

P122 - INTERDISCIPLINARY FASCIA THERAPY (IFT METHOD) REDUCES CHRONIC LOW BACK PAIN: A PILOT STUDY FOR A NEW MYOFASCIAL APPROACH

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Introduction: This pilot study is the first in a planned series of five consecutive studies designed to evaluate the effectiveness of the interdisciplinary fascia therapy (IFT Method) for chronic low back pain. The IFT Method augments myofascial trigger point release (MTPR) with heart rate variability training (HRV) in order to potentiate treatment effects.

Purpose/Aim: This pilot study evaluated the effectiveness of a MTPR technique in combination with HRV training of patients with chronic low back pain.

Materials and Methods: Nine patients (7 female, 2 male; mean age = 53.6±12) with chronic low back pain were treated in a standard outpatient setting in a clinic specialising in acute and chronic pain therapy solutions. Nine treatments were performed by fully qualified physical therapists two times a week within an intervention period of five weeks. The treatment consisted of a 12 grip, standardized, manual sequence focusing on the deep paravertebral myofascial structures as well as the pelvis, hip diaphragm and cervical structures. The intervention involved MTPR in combination with HRV training (15 minutes twice a day). All patients filled out the Brief Pain Inventory (BPI) questionnaire before the first, 4th and after the 9th treatment. Before the first treatment and after the 9th treatment patients were measured with long term ECG for 24-hours and before/after each

treatment a 1-minute HRV test. Statistical analysis included the t-test, Wilcoxon signed rank test and Cohen's d-test. The study was undertaken in accordance with the Declaration of Helsinki.

Results: Responses on the BPI questionnaire indicated significant reductions ($p < 0.001$) for momentary pain, the strongest, the minimal and the average pain of the last 24 hours. Disturbances of general activity, mood, normal working, relationship to other humans, sleep, walking ability and zest for life also increased significantly ($p < 0.001$). T-test and Wilcoxon signed rank tests sum scores of four questions concerning pain intensity (83% reduction) and of seven questions concerning pain disability (87% reduction) also revealed significant reductions ($p < 0.001$). Cohen's d showed large effect sizes of 2.08 and 1.52 respectively. The 24-hour HRV showed no significance in all standard parameters, but HRV parameters revealed a medium effect size in the PNN50 (0.63), Power HF Band (0.57), HRV-breath coherence (0.59), SD2 (0.63) and a large effect size in RMSSD (0.82).

Conclusions: The IFT Method (MTPR combined with HRV training) showed a significant reduction of pain sensation and promising results of the HRV training for regulation of the autonomic nervous system of patients with chronic low back pain. Controlled trials are planned to further document the promising findings of this initial pilot study.

Keywords: Interdisciplinary Fascia Therapy; Chronic low back pain; Myofascial Trigger Point Release; Heart Rate Variability; Brief Pain Inventory