Radiofrequency Microtenotomy with Concurrent Gastrocnemius Recession Improves Postoperative Vitality Scores in the Treatment of Recalcitrant Plantar Fasciitis

Deborah M <u>Huang</u>, ¹MBBS, MMed (Ortho), FRCS, Andrew CC <u>Chou</u>, ¹MD, Nicholas EM <u>Yeo</u>, ¹MBBS, MMed (Ortho), FRCS, Inderjeet R <u>Singh</u>, ¹MBBS, FRCS

Abstract

Introduction: Gastrocnemius recession and radiofrequency microtenotomy treat plantar fascia via different mechanisms. While studies have shown additive effects in performing plantar fasciotomy in conjunction with gastrocnemius recession, no such study exists examining the effects of performing radiofrequency microtenotomy with gastrocnemius recession. We hypothesised that performing both gastrocnemius recession and radiofrequency microtenotomy concurrently for recalcitrant plantar fasciitis is more effective than performing either procedure individually. Materials and Methods: We analysed all patients who underwent either a radiofrequency microtenotomy, a gastrocnemius recession, or both procedures concurrently between 2007 and 2014. The American Orthopaedic Foot and Ankle Society (AOFAS) Ankle-Hindfoot Scale, the SF-36 Health Survey, and 2 questions regarding patient satisfaction and met expectations were assessed preoperatively and postoperatively up to 1-year. Results: Patients who underwent both procedures concurrently had significantly higher vitality scores on the SF-36 Health Survey at 1-year postoperatively compared to patients who underwent either procedure individually. Type of intervention offered and preoperative factors were not predictive for patient outcomes. Conclusion: Combining radiofrequency microtenotomy and gastrocnemius recession in patients with recalcitrant plantar fasciitis and an underlying gastrocnemius contracture shows favourable mediumterm outcomes compared to performing either procedure in isolation.

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Address for Correspondence: Dr Deborah Miao'en Huang, Department of Orthopaedic Surgery, Singapore General Hospital, 20 College Road, Academia, Level 4, Singapore 169865.

Email: deborah.huang.m.e@singhealth.com.sg

¹Department of Orthopaedic Surgery, Singapore General Hospital, Singapore