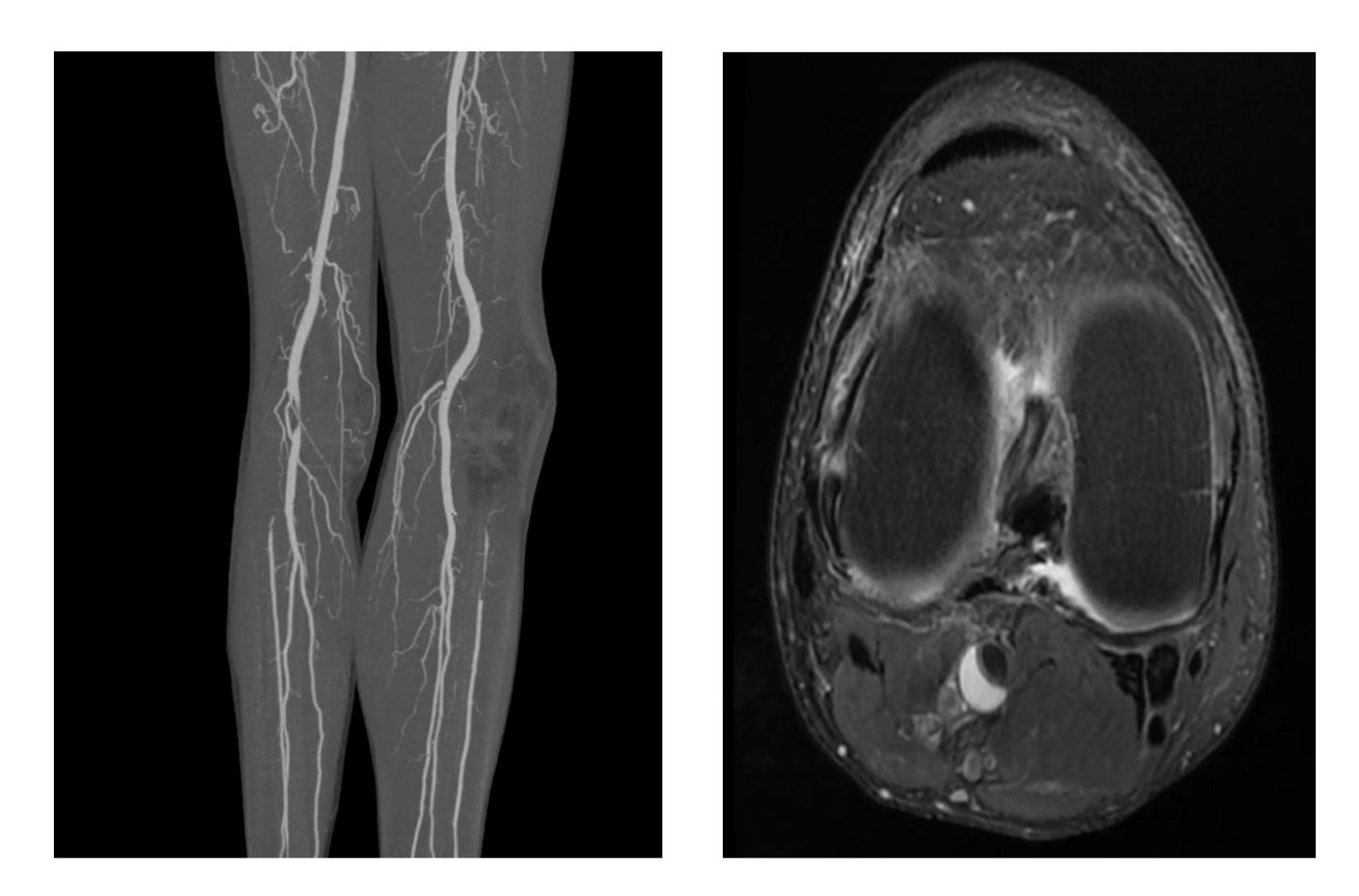
### Background

Cystic adventitial disease is a rare cause of arterial insufficiency, typically affecting the popliteal artery. Some evidence supports an articular origin of the cyst. Treatment options such as patch angioplasty or interposition of prothesis or vein have been described. We discuss an alternative method.

## **Case description**

Two middle-aged men, without atherosclerotic risk factors, were referred because of unilateral exercise-induced claudication, There was no rest pain nor ischemic wounds but both patients required treatment because of invalidating complaints. Work-up with a CTA and MRI revealed a cystic mass located in the wall of the popliteal artery with a local stenotic effect. Otherwise normal vessels without atherosclerotic disease were seen.



# Two cases of severe calf claudication during exercise. L. Lootens, F. Goudsmedt, E. Decoster, J. De Letter Department of Vascular Surgery, AZ Sint-Jan, Bruges

### Results

We performed a popliteal fossa exploration with posterior approach. When opening the fibrous sheath around the popliteal artery (and isolating the artery) the cystic lesion was visualised. No connection with the joint was detected. After clamping the artery, the cyst was incised and a clear jelly-like content was evacuated. We resected the entire cystic wall together with the adventitia without additional patch angioplasty or reconstruction. Both patients were discharged on the 2nd postoperative day. They are asymptomatic and are doing well after several months of follow-up. Pathology confirmed a cyst wall composed of adventitia, the presence of polysaccharides suggests an synovial origin.



### Conclusion

The management of cystic adventitial disease depends on the condition of the affected vessel. Many treatment options have been described, adapted to the individual patient. With these two cases, we were able to prove that a deroofing of the cyst, without major vascular reconstructions, is a valuable option.

