Do PROMIS Scores Show That Nonoperative Treatment of Achilles Tendonopathy Works?

Michael R. Anderson, DO; David N. Bernstein, MBA, MA; Judith F. Baumhauer, MD, MPH; Irvin C. Oh, MD; Adolph S. Flemister, MD; John P. Ketz, MD; Benedict F. DiGiovanni, MD

University of Rochester Medical Center
Department of Orthopaedics and Rehabilitation
Rochester, NY
Disclosure

There are no potential conflicts to disclose with this presentation

Michael R. Anderson, DO
David N. Bernstein, MBA, MA
Judith F. Baumhauer, MD, MPH
Irvin C. Oh, MD
Adolph S. Flemister, MD
John P. Ketz, MD
Benedict F. DiGiovanni, MD

Our disclosures are listed in their entirety in the final AOFAS mobile app.
Background

• Achilles tendonopathy is a common complaint in foot and ankle clinics

• Despite the frequency of achilles tendonopathy previous studies have been limited
  • Typically have employed non validated outcome measures
  • Combine insertional and non-insertional achilles tendonopathy into a single cohort
Background

• Patient Reported Outcomes Measurement Information System (PROMIS) is validated for foot and ankle patients
  • Use for disease specific outcomes within foot and ankle is in its infancy
  • Has typically been employed in the evaluation of operative outcomes
Purpose/ Hypothesis

Purpose
• To evaluate the initial response to non operative care in the treatment of achilles tendonopathy
• To evaluate the differences between insertional and non insertional achilles tendonopathy at presentation and following nonoperative care
• To use PROMIS to evaluate nonoperative care

Hypothesis
• Nonoperative care will result in clinical improvement of achilles tendonopathy
• Nonoperative care will be more successful in the care of non insertional achilles tendonopathy than insertional achilles tendonopathy
• PROMIS will be an effective tool for evaluation of nonoperative care
Materials/ Methods

102 patients with achilles tendonopathy identified by ICD-9 code (726.71)
  • Stratified between insertional and non-insertional after chart review
  • Complete PROMIS data
  • Mean follow up of 62 days
  • Minimum Clinically Important Difference (MCID) set at ½ standard deviation

Non-operative care determined by provider
  • Eccentric achilles stretching (either HEP or PT)
  • Heel lefts
  • +/- immobilization in cast or boot
Results- Insertional vs. non-insertional

- **Presentation**
  - PROMIS scores did not vary in any domain between groups at initial presentation

- **Gender difference**
  - Women disproportionately affected by insertional achilles tendonopathy (63.8%)
  - Men disproportionately affected by non-insertional achilles tendopathy (63.6%)

- **Outcome difference**
  - Changes in PROMIS pain domain demonstrated greater improvement for non-insertional achilles tendopathy
  - More patients with non-insertional achilles tendopathy reached MCID in PROMIS pain
Results - According to type

• **Insertional achilles tendopathy**
  - 25% reached MCID for PROMIS physical function
  - 29% reached MCID for PROMIS pain interference
  - 32% reached MCID for PROMIS depression
    - Only 9% reached MCID in both pain and function

• **Non-insertional achilles tendopathy**
  - 46% reached MCID for PROMIS physical function
  - 36% reached MCID for PROMIS pain interference
  - 27% reached MCID for PROMIS depression
    - 33% reached MCID in both pain and function
Summary

Insertional
• Approximately 25% improve in pain OR function
  • Only 10% improve in BOTH pain AND function

Non insertional
• Approximately 35-45% improve in pain OR function
  • 33% improve in BOTH pain AND function
Discussion

• Insertional and non-insertional achilles tendopathy are similarly debilitating at initial presentation
• Non-insertional achilles tendopathy responds better to initial nonoperative management in regards to pain and function outcomes as measured by PROMIS
• Nonoperative care demonstrates utility in the treatment of achilles tendopathy but patients should be counseled that improvement is not universal
  • Surgeons and care providers can use this information to counsel patients about realistic expectations for the nonoperative treatment of these common achilles problems
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• References
  • Ho BS, Houck JR, Flemister AS, Ketz J, DiGiovanni BF, Oh IC, Baumhauer JF. Preoperative PROMIS Scores Predict Postoperative Success in Foot and Ankle Patients. Foot Ank Int; 37(9):911-918.