

Eccentric loading, shock wave treatment, or a wait-and-see policy for tendinopathy of the main body of tendo Achillis

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Device and producing company:

Swiss Dolorclast, EMS

Introduction:

Few randomized controlled trials compare different methods of management in chronic tendinopathy of the main body of tendo Achillis. Our purpose was to compare the effectiveness of 3 management strategies: Group 1, eccentric loading; Group 2, repetitive low-energy shock wave therapy (SWT); and Group 3, wait-and-see in patients with chronic tendinopathy of the main body of tendo Achillis in a randomized controlled trial.

Methods:

Seventy-five patients with a chronic recalcitrant (>6 months) non-insertional Achilles tendinopathy were enrolled in a randomized controlled study. All patients had received unsuccessful management for >3 months, including at least: (1) peritendinous local injections, (2) nonsteroidal anti-inflammatory drugs, and (3) physiotherapy. A computerized random-number generator was used to draw up an allocation schedule. Analysis was on intention-to-treat basis.

Results:

At 4 months from baseline, the Victorian Institute of Sport Assessment (VISA)-A score increased in all groups: from 51 to 76 points in Group 1 (eccentric loading); from 50 to 70 points in Group 2 (repetitive low-energy SWT); and from 48 to 55 points in Group 3 (wait-and-see). Pain rating decreased in all groups: from 7 to 4 points in Group 1; from 7 to 4 points in Group 2; and from 8 to 6 points in Group 3. Fifteen of 25 patients in Group 1 (60%), 13 of 25 patients in Group 2 (52%), and 6 of 25 patients in Group 3 (24%) reported a Likert scale of 1 or 2 points ("completely recovered" or "much improved"). For all outcome measures, Groups 1 and 2 did not differ significantly. For all outcome measures, Groups 1 and 2 showed significantly better results than group 3.

Discussion:

At 4-month follow-up, eccentric loading and low-energy SWT showed comparable results.

Conclusion:

The wait-and-see strategy was ineffective for the management of chronic recalcitrant tendinopathy of the main body of the Achilles tendon.