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FASCIA SCIENCE AND CLINICAL APPLICATIONS: EDITORIAL

A fascia and the fascial system



One of the main topics of the last Fascia Research Congress (Washington, 17–21 September 2015) was the terminology about fascia. Many researchers are convinced that the indiscriminate use of the term “fascia” in reference to various types of connective tissue often leads to confusion. Furthermore, inconsistent use of anatomical terms makes it difficult to compare results across research studies and to draw generalized conclusions (Langevin, 2014). This situation may be comparable to a time in anatomy history described by Adstrum (2014): “more than 50,000 terms were used to identify 5000 structures, so, anatomical terminology was in a state of chaos, incoherent, full of inequities, contradictions, and obscurities”. This striving for more clarity in terms of terminology resonates with a comparable attempt among researchers to describe manual therapies. In 2013, Paul Standley called for the establishment of a unified set of terms to enhance the construction of an evidence base to describe clinical efficacy of the various manual treatments. Indeed, he observed that most manual methods involve combinations of stretch, compression, shear and torque forces, and that “despite being called different names, many of these techniques used around the world really create the same (or nearly the same) effects on tissues and cells”.

One year ago a group was created by the Fascia Research Society to move towards a common definition of fascia and to clarify which anatomical structures could be included in this definition. Authors that had contributed to the ongoing terminology discussion in the Journal of Bodywork and Movement Therapies were invited to participate, as well as a representative of each category: osteopathic, chiropractic, medical doctor, basic science researchers, and movement practitioners. In order to converge towards a consistent terminology, we proposed adopting the Delphi Method in December 2014. This is a transparent and streamlined process for fostering a statement of consensus among a wide array of experts in a specific field and applying the methodology in other fields as well. During this process, it became evident that the choice of most suitable nomenclature depends on the type of investigation or perception of fascia. If the focus of the investigation is morphological, then a narrower fascia definition tends to

work best, such as the one proposed by FCAT (Federative Committee on Anatomical Terminology). If one intends to investigate functional aspects – such as force transmission or sensory capacities – then a wider definition of fascia tends to be more helpful. Both of these perspectives and related definitions are associated with major advantages which make the respective terminology superior when applying it within a specific context.

The Delphi process culminated in a personal committee meeting prior to the last Fascia Research Congress. Here the participants finally decided to distinguish the term “A FASCIA” from the term “THE FASCIAL SYSTEM”. The first term – ‘a fascia’ - indicates “*a sheath, a sheet or any number of other dissectible aggregations of connective tissue that forms beneath the skin to attach, enclose, separate muscles and other internal organs*”. This is a purely anatomical definition that has the aim of permitting everybody to know exactly what we’re talking about, to isolate these layers in cadavers and perform histological and morphological analysis, to sample the fasciae during surgery to evaluate pathological alterations and to study them in living subjects by means of imaging technology. Finally, it permits for the comparison of the results of anatomical studies performed by different researchers.

However, this distinct anatomical definition of ‘a fascia’ is not always helpful for use among all clinicians, because it may lead towards the exclusion of important tissues when trying to understand the function of the global fascial net during movement, including the interconnections of fascial tissues with joint capsules, aponeuroses, tendons, ligaments and intramuscular connective tissues (Schleip et al., 2012). Besides, as highlighted by Myers (2014), for those of us, however, who initiate treatment from the outside with our hands, the palpatory distinction between e.g. the transversalis fascia and parietal peritoneum can engage our interest as a research concern; but in practice the layers are inseparable; they move and respond together. For this reason, it is helpful to have the option of a second term – i.e. ‘the fascial system’ – which points the interest more into the functional aspects of the larger fascial net, including force transmission, sensory functions and wound regulation. With our proposed term “the fascial system” we

refer to a network of interacting, interrelated, interdependent tissues forming a complex whole, all collaborating to perform a movement. To better define what the fascial system is and what elements it includes, a new subcommittee was elected, consisting of Sue Adstrum, Robert Schleip, Carla Stecco, Paolo Tozzi and Can Yucesoy.

It is hoped that in the future both pathways of exploration may profit from the clarification of their respective terminologies. When communicating among clinicians interested in understanding the dynamics of the wider fascial system, then a more comprehensive terminology may be the most suitable. However, for the exploration of precise anatomical and histological relationships, and for the respective communication with medical scientists, the suggested definition of 'a fascia' with its much stricter inclusion parameters is highly recommended.

This will be an ongoing dialogue, in which much more work is necessary. This will include further terminological clarifications as well as further progress in trying to better understand the different backgrounds and values of the many diverse professions involved in the field of fascia research and fascia oriented therapies. A very big thank you needs to be expressed to all colleagues, who have contributed to this important clarification process in this journal.

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