90% Pain Relief and Well-Tolerated Procedure Can Be Done in An Outpatient Setting Using Local Anesthesia

A Gluteal Tendinopathy Study Using the TX System Published in The Orthopaedic Journal of Sports Medicine (Baker and Mahoney, 2020)



Study Methods

- 29 patients with gluteal tendinopathy who did not respond to non-surgical treatment (for a minimum of 4 months) underwent ultrasound-guided, percutaneous ultrasonic tenotomy (PUT) in an outpatient setting.
- Results were assessed with VAS for pain, Harris Hip score evaluation and SF-12. Follow-up was conducted at 3 weeks, 3 months, 6 months and final (18-30 months).



Results and Conclusions

- 90% successful pain relief.
- Mean VAS score improved from 5.86 ±1.73 to 2.82± 2.22 (at mean follow-up of 22 months).
- Mean Harris Hip Score improved from 60.03 ± 10.86 to 77.47 $\pm 14.34.$
- Mean SF score improved from 29.93 \pm 5.39 to 34.41 \pm 4.88.
- Complications = 0.
- This procedure appears to be an effective and safe option for gluteal tendinopathy and is a valid option for patients not wanting to undergo open surgery.

Key Takeaways

- 1st prospective study of PUT for gluteal tendinopathy.
- 90% success.
- Well-tolerated.

- Can be performed as an outpatient procedure under local anesthesia.
- No complications.



Ultrasound-Guided Percutaneous Tenotomy for Gluteal Tendinopathy

Baker CL, Mahoney JR. The Orthopaedic Journal of Sports Medicine. 2020 March 19;8(3):1-8.

Purpose: To evaluate the efficacy of ultrasound guided ultrasonic percutaneous ultrasonic tenotomy for patients who have failed conservative management of gluteal tendinopathy.

Methods: 29 patients over the age of eighteen who had failed more than 4 months of conservative treatment were enrolled in this prospective, IRB approved study to evaluate the safety and efficacy of Ultrasound Guided Percutaneous Ultrasonic Tenotomy (PUT) in an outpatient setting. All patients had an MRI demonstrating tendinopathy of the gluteus minimus/medius tendons prior to PUT. Outcomes were assessed by use of a visual analog pain scale (VAS), Harris Hip Score, 12-item Short Form Health Survey and additional specific hip function questions. Patients were followed for a minimum of 6 months. Patients were given outcome questionnaires before the procedure and at follow-up of 3 weeks, 3 months, and 6 months. Results: The mean VAS score improved from $5.86(\pm 1.73)$ preoperatively to $2.82 (\pm 2.22)$ 6 months after the procedure. Harris Hip Scores improved from a mean of 60.0 (± 10.86) preoperatively to 77.47 ($\pm 14.34.5$) at 6 months. When asked at 6 months if they would have the procedure again, 15 replied "yes definitely", 3 replied "yes probably", 3 replied "maybe", 1 replied "likely not" and 2 replied "definitely not". Data was not available for 2 patients. 3 patients continued to have pain and went on to have additional surgical repair. 26/29 patients (90%) had pain relief. There were no complications.

Conclusion: This first prospective evaluation of ultrasound guided PUT for gluteal tendinopathy showed early improvement in pain and function with no complications. PUT appears to be an effective and safe alternative to surgical intervention, that can be done in an outpatient setting and is well tolerated.

