

Evidence Discussion (PVD 7.4)

Lower Extremity Artery Aneurysms

Duplex ultrasound is the preferred modality for surveillance of lower extremity arterial aneurysms. This modality uses no ionizing radiation or contrast, has a reasonable level of accuracy and is cost-effective. CT/MR imaging may be indicated for preoperative planning or in cases where ultrasound is technically limited.¹

References:

1. Hall HA, Minc S, Babrowski T. Peripheral artery aneurysm. Surg Clin North Am. 2013;93(4):911-ix. doi:10.1016/j.suc.2013.04.008.
2. Corriere MA, Guzman RJ. True and false aneurysms of the femoral artery. Semin Vasc Surg. 2005;18(4):216- 223. doi:10.1053/j.semvascsurg.2005.09.008.
3. Kim TI, Sumpio BE. Management of Asymptomatic Popliteal Artery Aneurysms. Int J Angiol. 2019;28(1):5-10. doi:10.1055/s-0038-1676792.
4. von Stumm M, Teufelsbauer H, Reichenspurner H, Debus ES. Two Decades of Endovascular Repair of Popliteal Artery Aneurysm--A Meta-analysis. Eur J Vasc Endovasc Surg. 2015;50(3):351-359. doi:10.1016/j.ejvs.2015.04.036
5. Smith T, Quencer KB. Best Practice Guidelines: Imaging Surveillance After Endovascular Aneurysm Repair. American Journal of Roentgenology. 2020;214(5):1165-1174. doi:10.2214/ajr.19.22197.
6. Zierler RE, Jordan WD, Lal BK, et al. The Society for Vascular Surgery practice guidelines on follow-up after vascular surgery arterial procedures. J Vasc Surg . 2018;68(1):256-284. doi:10.1016/j.jvs.2018.04.018.1.