

9th Interdisciplinary World Congress on Low Back and Pelvic Girdle Pain

PROGRESS IN EVIDENCE BASED DIAGNOSIS AND TREATMENT

SINGAPORE
MARINA BAY SANDS
EXPO and CONVENTION CENTRE

31-10 ~ 3-11//2016

WWW.WORLDCONGRESSLBP.COM



INTERDISCIPLINARY FASCIA THERAPY (IFT METHOD) FOR CHRONIC LOW BACK PAIN: AN EXAMINATION OF THERAPY PROCESS AND OUTCOME AT 18 MONTHS

Gordon C.-M.^{1,2,3}, Schleip R.², Vagedes J.³, Birbaumer N.⁴, Montoya P.⁵, Andrasik F.⁶, Gevirtz R.⁷

¹Center for Integrative Therapy, Stuttgart, Germany;

²Fascia Research Group, Division of Neurophysiology, University of Ulm, Germany;

³ARCIM Institute, Filderklinik, Bonlanden, Germany;

⁴Institute of Medical Psychology and Behavioral Neurobiology, University of Tübingen, Germany;

⁵Research Institute on Health Sciences, University of Balearic Islands, Palma, Spain;

⁶Department of Psychology, University of Memphis, USA

⁷Alliant International University, San Diego, USA

¹Christopher-Marc Gordon, phone: 00497112366321, email: christopher.gordon@fasciaresearch.de

Introduction

The interdisciplinary fascia therapy method (IFT Method) is a newly developed treatment for chronic low back pain. This treatment combines instrument assisted, manual based fascia therapy with diaphragmatic stimulation for the purpose of increasing vagal tone of the parasympathic nervous system through a specialized paced breathing technique (heart rate variability— HRV training).

Purpose/Aim

The aims of this study were to assess the effectiveness of IFT, compare its outcome to that obtained by the more common classic massage (CM), and to begin to understand some of the factors mediating IFT (herein referred to as therapy process).

Materials and Methods

Participants (N=50) were randomly assigned to one of two groups: CM (N=18), IFT (N=19); we subsequently recruited a non-intervention control group for comparison purposes (N=13). Each patient received six 30-minute standardized therapy sessions, scheduled bi-weekly. The IFT group received manual and tool assisted myofascial techniques as well as HRV training; the CM group received classical massage and relaxation training. The Brief Pain Inventory (BPI), Pain Disability Index (PDI), and spine range of movement (ROM) with the Schober and Ott test served as the primary measures of outcome. Expectations for improvement (Ferts-Placebo questionnaire), pain pressure threshold (PPT) on lumbar tissues and thumbnails using the pain pressure algometer, and the biomechanical variables of stiffness and elasticity measured by the MyotonPro provided measures of therapy process. Statistical analyses included the paired t-test, Wilcoxon signed rank test, Cohen's d-test, and ANOVAs. The study was undertaken in accordance with the Declaration of Helsinki.



Results

The IFT intervention was significantly more effective than CM ($p < 0.05$) and the non-intervention in improving pain and life quality, both at 3 and 18 months following treatment. ROM with the Schober test and HRV coherence baseline testing in the IFT group showed significant improvement ($p < 0.05$) both pre to post 3 months. Reduction of muscle stiffness and gain in elasticity were improved pre to post 6 weeks intervention in the IFT group. Cohen's d revealed medium to large effect sizes for all primary measures of outcome and also for all measures of the therapy process.

Conclusions

The IFT Method appears to be an effective intervention for patients with non-specific low back, yielding improvements that endured for 1.5 years. Massage therapy revealed a significant increase for life quality but no pain reduction post 3 months of intervention. However, further research is warranted to better understand the physiological basis and clinical applications of this promising technique, IFT.

Keywords

Instrument Assisted Fascia Therapy; Chronic Low Back Pain; Myofascial Trigger Point Release; HRV Training; Vagal tone stimulation.

References

- [1] Gordon CM, Schleip R, Vagedes J, Riquelme I, Birbaumer N, Andrasik F, Montoya P. Does Myofascial Pain Sensitization Correlate with Chronic Low Back Pain? A RCT, Myometer Study with a 3 and 18 Month Follow Up. *Fascia Research IV*, Washington DC, 11/2015, 252.
- [2] Gordon CM, Lindner SM, Birbaumer N, Montoya P, Andrasik F. Interdisciplinary Fascia Therapy (IFT) in Chronic Low Back Pain. An Effectivity-Outcome Study with Outpatients. *Fascia Research IV*, Washington DC, 11/2015, 253. / Prospective submission for 9th Interdisciplinary World Congress on Low Back and Pelvic Girdle Pain 2016.
- [3] Gordon CM, Birbaumer N, Andrasik F. Interdisciplinary fascia therapy (IFT method) reduces chronic low back pain: A pilot study for a new myofascial approach. Prospective submission for 9th Interdisciplinary World Congress on Low Back and Pelvic Girdle Pain 2016.