ROLE OF FASCIAE IN NONSPECIFIC LOW THORACIC AND LUMBAR PAIN

Conclusions: The HCP included in the present study had a good knowledge about the HVLA SM. However, a few of them had some misconceptions/misbeliefs which might create a dependency for regular HVLA SM and induce some misbeliefs which might favor kinesiophobia and prevent patients taking an active role in their own treatment. Studies with larger sample sizes are needed to confirm the findings of the present study and to investigate if there are differences between knowledge/beliefs between the various kinds of HCP who practice HVLA SM (manual therapists, osteopaths, chiropractors, etc.).

Keywords: Thrust, spine, manual therapy, belief, representation

P118 - ROLE OF FASCIAE IN NONSPECIFIC LOW BACK PAIN

Casato G.1, Stecco C.2, Busin R.3
1Private Clinic, Piovene Rocchette; 2Dept. of Human Anatomy and Physiology, University of Padova, Padova; 3Private Clinic, Piovene Rocchette, Italy

Introduction: More and more evidences show how the thoracolumbar fascia is involved with nonspecific low back pain. Nevertheless, no treatments having the myofascial tissue as a target are mentioned in the lately guidelines regarding low back pain. Moreover, in the cases considering the fascial tissue, a dysfunction of just the thoracolumbar fascia or of the intimately contiguous myofascial tissue is generally recognized, not a dysfunction of the entire anatomically connected fascial tissue. Indeed, recent studies about anatomy have shown the presence of a continuity between the thoracolumbar fascial and the deep fascia of the limbs. According to these studies the posterior lamina of the thoracolumbar fascia continue distally with the gluteal fascia and the fascia lata, while it incorporates the trapezius and the latissimus dorsi proximally. It then has a more distal myofascial expansion within the brachial fascia. Several more distal myofascial expansions guarantee an anatomical continuity until hands and feet. Often, the Fascial Manipulation® does not treat the area where the painful symptoms are but tends to be applied on the fascial tissue of other areas of the body taking advantage on that anatomical continuity concept.

Purpose/Aim: Investigating, according to the fascial continuity concepts, which effects the manipulation of the myofascial tissue of the limbs could have on nonspecific low back pain cases.

Materials and Methods: Five patients among those affected by nonspecific low back pain have been selected. Those are four women and one man aged between 40 and 62 years old. Three of them were affected by acute symptoms while two by chronic ones. During the first examination specific spots of the low back and of the legs or the forearms were palpated and compared. Patients’ treatment focused just on the manipulation of those painful spots present in other areas of the body than the low back one and the gluteal region. The pain level (NRS) and the lumbar flexion-extension range of motion have been measured before and after each session and on the subsequent examinations after one, three and six months; the Roland And Morris Disability Questionnaire has been given on the first, one-month, three-months and six-months examinations to measure the disability.
Results: Thighs, legs, feet and forearms were treated. Each patient reported a clinically significant reduction of the painful symptoms (a NRS score difference ≥ 2) straight after the manipulation. The lumbar flexion range of motion did not show any change; while in three cases, where the treatment focused on the inferior limbs, a clinically significant increase (≥ 5°-10°) of the overall range of motion of the distal joints has been observed. A clear improvement (ROM increase > 100%) of the lumbar extension has been observed when the arms had been treated. The subsequent examinations after one and three months pointed out the conservation of the range of motion and the absence of pain. The treatment of just the limbs, with regard to the previous trauma or an overuse of the limbs, did not show any change; while in two cases, where the treatment focused on the thoracolumbar region and the deep fascia of the limbs, a consequent modified sprain of its embedded mechanoreceptors and pain. The treatment of just the lumbar district would implicate a temporary result because it is not focused on the resolution of the primary cause of the dysfunction. Just the limbs were manipulated in this study to evaluate only the effect of their manipulation. If modifications are found with the palpation of the trunk too, its manipulation would be useful for a better result. A dysfunction of the myofascial tissue non-intimately contiguous with the symptomatic area is then suggested to be taken in consideration among the causes of nonspecific low back-pain.

Conclusion(s): The lumbar pain perception is decreased by the myofascial tissue manipulation of the limbs in the nonspecific low back pain cases. The anatomic fascial continuity between the thoracolumbar area and the deep fascia of the limbs can explain this phenomenon. In facts a previous trauma or an overuse of the limbs can alter density of hyaluronan that is present among the sliding layers of the deep fascia of the limbs. That causes an alteration of the tension balance of the thoracolumbar fascia with a consequent modified sprain of its embedded mechanoreceptors and pain. The treatment of just the lumbar district would implicate a temporary result because it is not focused on the resolution of the primary cause of the dysfunction. Just the limbs were manipulated in this study to evaluate only the effect of their manipulation. If modifications are found with the palpation of the trunk too, its manipulation would be useful for a better result. A dysfunction of the myofascial tissue non-intimately contiguous with the symptomatic area is then suggested to be taken in consideration among the causes of nonspecific low back-pain.

Keywords: Fascia, nonspecific low back pain, limb myofascial manipulation, fascial continuity, case series

P119 - MANUAL TREATMENT OF COCCYGODYNIA: CASE SERIES

Lilje S.
Dept. of Health, Blekinge Institute of Technology, Karlskrona, Sweden

Introduction: Pain in the coccygeal region is a common but poorly documented condition, both with regard to etiology and treatment. Pain is typically most often experienced in sitting and when going from sit to stand, and some patients suffer from constant pain. The pain may be radiating to the lower back/pelvis, hips/groin, and to one or both legs/feet. Often there is no known reason for the pain, which may last for years, and there are low levels of evidence in studies of conservative treatment such as analgetics, rubber rings, and/or steroid injections. Intra-rectal manipulation is an alternative, and if none of these interventions improve the condition, a coccygectomy may be performed. Since intra-rectal manipulation is a painful treatment, a technique for external mobilisation of the coccyx has been developed. It is simple and most often effective, but to our knowledge no studies on the effectiveness of the intervention are published.

Purpose/Aim: To describe the effects of external mobilisation of the coccyx in twelve patients.

Materials and Methods: Case series. Consecutive patients seeking care for traumatic or idiopathic coccygodynia in a Naprapathic clinic. External mobilization of the pericoccygeal ligaments through repeated impulses of the coccyx, and stretching of mm. gluteus maximus and piriformis were performed with as many treatments as required in order to get better/symptom free. Stretching was also given as home exercise. Pain duration, worst, average and present pain (VAS), physical function, presence of any radiating pain and/or sleep disturbance, medication, and perceived recovery were measured at the patients' first and last visits, and after four weeks.

Results: Ten participants (two men), mean age 43,6 (range 8-70 years), were evaluated. The average pain duration was 48,3 weeks (10 - 830 days), and the number of treatments 3,6. The mean pain was 1,17 compared to 44,7 at baseline, and as regards physical function 73% stated that they were free from dysfunctions. Three out of initially five patients didn't experience any radiation, and for the other two it decreased. Three out of four patients did no longer suffer from sleep disturbances, and ceased their medication. One out of four had decreased sleep disturbance, and intake of medication. All patients were a little or much better, or free from pain (27%, 27%, and 46%, respectively).