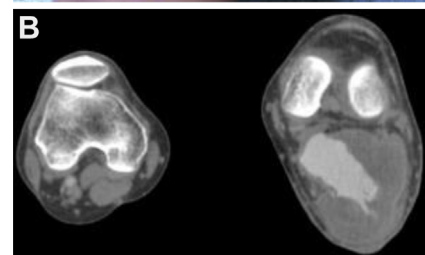


Ruptured giant popliteal artery aneurysm

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A 70-year-old man visited the outpatient clinic with complaints of a large pulsating mass with ulceration at the left popliteal fossa (A) and a recent episode of bleeding, which stopped after compression. A mass of about 1.5 cm in size was detected by the patient first at 18 month previously, but he did not seek medical help. At his current admission, he only complained of tingling and numbness at the knee and edema on his left calf and foot. Physical examination revealed a huge pulsating mass at the left popliteal fossa with overlying skin necrosis. There was no active bleeding. The left posterior tibial artery pulse was palpable, but the dorsalis pedis pulse was absent. Computed tomography angiography showed an 11.2- × 9.7-cm large left popliteal aneurysm with contained rupture with septations and partial organized thrombus in the aneurysm sac (B and C). Severe stenosis of the tibioperoneal trunk was also noted. There was no aneurysm detected at the other sites. Because of the rupture and compression symptoms, we proceeded with open surgical repair. After the resection of the popliteal aneurysm through the posterior approach, a left femorotibial bypass with reversed saphenous vein was performed through a medial approach (D). After 6 months, a proximal anastomotic stenosis was treated with balloon angioplasty. The patient was doing well at his 4-year follow-up evaluation. The patient consented to the publication of the images and information included in this article.



DISCUSSION

Although the endovascular treatment of popliteal aneurysm has become popular, open surgical repair is required in many cases, including rupture, giant aneurysm, compression syndrome, poor run-off, good saphenous vein conduit, young patient, and the presence of infection.^{1,2} Giant true popliteal aneurysm has been rarely reported,³ and to our knowledge, this case is one of the largest popliteal aneurysms true or false, due to a contained rupture, that has ever been reported. Because of the large size of this aneurysm, we were not able to perform the full reconstruction through a posterior approach. To perform the bypass, we had to turn the patient and complete the operation through a medial approach. Open surgical treatment of a giant popliteal aneurysm should be individualized for each patient, considering the extent of popliteal artery involvement, the patients symptoms and comorbidities, as well as the runoff and the vascular anatomy.^{1,2}

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