



LETTER TO THE EDITOR

Attention to soft tissues in hip pain: The importance of myofascial trigger point of the iliopsoas muscle in hip osteoarthritis

Kalça ağrısında yumuşak dokulara dikkat: Kalça osteoartitinde iliopsoas kasının miyofasiyal tetik noktasının önemi

Fatih BAĞCIER,¹ Ozan Volkan YURDAKUL²

To the Editor,

Osteoarthritis is not solely a joint disease; also, periarticular soft tissues play a role in its pathophysiology. In the past, joint pathologies could only be detected and diagnosed with conventional methods such as X-rays; however, at present, imaging techniques such as ultrasound and magnetic resonance imaging can detect the most complex pathologies of the articular cartilage and surrounding soft tissues.^[1]

The myofascial trigger point is a concept associated with osteoarthritis, which can occur in the muscles around the joints and affect the outcome of the osteoarthritis treatment.^[2] Simons, one of the people who defined this pathology in the literature used the term “orphan organ” for muscle since the muscle does not have a special department of its own such as neurology or cardiology, and it is considered a common organ in which many departments have a say. Unfortunately, this situation causes a disadvantage for the awareness of the myofascial trigger point concept, thus leading it to be an underdiagnosed condition.

Due to the complex anatomy of the hip joint, history and physical examination are essential for the diagnosis in patients who present with hip pain. However, the anatomical relation of various mus-

cles, tendons, and ligaments may cause difficulty in making a specific diagnosis.^[3] Studies demonstrating the effect of myofascial trigger points on pain and functional limitation in patients with hip osteoarthritis have been conducted. Therefore, only the restoration of the cartilage should not be aimed at the treatment of hip pain. Treatment success can be achieved by additionally inactivating myofascial trigger points adjacent to the joint and then performing stretching, range of motion, and strengthening exercises.^[4] Considering that there are patients with needle phobia, it may be possible to treat more than one pathology by penetrating a single needle into the body. Besides, performing an ultrasound-guided procedure during therapeutic applications reduces complications and increases the treatment's effectiveness.^[5]

The myofascial trigger point of the iliopsoas muscle, the strongest flexor muscle of the hip joint, can cause reflected pain in the hip, groin, and appendix vermiformis region. For treating the trigger points of the iliopsoas muscle and injecting into the hip joint at the same time with a single injection, we recommend the below technique with ultrasound guidance. (1) The application of dry needling therapy to the iliopsoas muscle should be performed at the femoral head level. The penetration angle of the needle into the skin should be smaller for a superficial injection into the muscle. Blind injections

¹Department of Physical Medicine and Rehabilitation, Cam and Sakura State Hospital, İstanbul, Türkiye

²Department of Physical Medicine and Rehabilitation, Bezmialem University Faculty of Medicine, İstanbul, Türkiye

Submitted (Başvuru) 28.03.2021 Revised (Revizyon) 07.07.2021 Accepted (Kabul) 08.07.2021 Available online (Online yayımlanma) 13.07.2023

Correspondence: Dr. Ozan Volkan Yurdakul. Bezmialem Üniversitesi Tıp Fakültesi, Fiziksel Tıp ve Rehabilitasyon Anabilim Dalı, İstanbul, Türkiye.

Phone: +90 - 212 - 453 17 00 **e-mail:** yurdakul_ozan@yahoo.com

© 2023 Turkish Society of Algology

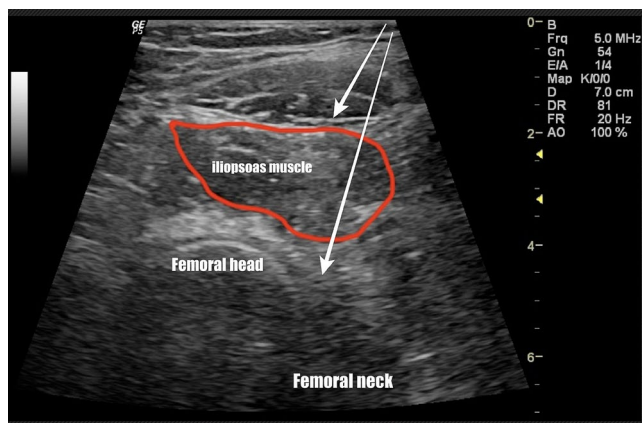


Figure 1. Ultrasound-guided hip injection technique arrows showing the trajectory for iliopsoas muscle needling and intra-articular injection.

for trigger points can be performed; however, the deep localization of the muscle may prevent us from seeing the twitching responses. This problem may be eliminated with ultrasound guidance (Fig. 1). (2) Intra-articular injection is recommended by pulling the needle back slightly and inserting it with a larger angle without removing it from the body (Fig. 1).

The point that should be kept in mind is that the myofascial trigger point is more common than thought, and it should be a part of the treatment in conventional treatment approaches.

References

1. Crema MD, Roemer FW, Marra MD, Guermazi A. MR imaging of intra- and periarticular soft tissues and subchondral bone in knee osteoarthritis. *Radiol Clin North Am* 2009;47:687–701. [\[CrossRef\]](#)
2. Bajaj P, Bajaj P, Graven-Nielsen T, Arendt-Nielsen L. Trigger points in patients with lower limb osteoarthritis. *J Musculoskelet Pain* 2001;9:17–33. [\[CrossRef\]](#)
3. Ensekı K, Harris-Hayes M, White DM, Cibulka MT, Woehrle J, Fagerson TL, et al. Nonarthritic hip joint pain. *J Orthop Sports Phys Ther* 2014;44:A1–32. [\[CrossRef\]](#)
4. Imamura ST, Riberto M, Fischer AA, Imamura M, Kaziyama HHS, Teixeira MJ. Successful pain relief by treatment of myofascial components in patients with hip pathology scheduled for total hip replacement. *J Musculoskelet Pain* 1998;6:73–89. [\[CrossRef\]](#)
5. Chang KV, Wu WT, Lew HL, Özçakar L. Ultrasound imaging and guided injection for the lateral and posterior hip. *Am J Phys Med Rehabil* 2018;97:285–91. [\[CrossRef\]](#)