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Title of the An adapted eccentric training in the management of chronic lateral epicondylar

paper: tendinopathy

First author: Croisier Jean-Louis

Authors: Croisier, JL., Foidart, M., Crielaard, JM., Forthomme, B.

Institution: University of LIEGE and CHU Sart Tilman

Department: Motricity Sciences

Country: Belgium

Abstract text Introduction: Lateral epicondylar tendinopathy represents a frequent overuse injury. In spite of

many conservative treatment procedures, that injury frequently entails prolonged symptoms and relapse when returning to offending activities. Aim: To compare the outcome of patients performing an isokinetic eccentric training with that of age-, gender-, activity- matched patients receiving a non strengthening classical rehabilitation. Patients and Methods: 92 patients with unilateral chronic lateral epicondylar tendinopathy (mean duration of symptoms 8 +/- 3 months) were assigned either to a control group (n = 46) or to an eccentrically trained group (n = 46). The control group underwent from a passive standardized rehabilitation excluding strengthening exercises. In addition to this program, the trained group performed eccentric exercises based on the repetitive lengthening of the active musculo-tendinous unit. That program started with submaximal contraction intensity and slow speed movement. Modalities were progressively intensified (increase in intensity contraction and speed movement) over a long-lasting treatment. Program effectiveness was assessed through pain score evaluation, disability questionnaire, muscle strength measurement and ultrasonographic examination. Results: Compared to the non-strengthening control group, the eccentric training permitted to observe: (1) a significantly more marked reduction of pain intensity, mainly after one month of treatment, (2) the absence of strength deficit on the involved side through bilateral comparison for the forearm supinator and wrist extensor muscles, (3) an improvement of the tendon image as demonstrated by a frequent decreased thickness and recovered homogenous tendon structure, (4) a more marked improvement of the disability status during occupational, spare time and sports activities. In conclusion, these results highlight the relevance of implementing an isokinetic adapted eccentric training in the management of chronic lateral epicondylar tendinopathy. References. Croisier et al., Br J Sports Med, 41, 269-275, 2007

Topic: Rehabilitation

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Keyword III: eccentric

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