

Critical Muscle of the Shoulder Area: A Cite to the Subscapularis Muscle, Known as the “Frozen Shoulder Muscle” and Dry Needling Treatment Protocol

Omuz Bölgesinin Kritik Kası: Donuk Omuz Kası Olarak Bilinen Subskapularis Kasından Bir Alıntı ve Kuru İğneleme Tedavi Protokolü

¹Bülent ALYANAK^a, ²Burak Tayyip DEDE^b, ³Mustafa Hüseyin TEMEL^c,
⁴Mustafa Turgut YILDIZGÖREN^d, ⁵Fatih BAĞCIER^e

^aGölcük Necati Çelik State Hospital, Clinic of Physical Medicine and Rehabilitation, Kocaeli, Türkiye

^bProf. Dr. Cemil Taşcıoğlu City Hospital, Clinic of Physical Medicine and Rehabilitation, İstanbul, Türkiye

^cÜsküdar State Hospital, Clinic of Physical Medicine and Rehabilitation, İstanbul, Türkiye

^dKonya City Hospital, Clinic of Physical Medicine and Rehabilitation, Konya, Türkiye

^eBaşakşehir Çam and Sakura City Hospital, Clinic of Physical Medicine and Rehabilitation, İstanbul, Türkiye

One of the most prevalent shoulder diseases, frozen shoulder (FS), is characterized by pain, stiffness, and a limited range of motion in both the active and passive components. The prevalence in the general public ranges from 2% to 5%.¹ According to Travell and Simons, FS is not an adhesion but a muscle dysfunction model. The subscapularis was highlighted among the shoulder girdle muscles, and it has been demonstrated that if the muscle was short due to a myofascial dysfunction, it might account for the symptoms of FS.² Myofascial pain syndrome (MPS) is one of the most frequent and overlooked causes of musculoskeletal pain due to the myofascial trigger points (MTrPs) located in muscle tissue.³ Treatment

of MTrPs in the muscles can also contribute to the healing of existing pathology by reducing the restriction in the fascia and the tension in the tendon, breaking the vicious cycle of pain-spasm-pain.⁴ Postural incorrections, alignment pathologies of the scapula, and acute or chronic muscle overuse can cause MTrPs in the subscapularis muscle. It is difficult to diagnose when the MTrPs, which should be considered in the differential diagnosis of FS, are not viewed from the perspective of MPS. Dry needling (DN) is a treatment that is increasingly gaining popularity and is also a micro-invasive and cost-effective approach with a low risk of side effects in the treatment of MTrP.⁵ This article aims to discuss the im-

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Correspondence: Bülent ALYANAK

Gölcük Necati Çelik State Hospital, Clinic of Physical Medicine and Rehabilitation, Kocaeli, Türkiye

E-mail: bulentalyanak@hotmail.com



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portance of the MTrPs of the subscapularis muscle in FS and the treatment of the MTrPs of this muscle with the DN method.

MTrPs of the subscapularis muscle can cause pain in the posterior shoulder region, the axillary region, the scapular region, the upper arm, and the dorsal region of the forearm. Although MTrPs of the subscapularis muscle can be localized in the medial or lateral parts of the muscle, it is impossible to examine the medial aspect due to the scapular limitations. Hence, examination and the application of the DN to the lateral part is presented. The patient is positioned in the supine position, shoulder in external rotation and elbow 90-degree flexion. Pincer palpation technique is used. 0.3x50 mm needle is penetrated the skin from the ventral side to the dorsal direction, targeting the area between the thumb and the second-third finger.

To summarize, MTrPs may be the primary source of FS or secondary to the underlying disease. We conclude that MTrPs of the subscapularis muscle should be considered in differential diagnosis for FS, and inclusion of MTrPs of this muscle in treatment protocols will positively affect the treatment results.

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