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Patella Tendonosis

With special thanks to Associate Professor Justin Roe (MBBS, FRACS) and the North Sydney Orthopaedic Research Group



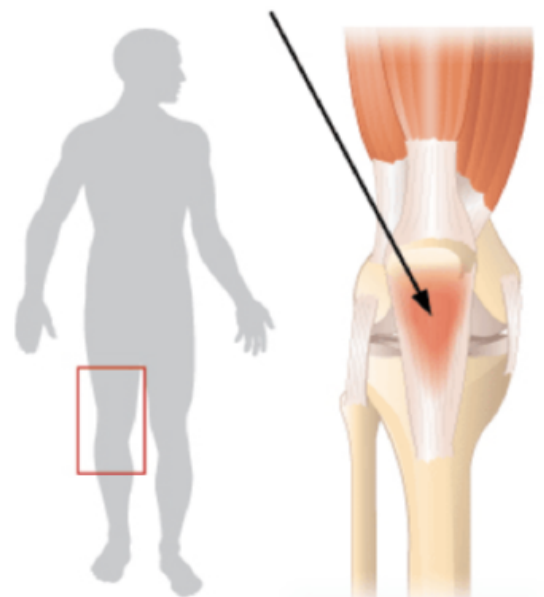
WHAT IS PATELLA TENDONOSIS?

This is a common condition. It affects the patella tendon (ligament) which is the structure which runs from below the knee cap (patella) to the shin bone (tibia). Its function is to straighten the knee in activities such as jumping, walking and running. Patients complain of pain from the patella tendon which may feel sharp particularly after running or jumping. The pain can persist after exercise as a dull ache. The patella tendon becomes tender to touch.

WHO GETS PATELLA TENDINOSIS?

It is not known why people get the condition. It can affect anyone, but it is common in athletes who put large forces through their patella tendon through activity such as jumping; this condition was once known as jumper's knee. It can also occur in runners. Poor flexibility in your thigh muscles (quadriceps) and your hamstrings, and a raised kneecap (patella alta) are thought to increase the forces through the patella tendon and increase the risk of patella tendonosis. One theory is that repeated stress on the tendon causes the tendon to be damaged faster than the tendon can be repaired.

Patellar Tendonosis



DIAGNOSIS

The diagnosis is usually clear from the symptoms and examination. Your doctor will feel for tenderness of the patella tendon and ask you to squat down to try to reproduce your pain. Occasionally, your doctor will order further tests, such as an MRI (magnetic resonance imaging) scan or an ultrasound scan. These may reveal subtle changes in the patella tendon. However a negative test does not exclude patella tendonosis, and an MRI is usually only ordered if your doctor suspects that there may be alternate diagnoses.

COMPLICATIONS

The pain from the patella tendon prevents the thigh muscles (quadriceps) contracting normally and the muscles can become weak. Rarely there are cystic or nodular changes in the tendon which need to be excised.

TREATMENT

Most cases are treated by non surgical (conservative) measures. This will frequently involve a physiotherapist to assist you rehabilitating your tendon in the correct way. Unfortunately, the condition does not resolve overnight and can reoccur. It will take a minimum of six weeks for your knee to improve. A diligent programme of rehabilitation is needed.

Treatment options include:

1. In the short term, avoid activity that aggravates the pain until your condition improves. It is important to choose and continue with exercises that do not cause pain.
2. Pain killers and ice will help control symptoms and allow rehabilitation exercises.
3. Stretching of tight hamstrings and quadriceps reduces the forces through the patella tendon.
4. An exercise regime with a physiotherapist consisting of a special exercise programme ('eccentric exercises') can help improve the condition of the tendon. These consist of squats initially using two legs. As the condition improves, squats can be done on a slope and there can be a gradual progression to single leg squats. Pain is used to guide the rate of progress.
5. Occasionally the condition does not resolve with these measures and patients can be treated by sports physicians with a specialist interest in this condition. Further treatment options may include GTN patches and injections around the knee.
6. In the rare cases that conservative measures are not sufficient to alleviate symptoms surgical treatment will be considered.