



## Comment to the article: Efficacy of trigger point injection therapy in non-cardiac chest pain

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First of all, we would like to mention that the study by Şengül et al.<sup>[1]</sup> on trigger point injection into the pectoral muscles has made remarkable contributions to the body of knowledge in the literature. The aforementioned study clearly demonstrated the efficacy of injection therapies in the treatment of non-cardiac chest pain (NCCP) due to myofascial pain syndrome (MPS). However, we would also like to contribute by highlighting other muscles that should be included in the differential diagnosis of chest pain from a myofascial perspective.

Chest pain is one of the most common reasons for seeking medical attention worldwide. In the literature, it has been reported that nearly half (50%) of these presentations for chest pain originate from the musculoskeletal system, which is the most common cause of the entity. One of the main causes of musculoskeletal chest pain is MPS. Review of the literature also reveals some other studies emphasizing MPS in chest pain consistent with this study.<sup>[2-4]</sup> Sarıkaya et al.<sup>[3]</sup> reported the trigger points of the pectoralis major and minor muscles among the causes of non-cardiac chest pain and recommended using the ultrasound-guided needling method for the trigger points detected in these two muscles in a single session. In another report, Shin et al.<sup>[4]</sup> applied ultrasound-guided trigger point injection to the pectoral and subscapularis muscles in patients with post-mastectomy chest pain and obtained successful results. Furthermore, it has been reported that pectoral

muscles may be the cause of chest pain, and Simon et al.<sup>[5]</sup> defined these muscles as pseudo-angina muscles. Bağcier et al.<sup>[6]</sup> found in their article that trigger points of the serratus anterior muscle might be among the causes of chest pain; they even reported that trigger points of this muscle might mimic a heart attack. These authors also suggested the blinded dry needle technique for this muscle. Choi et al.<sup>[7]</sup> showed in their case report that the trigger points of the scalene muscles caused chest pain and that chest pain was successfully treated with trigger point injection. Taken together, all these articles are case reports and Şengül et al.,<sup>[1]</sup> thus, have made a significant contribution with the first randomized-controlled trial in this field. In addition, Simons et al.,<sup>[5]</sup> one of the authorities who defined MPS in the literature, emphasized that the trigger points of the sternocleidomastoid, subclavian and intercostal muscles should be kept in mind in patients presenting with chest pain. Indeed, in a straightforward manner, wherever there is a skeletal muscle, there will potentially be a myofascial trigger point.<sup>[5,8]</sup> Latent trigger points in these muscles may become active and cause symptoms, particularly in individuals with postural disorders and who do not perform regular stretching exercises, or due to underlying spinal deformities such as ankylosing spondylitis and scoliosis. Physiatrists who recognize this condition can effectively manage the muscular process after consulting with cardiac and pulmonary specialists and ruling out related issues.

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In conclusion, myofascial trigger point-induced chest pain, which is frequently encountered and causes a patient load in the emergency setting, should be recognized. Interdisciplinary training should be arranged for physicians in emergency medicine, cardiology, and pulmonology to become familiar with this clinical condition, which is a fundamental concern for us as physiatrists.

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