Agri 2026;38(1):59–60
doi: 10.14744/agri.2023.98512

The underdiagnosed issue in anterior hip painful conditions: A myofascial perspective to the sartorius muscle and dry needling protocol

Sema Nur Mutlu Ekici,[1] Fatih Bağcıer[2]

[1]Department of Physical Medicine and Rehabilitation, Necmettin Erbakan University Faculty of Medicine, Konya, Türkiye
[2]Department of Physical Medicine and Rehabilitation, Başakşehir Çam and Sakura Hospital, İstanbul, Türkiye

To the Editor,

One of the causes of anterior hip pain is overuse or injury to the muscles or tendons. Muscles located in front of the hip, including the sartorius, iliopsoas, rectus femoris, and adductor longus muscles, play a role in this issue.[1] Considered one of the longest muscles in the human body, the sartorius originates from the anterior superior iliac spine (ASIS) and inserts into the pes anserine region of the proximal tibia. It plays a role in facilitating both hip and knee flexion.[2] As is known, soft tissue problems such as bursitis, tendinitis, and fasciitis can cause myofascial pain in the muscles, and myofascial trigger points can play a role in the development of osteoarthritis by causing pain and physical function limitation.[3] There are many publications in the literature about pes anserine bursitis, which is characterized by inflammation at the attachment site of the sartorius, gracilis, and semitendinosus muscles and is associated with the overuse of these muscles.[4] However, in our literature review, we did not find any publication specifically addressing myofascial pain occurring in the more proximal region of the sartorius muscle. Considering all these factors, we think that myofascial evaluation of the sartorius muscle may be ignored in individuals presenting with anterior hip pain.

Myofascial pain syndrome is characterized by the presence of a nodule in the muscle fibers that is painful when pressed or spontaneously, causing both local and referred pain. When evaluating patients, it is imperative to consider that myofascial pain syndrome is a significant contributor to musculoskeletal pain and requires the development of a targeted treatment approach. In the treatment of myofascial pain syndrome, non-invasive treatment methods such as manual therapy, ultrasound, laser therapy, transcutaneous electrical stimulation, as well as invasive treatment methods such as dry needling, local anesthetic injections, and botulinum toxin applications are used.[5]

The myofascial trigger point of the sartorius muscle can cause referred pain along the muscle and medial to the knee (Fig. 1a). When these trigger points are treated, a dramatic improvement in the patient's pain complaint can be observed. Dry needling, one of the treatment methods, is performed in the supine position. Considering the superficial anatomical structure of this muscle, dry needling should be performed with a 0.14x15 mm sterile acupuncture needle. The needle should be inserted parallel to the skin from lateral to craniomedial direction using the pincer palpation technique (Fig. 1b).

Submitted: 15.11.2023 Accepted: 26.12.2023 Available online: 14.01.2026

Correspondence: Dr. Sema Nur Mutlu Ekici. Necmettin Erbakan Üniversitesi Tıp Fakültesi, Fiziksel Tıp ve Rehabilitasyon Anabilim Dalı, Konya, Türkiye.
Phone: +90 - 332 223 60 00 **e-mail:** semanurmutlu.94@gmail.com

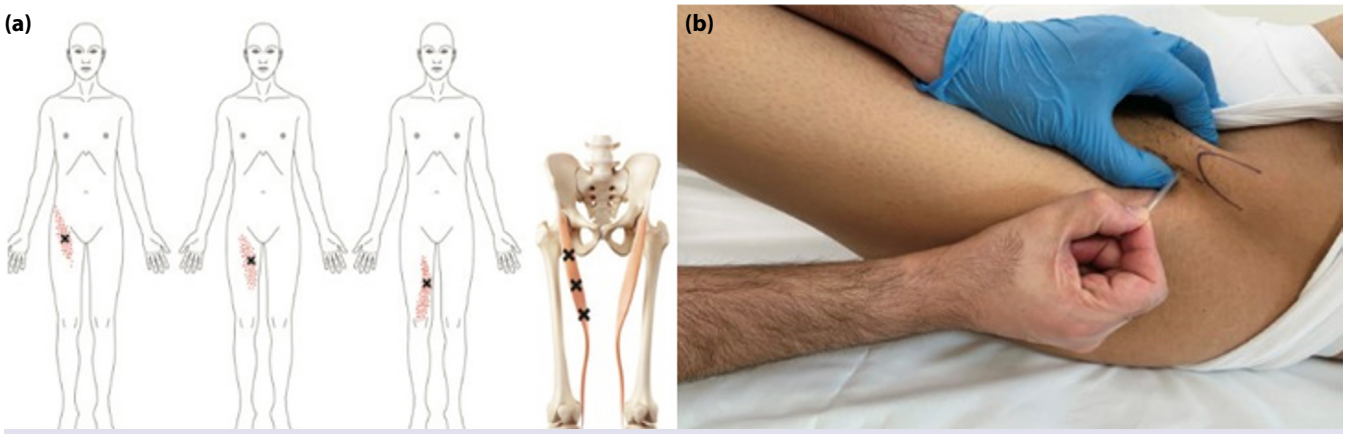

Figure 1. (a) Referred pain area of sartorius muscles trigger point, **(b)** dry needling technique with pincer palpation.

The purpose of this article is to draw attention to the fact that although the sartorius muscle is often associated with pes anserine bursitis in the literature, myofascial pain arising from the trigger point of this muscle can cause pain in the anterior part of the hip. In the differential diagnosis of a patient presenting with anterior hip pain, myofascial pain of the sartorius muscle should be taken into consideration, as well as joint and extra-articular causes. Applying dry needling therapy to trigger points of the sartorius muscle may be therapeutic in these patients.

Informed Consent: Written informed consents were obtained from patients who participated in this study.

Conflict of Interest: None declared.

Financial Disclosure: This study has no funding or sponsor.

Use of AI for Writing Assistance: Not declared.

Authorship Contributions: Concept – FB; Design – SNME; Supervision – FB; Resources – SNME; Materials – SNME; Data collection and/or processing – SNME; Analysis and/or interpretation – SNME; Literature search – SNME; Writing – SNME; Critical review – FB.

Peer-rewiew: Externally peer-reviewed.

References

1. O'Kane JW. Anterior hip pain. Am Fam Physician 1999;60:1687–96.
2. Valera-Calero JA, Varol U, Plaza-Manzano G, Fernández-de-Las-Peñas C, Agudo-Aguado A. Regression model decreasing the risk of femoral neurovascular bundle accidental puncture. Tomography 2022;8:2498–507. [CrossRef]
3. Ceballos-Laita L, Jiménez-Del-Barrio S, Marín-Zurdo J, Moreno-Calvo A, Marín-Boné J, Albarova-Corral MI, et al. Effectiveness of dry needling therapy on pain, hip muscle strength, and physical function in patients with hip osteoarthritis: a randomized controlled trial. Arch Phys Med Rehabil 2021;102:959–66. [CrossRef]
4. Hubbard MJ, Hildebrand BA, Battafarano MM, Battafarano DF. Common soft tissue musculoskeletal pain disorders. Prim Care 2018;45:289–303. [CrossRef]
5. Barbero M, Schneebeli A, Koetsier E, Maino P. Myofascial pain syndrome and trigger points: evaluation and treatment in patients with musculoskeletal pain. Curr Opin Support Palliat Care 2019;13:270–6. [CrossRef]