

Evidence Discussion (PVD 7.2)

Popliteal Artery Entrapment

Popliteal artery entrapment syndrome is a nonatheromatous cause of lower extremity ischemic symptoms. It is caused by abnormal embryologic development of the structures in the popliteal fossa. The symptoms are caused by compression of the popliteal artery by the muscles or fibrous bands. The typical presentation is claudication symptoms in physically active young men who have normal pulse examination.

Due to its unusual nature and presentation, ultrasound, CT Angiography or MR Angiography of the lower extremity is supported for diagnosis. Since it is critical to understand the anatomic relationships of the muscles to the vessels in the popliteal fossa, CT or MRI of the lower extremity is supported if requested by the surgeon for pre-operative planning.

1. Sinha S, Houghton J, Holt P.J, et al. Popliteal entrapment syndrome. J Vasc Surg. 2012;55(1):252–262 e30. PMID: 22116047
2. Shahi N, Arosemena M, Kwon J, et al. Functional popliteal artery entrapment syndrome: a review of diagnosis and management. Ann Vasc Surg. 2019;59:259–267. PMID: 31028851