BIOLOGY OF EXERCISE
VOLUME 15.2, 2019

It is time to modify the exercise program for the management of lateral elbow tendinopathy. Editorial

D.O.I: https://doi.org/10.4127/jbe.2019.0158

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EDITORIAL

One of the two most common tendinopathies of the upper limb is Lateral elbow tendinopathy (LET). It is a syndrome of pain in the area of the lateral epicondyle which may be degenerative rather than inflammatory. Extensor carpi radialis brevis (ECRB) is the most commonly affected structure. LET patients complain of pain and decreased function / strength. The symptoms of LET are clear and its diagnosis is easy. Physiotherapy is usually recommended as treatment of choice for LET patients.

The most common physiotherapy treatment for LET management is an exercise programme, supervised or in clinic. One consisting of eccentric training of the ECRB has shown good clinical results in LET (1). However, the exercise programme for the management of LET has been modified the last 10-15 years.

Eccentric training is not enough for all LET patients. Eccentric training of the injured tendon is combined with stretching exercises, especially static, of the injured tendon (2) Malliaras et al (3) concluded that clinicians should consider eccentric-concentric loading (heavy slow resistance exercise) alongside or instead of eccentric loading in tendinopathy. Recently, isometric exercises are indicated to reduce and manage LET pain (4,5). LET is often related to forceful grip activities requiring isometric contraction of the wrist flexors and extensors. (6) Perhaps isometric contractions would be more beneficial than eccentric ones in LET. (6)

Moreover, in LET not only the ECRB but also the supinator may be involved (7). The exercise program should include exer-

cises not only for ECRB strengthening but also for supinator strengthening [8]. In addition, rotator cuff and scapular muscle strengthening is also needed [9]. Using supinator, rotator cuff and scapular muscles strengthening loading, usual motion might have been returned, resulting in resolution of pain with actions and a return to painless gripping for the patient. (10)

In addition, reduced proprioception has been found in LET patients (11). If therapists use techniques to improve proprioception the results will be effective sooner in the management of LET (12). Finally, recent evidence suggests that the central nervous system may play a role in the management of tendinopathy (13). Tendon neuroplastic training (TNT) is proposed to address the central nervous system component of tendinopathy (14). TNT combines isometric or isotonic strength training with an externally-paced audio or visual cue (14).

According to previous reported issues, it is time to stop strengthening the ECRB only eccentrically. Eccentric training is not the only exercise option. Isometric, concentric-eccentric, stretching - eccentric, progressive loading of the upper extremity (kinetic chain), proprioception training and TNT may be indicated depending on factors multiple factors such as pain, function, age, site of tendinopathy, access to equipment, etc. However, the optimal protocol of exercise programme needs to be investigated.

Physical modalities, manual therapy techniques, bracing/ Taping/K-taping and acupuncture have also been recommended in the management of LET. The above recommended therapies should not be substitute but instead an adjunct to an exercise training. Further research is needed to find out which treatment strategy, if exists a treatment strategy, combined with progressive exercise training will provide the best results in the rehabilitation of LET.

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