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The secret hero of the lumbopelvic region: A cite to gluteus medius muscle and its trigger point

Ebru Kübra Taşpolat,[1] Ozan Volkan Yurdakul,[2] Fatih Bağcıer[1]

[1]Department of Physical Medicine and Rehabilitation, Başaksehir Çam and Sakura City Hospital, Health Sciences University, İstanbul, Türkiye
[2]Department of Physical Medicine and Rehabilitation, Bezmialem Vakıf University, İstanbul, Türkiye

To the Editor,

The gluteus medius, the primary abductor muscle of the hip joint, has a critical role in the lumbopelvic junction. It has been suggested that decreased dynamic lateral stability of the pelvis and lumbar region, caused by the weakness of the gluteus medius, will change the movement pattern of the spine and increase the load on the discs.[1] Similarly, it is believed that decreased hip abductor muscle strength due to gluteus medius-related pathologies may increase valgus stress on the knee, consequently resulting in patellofemoral pain syndrome.[2]

Myofascial pain syndrome (MPS) is a condition stemming from trigger points within taut muscle bands, exhibiting a prevalence of 85% in pain clinics. Despite its frequent occurrence, MPS is often under-recognized and can manifest as pain in the lumbosacral area. Myofascial trigger points (MTrPs) of the gluteus medius muscle can cause pain reflected in the sacroiliac joint, gluteal and lumbosacral regions, iliotibial band trace, and thigh region. Therefore, it should be considered when establishing differential diagnoses of the pathologies in these regions. It has been reported that the MTrPs of this muscle play a role in chronic low back pain, anterior knee pain, greater trochanteric pain syndrome, and failed back surgery syndrome.[3] MTrPs of the gluteus medius may cause pain, joint range of motion restriction, and muscle weakness.[4]

Figure 1. Dry needling technique of gluteus medius muscle.

No laboratory or imaging method is used in its diagnosis, which is established by palpation, demonstrating the importance of physical examination.[3] David G. Simons,[5] one of the authors of the MTrP concept, has expressed that skeletal muscles are not regarded as organs of any specialization and are treated as orphan organs, which is unfortunately the harsh reality. Myofascial trigger points are areas suitable for research, open to development, and increas-

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Correspondence: Dr. Ebru Kübra Taşpolat. Sağlık Bilimleri Üniversitesi, Başakşehir Çam ve Sakura Şehir Hastanesi, Fiziksel Tıp ve Rehabilitasyon Kliniği, İstanbul, Türkiye.
Phone: +90 - 534 - 721 96 05 **e-mail:** ebrutaspolat@gmail.com

ingly arousing interest. Future studies on this topic will raise awareness of the subject.

Invasive techniques have been described for its treatment.[6] Dry needling, an increasingly popular treatment approach, is an easily applicable, safe, and inexpensive method used in outpatient practice. The patient's position, needle size, and skin penetration angle are vital in this treatment. Hence, it is recommended to administer the treatment based on the logic of "every muscle is special."

In the gluteus medius, needling is performed while the patient is lying on the side. The patient's hip and knee joints should be positioned in slight flexion.[6] Treatment is applied using the straight palpation technique. The skin should be penetrated with the needle at a perpendicular angle (Fig. 1). A sterile acupuncture needle with a size of 0.3×60 mm should be used. Considering the possible variations of the sciatic nerve, which is the adjacent anatomical structure, patients should be asked whether they feel sharp pain during treatment.

As physicians working with musculoskeletal pathologies, it should be noted that the concept of MTrP is a part of our professional lives, sometimes as a primary pathology or as a condition accompanying it. The first rule is that MTrP should always come to mind.

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