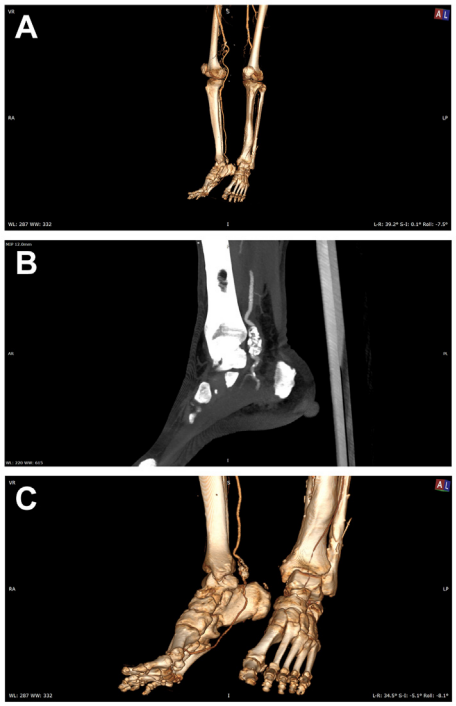
Atherosclerotic posterior tibial artery aneurysm

Georgios S. Sfyroeras, MD, *Athens, Greece*



Aneurysms of the posterior tibial artery (PTA) are extremely rare. In total, 26 cases have been reported, with only three of them attributed to atherosclerosis.[1] True aneurysms are more commonly associated with infection or vasculitis.[1] Trauma is the most common cause of pseudoaneurysms of the PTA.[2] Management vary from conservative approach to surgical excision followed by reconstitution of the PTA. Treatment should be considered for symptomatic aneurysms, asymptomatic large aneurysms, and those with laminated thrombus.[3] Surgical excision with reconstitution of the PTA remains the preferred approach. Endovascular embolization is commonly employed for pseudoaneurysms but carries a risk of limb ischemia.

No cases of PTA aneurysm with concurrent bilateral popliteal artery (PA) aneurysms exist in the literature. We report the case of a 75-year-old male patient who experienced acute left lower limb ischemia, manifesting as claudication. Computed tomography angiography revealed the presence of a thrombosed left PA aneurysm, a 3.5-cm right PA aneurysm, and a 1.5-cm atherosclerotic aneurysm of the right PTA. The patient did not report any prior trauma or instrumentation to this area. Informed consent for publication was obtained from the patient.

During the initial evaluation, we observed audible monophasic Doppler signs at the pedal arteries. Despite the thrombosed left PA aneurysm, we decided against treatment involving a below-knee bypass graft—a procedure typically not recommended for intermittent claudication. Instead, we focused on managing the right side, considering the potential risk of PA thrombosis, which could compromise limb viability. The patient underwent aneurysm ligation and a reversed saphenous bypass graft (*A*). The PTA aneurysm is currently under surveillance (*B* and *C*/Cover). After 2 years, the patient remains asymptomatic.

DISCLOSURES

None.

REFERENCES

1. Crisp J, Ahmad M, Crockett S, et al. Spontaneous bilateral superficial femoral artery pseudoaneurysms and a unilateral posterior tibial artery aneurysm in an immunocompromised patient. *Clin Case Rep*. 2024;12:e8686.
2. Sagar J, Button M. Posterior tibial artery aneurysm: a case report with review of literature. *BMC Surg*. 2014;14:37.
3. Mukherjee D. Posterior approach to the peroneal artery. *J Vasc Surg*. 1994;19:174–178.

Submitted Jul 4, 2024; accepted Aug 9, 2024.

From the First Department of Vascular Surgery, University of Athens Medical School, "Attikon" Hospital.

Additional material for this article may be found online at www.jvscit.org.

E-mail: gsfyr@yahoo.gr.

The editors and reviewers of this article have no relevant financial relationships to disclose per the Journal policy that requires reviewers to decline review of any manuscript for which they may have a conflict of interest.

J Vasc Surg Cases Innov Tech 2024;10:101608
2468-4287

https://doi.org/10.1016/j.jvscit.2024.101608