Non-Specific Low Back Pain In Elderly And The Effects Of Myofascial Release Technique Combined With Core Stabilization Exercise: Not Just Muscles

[Letter]

Dear editor

I would first like to congratulate Ozsoy et al on the publication of their research article on treatment in the elderly with non-specific low back pain (NSLBP) and the effects of myofascial release technique. The topic is interesting and clinically relevant, because back problems increase with ageing, but I would like to clarify some of the concepts expressed in the article.

The causes that determine low back pain (LBP) are different and it is not possible to carry out this pathology to a dysfunction of a single tissue (fascia) and of a muscular structure that could (theoretically) influence the back. In the introduction of the text it is possible to read: “Because of the changes in fascia structures, dysfunction of deep muscles of back and trunk is common in chronic LBP. Injuries of the lower back are mostly caused by the superficial back line (SBL)”. And yet we can read: “Chronic LBP is caused by deep muscle dysfunctions and altered fascia structures.” Currently, we have no absolute evidence on the influence of muscle chain theory and health status, as well as the causes that determine LBP in the elderly have different origins. For example, in 41% of patients with NSLBP, the pain is caused by the presence of iliac crest pain syndrome (ICPS), an alteration of tendon tissue on the bone area of the iliac crest (tendinopathy) of the erector spinae muscle.

The causes that determine low back pain (LBP) are different and it is not possible to carry out this pathology to a dysfunction of a single tissue (fascia) and of a muscular structure that could (theoretically) influence the back. In the introduction of the text it is possible to read: “Because of the changes in fascia structures, dysfunction of deep muscles of back and trunk is common in chronic LBP. Injuries of the lower back are mostly caused by the superficial back line (SBL)”. And yet we can read: “Chronic LBP is caused by deep muscle dysfunctions and altered fascia structures.” Currently, we have no absolute evidence on the influence of muscle chain theory and health status, as well as the causes that determine LBP in the elderly have different origins. For example, in 41% of patients with NSLBP, the pain is caused by the presence of iliac crest pain syndrome (ICPS), an alteration of tendon tissue on the bone area of the iliac crest (tendinopathy) of the erector spinae muscle.

In the introduction section it is written: “… by increased activation in the superficial muscles (such as the erector spinae) in patients with LBP”. The erector spinae muscles are made up of different muscles (spinalis, longissimus thoracis, and iliocostalis muscles) and are not superficial muscles. For their identification, for example for the erector spinae plane (ESP) block, ultrasound is used, as in cases of postoperative pain in thoracic surgery or in cases of chronic thoracic neuropathic pain.

The core stability exercise described by Ozsoy et al is cited as: “… core stability exercise is more effective than general exercise”. In reality, it is only partially true, because a review study highlights the effectiveness of the exercise but emphasizes the equality of the presence of long-term pain between the usual exercises and the core stability. NSLBP does not depend only on muscular alterations, but also on neurological alterations and neuropathic, central (sensitization) or peripheral (allodynia)
components, particularly in females.\textsuperscript{5} The role of the diaphragm muscle in lumbar stabilization has not been taken into consideration, as well as a possible assessment of its position and movement was not considered. In the presence of NSLBP, there are alterations of the disc (annulus fibrosus fissures) and of the grosser morphological alterations of the vertebrae (not symptomatic). In the study by Ozsoy et al,\textsuperscript{1} the latter information was not taken into account, leading to questionable results.

To conclude, in the conclusions section the placebo effect of the treatment was not taken into consideration, which could induce false results.

**Disclosure**
The author reports no conflicts of interest in this communication.

**References**