LETTER TO THE EDITOR



An unexpected circumstance detected in a patient presenting with radicular low back pain

Radiküler bel ağrısı ile başvuran hastada saptanan beklenmedik durum

💿 Alper MENGİ, 1 💿 Uğur UYGUNOĞLU²

To the Editor,

Lumbar radiculopathy (LR) is a term used to describe a pain syndrome caused by compression or irritation of the lumbar nerve roots. LR is a symptom rather than a diagnosis and can be caused by common conditions such as acute disc herniation and spondylolysis, as well as rarer neoplastic, developmental, infectious, inflammatory, and metabolic.^[1]

A 47-year-old female patient presented to our clinic with complaints of pain radiating from her back to her leq. The clinical interview revealed that she had experienced this pain for the past 3 months and felt sensory loss in her left leg. Her complaints had begun gradually, and she had no loss of strength or incontinence. She had previously applied to a neurosurgery outpatient clinic with similar complaints and was referred to a physiatrist with a preliminary diagnosis of lumbar disc herniation. Examination revealed a full range of motion in the lumbar joint and increased pain with lumbar flexion. The left extremity straight leg raise test was positive at 40°, and hypoesthesia was present in the L4 and L5 dermatomes of the left leg. She had no loss of strength or pathological reflexes, and deep tendon reflexes were normoactive. Her past medical history and family history were unremarkable.

Lumbar magnetic resonance imaging (MRI) revealed no evidence that could explain the existing pathology. However, lumbar spine MRI revealed a T2 hyperintense nonexpansile lesion in the lower thoracic spinal cord (Fig. 1). Upon reinterview of the patient



Figure 1. Sagittal T2-weighted MRI of the lumbar spine showing hyperintense nonexpansile lesion in the lower thoracic region of the spinal cord.

after MRI evaluation, she described frequent urination and inability to completely empty her bladder after urinating, but no urinary incontinence. She also described occasional vision problems in her left eye

¹Department of Algology, Physical Medicine and Rehabilitation, İstanbul University-Cerrahpaşa, Cerrahpaşa Faculty of Medicine, İstanbul, Türkiye ²Department of Neurology, İstanbul University-Cerrahpaşa, Cerrahpaşa Faculty of Medicine, İstanbul, Türkiye

Submitted (Başvuru) 11.08.2022 Revised (Revizyon) 12.04.2023 Accepted (Kabul) 06.07.2023 Available online (Online yayımlanma) 13.10.2023

Correspondence: Dr. Alper Mengi. İstanbul Üniversitesi-Cerrahpaşa, Cerrahpaşa Tıp Fakültesi, Fiziksel Tıp ve Rehabilitasyon Anabilim Dalı, Algoloji Bilim Dalı, İstanbul, Türkiye. Phone: +90 - 212 - 414 30 00 e-mail: a_mengi22@hotmail.com © 2023 Turkish Society of Algology for the last 9 months, and blurred vision in the last 3 months. She had no pain or redness around the eyes. Consequently, contrast-enhanced thoracic and cranial MRI was requested. Thoracic spine MRI revealed a T2/FLAIR hyperintense nonexpansile lesion without contrast enhancement at T11. Cranial MRI revealed T2/FLAIR hyperintense lesions located in the juxta-subcortical regions in the bilateral cerebral hemispheres and vertically in the periventricular deep white matter. The patient was referred to the neurology outpatient clinic. The patient's current visual impairment, urinary symptoms, and pain radiating from the back to the leg were thought to be related to an MS attack. The patient has initiated 1 g/ day methylprednisolone treatment for 7 days. In the 2nd week after starting medication, the patient's pain and numbness complaints disappeared.

When patients apply to the hospital, they may not be inclined to mention symptoms that they think are unrelated to their primary complaints. Therefore, if the clinical history, findings, and imaging findings are inconsistent and do not explain the current situation, the patient's history should be further investigated. In this case, the patient was found to have a non-expansile lesion at the lower thoracic levels in the lumbar MRI, and when she was questioned in more detail in terms of different systems, she described complaints of blurred vision, frequent urination, and inability to empty the bladder. These symptoms were significant neurological symptoms and were red flags; therefore, more comprehensive imaging was performed on the patient.

Although different pain types, including trigeminal neuralgia, Lhermitte's sign, painful tonic spasms, extremity pain, and headache, are frequently observed in multiple sclerosis (MS), pain is an unusual initial symptom.^[2,3] Acute radicular pain is a rare condition in MS and occurs due to a plaque in the spinal cord. ^[2,4] Evlice et al.^[2] reported that 19 out of 680 MS patients had unusual initial symptoms, in which radicular pain was the initial symptom in four of them. Marchettini et al.^[5] described three MS cases in which lumbar pseudoradicular pain was one of the primary symptoms. While none of the patients had previous neurological symptoms in their past medical histories, sensory examinations of the patients revealed sensory disorders in regions remote from the pain, and these abnormal cutaneous sensations were unreported by the patients. Furthermore, all patients had negative Lasègue's test. It was stated that a comprehensive sensory examination is important in patients with uncertain or suspicious symptoms, and hypoesthesia in dermatomal regions dissociated with pain should not be overlooked.

Painful dysesthesia, a type of central neuropathic pain, is the most common type of pain in MS. Its prevalence has been reported to be 17-26%, and it generally affects the lower extremities.^[3] Patients may describe this condition they feel in the lower extremities as radiculopathy-like pain. Furthermore, neuropathic complaints due to nerve root compression may be observed in LR. The presence of symptoms only in the affected nerve root distribution and the positive nerve stretch tests suggest radiculopathy. Marchettini et al.^[5] reported that the presence of sensory abnormalities localized outside the affected nerve root distribution detracts from a preliminary diagnosis of radiculopathy. In the current case, dermatomal sensory examination was normal except for the nerve root that was thought to be affected. Lasègue's test, a sciatic nerve stretch test, was also positive. Therefore, radiculopathy was the first thing that came to mind in the preliminary diagnosis after the clinical examination.

Ramirez-Lassepas et al.^[4] reported 11 patients who presented with acute radicular pain and were later diagnosed with MS. Six of the reported patients had lumbosacral, three had cervical, and two had thoracic radiculopathy symptoms. Six of these patients had radicular pain immediately after trauma, and two had previous radicular pain in the same area as the symptoms, and seven patients had muscle weakness, numbness, paresthesia, urinary retention, facial myokymia, and paraspinal muscle spasms in addition to pain. However, the presence of the same symptoms in the same region in the past and accompanying neurological findings may be encountered in MS. In addition to radicular pain, our patient had additional neurological problems, such as vision loss and urinary retention.

When patients are not questioned, they may fail to report complaints that they dismiss as irrelevant to their complaints at the initial presentation. If the patient's history, clinical and imaging findings do not fully explain the symptoms of radiculopathy, demyelinating disease should be considered in the differential diagnosis of radiculopathy.



References

- 1. Tarulli AW, Raynor EM. Lumbosacral radiculopathy. Neurol Clin 2007;25:387–405.[CrossRef]
- 2. Evlice A, Demir T, Kaleağası C, Özcan F, Demirkıran M. Rare onset symptoms in multiple sclerosis. Acta Clin Belg 2016;71:154–7. [CrossRef]
- 3. Brola W, Mitosek-Szewczyk K, Opara J. Symptomatology

and pathogenesis of different types of pain in multiple sclerosis. Neurol Neurochir Pol 2014;48:272–9. [CrossRef]

- 4. Ramirez-Lassepas M, Tulloch JW, Quinones MR, Snyder BD. Acute radicular pain as a presenting symptom in multiple sclerosis. Arch Neurol 1992;49:255–8. [CrossRef]
- 5. Marchettini P, Formaglio F, Lacerenza M. Pain as heralding symptom in multiple sclerosis. Neurol Sci 2006;27:294–6.