

Interview with Antonio Stecco

“The fascia is the forgotten tissue, but is essential in the regulation of proprioceptive afferents”

► by Erika Calvani

The fascia is a membrane structure composed of connective tissue, extended over the entire body below the skin. It connects the various parts of the body, lines the muscles and invaginates between the muscle fibers, coordinating an articulation with the other, correlating each part of the body with the whole body and synchronizing the action of each part with the totality.

Luigi Stecco, physiotherapist since 1975, after a 30-year work experience has highlighted the importance of the fascia in the treatment of musculoskeletal disorders, developing the technical foundations of Fascial Manipulation. The fasciatherapist does not focus his attention on the area of symptomatic manifestation or on the joint, but on particular areas of the fascia defined as coordination centers. The treatment of pain is performed through the manipulative intervention on the fascial densifications situated on the respective Coordination Centres responsible for the dysfunction or pain. We will now analyze the method of fascial manipulation with Antonio Stecco, current President of the Fascial Manipulation Association (AMF).

What is the primary concept underpinning the method of fascial manipulation?

The basic principle of fascial manipulation is to restore the normal flow both at the intrafascial level and between fascia and epimysium, in specific points of the body that have been encoded. The advantage of this method are the long-lasting results. This is possible thanks to a specific assessment of the patient by completing an electronic file, which orders and guides the therapist in the choice of the areas to be addressed. The electronic file is appreciated in all the forty countries in which we are still teaching fascial manipulation. All participants are surprised about the MF methodology and the clear guidelines that are provided to help the therapist gather the necessary information and decide on the treatment plan.

What is the densification of the fascia and how can it cause structural alterations until the onset of pain?

The densification is an increase in the viscosity of the lax collagen substance present in different compartments of the body. An increase in intrafascial viscosity, between the fascia and the epimysium, generates a decrease in flow, reducing the articular range and hyper-activating mechanoreceptors, which will send incorrect information to the CNS (typical symptoms related to the syndrome of non-specific musculoskeletal pain).

How can the manipulative maneuver restore the tensional balance of the fascial system?

We have published two papers showing ultrasound modification of fascial tissue pre- and post-treatment of the fascia. In an article we highlighted the thickening of the fascia due to an intrafascial increase in the lax collagen substance. In post-treatment and follow-up controls, a normalization of the thickness of the fascia was noticed, which was higher than in the control group. In the second article we showed how, with FM, we were able to decrease the “stiffness” of the fascia through an elastosonographic assessment. This assessment, using a special ultrasound software, evaluates the stiffness of tissues.

For years, AMF has studied the therapeutic potential of fascial manipulation. What is the latest scientific evidence about the anatomical function of the fascia?

Last year we published the effectiveness of fascial manipulation for the carpal tunnel and for functional adolescent kyphosis.

In the first article we confirmed how the entrapment of the median nerve can occur at different levels, not just the carpal ligament. For this reason, fascial

manipulation, acting in more body segments, is able to decrease the entrapment which is generated between nerve and epineurium (the fascial tissue that surrounds the nerve). This study confirms the role of the fascia in nerve entrapment and supports fascial manipulation as a method of diagnosis and treatment. The result that excites us the most is the duration of the same results, which are maintained in the long term.

What about the latest studies on the fascia in the treatment of musculoskeletal disorders?

We are now completing work on chronic low back pain with the University of Bologna. It will be published later this year. This is a randomized clinical trial that shows the superiority of Fascial Manipulation compared to another treatment, with results that are maintained over time. With the University of New York NYU first a preclinical study, and now a clinical one, were carried out on the treatment of the fascia in patients with muscle stiffness. The preclinical study has already been published. I cannot deny the enthusiasm among my colleagues in the Motor Recovery Lab at the Rusk Institute. We generated a patent that will allow us to further investigate this new scope of fascial manipulation. We have already introduced a number of applications in the third level of the course of fascial manipulation, but our aim is to further improve the guidelines in the 2016 edition .

How does the fascia therapist do for musculoskeletal pain?

Whoever uses FM should evaluate the patient by our guidelines, involving the use of the FM file. This file (now also in electronic format) helps the therapist to gather the information needed for proper treatment. Of course clinical reasoning cannot be dictated by the software.

For further information

Luomala T, Pihlman M, Heiskanen J, et al. *Case study: could ultrasound and elastography visualized densified areas inside the deep fascia?* J Bodyw Mov Ther 2014;18:462-8.

Stecco A, Meneghini A, Stern R, et al. *Ultrasonography in myofascial neck pain: randomized clinical trial for diagnosis and follow-up.* Surg Radiol Anat 2014;36:243-53.

When is fascial manipulation recommended? In sports, in which algic-dysfunctional circumstances does it have more results?

We have trained several physiotherapists who work in the sports sector, not least the team following Juventus, Diamonds baseball team in the USA, Worcester Rugby Team in the UK, Net basketball team in NYC and many others. The application of FM is the most diverse. It is indicated in painful symptoms as in those related to the lack of proprioception.

What is the relationship between fascial manipulation and prevention?

With several team sports a pre-season evaluation protocol is applied to decrease major trauma. We are collecting very encouraging preliminary results.

What can be said on the relationship between fascial manipulation and rehabilitation?

Several international organizations, such as ISPRM (International Society of Physical Medicine), are supporting the application of FM in rehabilitation as a valuable tool for this branch of medicine.

How important is it for a professional in sports and rehabilitation to know about the physiology of the fascia while performing their daily work?

Unfortunately the fascia is “the forgotten tissue”. Ignoring the anatomy and physiology of the fascia is like having a lacuna in the bases of scientific theories that support the entire clinical work. In all international conferences more and more attention is given to this tissue, but this new information will not be available to all until they are included in the professional training curriculum.

Pratelli E, Pintucci M, Cultrera P, et al. *Conservative treatment of carpal tunnel syndrome: comparison between laser therapy and fascial manipulation(®).* J Bodyw Mov Ther 2015;19:113-8.

Ćosić V, Day JA, Iogna P, et al. *Fascial Manipulation(®) method applied to pubescent postural hyperkyphosis: a pilot study.* J Bodyw Mov Ther. 2014;18:608-15.