

EVALUATING THE PROGRESS OF MID-PORTION ACHILLES TENDINOPATHY DURING REHABILITATION: A REVIEW OF OUTCOME MEASURES FOR SELF- REPORTED PAIN AND FUNCTION

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ABSTRACT

Introduction: Management of mid-portion Achilles tendinopathy is a challenge for both clinicians and researchers. Alteration in tendon structure, muscle performance and pain processing mechanisms have been suggested as mechanisms driving improvement in pain and function. However, few trials have used consistent outcome measures to track changes in pain and function.

Objectives: 1) To identify all outcomes measures used in trials utilizing exercise-based interventions for mid-portion Achilles tendinopathy (AT) that assess self-reported pain and function and to report on the reliability and validity of the identified measures, and 2) Propose measures to optimally assess self-reported pain and function in patients with AT.

Design: Literature Review

Data Sources: Three major electronic databases were searched from inception until May 2016 for studies using isometric, eccentric or isotonic loading protocols for mid-portion AT.

Eligibility Criteria: Randomized and non-randomized trials of isometric, eccentric or isotonic loading in people with mid-portion AT.

Results: Forty-six studies were included and all outcome measures assessing self-reported pain and function were extracted. While a variety of outcome measures have been used, few have provided reliability data. There is evidence to suggest that the Victorian Institute of Sports Assessment- Achilles (VISA-A) is the only valid and reliable measure of self-reported pain and function for people with mid-portion AT. No other outcome measures have been validated in mid-portion AT.

Conclusion: The VISA-A remains the gold standard for assessing pain and function in mid-portion AT. However, while the validity or reliability of the Numerical Rating Scale (NRS) of pain during a functional task has not been established it may be a better measure of immediate treatment effect.

Level of evidence: 5

Key words: Achilles; outcome measures; reliability; tendinopathy; validity

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