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Clinical Image

Popliteal Artery Pseudoaneurysm after Prolonged Stress Position

Clinical Image

A 56-year-old man with past medical history of hypertension on treatment with valsartan and left fibula fracture 15 years ago, presented with a 2-month history of paresthesia on the left lower limb after working many hours on a vineyard in a squatting position. During the physical exam, the patient presented symmetric pulses on all extremities and a palpable, pulsatile mass on the left popliteal fossa. CT scan showed a patent popliteal artery with a saccular aneurysm of 37 millimeters in diameter (Figure 1), which was confirmed intraoperatively (Figure 2). A popliteal-popliteal bypass was done with the left great saphenous vein through a posterior approach (Figure 3). Blood, arterial wall and thrombus cultures were negative. Pathology confirmed diagnosis of pseudoaneurysm and no malignant cells were present. At 12-month follow-up the patient is asymptomatic with good distal pulses and no signs of bypass restenosis on ultrasound. The incidence of popliteal artery aneurysm is 0.1-1% [1], while traumatic pseudoaneurysm represents 0-3.5% of all popliteal aneurysms. Pseudoaneurysm of this artery is an uncommon clinical entity and the most common causes are trauma, iatrogenic lesions

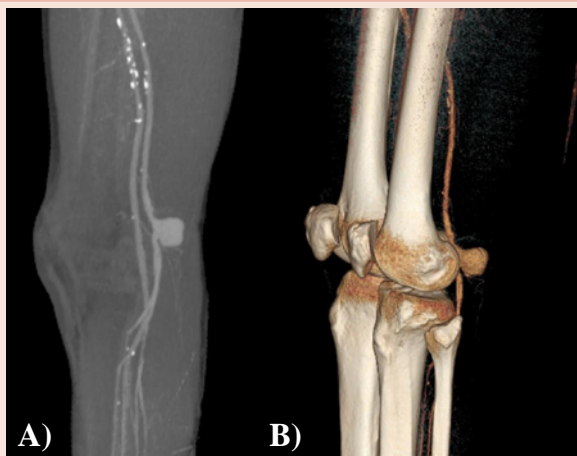


Figure 1: (A) MIP CT scan reconstruction showing left popliteal artery pseudoaneurysm. (B) Volume rendering CT reconstruction of left popliteal artery pseudoaneurysm.

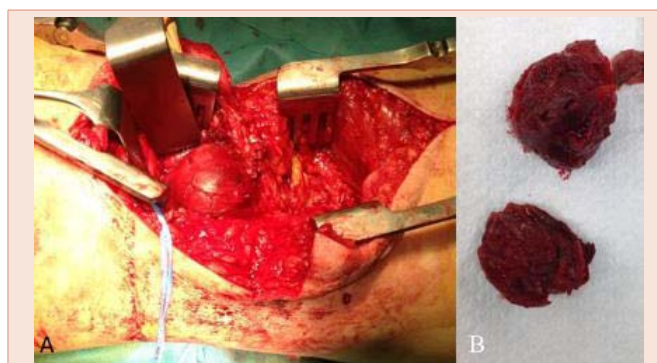


Figure 2: (A) Left popliteal pseudoaneurysm seen through a posterior approach. (B) Thrombus resected from the arterial wall.

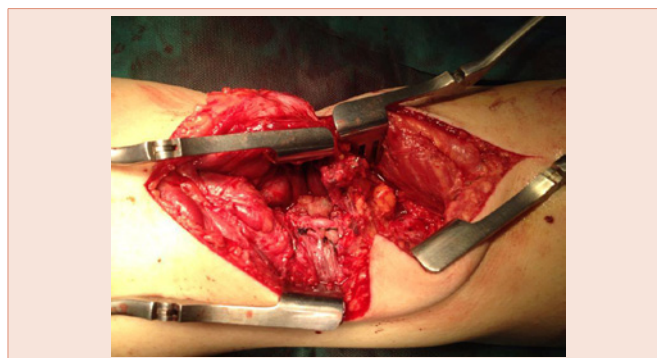


Figure 3: Popliteal-Popliteal bypass with left great saphenous vein through a posterior approach.

and infections [2,3]. The complications (rupture, thromboembolism, among others.) are associated with high morbidity and mortality and has a significant risk of major amputation [4]. Treatment alternatives include ultrasound-guided thrombin injection, stenting and open repair [1]. We didn't use thrombin because of the diameter, neck width and high risk of limb ischemia. Endovascular treatment is fast and minimally invasive, but is associated with stent fracture and lower patency. In this case, due to location and size of the pseudoaneurysm, open repair was performed.

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