Risk Factors for Failure of Conservative Management of Insertional Achilles Tendonitis
Bryce Floyd Kunkle, Nicholas Allen Baxter, Caroline Patricia Hoch¹, Daniel J Scott¹, Christopher Edward Gross¹
¹Medical University of South Carolina

INTRODUCTION: Insertional Achilles tendinitis (IAT) is a common orthopaedic condition that can be treated conservatively or surgically. While nonsurgical treatment is thought to be beneficial in approximately 50-70% of cases, the precise success rate of nonsurgical treatment is not fully defined in the current literature. The purpose of this study is to define the success rate of modern nonsurgical treatment of IAT more precisely.

METHODS: A retrospective chart review was performed to identify patients who received either surgical or nonsurgical treatment of IAT with a single fellowship-trained foot and ankle surgeon at an academic medical center between September 2015 and June 2019. A total of 133 patients (137 ankles) were identified. The success rate of nonsurgical treatment, defined as the lack of need for surgical treatment within two years of initial diagnosis of IAT, was recorded. Patients with IAT were treated with scheduled anti-inflammatory medications, physical therapy with a focus on eccentric strengthening and Achilles stretching and, when needed, controlled ankle motion (CAM) boot, short leg casting, or Platelet-Rich Plasma injections for refractory cases. A demographic and comorbidity comparison was performed between groups. Statistical analysis was performed using two-tailed Student t-test and Chi-squared test.

RESULTS: There was no difference in treatment method between those successfully treated conservatively and those who went on to fail conservative management and require surgery. At first encounter, patients who later received surgery were significantly more likely to have higher VAS pain scores (surgery=6.54, conservative=5.10; \( p = .045 \)) and lower SF-12 physical scores (surgery=25.16, conservative=35.61; \( p < .001 \)). The overall success rate of nonsurgical treatment was 78.57% and the average time from initial diagnosis to surgery was 198.83 days (range, 28-486).

DISCUSSION AND CONCLUSION: Based on the results of this study, the success rates of nonsurgical treatment for IAT may be higher than what is traditionally thought, at just under 80%. Further, patients with worse VAS and SF-12 physical scores were significantly more likely to fail conservative management. Orthopaedic surgeons should use this information to provide more accurate counseling on the most appropriate treatment strategies for IAT.