

TX System Can Effectively Treat Tendinopathy Following Failed Surgical Intervention

A Patellar Tendinopathy Case Presentation in the PM&R Journal (Nanos and Malanga, 2015)



PAIN FREE AND RETURN TO SPORTS -ATHLETE PREVIOUSLY FAILED EXTENSIVE CONVENTIONAL THERAPY AND SURGERY

Study Methods

- · Case report.
- A collegiate athlete (basketball player) with chronic proximal patellar tendinopathy was treated effectively with percutaneous tenotomy after not responding to extensive nonoperative treatment, surgical debridement and PRP injections.

Results and Conclusions

- Successful treatment of an athlete 6 years symptomatic and unable to play for 6 months pre-operatively.
- · Patient returned to sport after 3 months.
- · Pain-free, no limits to activity after 7 months.
- Sustained results > 2 years.

Key Takeaways

- Resolution of patellar tendinopathy 6 years symptomatic.
- Sustained for > 2 years.

- Successful treatment of failed surgical debridement.
- Can be used in conjunction with PRP.

Treatment of Patellar Tendinopathy Refractory to Surgical Management Using Percutaneous Ultrasonic Tenotomy and Platelet-Rich Plasma Injection: A Case Presentation

Nanos KN, Malanga GA. PM R. 2015;7(12):1300-1305.

Chronic proximal patellar tendinopathy is a common sports condition that may be refractory to nonoperative treatments, including activity modification, medications, and comprehensive rehabilitation. Proximal patellar tendinopathy affects up to 40% of professional athletes, particularly those involved in jumping sports. Approximately 10% of cases will become refractory. In these cases, the tendon is understood to be in a chronic, degenerative, "underhealed" histologic state. When conservative treatment fails for refractory cases, open or endoscopic surgical debridement presents a definitive treatment, albeit with success rates as low as 45%. Unfortunately, in cases where surgical intervention is unsuccessful, there are few remaining traditional therapeutic options.

This article presents a case study of a collegiate athlete with chronic, proximal patellar tendinopathy refractory to traditional interventions, regenerative interventions and surgical debridement, who was treated with percutaneous ultrasonic tenotomy (PUT) and a single PRP injection. This is the first published report of successful PUT in the setting of previous surgical failure.

The patient had a 6-year history of proximal patellar tendinopathy refractory to ice, supervised activity modification, anti-inflammatories, kenesio taping, patellar bracing, eccentric physical therapy, multiple percutaneous needle tenotomies accompanied by paratenon hydrodissection, and arthroscopic soft-tissue debridement with PRP injection. 11 months after the last surgery, his pain rated 7 of 10 on the VAS scale for daily activities and 10 of 10 with physical activity. He was unable to return to sports. PUT was performed with an accompanying PRP injection.

At 2 months follow-up, there was a 60-65% improvement in pain and function. At 5 months, the patient returned to collegiate level basketball with only occasional soreness after performance. He remains asymptomatic 2 years after the procedure. Percutaneous ultrasonic tenotomy can be considered as a treatment option in patients presenting with refractory proximal patellar tendinopathy, including those who do not respond to previous operative intervention.

