Results: Patient reported increased flexibility in the lumbar area immediately following each myofascial/deep tissue massage treatment. Pain levels decreased from 6/10 to 2-3/10 post 17 medical massage therapy treatments over a six month period. Functional improvements include patient returning to pool exercises and physical therapy due to decreased pain complaints.

Relevance: The patient's low back pain was reproduced upon evaluation and treatment of the abdominal/lumbar scars. It was interpreted that the scars were significant in contributing to patient's myofascial low back pain.

Conclusion: Myofascial release of abdominal and lumbar scars can contribute to myofascial low back pain. Treatment of these scars and surrounding tissue can help to reduce myofascial low back pain complaints.

Keywords: Myofascial pain syndrome

References:

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

P123 - IMMEDIATE EFFECTS OF CENTRAL POSTEROANTERIOR MOBILISATION ON PAIN PRESSURE THRESHOLDS IN NON SPECIFIC LOWBACK PAIN INDIVIDUALS: A RANDOMISED CONTROLLED TRIAL

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Introduction: Nonspecific low back pain is the most common condition treated by manual physical therapists. Various forms of manual therapy are being used globally to treat this condition with little evidence proving its mechanism of action. Pain relieving effect of manual therapy can be explained by biomechanical and neurophysiological effects. A recent systematic review conclude there were inconsistent results on remote pain pressure thresholds following manual therapy interventions and indicated the need for quality research investigating the hypoalgesic effects of manual therapy. Further study to the best of our knowledge have been conducted on Nonspecific low back pain subjects investigating the hypoalgesic effects of mobilisation.

Purpose/Aim: We aimed to know the effect of Maitland's central posteroanterior (PA) mobilization of lumbar spine on pain pressure thresholds at local and remote sites in individuals with nonspecific low back pain which would enable to understand the mechanism of action of manual therapy.

Materials and Methods: Subjects with nonspecific low back pain participated in the study (Mean age: 46±7 years). The subjects were randomly allocated to control group and experimental group which received manual hand placement and central PA glide respectively on L3 vertebra for a duration of 1min for 3 sets. Pain pressure thresholds were measured pre and post intervention on the lumbar spine and at remotes site on the mid leg on the lateral and medial aspects. Repeated measures ANOVA was used to known the with-in and between group differences.

Results: Detailed results are awaited since the data collection is being done. We conducted Interim analysis of eighteen participants who showed an increase in pain pressure thresholds at lumbar spine in both groups and there were no significant differences between the groups post treatment (p=0.67). However, at the remote sites a significant increase in PPTs was noted in the central PA mobilisation group with no change being found in the manual hand placement group (p=0.04).

Conclusion: Interim analysis of our study that there were no significant differences of manual contact and central PA glide on pain pressure thresholds in individuals with nonspecific low