

## Postoperative evaluation of patients undergoing minimally invasive treatment for acute calcaneal tendon rupture

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**Introduction:** Achilles tendon rupture (ATR) is a frequent musculoskeletal injury, representing the most affected tendon of the lower limb, with an incidence of approximately 40 cases per 100,000 inhabitants. With the advancement of surgical techniques, minimally invasive procedures have gained prominence for promoting less tissue aggression, reduced complications, and potentially faster rehabilitation. Among these techniques, the use of the Tenolig® device stands out, which is designed to promote adequate approximation of the tendon stumps during the healing process. Thus, the present study aims to evaluate the degree of patient satisfaction and clinical-functional results, such as pain, range of motion, muscle strength, time to return to activities, and occurrence of complications, undergoing the minimally invasive technique in the treatment of Achilles tendon rupture, using a percutaneous repairer (Tenolig®) followed by Alfredson eccentric protocol.

**Methods:** Retrospective and descriptive observational study, including 20 patients with acute Achilles tendon rupture (<5 days), treated by percutaneous technique with Tenolig®

**Results:** The sample consisted predominantly of men (75%), with a mean age of 39.7 years. The ATRs score showed that 75% of patients had a score of 0, indicating no functional limitation. The mean Alfredson test execution time was 31.8 seconds, with no significant pain. There was one case of re-rupture (5%). Lower adherence to the rehabilitation protocol was observed among patients with lower education and social support.

**Conclusion:** Minimally invasive treatment with Tenolig® proved effective and safe in the management of acute Achilles tendon rupture, with low complication rates and excellent functional results.

**Keywords:** Minimally invasive surgical procedures; Achilles tendon; Rehabilitation.

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