



WHAT IS PATELLA TENDINOPATHY?

Tendons are structures that attached a muscle to bone. The patella tendon is a continuation of the quadriceps tendon to which the quadriceps muscle group attach. The patella tendon is immediately below the kneecap (patella) and attaches into the tibial tuberosity that is on the front of the shin. Tendinopathy is classified by overuse of the tendon, which leads to disrepair and degeneration.

INJURY FACTS:

'Patella tendinopathy' has replaced the previous term of 'patella tendinitis' because the condition is recognised as degenerative, rather than inflammatory. This condition is also known as 'jumpers knee' because of the high prevalence amongst jumping sports including basketball and volleyball.

Patella tendinopathy can now be classified into the following stages:

1. *Reactive tendinopathy* which refers to a rapid increase in loading;
2. *Tendon disrepair* often follows a reactive tendinopathy if the tendon continues to be excessively loaded;
3. *Degenerative tendinopathy* represents the response of the patella tendon to chronic overloading.

MECHANISM OF INJURY:

The patient may report an increased training load (distance, time, intensity), change of footwear, change of environment (more hills when running or harder sporting surfaces) or a change of activity level e.g. running for the first time in 10 years.

SIGNS AND SYMPTOMS:

- Painful to touch the tendon;
- Pain during everyday activities;
- Pain with prolonged knee bending;
- Increased pain when jumping
- Muscle wasting due to pain inhibition;
- Tightness through the quadriceps and calf muscles;
- Decreased ankle range of motion;
- Poor hip muscle strength.

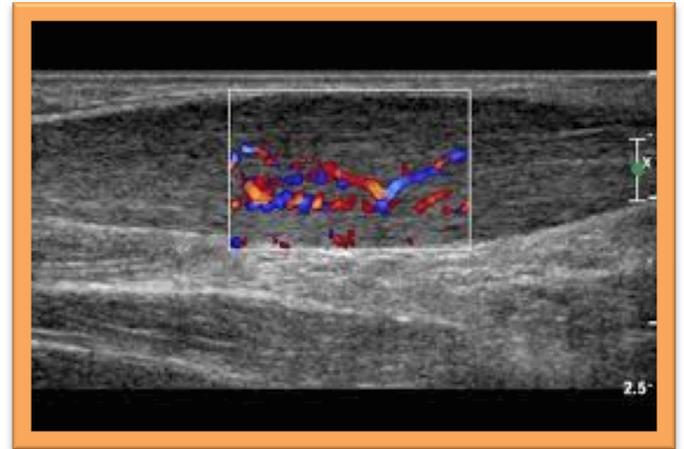




DIAGNOSIS:

An extensive subjective history will guide the physiotherapist in the correct direction for diagnosis. The physiotherapist will also look for area of pain, muscles tightness and weakness, joint mobility and often test for aggravating activities.

Tendon compromise will be seen on MRI or US in the way of tendon thickening, swelling and disorganisation of the tendon.



PHYSIOTHERAPY TREATMENT OPTIONS:

- Exercise prescription including concentric and eccentric programs;
- Biomechanical analysis and correction
- Weight loss strategies
- Training analysis
- Electrotherapy
- Dry needling
- Joint mobilization
- Taping
- Education
- Deep tissue massage
- Footwear advice

FURTHER TREATMENT OPTIONS:

Tendon injuries are a very slow healing structure and often require further medical treatment in regards to injections from a sports doctor. Common types of injections include cortisone, saline and platelet rich plasma (PRP).

HELPFUL HINTS:

- Treat appropriately during the reactive or disrepair phases to avoid permanent damage and moving into the degenerative phase;
- Use ice massage following exercise for 20 minutes;
- Use self massage techniques for the quadriceps muscles;
- Address biomechanical inefficiencies with your coach or physiotherapist;
- Lose weight, eat healthy and drink green tea.

OTHER RISK FACTORS:

Persons may have a genetic predisposition to tendon disease and/or central fat storage. This means increased BMI, persons with Diabetes and poor diets can contribute to tendon disease.