Pelvic Venous Varices: An Uncommon Cause of Sciatic Neuropathy

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INTRODUCTION

- Sciatic neuropathy is a common diagnosis that is frequently attributed to post-operative complications, piriformis syndrome or external compression[1]
- We present a rare cause of sciatic nerve compression: pelvic venous varices

CASE DESCRIPTION

- 81-year-old male with 8 months of pain in the left gluteal region and leg with poor sitting tolerance
- Pain refractory to physical therapy, oral analgesics, left piriformis injection and lumbar epidural injections
- EMG/NCS, bilateral venous duplex ultrasound and left hip MRI with and without contrast were unrevealing
- An MRI of the pelvis with and without contrast showed left pelvic varices causing mass effect on the proximal left sciatic nerve
- Patient was subsequently referred to interventional radiology and is pending repeat venous duplex ultrasound and CT venogram of the abdomen and pelvis

METHODS

- Written patient informed consent was obtained for publication of this case report. As the case report is devoid of patient identifiable information, it is exempt from IRB review requirements per University of California, Irvine policy

Figure 1 (A)

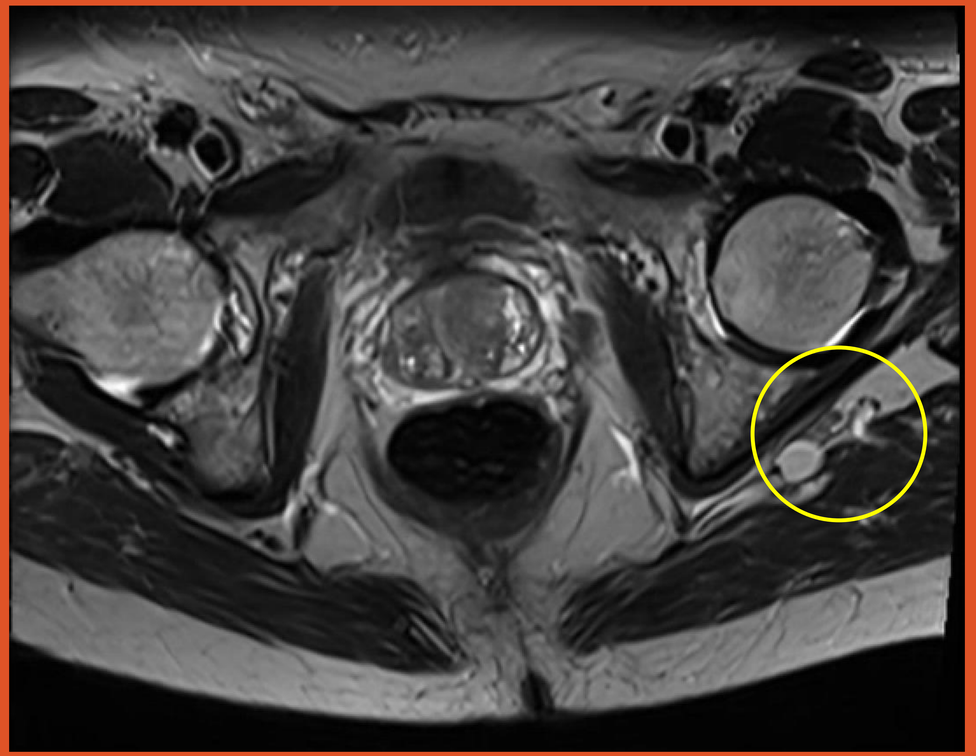


Figure 1 (B)

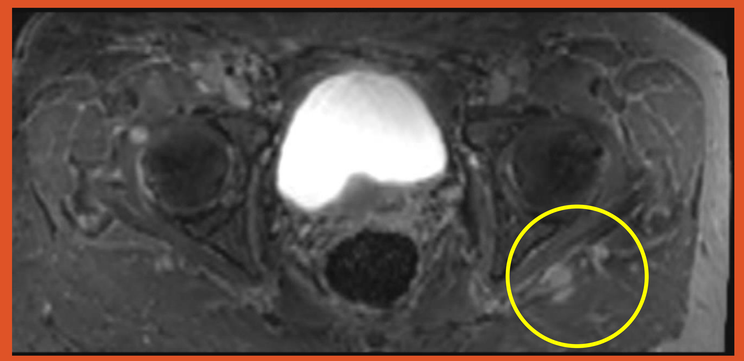


Figure 1(A) Axial T2 and Figure 1(B) axial fat-suppressed T1 MRI of the pelvis at the level of the hip joints. Circled region shows pelvic venous varices deep to the gluteal musculature exerting mass effect on the proximal left sciatic nerve.

MRI of pelvis with and without contrast:
Impression: Mass effect on the proximal left sciatic nerve by prominent left pelvic varices in the pelvis deep to the left gluteal musculature. Mild thickening and increased T2 signal of the left sciatic nerve distal to the site of compression likely represents sciatic neuropathy.



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DISCUSSION

- This case draws attention to an under-recognized cause of sciatic nerve compression
- In previously reported cases, mechanisms causing vascular compression include traumatic and thrombotic etiologies[2,3]
- Sciatic neuropathy secondary to compressive force is commonly position-dependent, with exacerbation of symptoms when seated[4,5]
- Standard work-up including lumbar spine and hip MRI can miss the true cause of compression as pelvic vascular structures may fall outside typical imaging protocols
- Treatment options to relieve sciatic nerve compression include coil embolization or sclerotherapy, as well as open surgical decompression

CONCLUSION

- In patients with sciatic neuropathy accompanied by a negative spinal workup and position-dependent symptom exacerbation[4,5], vascular etiology of nerve compression should be considered
- Early recognition facilitates faster referral for appropriate treatment, sparing patients time and unnecessary interventions

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