

94% Patient Improvement Allows Collegiate Athletes to Return to Competition

A Jumper's Knee Study Published in Operative Techniques in Orthopaedics (Elattrache and Morrey, 2013)



PATIENT IMPROVEMENT - 16 PATIENTS
10 RETURNED TO PRIOR ATHLETIC COMPETITION / ACTIVITY

Study Methods

- Expert opinion; with brief discussion of a case series involving 16 patients.
- Discusses success with ultrasonic percutaneous tenotomy using the Tenex Health TX® System for chronic patellar tendinopathy (jumper's knee).
- Procedure described in detail.

Results and Conclusions

- This is the only modality other than open surgery to cut and debride diseased tissue. It holds potential for definitive treatment.
- 15/16 (94%) patients improved; 10 returned to prior level of competition or activity.
- Effectiveness appears to improve with time.
- Percutaneous ultrasonic tenotomy with TX1 is extremely well tolerated and has a low complication rate. It is a viable and attractive alternative for refractory patellar tendinopathy.

Key Takeaways

- Definitive treatment with no additional follow-on treatments required.
- Effectiveness may improve with time.
- Allows athletes to return to competition.
- Study by prestigious orthopaedic surgeon for professional sports teams.

Percutaneous Ultrasonic Tenotomy as a Treatment for Chronic Patellar Tendinopathy—Jumper’s Knee

Elattrache NS, Morrey BF. Operative Techniques in Orthopaedics. 2013;23(2):98-103.

Chronic tendinopathy of the patella or “jumper’s knee” remains a major treatment challenge. Surgery has considerable morbidity and is unpredictable in effectiveness and most surgeons will try other conservative treatment for about a year prior to performing. The result is often the patient has marked dysfunction even for daily activity. Most recently the use of ultrasound to guide various treatments has been introduced and documented. Emerging as a treatment for chronic tendinopathy is to first isolate the lesion by ultrasound guidance and perform a percutaneous tenotomy using ultrasonic

cutting energy. Tenex Health has developed the TX1 instrument with targeted ultrasonic cutting energy to perform a percutaneous tenotomy on areas of anatomy where tendinopathy exists. To date, the safety and efficacy of the procedure in general has been exhibited in over 5000 patients treated for chronic tendinosis or plantar fasciitis. This is the only percutaneous modality, other than open resection, that is capable of cutting and debriding the diseased tendon tissue. Percutaneous tenotomy of the patella tendon with the TX1 MicroTip was successfully performed in 16 patients of which 10 were collegiate level athletes. The patients were treated with the TX1 MicroTip once with no additional follow-on treatments. The procedure is well tolerated and has a low complication rate and is a viable alternative to treat refractory patellar tendinopathy.

