



A RARE CASE OF ACUTE ON CHRONIC BACK PAIN IN THE SETTING OF LUMBAR SPINAL STENOSIS AND MULTIPLE SCLEROSIS

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INTRODUCTION

Multiple sclerosis (MS) is a common demyelinating condition, characterized by neurological deficits distributed over time and space. Differentiating multiple sclerosis symptoms from radiculopathy due to spinal stenosis can be challenging. MRI (Magnetic Resonance Imaging), CSF analysis, and Nerve Conduction Studies (NCS) can help in differentiating the two.

Here, we present a case of lumbar spinal stenosis and associated radiculopathy in a patient with MS causing diagnostic difficulty.

CASE PRESENTATION

A 47-year-old female with history of multiple sclerosis (diagnosed in 2003) on Ozanimod, L5-S1 spinal stenosis on cyclobenzaprine, tizanidine, and gabapentin, prior radiculopathy and myofascial pain - having received multiple trigger point injections with lidocaine over bilateral cervicothoracic paraspinals and prior TFESI (Transforaminal Lumbar Epidural Steroid Injections) in 2015, presented to the emergency department in 2024 with shooting pain starting at her right hip progressing down the back of her leg with associated numbness on the right ankle and foot. She had similar episodes in the past relieved by a steroid course, which did not alleviate symptoms this time. She had also been intermittently self-catheterizing herself due to stated inability to walk to the restroom in the setting of pain. Neurology was consulted with concern for multiple sclerosis flare. At that time, physical exam was pertinent for weakness on right plantar flexion and eversion, absent right ankle jerk, and diminished sensation to the plantar surface of the right foot.

CASE PRESENTATION

MRI (Magnetic Resonance Imaging) of brain showed stable plaque burden. MRI Lumbar spine showed right central/paracentral caudally migrated disc extrusion causing severe right lateral recess stenosis and mass effect on the transiting right S1 nerve root, rim enhancement surrounding the extruded disc, and enhancement involving impinging right S1 nerve root at L5-S1.

She was started on a multimodal pain regimen including oxycodone 5 mg, acetaminophen 975 mg, ibuprofen 800 mg, lidocaine patch, gabapentin 600 mg, cyclobenzaprine 10 mg, duloxetine 30 mg and hydromorphone for breakthrough pain. Orthopedics was consulted and recommended no acute intervention at that time. She was discharged on methocarbamol 1000 mg, lidocaine patch, gabapentin 600 mg, cyclobenzaprine 10 mg with as-needed acetaminophen 1000 mg, ibuprofen 800 mg and oxycodone 7.5 mg. She was seen in clinic and was offered surgical option but was not interested. She was referred to the pain clinic for TFESI.



DISCUSSION

Lumbar radiculopathy is a common cause of lower extremity pain, weakness, numbness, and tingling which can overlap with symptoms of a known MS patient. In patients with MS, diagnosis can be challenging, and MS flare should be ruled out(1,2).

Other differentials such as spinal stenosis should not be dismissed prematurely(2). This case highlights the importance of ruling in causes of acute on chronic pain in the setting of lumbar stenosis with a known MS diagnosis and providing treatment options early.

Treatment options include conservative management with multimodal analgesia, surgical decompression and transforaminal steroid injections to reduce inflammation and pain(1).

REFERENCES

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