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Beyond Greater Trochanteric Pain Syndrome: The Role of Tensor Fascia Latae Myofascial Pain in Lateral Hip Pain

Büyük Trokanterik Ağrı Sendromunun Ötesinde: Lateral Kalça Ağrısında Tensor Fasya Lata Miyofasiyal Ağrısının Rolü

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Dear Editor,

Lateral hip pain, characterized by discomfort around the greater trochanter, has traditionally been attributed to trochanteric bursitis. However, advances in imaging techniques have revealed that the prevalence of true trochanteric bursitis is lower than previously thought. Given the complexity of lateral hip pain, trochanteric bursitis alone does not fully account for the spectrum of symptoms. Conditions such as snapping hip syndrome, abductor tendon tears, and dysfunction of the surrounding musculature are now collectively referred to as greater trochanteric pain syndrome (GTPS) (1-3).

Dysfunction, overuse injuries, and tears of key stabilizing muscles, particularly the gluteus medius and minimus, are primary contributors to GTPS. Other potential causes of lateral hip pain include joint-related disorders, iliotibial band syndrome, meralgia paresthetica, lumbar spine pathologies, and myofascial pain syndromes, although these are less frequently diagnosed.

Although less frequently reported in the literature, myofascial disorders of the tensor fascia latae (TFL) muscle represent another overlooked cause of lateral hip pain, distinct from GTPS. The TFL muscle, located on the anterolateral aspect of the hip, functions synergistically with the gluteal muscles to facilitate hip abduction, flexion, and internal rotation. Originating from the anterior superior iliac spine, the TFL inserts into the fascia lata and distally transitions into the iliotibial band, playing a crucial role in stabilizing the pelvis during gait and maintaining tension in the fascia lata (1-4). Given its anatomical positioning and functional connections, myofascial pain originating from the TFL muscle may present as referred pain, radiating from the anterolateral aspect of the hip to the lateral thigh and sometimes extending to the knee (Figure 1a). This pain pattern can mimic other common causes of lateral hip and knee pain, often leading to misdiagnosis.

The diagnosis of TFL myofascial pain hinges on the identification of hyperirritable nodules within the muscle, eliciting referred pain patterns upon palpation. A hallmark feature is the local twitch response triggered by direct pressure or needling. Clinically, TFL myofascial pain may result in restricted joint range of motion and muscle weakness despite the absence of visible atrophy. This diagnostic overlap with other hip pathologies underscores the importance of a thorough physical examination. A meticulous physical examination, emphasizing palpation to localize tenderness and identify trigger points, is essential for accurate diagnosis. The flat palpation technique is particularly effective in detecting trigger points within the TFL muscle (2-5).

Management of TFL myofascial pain involves a multimodal approach, including stretching and strengthening exercises, posture correction, and pharmacological interventions such

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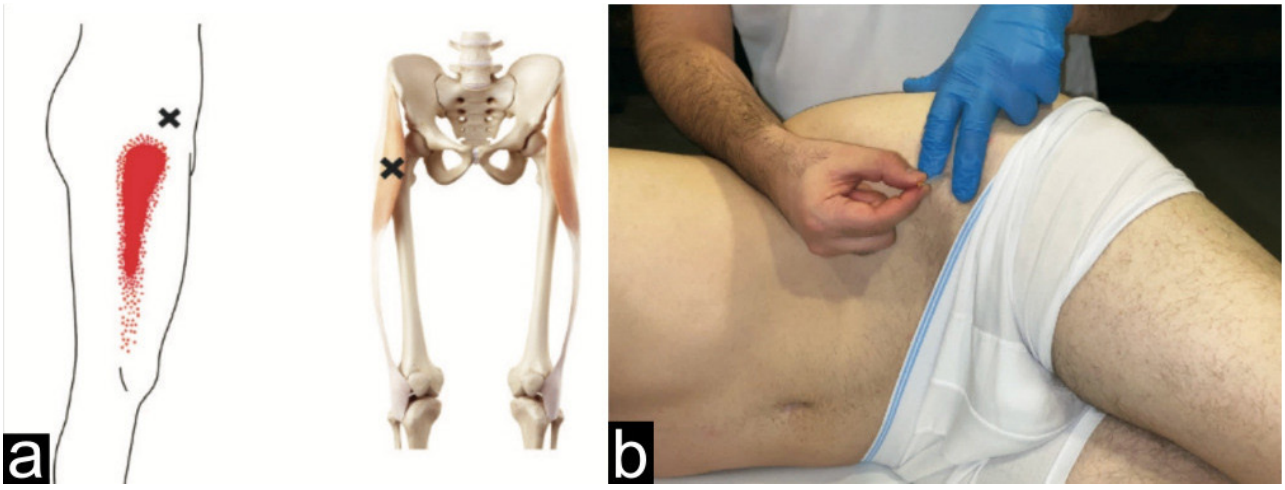

Figure 1. (a) Referred pain distribution associated with the tensor fascia latae (TFL) muscle trigger point, illustrating the radiation from the anterolateral hip to the lateral knee. (b) Illustration of the dry needling technique for TFL trigger points, employing flat palpation and perpendicular needle insertion at the identified site

as tricyclic antidepressants and muscle relaxants. Additionally, thermal agents (hot and cold therapy) and targeted trigger point injections are commonly employed to alleviate symptoms and restore functional mobility (5). Dry needling, a highly effective technique for deactivating trigger points, is frequently utilized in the management of TFL myofascial pain. The procedure is performed with the patient in a supine position, the hip and knee slightly flexed to optimize muscle accessibility. Using the flat palpation method, an acupuncture needle (0.30×30 mm) is inserted perpendicularly from ventral to dorsal into the identified trigger point (Figure 1b). This approach has shown promising results in relieving pain and improving mobility.

Lateral hip pain is a multifactorial condition requiring a comprehensive diagnostic framework. While GTPS is commonly diagnosed, the potential involvement of the TFL muscle in myofascial pain syndromes is underexplored. Unlike gluteal tendinopathies or bursitis, TFL myofascial pain has distinct characteristics, including its referred pain pattern and response to specific interventions like dry needling.

Identifying TFL as a potential source of pain broadens the scope of differential diagnosis for lateral hip pain. This is particularly relevant when conventional treatments for GTPS or hip osteoarthritis fail to alleviate symptoms. The referred pain distribution to the lateral thigh and knee may mislead clinicians toward diagnoses such as iliotibial band syndrome or lateral meniscus pathology, underscoring the need for a detailed physical examination focused on myofascial trigger points (2,5).

Dry needling has emerged as an effective intervention for deactivating TFL trigger points. Its mechanism involves disrupting the dysfunctional motor endplates and improving local blood flow, which helps reduce sensitization and restore muscle function. When combined with postural training, stretching, and strengthening exercises, it provides a comprehensive strategy for managing TFL-related myofascial pain. Additionally, the minimally invasive nature of dry needling makes it a practical choice for patients unresponsive to pharmacological or conservative measures (5,6).

There is a need for high-quality studies investigating the prevalence of TFL myofascial pain and its contribution to lateral hip pain syndromes. Moreover, randomized controlled trials comparing dry needling with other modalities, such as ultrasound-guided injections or physiotherapy, could establish clearer guidelines for treatment.

Myofascial pain of the TFL, although a less common etiology, should be recognized as an important differential diagnosis in lateral hip pain. The muscle's unique referred pain pattern and anatomical positioning often result in diagnostic challenges. By incorporating targeted interventions such as dry needling, clinicians can offer effective relief for patients with refractory lateral hip pain. Future research focusing on diagnostic precision and comparative treatment efficacy will further enhance our understanding of this underappreciated condition.

Footnotes

Authorship Contributions

Concept: B.A., M.T.Y, Design: T.S., M.H.T., Data Collection or Processing: B.A., F.B., Analysis or Interpretation: T.S., M.T.Y., Literature Search: B.T.D., M.H.T., Writing: B.T.D., F.B.

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