EDITORS’ INTRODUCTION

Trans-Atlantic Debate: Nonoperative versus Surgical Management of Small (less than 3 cm), Asymptomatic Popliteal Artery Aneurysms

J.-B. Ricco a,*, T.L. Forbes b

a Debate Section Editor, European Journal of Vascular and Endovascular Surgery, Poitiers, France
b Debate Section Editor, Journal of Vascular Surgery, London, Ontario, Canada

Popliteal artery aneurysms represent a common pathology that vascular surgeons are often confronted with. However, several issues remain incompletely understood, including indications for intervention and optimal methods of treatment. In the following paper, our discussants debate the appropriate management of small popliteal artery aneurysms. Further complicating this discussion is the unclear relationship between popliteal artery aneurysm diameter and subsequent complications. Whereas with abdominal aortic aneurysms diameter is linked to rupture risk, it is less clear with popliteal artery aneurysms where complications are more likely to include thrombosis, embolization and compression whether aneurysm diameter is accurately predictive. Perhaps other anatomic features should be included in our management algorithms? Regardless, our debaters will try to convince us whether small popliteal artery aneurysms warrant repair or not.

doi: 10.1016/j.ejvs.2011.02.005

Part One: For the Motion.
Asymptomatic Popliteal Artery Aneurysms (less than 3 cm) Should be Treated Conservatively

J.E. Cross, R.B. Galland *

Department of Surgery, Royal Berkshire Hospital, London Road, Reading, Berkshire RG1 5AN, UK

Popliteal aneurysm (PAA) management has been confounded by paradox and controversy. Until the start of the 20th century the principle of management was to induce thrombosis within the aneurysm either by compression or ligation.1 Subsequently the aim of treatment was to prevent thrombosis from happening! This is the paradox. Controversial aspects of their treatment include the use of intra-arterial thrombolysis for thrombosed PAAs,2 which operation to carry out, what approach to use and whether an endovascular repair is appropriate.5,6 However, the greatest controversy is probably when to operate on an asymptomatic PAA.

Demographics and Natural History

PAAs account for more than 80% of all peripheral aneurysms, having a prevalence of approximately 1% in men aged 65–80 years.7 They are mostly atherosclerotic in origin: other rarer causes include infection, trauma, familial or those associated with Marfan’s and Behcet’s