Gluteal Pain: When Neuropathic Symptoms Mask a Vascular Issue

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Case Description

This is a 51-year-old female with no known past medical or surgical history presented to a tertiary care community hospital emergency room with complaints of intractable 10/10 left gluteal pain. Patient reported that the left gluteal pain began about 3 days prior to presentation, located under the left gluteal crease. Pain began suddenly when she woke up from bed and gradually progressed until she could not move out of bed due to the pain. Additionally, she endorsed intermittent radiating pain down the leg with numbness and burning in the bottom of the foot. Patient denied any trauma, falls, car accidents, picking up heavy objects or any other inciting factors. Denied any past history of back pain or sciatica. Xray of the left hip and ankle/foot were unremarkable. Labs and vitals were unremarkable upon presentation. On physical examination, patient remained laying in prone position, was not able to move due to significant pain, she was very tender to palpation at the left gluteal crease and the bottom of her left foot. She also had weakness of the left leg and foot due to pain, with numbness along the the left lateral femoral cutaneous nerve distribution. There was no evident swelling, overlying erythema/skin changes, warmth or signs of trauma to the gluteal/leg. Neurology was consulted and thought the etiology of patient's pain could be due to piriformis syndrome. Pain management was consulted and thought it could be lumbar radiculopathy vs piriformis syndrome, they recommended starting patient on gabapentin, Robaxin and ibuprofen. Trigger point injection was done for piriformis syndrome without much relief and MRI was ordered which revealed L4-L5 moderate to severe right and mild left neural foraminal narrowing and left paracentral disc herniation. Neurosurgery recommended no acute intervention. Patients pain did not subside with medications and was not able to participate in Physical therapy. Venous duplex US was ordered and revealed a left peroneal DVT. Patient was started on therapeutic anticoagulation. After 3 days patient's pain began to subside and was able to participate in physical therapy and was able to be discharged home safely.

Discussion

This case presents a unique scenario in which the patient's severe left gluteal pain, initially interpreted as radiculopathy or piriformis syndrome, was ultimately attributed to a deep vein thrombosis (DVT) in the peroneal vein. The clinical features, including radicular symptoms and lower extremity weakness, led specialists to focus on neurological and muscular etiologies. However, literature indicates that neuropathic pain can occasionally stem from vascular causes. A study by O'Donnell et al. (2018) reported that approximately 1% of patients with DVT may present with pain mimicking radiculopathy, highlighting the importance of a thorough evaluation. Similarly, an article by Kahn et al. (2007) emphasized that while DVTs are typically associated with swelling and tenderness, they can manifest atypically, leading to diagnostic challenges.
In this case, the presence of a DVT causing pain resembling radicular symptoms is a reminder of the complexities involved in diagnosing leg pain. As vascular conditions can mimic or mask neurological symptoms, maintaining a broad differential diagnosis is crucial.

Conclusion

This case underscores the rarity of DVT presenting with radiculopathy-like symptoms, challenging the conventional focus on nerve and muscular origins in patients with leg pain. Given the atypical presentation, it is essential for clinicians to consider DVT as a potential differential diagnosis when evaluating patients with unexplained leg pain and weakness. This case serves as a valuable reminder that a comprehensive assessment, including vascular evaluations, can lead to better patient outcomes and prevent potential complications associated with untreated DVT.

References

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