

Lower Limb Tendinopathy

Introduction/aim

Lower limb tendinopathies include Hamstrings origin, Gluteal, Patellar tendon, Achilles tendon, Plantar Fasciitis and Tibialis Posterior. Typical features of lower limb tendinopathies can include localised pain, morning stiffness, a clear load-pain relationship, warm up with exercise and worsening symptoms after load.

A progressive tendon loading programme, in conjunction with other strategies, can be effective in the conservative management of lower limb tendinopathies.

Scope of practice

This statement is aimed to guide out patient physiotherapists treating patients with lower limb tendinopathies.

The statement and recommendations should always be used in conjunction with the clinical reasoning skills of the physiotherapist and patients should always be treated on a case by case basis.

Evidence base

References supplied by Peter Malliaras, course tutor “Mastering Lower Limb Tendinopathy” course.

Expectations from Physiotherapy

Pain relief

Improved function – ranging from activities of daily living to return to sport

Education - full return to sport may not always be achieved.

Physiotherapy recommendations

- Clear other potential causes: **D**

This will be specific to the area involved.

- Use **pain** as a monitoring tool: ⁽³⁶⁾ **D**

Pain should be used as an indicator of load progression.

- Initial load management: ^(1,36) **D**

Establish the patient's 'load tolerance' by considering their severity and irritability

Continue with non or low pain inducing activity

Temporarily eliminate the following activity (as appropriate):

- Highly irritating
- High load/plyometric (fast energy storage)
- Other sensitised movements or postures, e.g. avoid prolonged sitting in Hamstring tendinopathy

Reduce frequency of activity

Replace with cross training, if applicable

Continue with their sport, if possible

The above strategies should bring the patient's pain within an 'acceptable' level as a baseline for commencing rehabilitation.

- Progression of load: ^(1,2,4,7,9,18,25,28,33,36,39,43,44,45,47,50,51) **A**

Load should be progressive in nature

Load is patient specific and does not always need to be eccentric in nature to improve pain

The severity and irritability of the patient's symptoms will determine the level of load the tendon will tolerate. For example, a patient with high severity and irritability may only manage isometrics to begin with, whereas a patient who is

less irritable and severe may manage isotonics or eccentrics. **Clinical reasoning of the clinician is critical**

As previously mentioned, **pain** is the indicator for load progression

As a general guide, flare up pain from rehabilitation exercises should have settled back to the patient's baseline prior to the next loading (rehabilitation) session.

- Activity modification: ⁽³⁶⁾ **D**

As described above in 'Initial load management' section.

- Movement Dysfunction: ^(14,32,36) **D**

Examine, analyse and address abnormal movement patterns and dysfunctions, as appropriate, for the individual patient.

- Analyse the kinetic chain: ^(21,36,37,42,53,54,55,56) **D**

Assess and address any shortfalls throughout the kinetic chain in order to reduce abnormal load from surrounding structures on the irritable tendon.

- Education: ⁽³⁶⁾ **D**

Education should be given regarding diagnosis, rehabilitation commitment and timescales for rehabilitation (minimum 3-6 months)

The aim of rehabilitation is to increase load threshold by loading the tendon appropriately

Choice of language and method of communication is key in engaging the patient with a positive outlook on rehabilitation eg, avoid negative and medicalised terminology.

- Advice: ⁽³⁶⁾ **D**

Patient and area specific advice should be given as appropriate.

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Review of old Practice Based Statement (2017) and agreed by MSK Network Group still relevant Feb, 2022

Date for Review Feb 2027

Lower Limb Tendinopathy Best Practice Statement

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Sign Grading System

Levels of Evidence:

1++	High quality meta-analyses, systematic reviews of RCTs, or RCTs with a very low risk of bias.
1+	Well-conducted meta-analyses, systematic reviews, or RCTs with a low risk of bias.
1-	Meta-analyses, systematic reviews, or RCTs with a high risk of bias.
2++	High quality systematic reviews of case control or cohort or studies. High quality case control or cohort studies with a very low risk of confounding or bias and a high probability that the relationship is causal.
2+	Well-conducted case control or cohort studies with a low risk of confounding or bias and a moderate probability that the relationship is causal.
2-	Case control or cohort studies with a high risk of confounding or bias and a significant risk that the relationship is not causal.
3	Non-analytic studies, e.g. case reports, case series.
4	Expert opinion.

Grades of Recommendations:

- A At least one meta-analysis, systematic review, or RCT rated as 1++, and directly applicable to the target population; or
 A body of evidence consisting principally of studies rated as 1+, directly applicable to the target population, and demonstrating overall consistency of results.
- B A body of evidence including studies rated as 2++, directly applicable to the target population, and demonstrating overall consistency of results; or Extrapolated evidence from studies rated as 1++ or 1+.
- C A body of evidence including studies rated as 2+, directly applicable to the target population and demonstrating overall consistency of results; or
 Extrapolated evidence from studies rated as 2++.
- D Evidence level 3 or 4;
 or
 Extrapolated evidence from studies rated as 2+.

