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A Comparison of Two Different High-Volume Image-Guided Injection Procedures for Patients With Chronic Noninsertional Achilles Tendinopathy: A Pragmatic Retrospective Cohort Study.

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Abstract

We undertook a comparison evaluation of outcomes after 2 different high-volume image-guided injection (HVIGI) procedures performed under direct ultrasound guidance in patients with chronic noninsertional Achilles tendinopathy. In group A, the HVIGI involved high-volume (10 mL of 1% lidocaine combined with 40 mL of saline) and no dry needling. In group B, the HVIGI involved a smaller volume (10 mL of 1% lidocaine combined with 20 mL of saline) and dry needling of the Achilles tendon. A total of 34 patients were identified from the clinical records, with a mean overall age of 50.6 (range 26 to 83) years and an overall mean follow-up duration of 277 (range 49 to 596) days. The change between the preinjection and postinjection Victorian Institute of Sports Assessment-Achilles scores of 33.4 ± 22.5 points in group A and 6.94 ± 22.2 points in group B, was statistically significant (p = .002). In group A, 3 patients (16.7%) required surgical treatment compared with 6 patients (37.5%) in group B requiring surgical treatment (p = .180). Our results indicated that a higher volume without dry needling compared with a lower volume with dry needling resulted in greater improvement in noninsertional Achilles tendinopathy. However, confounding factors mean it is not possible to categorically state that this difference was solely due to different injection techniques.

KEYWORDS:

Achilles tendon; dry needling; injection; outcome study; patient assessment; tendon disorder

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