

Muscle Energy Technique Improves Chronic Lateral Epicondylitis

Küçükşen S, Yılmaz H, Sallı A, Uğurlu H.
Muscle energy technique versus corticosteroid injection for management of chronic lateral epicondylitis: randomized controlled trial with 1-year follow-up.
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Lateral epicondylitis (LE) is the most commonly diagnosed elbow condition, affecting an estimated 1% to 3% of the population.¹ Proposed treatments are numerous; however, multiple reviews have revealed insufficient evidence to determine which modalities are most effective.²⁻⁶ Researchers from Turkey investigated the efficacy of muscle energy techniques (MET) compared with corticosteroid injections (CSI) for the management of chronic LE.

Eighty-two participants with chronic LE, as determined by an allopathic physiatrist, were randomly allocated to the MET group (n=41; 23 women; mean [SD] age, 46.17 [7.56] years) or CSI group (n=41; 22 women; mean [SD] age, 43.78 [9.16] years). Inclusion criteria included tenderness over or near the lateral epicondyle, pain elicited with at least 2 of 3 pain provocation tests, unilateral pain lasting more than 3 months, and pain greater than or equal to 50 mm on a 100-mm visual analog scale. Patients were excluded if they were surgically treated for elbow complaints, received physical therapy or CSI in the past 6 months, had bilateral elbow symptoms, or had elbow pain for less than 3 months.

Participants in the MET group received MET twice per week for 4 consecutive weeks from another physiatrist. Participants in the CSI group were injected with 1 mL of triamcinolone acetoneide (4 mg/mL) plus 1 mL of 1% lidocaine (10 mg/mL), 1 cm distally from the lateral epicondyle.

Patients were assessed with 3 standard outcome measures at baseline, 6, 26, and 52 weeks. Compared with baseline scores, mean pain-free grip strength scores in the MET group were significantly lower than the CSI group at 6 weeks

($P=.005$) but higher at 52 weeks ($P=.007$). Mean pain scale scores were significantly higher in the MET group than the CSI group at 6 weeks ($P=.004$) but were significantly lower at 26 and 52 weeks ($P=.016$ and $P=.01$, respectively). There were no statistically significant differences between the groups in their Disabilities of the Arm, Shoulder, and Hand (DASH) self-reported questionnaire scores.

Overall, both MET and CSI improved the strength, pain, and functional status of patients with LE. As a short-term therapeutic option, CSI may be used to reduce pain and return strength. However, MET may be a superior modality in the management of chronic LE. (doi:10.7556/jaoa.2016.012)

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