

Case Description

- 84-year-old male with a past medical history of hypertension, chronic kidney disease, lumbar spondylosis, prostate cancer status post radiation in 2014, and avascular necrosis and osteoarthritis of the right hip status post THA in 2019 presented to the Manhattan VA multiple times in 2023 for right hip pain.
- Pain management was consulted during his second hospital stay for intractable pain. He described pain in the Posterior Superior Iliac Spine (PSIS) area and groin with radiation to right thigh, stopping above the knee, described as “hot, burning, like a poker”.
- MRI demonstrated multilevel advanced degenerative disease with severe spinal stenosis seen at L2/3 and L4/5 as well as asymmetric atrophy and edema involving the right adductor musculature, including the obturator externus and internus, and atrophy of the right gluteus minimus and medius.
- EMG was concerning for bilateral polyneuropathy, Right L2-3 radiculopathy, Left L4 radiculopathy, and could not exclude the possibility of bilateral chronic lower lumbar radiculopathy.
- Patient received a transforaminal lumbar epidural steroid injection at the L2 and L3 levels for treatment of subacute radiculopathy. The patient reported immediate pain relief with improved range motion and activity tolerance.

Discussion

- Neuropathies are typically peripheral nerves affecting specific distributions and radiculopathies typically occur at the neural foramina or spinal canal, plexopathies can affect multiple segments of the nerve plexus.
- Lumbosacral radiculoplexopathies are a vaguely defined entity needing to meet clinical picture, neurophysiologic studies confirming involvement of at least 2 different root levels, and exclusion of other etiologies via imaging.
- Lumbosacral plexopathies are typically seen in diabetic patients, literature began to emerge implicating that this disease process is immune-mediated and/or related to ischemia.
- Patient had reproducible symptoms in right proximal lower extremity with MRI imaging demonstrating multi-level degenerative changes with spinal stenosis between L2-L4, however, notably had asymmetric atrophy of the right adductors and right gluteus medius and minimus implicating multiple nerve roots. EMG corroborated these MRI findings. Given these findings suggestive of multi-level spinal involvement, right-sided atrophy and symptoms, our patient’s presentation was consistent with a lumbosacral plexopathy
- Given this patient’s history, possible root causes include his radiation therapy, fibrous tissue formation after his right hip replacement, or local ischemia from his avascular necrosis.
- Transforaminal epidural steroid injection was noted to reduce the patients’ symptoms and improve their functional capacity as well as ADL tolerance.

Conclusion

The case underscores a few important points:

- Developing broad differentials for complex patients can help guide management and prevent delays in optimizing treatment plans.
- Using multiple diagnostic modalities can help corroborate specific diagnoses but require careful interpretation.
- Supporting early consultation of pain management for admissions for pain control.

References

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