

Letter to the Editor Regarding “Deep Friction Massage Versus Steroid Injection in the Treatment of Lateral Epicondylitis”

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Dimitrios Stasinopoulos^{1,2}

To the Editor,

I carefully read the published article “Deep Friction Massage Versus Steroid Injection in the Treatment of Lateral Epicondylitis.”¹ I would like to comment the following:

1. Lateral epicondylitis (LE) is categorized according to the site of injury and pathophysiology. The suffix “itis” implies an inflammatory pathology, although a review of the findings of histological, immunohistochemical, and electron microscopy studies suggests that the condition may be degenerative rather than inflammatory. Hence, the increased presence of fibroblasts, vascular hyperplasia, proteoglycans, and glycosaminoglycans together with disorganized and immature collagen may all take place in the absence of inflammatory cells. Furthermore, pathology is not always over the lateral epicondyle, but may occur below it, on the facet of the lateral epicondyle. Therefore, lateral elbow tendinopathy (LET) seems to be the most appropriate term to use in clinical practice because terms such as LE make reference to inappropriate etiological, anatomical, and pathophysiological terms.²
2. The authors did not describe the exercise program in detail, and the patients did not follow an exercise program. Rehabilitation of tendinopathies such as LET is changing, and now eccentric training is not the only exercise option. Malliaras and his colleagues³ concluded that clinicians should consider eccentric-concentric loading alongside or instead of eccentric loading. Martinez-Silvestrini et al⁴ stated that, unlike Achilles tendinopathy, LET is often related to forceful grip activities requiring isometric contraction, which would be more beneficial than eccentric contraction in LET. Recently, isometric exercises have been recommended to reduce and manage tendon pain, increasing the strength at the angle of contraction without producing inflammatory signs.⁵ The exercise program in LET should include exercises not only for extensor carpi radialis brevis (ECRB) strengthening but also for supinator, rotator cuff, and scapular muscle strengthening.^{6,7} Moreover, patients with LET have also reduced proprioception.⁸ Techniques to improve reduced proprioception are also recommended. Finally, tendon neuroplastic training (TNT) is needed to combine isometric or isotonic strength training with an externally paced audio or visual cue.⁹
3. Physician injected 1% lidocaine in the area of maximal tenderness at the lateral epicondyle and then underwent a deep friction massage (DFM) by the attending physician. The lidocaine provided local anesthesia for the patients to tolerate the friction massage. Unfortunately, the technique has developed a reputation for being very painful. However, pain during friction massage is usually the result of a wrong indication, a wrong technique, or an unaccustomed amount of pressure.¹⁰ If this form of massage is applied correctly, it will quickly result in an analgesic effect over the treated area and is not at all painful for the patient.¹⁰ On the contrary, treating clinicians claim this technique places considerable strain on their hands.¹⁰
4. The application of DFM was incorrect. Cyriax and Cyriax¹¹ claimed substantial success in treating LET using DFM in combination with Mill’s manipulation, which is performed immediately after DFM. For it to be considered a Cyriax intervention, the 2 components must be used together in the order mentioned. Patients must follow the protocol 3 times a week for 4 weeks.¹ The DFM for LET is applied as follows:^{10,11}

¹European University Cyprus, Nicosia, Cyprus

²Cyprus Musculoskeletal and Sports Trauma Research Centre, Nicosia, Cyprus

Corresponding Author:

Dimitrios Stasinopoulos, European University Cyprus, 6, Diogenes Street, Engomi, PO Box 22006, 1516 Nicosia, Cyprus.

Email: d.stasinopoulos@euc.ac.cy

Position the patient comfortably with the elbow fully supinated and at 90° of flexion. Locate the anterolateral aspect of the lateral epicondyle (facet of the lateral epicondyle, where the ECRB inserts, the most common site of pain in patients with LET) and identify the area of tenderness. Apply DFM on the side of the thumb tip, applying the pressure in a posterior direction on the teno-osseous junction. Maintain this pressure while imparting DFM in a direction toward your fingers, which should be positioned on the other side of the elbow for counterpressure. The DFM is applied for 10 minutes after the numbing effect has been achieved, to prepare the tendon for Mill's manipulation.^{10,11} Mill's manipulation for tennis elbow should be conducted as follows:^{10,11} Position the patient on a chair with a backrest, and stand behind the patient. Support the patient's arm under the crook of the elbow with the shoulder joint abducted to 90° and medially rotated. The forearm will automatically fall into pronation. Place the thumb of your other hand in the web space between the patient's thumb and index finger and fully flex the patient's wrist and pronate the forearm. Move the hand supporting the crook of the elbow onto the posterior surface of the elbow joint and, while maintaining full wrist flexion and pronation, extend the patient's elbow until you feel that all the slack has been taken up in the tendon. Step sideways to stand behind the patient's head, taking care to prevent the patient from leaning away either forward or sideways, which would reduce the tension on the tendon. Apply a minimal amplitude, high-velocity thrust by simultaneously side flexing your body away from your arms and pushing smartly downward with the hand over the patient's elbow. This maneuver is conducted once only at each treatment session because it is not a comfortable procedure for the patient, and the effects of treatment often become fully apparent over the following few days.^{10,11}

A debate on the above 4 topics is most welcome as existing aspects may contribute to misunderstanding and inappropriate treatment.

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