Patellar Tendonitis Treatments That Actually Work

Setbacks, conflicting advice, and stagnation: The treatment for patellar tendonitis can be long and frustrating.

In this article I will show you which treatment options exist and how effective they are.

About The Author

My name is Martin Koban and I've been helping people with patellar tendonitis since 2011, after suffering through a serious case myself. I've worked with professional as well as recreational athletes and all my publications are 100% evidence-based.

Treatment Options for Patellar Tendonitis

Patellar tendonitis is an overuse injury of the patellar tendon and the longer the overuse continues, the more the injury progresses.

In the early injury stages resting and activity modification are often enough to achieve a full recovery, but if the knee has been painful for more than a few weeks a passive approach (i.e., doing nothing) is usually no longer enough to get rid of pain permanently.

The following treatment options exist.

Physical Therapy Exercises

Once patellar tendonitis has become chronic only a handful of treatments actually work[1]. The most effective approach is supported by decades of evidence in academic research: stimulating positive tendon adaptation through progressive loading with slow strengthening exercises[2].

Let's take this concept apart so that you can understand how to use it with your physical therapy exercises. We're going to talk about the specific exercises in a moment.

Positive tendon adaptation happens when you do an exercise that is not too light and not too heavy for how strong your tendon is at the time. You also need to do the right number of repetitions and you have to leave a certain number of rest days in between these workouts.

Negative tendon adaptation happens when you rest for long periods of time[3] or – arguably worse – use too heavy weights, do too many repetitions, or train too often.

Progressive loading means you need to increase the resistance and volume you expose your tendon to in safe increments. Put differently, you need to do heavier exercises as your knees permit. This is necessary so that the adaptation process continues to the point where your knees are strong enough for your sport.

Slow strengthening exercises are those exercises that can be executed slowly, thereby allowing you to safely place the tendon under a long time under tension.

In other words, the training variables (resistance, volume, and training frequency) need to be within what your tendon can handle at the time. Once established you can then carefully increase resistance and volume in increments that your knee can tolerate.

Which treatment exercises work for patellar tendonitis?

Through my books and courses I've been helped thousands of people get rid of their tendonitis and the exercises that have worked best for this particular purpose are:

- The slow squat[4]
- The slow leg press
- Holds on the leg extension machine[5] (isometric)
- Wall Sits (isometric)
- The Spanish Squat (isometric)

The follow-up question to this list usually is "which exercise works best?" But there is no one exercise that works perfectly for everyone[6]. Usually starting with isometric exercises works well, but I've also had people that only made progress with the slow squat. Just like some folks did well on the leg press while others couldn't get it to work for them.

One thing is sure though:

Plyometrics and explosive lifting are not useful in the first two treatment stages[7] because the time under tension is too low and the force on the tendon is too high.

You also want to avoid all exercises and movements that cause tendon irritation. Risk factors for tendon irritation include deep knee flexion, forward knee movement, and direct pressure on the tendon like you get when you're kneeling.

Patellar tendonitis stretches can also cause irritation if the tendon is not yet strong enough. In that case stretching needs to wait until the tendon can handle it.

Your treatment plan can also benefit from self-massage to reduce muscle tension. Improving movement mechanics through biomechanical exercises is beneficial[8] for preventing pain from coming back in the future.

Other Treatment Options

If you've had patellar tendonitis for more than a few weeks, chances are you'll look for what else you can do, other than exercises. There has to be a faster way to get back into sports, right?

This desire for a shortcut contributed to the development of a large number of adjunct treatments for patellar tendonitis. Unfortunately most of them are not supported by strong evidence in academic research[9]. Here's the list:

Icing can be useful for pain management, especially during flare-ups, but didn't show long-term treatment benefits[10]

Patellar tendon straps can also be used for short-term pain reduction[11], but they don't deliver long-term improvements

Ultrasound therapy provided inconsistent results[12] and has failed to provide any benefits in several studies[13]

Cortisone injections can lead to a short-term reduction of pain[14], but they increase risk of relapse[15] and over the long-term cause weaker tendons[16] that are more prone to tearing[17]

PRP injections showed little evidence of an effect greater than placebo injections[18]

Prolotherapy and **dry-needling** are also not supported by strong evidence[19]

Surgery is a last resort option for refractory cases of patellar tendonitis. Rehab time from surgery is 6 – 12 months, but long-term results in these cases are promising.

How much Treatment Time Can You Expect?

Recovery from patellar tendonitis can happen in just 4 weeks, but it can also take up to 12 months and even more.

The treatment time depends on several factors including how far the injury has progressed and how well you can solve the many problems that happen during treatment, as it's not a straight-forward process.

In fact, you'll often read about people that have suffered from patellar tendonitis for years. However, if you do the right things at the right time and avoid costly mistakes you can shorten your recovery time by several months.

While we're on the topic of mistakes, here's probably the biggest one:

Running or cycling during treatment?

It sucks if pain side-lines you from your sport and as an athlete I understand why so many people train through pain. I've done it myself so many years ago.

And yet training through pain is one of the major reasons why treatment often takes much longer than necessary. If running or cycling are causing pain, you need to put these activities on hold until your knees are strong enough to tolerate them without a pain response. Here's a video about this:

Complete Recovery in 4 Weeks?

Some of the people I worked with were able to get back into sports without pain after just 4 weeks. These results are not typical of course, but if you want to recover as quickly as possible you need to use the right treatment strategy right away.

I want to help you with that so I've put everything you need to know to get back to 100% into my free email course about patellar tendonitis. I'll also send you my best future articles and videos to help you stay on target. Let's do this together!

Sign up here and start getting your life back today.

> **Thomas writes:**
>
> "Dear Martin,
> I just wanted to thank you very much for all your work in this field. I enjoyed your patellar tendonitis book and your emails.
> I've struggled with PT for 1 ½ years now, but I'm now finally eyeing a return to my beloved soccer. Season starts in late August and I'm very hopeful that I'll be able to play by then.
> At this point I can run 5 km and do intervals without problems. I can also play soccer on my own garden for 10 – 15 mins without any pain. So I guess I'm close"
> - Thomas C., Copenhagen

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