

Long-Term Outcomes of Combined Percutaneous Ultrasound Tenotomy (PUT) for Greater Trochanteric Pain Syndrome

24th Annual Pain Medicine Meeting
November 13-15, 2025 | Austin, TX

PAIN MEDICINE

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Greater Trochanteric Pain Syndrome (GTPS) causes lateral hip pain likely from gluteus medius (GMed) tendinopathy and iliotibial band (ITB) tension. Conservative treatments often fail. This study evaluates 2-year outcomes of combined ITB and GMed percutaneous ultrasound tenotomy (PUT), a minimally invasive alternative to surgery.

INTRODUCTION

GTPS is a disabling condition now understood as an enthesopathy involving the GMed and ITB. PUT targets these structures under ultrasound guidance. Prior studies showed short-term benefits; this study assesses long-term (24-month) outcomes in a large cohort.

METHODS

24 months

This retrospective study analyzed outcomes following GMed/ITB tenotomy performed between January 2022 and August 2023. A total of 79 hips with 24-month follow-up data were included. Follow-up data were available at 1, 6, 12, and 24 months via chart review and phone interviews. The primary outcome was ≥50% reduction in pain on the NRS. Secondary outcomes included improvement in side-lying and sit-to-stand tolerance, and the need for additional interventions on the affected hip.

RESULTS Characteristic Value **Total Hips** 79 **Total Patients** 69 % Female 95.7% Mean Age (± SD) 63.2 ± 11.3 years 32.8 ± 7.3 Mean BMI (± SD) 6.6 mm Mean ITB Thickness Average Follow-Up Duration 30.3 months (range 21–40) Pain (NRS – Median, IQR) 10 (9–10) Baseline 1 / 6 / 12 months 2 (1–4)

Outcome	1 Month	6 Months	12 Months	24 Months
Side-Lying Tolerance Improved	89.9%	89.6%	83.0%	55.7%
Sit-to-Stand Improved	87.3%	90.9%	84.9%	81.0%
Responder Rate	88.6%	89.6%	79.2%	56.9%

6 (4–10)

DISCUSSION

This 2-year follow-up study demonstrates that combined PUT of the GMed and ITB offers sustained improvements in pain and function for patients with refractory GTPS. While outcomes declined slightly over time, a majority of patients continued to benefit at 24 months.

The dual-target approach addresses both degenerative tendon changes and mechanical tension, offering a more comprehensive solution than single-site treatments. Compared to steroids and PRP, PUT is a minimally invasive, durable, and insurance-covered option.

CONCLUSION

Combined GMed and ITB PUT could be a safe, effective, and durable treatment for GTPS, offering a minimally invasive alternative to surgery with significant long-term improvements in pain and function.

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