LETTER TO THE EDITOR EDITORE MEKTUP

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How Appropriate is it That the Courses Only Focus on Tendon, Ligament, or Joint Structures? Let's Talk About the Importance of Muscle Visualization, and Myofascial Pain Syndrome

Derslerde Sadece Tendon, Bağ veya Eklem Yapılarına Odaklanmak Ne Kadar Uygun? Kas Görselleştirmenin Önemi ve Miyofasiyal Ağrı Sendromu Hakkında Konuşalım

¹⁰ Burak Tayyip DEDE^a, ¹⁰ Fatih BAĞCIER^b, ¹⁰ Mustafa Turgut YILDIZGÖREN^c

Dear Editor:

Many congresses, trainings, and courses related to the musculoskeletal system are held in our country. Although these congresses are very instructive and useful for physicians who are interested in the musculoskeletal system, especially for us physical therapists, we think that the muscle structures, which constitute an important part of the musculoskeletal system, are not sufficiently emphasized in these meetings.

We can easily explain this with a few examples. While mentioning the shoulder complex, although the joint, tendon, and ligament structures are emphasized respectively, the muscles in the shoulder region are not mentioned enough. From the muscles of the shoulder region, the subscapularis, teres minor, teres major, and infraspinatus muscles are as important as the tendon structure (Figure 1a, 1b, 1c). These muscles have been associated with pathologies such as myofascial pain syndromes, shoulder impingement syndrome, chronic shoulder pain, hemiplegic shoulder pain, and frozen shoulder.^{1,2} However, more emphasis should be placed on congresses, trainings, and courses to raise awareness of this issue. To be able to intervene in these muscles safely, it is necessary to know the "sonoanatomy" of the muscles.³

While examining the lumbar region, structures such as facet joints, medial nerve, and caudal epidural region are evaluated. However, myofascial pain syndrome is the most common cause of low back pain. In order to intervene the myofascial trigger points of muscles such as the longissimus, iliocostalis lumbo-



^aClinic of Physical Medicine and Rehabilitation, İstanbul Training and Research Hospital, İstanbul, Türkiye ^bClinic of Physical Medicine and Rehabilitation, Çam and Sakura City Hospital, İstanbul, Türkiye ^cClinic of Physical Medicine and Rehabilitation, Konya City Hospital, Konya, Türkiye



FIGURE 1: a: Sonographic image of the subscapularis(Subs) muscle and the teres minor (TMnr) muscle; b: Sonographic image of the teres major (TMjr) muscle; c: sonographic image of the infraspinatus(i) muscle and the deltoid(D) muscle; d: sonographic image of iliocostalis(ICL) and longissimus(Lo) muscle; e: sonographic image of the multifidus (M) muscle; f: sonographic image of the quadratus lumborum (QL) muscle; g: Sonographic image of the psoas (P) muscle and iliacus (I) muscle.

rum, multifidus muscle, quadratus lumborum, and psoas major muscle, it is necessary to know the "sonoanatomy" of these muscles.^{4,5}

Although myofascial trigger points cannot always be visualized by ultrasound, ultrasound-guided intervention is important for the treatment.³ Ultrasound is also used in the treatment of myofascial pain syndrome to intervene the right muscle, to monitor the local twitch response and to not harm neurovascular structures.

In conclusion, it should not be overlooked that each person has a myofascial trigger point map, from the frontal muscles to the interosseous muscles of the foot. As the primary physician of the musculoskeletal system, we should give more attention to the perspective of myofascial pain syndrome in our education system (Figure 1d, 1e, 1f, 1g).

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REFERENCES

- Arjun MV, Rajaseker S. Association between subscapularis trigger point and frozen shoulder: a cross sectional study. J Bodyw Mov Ther. 2021;28:406-10. [Crossref] [PubMed]
- Bağcıer F. An overlooked issue in frozen shoulder: miyofascial trigger point. Agri. 2021;33:276-7. [Crossref] [PubMed]
- Ricci V, Ricci C, Gervasoni F, et al. From Histoanatomy to sonography in myofascial pain syndrome: a EURO-MUSCULUS/USPRM approach. Am J Phys Med Rehabil. 2023;102:92-7. [Crossref] [PubMed]
- Dernek B, Adiyeke L, Duymus TM, et al. Efficacy of trigger point injections in patients with lumbar disc hernia without indication for surgery. Asian Spine J. 2018;12:232-7. [Crossref] [PubMed] [PMC]
- Eftekharsadat B, Fasaie N, Golalizadeh D, et al. Comparison of efficacy of corticosteroid injection versus extracorporeal shock wave therapy on inferior trigger points in the quadratus lumborum muscle: a randomized clinical trial. BMC Musculoskelet Disord. 2020;21:695. [Crossref] [PubMed] [PMC]