Effect of deep cross-friction myotherapy on Pressure Pain Thresholds on Patients with Non-specific Low Back Pain

Farasyn Andre PhD PT, DO,  
Fac. Phys. Educ. & Rehabil. Sciences, Vrije Universiteit Brussel (VUB) Laarbeeklaan 103, 1090 Brussels Belgium  Tel.: +32.2.477.45.29 email: andre.farasyn@vub.ac.be

PURPOSE: The intended effects of deep cross-friction myotherapy (CFT) with the aid of a hand-grip T-bar (Roptrotherapy) on myofascial structures are to regenerate connective scar tissues and reduce local tenderness as a possible mechanism of pain relief. The aim of the study is to explore the effect of FMT on pressure pain thresholds (PPTs) in a group of patients with subacute non-specific low back pain (LBP), in order to verify the model of central sensitization [1, 2].

METHODS: The primary outcome measures were the PPTs of levels L1, L3, L5 of the Erector spinae and the Gluteus maximus, Gluteus medius and Tensor Fasciae Latae, measured with the aid of a Fisher algometer. The PPT of the left Triceps brachii (Triceps) is measured as a-not-to-LBP related measuring point. Fifty healthy subjects were examined with respect to similar PPTs. In this study, a 3 x weekly FMT session is employed on a group of 58 patients with LBP and re-examined at a 3-month follow-up.

RESULTS: At the 3-month follow-up examination, the original symptoms of LBP disappeared in the whole group. The mean PPT values of the Triceps showed no meaningful changes, while the PPTs at the level of the thoraco-lumbo-pelvic muscles reverted to the same mean values as healthy subjects.

CONCLUSIONS: The effect of deep cross-friction myotherapy in patients with subacute nonspecific LBP may be rather explained as local restoration of connective tissues in the thoraco-lumbo-pelvic myofascial structures and buttock musculature, than explained through the mechanism of central sensitization.

REFERENCES