Comparison of injection modalities in the treatment of plantar heel pain: a randomized controlled trial.

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Abstract
In a prospective randomized study of plantar heel pain, 44 patients were treated with injection of 1 mL of 2% prilocaine using the peppering technique, 1 mL of 2% prilocaine combined with 2 mL of autologous blood, or 1 mL of 2% prilocaine mixed with 40 mg of methylprednisolone acetate. At 6-month follow-up, clinical improvement was evaluated by using a 10-cm visual analog scale and the rearfoot score of the American Orthopaedic Foot and Ankle Society. Results were analyzed using sample t-tests within groups and repeated-measures analyses of variance between groups. Mean +/- SD visual analog scale scores in the peppering technique, autologous blood injection, and corticosteroid injection groups improved from 6.4 +/- 1.1, 7.6 +/- 1.3, and 7.28 +/- 1.2 to 2.0 +/- 2.2 (P < .001), 2.4 +/- 1.8 (P < .001), and 2.57 +/- 2.9 (P < .001), respectively. Mean +/- SD rearfoot scores in the same groups improved from 64.1 +/- 15.1, 71.6 +/- 1, and 65.7 +/- 12.7 to 78.2 +/- 12.4 (P = .018), 80.9 +/- 13.9 (P = .025), and 80.07 +/- 17.5 (P = .030), respectively. There were no statistically significant differences among the groups. Good outcomes have been documented using the peppering technique and autologous blood injection for the treatment of lateral epicondylitis. Although the curative mechanisms of both injection modalities are based on a hypothesis, they seem to be good alternatives to corticosteroid injection for the treatment of plantar heel pain.

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