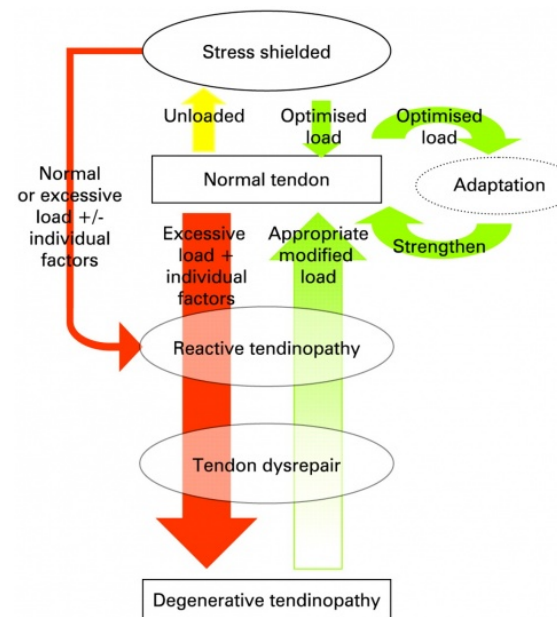


BUT when we load tendons **too quickly**, in the wrong way or with excessive compressive forces, **they can't adapt in time and will malform into a pathological tendon structure.** There is an increase in water content, disturbance of collagen (tendon cells) type and structure as well as ingrowth of nerve and blood vessels in the tendon. All of this contributes to pain and weakness felt in the tendon. **This is called tendinopathy.**

How is tendinopathy treated?

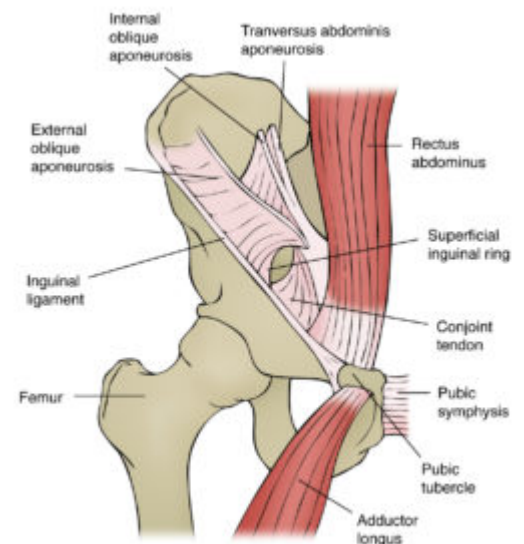
Tendinopathy runs on a continuum ranging from a mechanically weak tendon to a healthy, strong, resilient tendon to reactive tendinopathy to tendon dysrepair and finally a degenerative tendon. Depending on the loads applied to the tendon, it will move back and forth on this continuum as pictured.

As you can see, complete rest results in a weak tendon rather than just returning to a normal tendon state and therefore is not recommended. Continued inappropriate and excessive loading will further stress the tendon towards the degenerative stages. Appropriate and optimised tendon loading is important to restore normal tendon structure and create a healthy resilient tendon.



What about osteitis pubis (OP)?

Osteitis pubis is an over diagnosed and poorly understood condition. As the name would suggest, the previous understanding of OP is that it was caused by inflammation of the pubic symphysis (the soft disc in the joint between the pelvic bones as pictured). However we now know that OP occurs when the muscles and connective tissues attaching to the pubic bone become overloaded and tighten up and **the periosteum (outer layer of the bone) becomes irritated**. So OP is actually a bone stress condition and can be a progression from overloaded adductor muscles/tendinopathy but it is not always the cause of groin pain.



Should I take anti inflammatories or have a cortisone injection?

- Non-steroidal anti-inflammatory medication (NSAIDs eg. neurofen or voltaren) and cortisone injections (which are strong steroidal anti-inflammatory injections) work by reducing our bodies natural immune response which is causing the inflammation. They **can be very effective treatments in reducing inflammation** when the body **goes overboard** and causes **too much or persistent inflammation**.
- Cellular studies of pathological tendon have shown no trace of inflammation, so despite the old term for tendon pain “tendonitis”, we know that inflammation is not causing the pain so anti-inflammatories and rest won't help tendinopathy
- Cortisone injections **can actually weaken the tendon** and **can cause worse outcomes** later even if short term pain relief is achieved. Because of the potential side effects, in most cases we recommend a **minimum 6-12 week progressive strength program before considering cortisone injections as a last resort treatment**

Do I need to stop running/jumping/training etc?

As physiotherapists it is our job to keep you moving as much as possible, even throughout rehab. **Tendons are very resilient** and **some pain associated with your rehab pain is absolutely okay** but we do use pain as a guide to measure the correct load. We stick to **the 4/10 rule**: pain up to a 4/10 during any activity is okay, so long as the pain settles within 1 hour of finishing the activity and is not worse the next day after.

How do I fix my groin pain?

- **Load management** is the **MOST IMPORTANT** part of treatment. This might involve adjusting your training sessions, trying cross training, changing the periodisation of weekly sessions or reducing the volume. Then we will gradually build you back up to where you need to be for your goals.
- **A progressive strength program** over a **minimum of 6-12 weeks** is needed to make good strength gains. This needs to be targeted at your specific needs for best results.
- An assessment of your running, squatting or jumping to adjust technique as needed
- **Manual therapy (massage, dry needling etc)** can be a helpful **short term tool** to manage the pain and allow you to perform your rehab program