

KNEE TENDONITIS

Patellar and Quadriceps Tendon Pain



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WHAT IS KNEE TENDONITIS?

Two large tendons work together to straighten your knee. The quadriceps tendon connects the thigh muscles to the top of the kneecap, and the patellar tendon connects the bottom of the kneecap to the shinbone. Together they transmit the force that lets you stand, walk, run, and jump.

When one of these tendons is repeatedly overloaded over time it may develop small areas of damage that the body does not fully repair. Despite the name tendonitis, what is happening is **usually not just simple inflammation**. The tendon fibers become disorganized and weaker in a small region in a process **better described as tendinopathy**. That distinction is important because it drives the reasoning behind the treatment strategy.

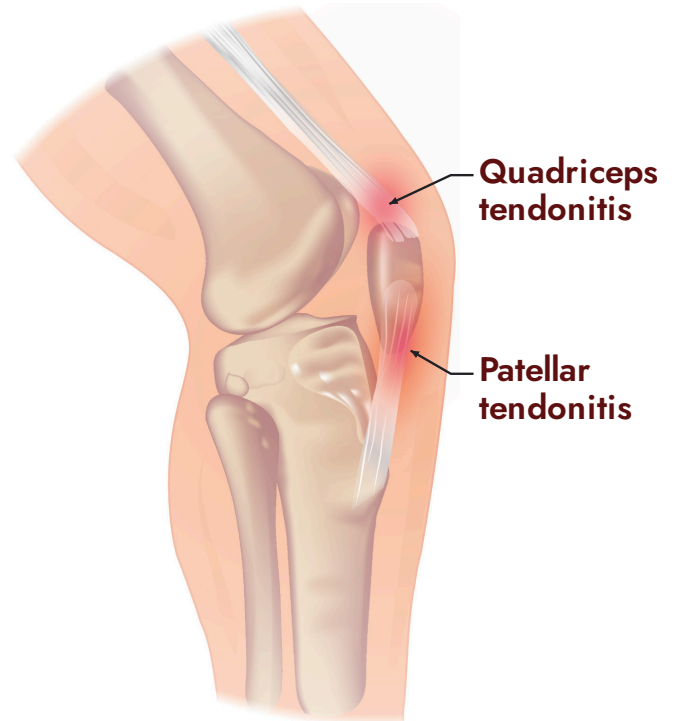


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WHO GETS IT AND WHY

Knee tendonitis is often an overload problem. It usually develops when the demand placed on a tendon repeatedly exceeds its capacity to recover most often from jumping, landing, sprinting, and rapid changes of direction. Patellar tendonitis is common enough in jumping athletes that it is **often called jumper's knee**, and is seen frequently in basketball and volleyball players.

Several factors raise the risk such as a rapid increase in training volume or intensity, training on hard surfaces, limited flexibility or strength in the thigh and hip muscles, differences in alignment or leg length, higher body weight, and certain medical conditions including diabetes. Quadriceps tendonitis tends to occur in slightly older patients than patellar tendonitis.



Jumping and landing



Rapid increase in
training



Hard training surfaces



Limited flexibility or
strength



Higher body weight

Common Symptoms

- Aching pain at the front or top of the knee that you can usually point to
- Pain just below the kneecap with patellar tendonitis, or just above it with quadriceps tendonitis
- Pain that is worst at the start of activity, sometimes easing as you warm up, then returning afterward
- Pain with jumping, squatting, stairs, or getting up after sitting for a while
- Stiffness in the morning or after periods of rest
- Symptoms that build gradually over weeks to months

How It Is Diagnosed

- This is **primarily a clinical diagnosis** based on your history and examination.
- Examination localizes tenderness to the tendon itself and assesses strength, flexibility, and how you move.
- X-rays are often normal but can show calcification within the tendon.
- MRI can confirm the diagnosis and show the extent of tendon changes when the picture is unclear, but this is often not needed.
- **Imaging findings do not always match symptoms.** Many people have tendon changes on imaging without pain.



PATELLAR VERSUS QUADRICEPS TENDONITIS



Patellar Tendonitis



Quadriceps Tendonitis

	Patellar Tendonitis	Quadriceps Tendonitis
WHERE IT HURTS	Just below the kneecap at the top of the patellar tendon.	Just above the kneecap where the thigh muscles attach.
WHO GETS IT	Often younger jumping athletes. Frequently called jumper's knee.	Often slightly older athletes and patients doing heavy or repetitive loading.
COMMON TRIGGERS	Jumping, landing, sprinting, and rapid changes of direction.	Squatting, lifting, stair climbing, and deep knee flexion under load.
TREATMENT	Nonoperative to start with activity modifications, a progressive loading program and adjunctive treatment.	Nonoperative to start with activity modifications, a progressive loading program and adjunctive treatment.

✓ YOUR TREATMENT OPTIONS

The large majority of patients with knee tendonitis improve without surgery. The most important factor is consistent treatment and therapy over time combined with the right activity modifications.

Nonoperative Treatment

The foundation of treatment is a **progressive loading program with therapy**. It starts with exercises the tendon can tolerate and builds gradually as it adapts. Formal physical therapy is helpful to learn the proper way to do these exercises and for adjunct therapy. Activity modification reduces the aggravating loads while the tendon rebuilds and a strap or brace may help with symptoms. Anti-inflammatory medications or acetaminophen can also be useful if tolerated.

May be appropriate if:

- This is the starting point for essentially all patients
- Your symptoms are activity-related rather than constant
- You have not yet completed a genuine trial of treatment

💡 *Consistency matters more than intensity. A loading program done most days over several months does far more than occasional aggressive sessions which may flare your symptoms and set you back.*

Surgical Treatment

Surgery is uncommon and is reserved for patients whose symptoms persist despite a genuine, well-executed loading program carried out over many months.

The procedure involves removing the degenerated portion of the tendon and repairing the healthy remaining tissue. It can be done open or arthroscopically depending on the location and extent of the changes.

Injections are sometimes discussed. **Corticosteroid injection directly into these tendons is generally avoided** because of concern about weakening the tendon and increasing the risk of a complete rupture. Other options including platelet-rich plasma may be considered though the evidence remains mixed.

Often recommended if:

- Symptoms persist after many months of a properly performed loading program
- Pain is limiting your sport, work, or daily activities despite conservative care
- Imaging shows substantial degenerative change within the tendon

🎯 Why Treatment Is More Than Just Rest



Modify activity



Progressive loading



Adjunct treatment

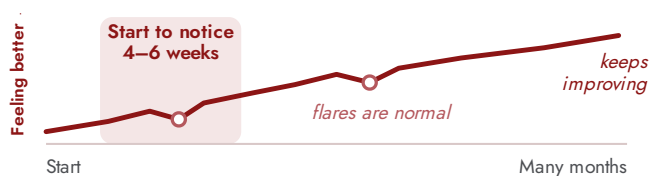
Relative rest and activity modification are an important part of your treatment. Reducing the load that aggravates the tendon is often the first thing that helps. On its own, however, **complete rest does not typically solve the problem**. A tendon that is not loaded at all gradually loses capacity, so the same activities can aggravate it again when you return to them.

Effective treatment combines several things such as modifying the activities that overload the tendon, a progressive loading program that rebuilds its capacity at a level you can tolerate, and adjunctive measures such as a compression strap, targeted therapy and in some cases shockwave or related treatments. Exercises should be worked into a range that does not provoke significant or lasting pain.



WHAT TO EXPECT

Recovery Takes Time



- Most patients start to notice improvement within four to six weeks of consistent therapy and continue to improve over many months.
- Progress is rarely linear. Good weeks and flares are both normal and **a flare does not mean you have undone your progress.**
- Patients may continue training in modified form rather than stopping entirely depending on symptoms.
- Symptoms often improve before the tendon has fully recovered. It is important to continue therapy even after you feel better to maintain your progress.
- **Your consistency is the single most important factor you control!**

Risks to Understand

- This condition is often stubborn. Many patients have symptoms for a year or more before it fully settles, particularly if it has been present a long time.
- **Returning to full training too quickly** is the most common reason symptoms recur.
- A small minority of patients do not improve with conservative care and go on to consider surgery.
- If surgery is performed, risks include infection, incomplete relief, and a recovery that still requires months of rehabilitation.

Selected Background Sources

Reflects current peer-reviewed literature and professional society recommendations:

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This handout is for education and does not replace the discussion with your surgeon.

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