

Patellar Tendinopathy with

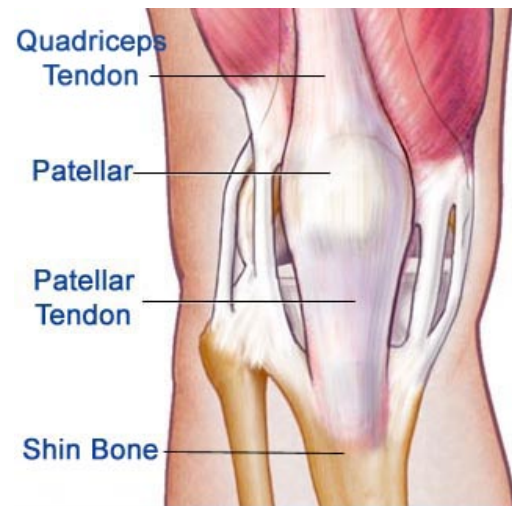


What is the Patellar Tendon?

The patellar tendon connects the kneecap (the patella) to the shin bone. Together with the quadriceps muscle and the quadriceps tendon, these structures allow your knee to straighten out, and provide strength for this motion. The patellar tendon, like other tendons, is made of tough string-like bands. These bands are surrounded by a vascular tissue lining that provides nutrition to the tendon.

Symptoms:

The patient complains of anterior knee pain. The most common site of tendinopathy is deep attachment of the tendon to the bottom side of the patella. The tendon is tender to touch and there is often related thickening of the tendon.



Patellar tendinopathy was once called *jumper's knee* because of its high rate of occurrence in jumping sports like volleyball, basketball and the jumping events in athletics. However the condition can exist where athletes change direction, or in sports where people do neither. There have been good advances in understanding this condition recently, but it still poses a major challenge to practitioners and athletes alike.

The commonly used term **patellar tendonitis** is a misnomer. It suggests the condition is an **inflammatory** (tendonitis) condition, rather than a **degenerative** (tendinosis) one. It is generally accepted that **Patellar Tendinopathy** is a more appropriate general label for this condition.

A normal patellar tendon is seen as white and glistening to the naked eye, but tendons of those undergoing surgery for patellar tendinopathy appear yellow-brown near the base of the kneecap. This appearance is commonly called **mucoïd degeneration**. Under the microscope, affected tendon fibers are not parallel and aligned, but appear jumbled and disorganized, suggesting microtearing.

Possible causes:

It is also important to ascertain other contributing factors, if any. Such factors may include muscle tightness of the quadriceps and hamstrings, increased neural tension; abnormal biomechanics of the pelvis, Patello Femoral Joint or lower leg. Calf weakness is also common to patients with patellar tendinopathy.

Clinicians often find it useful to have patients fill out the Victorian Institute of Sport Assessment (VISA) questionnaire throughout their rehabilitation, to gauge progress against the initial assessment. This link:

<http://www.clinicalsportsmedicine.com/articles/visa.pdf>

lands you at an excerpt from the book *Clinical Sports Medicine* by Brukner & Khan. (McGraw Hill, 3rd Ed., 2006) The document talks through the development of the Assessment, and, if you pan down, has the assessment itself.

Rehabilitation, covered in the next issue, will cover strength, biomechanics, balance, cryotherapy and much more.