

## Endoscopic flexor hallucis longus transfer for acute Achilles tendon ruptures is associated with a high re-rupture rate: A prospective case series

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**Introduction:** Achilles tendon rupture (ATR) is a frequent injury with significant functional impact. Endoscopic transfer of the flexor hallucis longus (FHL) has been proposed as a minimally invasive alternative, but its role in acute cases remains controversial. This study aimed to evaluate patient-reported outcomes, functional capacity, and re-rupture rates after endoscopic FHL transfer for acute ATR.

**Methods:** Prospective case series including 26 patients (15 men, 11 women; mean age 47.7 years) with acute ATR treated with isolated endoscopic FHL transfer between March 2022 and December 2023. Minimum follow-up was 12 months. Assessments included pain (VAS), VISA-A, ATRS, AOFAS, plantar and hallux flexion strength, ankle mobility, heel rise, lunge test, and Achilles tendon resting angle.

**Results:** Five patients (19.2%) sustained re-rupture between the second and fourth postoperative week. At 12 months, mean VAS was 0.5, VISA-A 94.4 (95% CI: 90.8–100), and ATRS 5.1. Plantar flexion strength and ankle mobility were significantly lower on the operated side versus contralateral ( $p = 0.015$  and  $p < 0.001$ ). No wound healing or neurovascular complications were observed.

**Conclusion:** Despite satisfactory functional scores, the isolated endoscopic FHL transfer showed an unacceptably high re-rupture rate in acute ATR. This technique should not be routinely indicated for very active patients seeking a rapid return to activity

**Keywords:** Achilles tendon rupture; Flexor hallucis longus; Endoscopy.

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