Achilles pain, stiffness, and muscle power deficits: midportion achilles tendinopathy revision – 2024.

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Overview

Guideline Objective

To provide recommendations for evidence-based physical therapy practice of interventions for Achilles pain, stiffness, and muscle power deficits associated with midportion Achilles tendinopathy

Note:

- While there is some overlap between the 2 types of Achilles tendinopathy, the recommendations from these clinical practice guidelines (CPGs) are specific to evidence focused on midportion Achilles tendinopathy and may not generalize to individuals with insertional Achilles tendinopathy.
- This CPG excludes interventions outside the scope of physical therapist practice, including but not limited to pharmacological and surgical interventions, unless directly compared to physical therapy management. Although it is used by some physical therapists, extracorporeal shockwave therapy (ESWT) was also considered outside the scope of physical therapist practice for this update.

Patient Population

Adults with midportion Achilles tendinopathy who have Achilles pain, stiffness, and muscle power deficits

Recommendations

Recommendation Statements

Interventions

Exercise

Clinicians should use tendon loading exercise, with loads as high as tolerated, as a first-line treatment to improve function and decrease pain for individuals with midportion Achilles tendinopathy who do not have presumed frailty of the tendon structure. (**Grade of Recommendation: A**)

Individuals using tendon loading exercise for managing their Achilles tendinopathy should exercise at least 3 times a week at an intensity as high as tolerated. (**Grade of Recommendation: E**)

Patient Education and Counseling

Clinicians should provide education and counseling on Achilles tendinopathy, with either a pain science or a pathoanatomic focus, in combination with tendon-loading exercise for Achilles tendinopathy. Education and counseling can be provided either in person or via telehealth according to the individual's preference. (**Grade of Recommendation: B**)

Clinicians should advise that complete rest is not indicated for individuals with midportion Achilles tendinopathy and that they should continue with their activities within their pain tolerance. (**Grade of Recommendation: B**)

Manual Therapy

Clinicians may use manual therapy directed at manipulating and/or mobilizing muscles, joints, and/or connective tissues in those with midportion Achille tendinopathy and mobility deficits. (**Grade of Recommendation: F**)

Dry Needling

Clinicians may use intramuscular dry needling to treat calf-related muscle pain and stiffness, particularly in those with more acute symptoms and/or in those who do not tolerate a progressive loading program. (**Grade of Recommendation: F**)

Heel Lifts

Clinicians may use heel lifts as a therapeutic tool to temporarily reduce ankle dorsiflexion during activity for individuals with midportion Achilles tendinopathy. (**Grade of Recommendation: C**)

Orthoses

Because contradictory evidence exists, no recommendation can be made for the use of orthoses in individuals with midportion Achilles tendinopathy. (**Grade of Recommendation: D**)

Taping

Clinicians may use therapeutic elastic tape to reduce pain or improve functional performance in individuals with midportion Achilles tendinopathy. (**Grade of Recommendation: E**)

Clinicians may use rigid taping to decrease strain on the Achilles tendon and/or alter foot posture in individuals with midportion Achilles tendinopathy. (**Grade of Recommendation: E**)

Physical Agents: Low-level Laser Therapy

Clinicians should not use low-level laser therapy for individuals with midportion Achilles tendinopathy. (**Grade of Recommendation: C**)

Physical Agents: Therapeutic Ultrasound

Clinicians should not use therapeutic ultrasound alone to treat Achilles tendinopathy. (**Grade of Recommendation: C**)

Multimodal Interventions

Clinicians may include multimodal treatment, including a variety of interventions, to enhance the benefits of exercise for those with midportion Achilles tendinopathy. (**Grade of Recommendation: C**)

Evidence Rating Scheme

Levels of Evidence Table[a]

Level	Intervention/ Prevention	Pathoanatomic/ Risk/ Clinical Course/ Prognosis/ Differential Diagnosis	Diagnosis/ Diagnostic Accuracy	Prevalence of Condition/ Disorder	Exam/ Outcomes
I	Systematic review of high-quality randomized clinical trials (RCTs) High-quality RCTs[b]	Systematic review of prospective cohort studies High-quality prospective cohort study[c]	Systematic review of high-quality diagnostic studies High-quality diagnostic study[d] with validation	Systematic review, high-quality cross-sectional studies High-quality cross-sectional study[e]	Systematic review of prospective cohort studies High-quality prospective cohort study
II	Systematic review of high-quality cohort studies High-quality cohort study[c]	Systematic review of retrospective cohort study Lower-quality prospective cohort study	Systematic review of exploratory diagnostic studies or consecutive cohort studies High-quality	Systematic review of studies that allows relevant estimate Lower-quality	Systematic review of lower-quality prospective cohort studies Lower-

	Outcomes study or ecological study Lower-quality RCT[f]	High-quality retrospective cohort study Consecutive cohort Outcomes study or ecological study	exploratory diagnostic studies Consecutive retrospective cohort	cross-sectional stud	quality prospective cohort study
III	Systematic reviews of case-control studies High-quality case-control study Lower-quality cohort study	Lower-quality retrospective cohort study High-quality cross-sectional study Case-control study	Lower-quality exploratory diagnostic studies Nonconsecutive retrospective cohort	Local nonrandom study	High-quality cross-sectional study
IV	Case series	Case series	Case-control study		Lower-quality cross-sectional study
V	Expert opinion	Expert opinion	Expert opinion	Expert opinion	Expert opinion

a Adapted from Phillips B, Ball C, Sackett D, et al. Oxford Centre for Evidence-based Medicine - Levels of Evidence (March 2009). Also refer to Appendix E of the original guideline.

b High quality includes RCTs with greater than 80% follow-up, blinding, and appropriate randomization procedures.

c High-quality cohort study includes greater than 80% follow-up.

d High-quality diagnostic study includes consistently applied reference standard and blinding.

e High-quality prevalence study is a cross-sectional study that uses a local and current random sample or censuses.

f Weaker diagnostic criteria and reference standards, improper randomization, no blinding, and less than 80% follow-up may add bias and threats to validity.

Recommendation Rating Scheme

Grades of Recommendation

Grades of Recommendation	Strength of Evidence	Level of Obligation
A Strong evidence	A preponderance of level I and/or level II studies support the recommendation. This must include at least 1 level I study	Must or should
B Moderate evidence	A single high-quality RCT or a preponderance of level II studies support the recommendation	Should
C Weak evidence	A single level II study or a preponderance of level III and IV studies, including statements of consensus by content experts, support the recommendation	May
D Conflicting evidence	Higher-quality studies conducted on this topic disagree with respect to their conclusions. The recommendation is based on these conflicting studies	
E Theoretical/ foundational evidence	A preponderance of evidence from animal or cadaver studies, from conceptual models/principles, or from basic sciences/bench research supports this conclusion	May
F Expert opinion	Best practice based on the clinical experience of the guideline development team	May

Related Content

Supporting Documents

No supporting documents available.

Implementation Tools

- The Original Guideline includes the following:
    - Decision Tree (pp. 18-19)

Patient Education

No patient education materials available.

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TRUST Scorecard

Composition of Guideline Development Group (GDG)

Multidisciplinary GDG Members	Yes
Methodologist Involvement	Yes
Incorporation of Patient and Public Perspective	

Systematic Review of Evidence

Literature Search	
Study Selection	
Evidence Synthesis	

Foundations for Recommendations

Strength of Evidence Grade	
Description of Benefits and Harms of Recommendations	
Summary of Evidence Supporting Recommendations	
Strength of Recommendations Rating	
Clear Articulation of Recommendations	

Funding Source

Yes

Disclosure and Management of Financial Conflicts of Interests



External Review



Updating



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