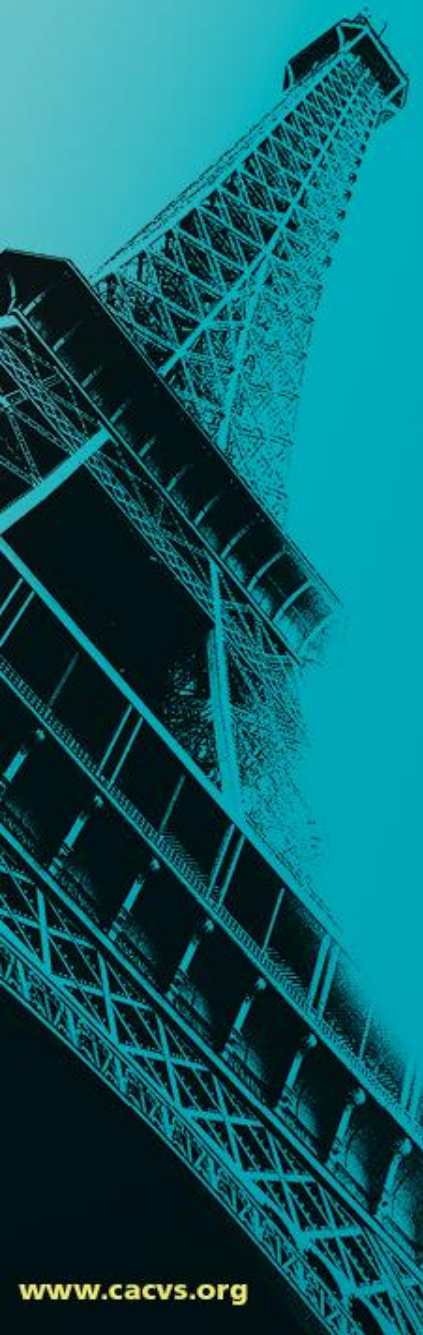
CONTROVERSES ET ACTUALITÉS EN CHIRURGIE VASCULAIRE
CONTROVERSIES & UPDATES IN VASCULAR SURGERY
JANUARY 19-21 2017
MARRIOTT RIVE GAUCHE & CONFERENCE CENTER
PARIS, FRANCE



Should we operate on the asymptomatic popliteal vein aneurysm?
NO!

Manj Gohel
Cambridge University Hospitals &
Imperial College London

Disclosure

Speaker name:

Mr Manj Gohel MD FRCS FEBVS

I have the following potential conflicts of interest to report:

✔ Consulting / Conferences: COVIDIEN, MEDTRONIC, GORE, COOK, ENDOLOGIX

☐ Employment in industry

☐ Shareholder in a healthcare company

☐ Owner of a healthcare company

✔ Other(s): Research award (Laboratoires Urgo)

Management of symptomatic and asymptomatic popliteal venous aneurysms: A retrospective analysis of 25 patients and review of the literature

Carmine Sessa, MD,[a] Philippe Nicolini, MD,[b] Michel Perrin, MD,[b] Issam Farah, MD,[a] Jean-Luc Magne, MD,[a] and **Henri Guidicelli, MD[a]** *Grenoble and Lyon, France*

(J Vasc Surg 2000;32:902-12.)


Dr Sessa
Mr Gohel

Introduction

There have been tremendous advances in the management of venous disease

Basic science / pathophysiology

Diagnostics

Superficial venous treatments

Deep venous stents

Deep vein reflux

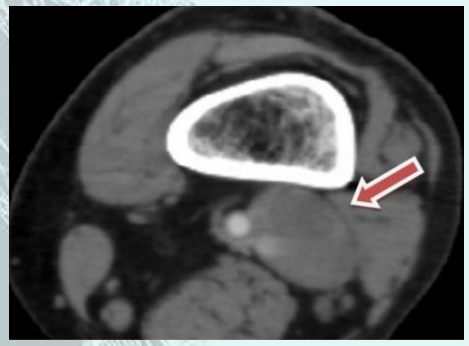
Introduction

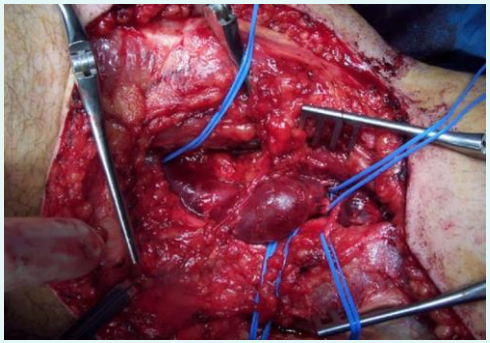
There have been tremendous advances in the management of venous disease, BUT…

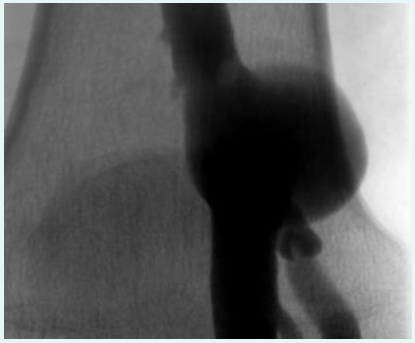
Anatomical / haemodynamic venous abnormalities are common

Extrinsic venous compression, 'pathological reflux', perforator reflux, entrapment, venous aneurysms

Popliteal vein aneurysm (PVA)







Uncommon –150-200 patients reported since 1968

Majority of case reports are symptomatic (PE)

Most commonly saccular

PVAs usually repaired in case reports

Images: Roche-Nagle et al Am J Surg 2010; Falls et al JVS 2010

Popliteal vein aneurysm (PVA)

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25 patients treated 1985-1999 in 2 centres

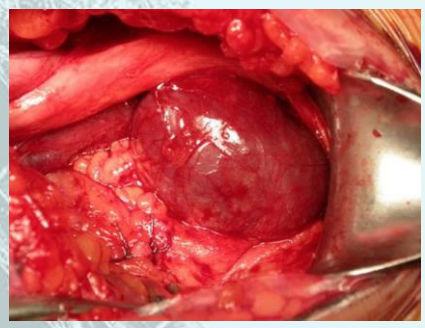
All patients treated with posterior approach and repair

No recurrent pulmonary emboli

5/25 had complications

6/25 residual / recurrent popliteal vein aneurysms

Popliteal vein aneurysm (PVA)



Surgical Treatment of Popliteal Venous Aneurysms

Jill K. Johnstone,[1] Mark D. Fleming,[1] Peter Gloviczki,[1] William Stone,[2] Manju Kalra,[1] Gustavo S. Oderich,[1] Audra A. Duncan,[1] Randall R. De Martino,[1] and Thomas C. Bower,[1] Rochester, Minnesota; and Phoenix, Arizona

Case Report

A Rare Case of Popliteal Venous Aneurysm

Roberto Fiori, Roberto Chiappa, Eleonora Gaspari, and Giovanni Simonetti

Popliteal Venous Aneurysms: Results of Surgical Treatment

Nicolas Maldonado-Fernandez, Cristina Lopez-Espada, Francisco Javier Martinez-Gamez, Moises Galan-Zafra, Manuel Luis Sanchez-Maestre, Elena Herrero-Martinez, and Jose Enrique Mata-Campos, Jaen, Spain

Images: Fiori et at Case reports in Medicine 2010

Popliteal vein aneurysm (PVA)

Surgical Repair for Popliteal Venous Aneurysm Causing Severe or Recurrent Pulmonary Thromboembolism: Three Case Reports

Togo Norimatsu, MD, and Haruo Aramoto, MD, PhD

Ann Vasc Dis Vol. 8, No. 1; 2015; pp 56–58

Two case series have described the course of asymptomatic patients with fusiform and saccular PVAs.[1)] Although untreated, none of these patients experienced thromboembolic events.

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Two case series have described the course of asymptomatic patients with fusiform and saccular PVAs.[1] Although untreated, none of these patients experienced thromboembolic events.

However, there were several minor complications. Early complications, including hematoma, transient nerve injury, infection, and thrombosis of the surgical repair, occurred in 20% of patients. Late complications developed in 4%, including thrombosis from the procedure (one case) and relapse of the venous aneurysm (three cases).

Popliteal vein aneurysm (PVA)

CASE REPORT

A rare and potentially fatal cause of popliteal fossa swelling

Arun Kelay, Jason Constantinou, Hamish Hamilton

Recurrence of a popliteal venous aneurysm

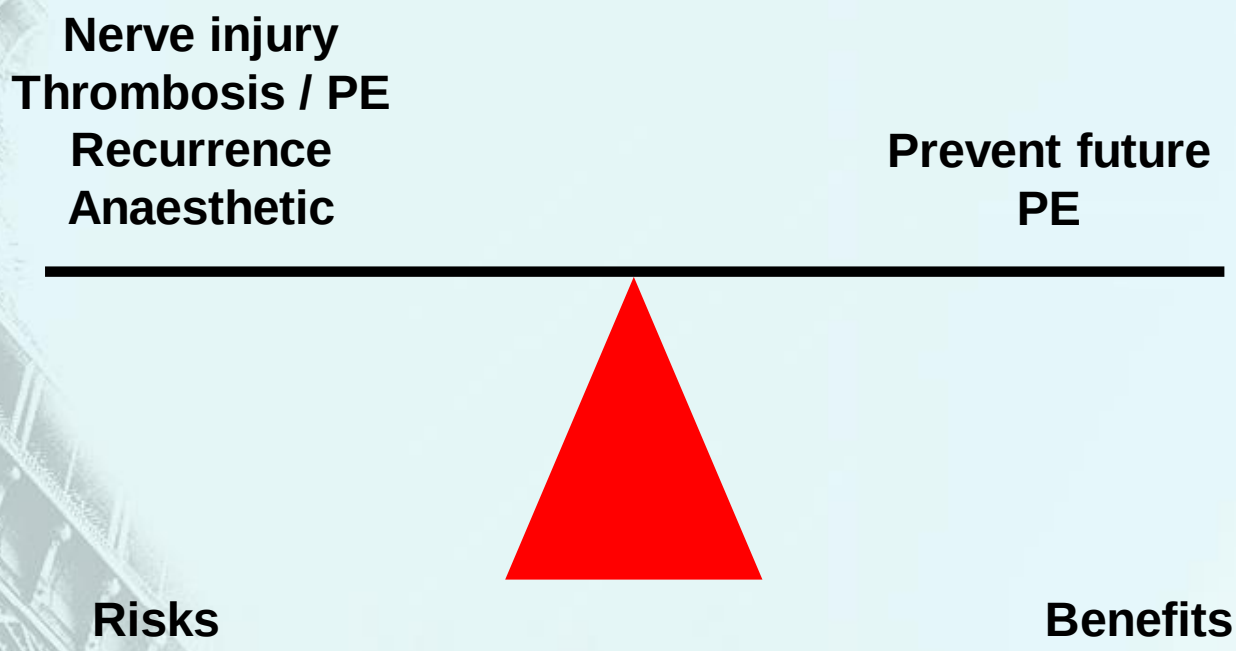
Garietta Falls, MD, and **Mohammad H. Eslami, MD,** *Worcester, Mass*

We report the case of a 40-year-old man with a recurrent popliteal vein aneurysm diagnosed 2 years after initial lateral aneurysmectomy. Definitive management consisted of popliteal vein aneurysm resection and reconstruction with an interposition spiral vein graft. Our case suggests that aneurysm vein resection and interposition vein graft should be the preferred surgical option. Also, patients treated may benefit from longer follow-up in light of the potential morbidity from recurrence if undetected. (J Vasc Surg 2010;51:458-60.)

Multiple reports of recurrence after primary repair of PVA

Asymptomatic PVA repair - CON

1. We have no idea of the pathophysiology or natural history of asymptomatic popliteal venous aneurysms



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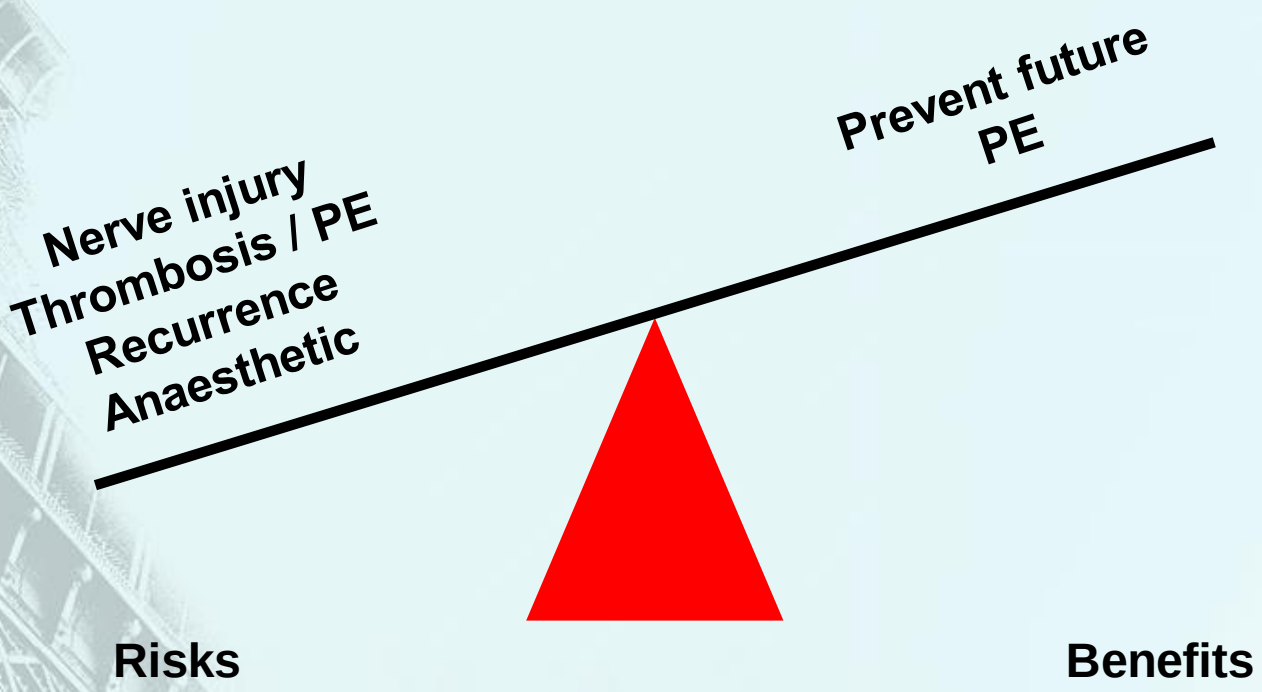
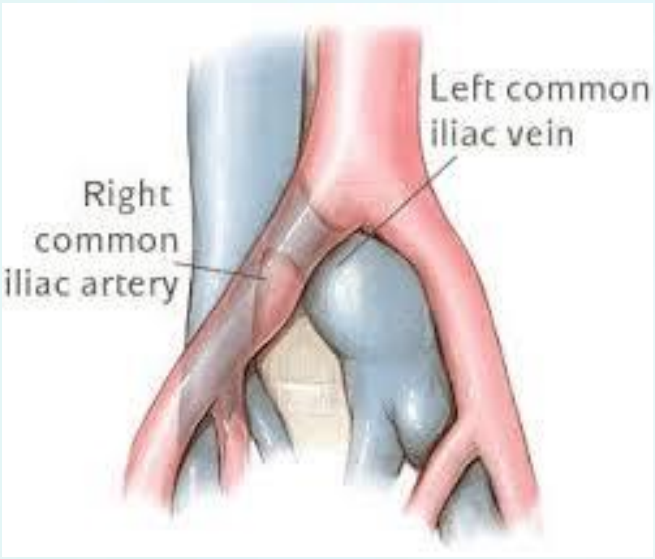


Asymptomatic PVA repair - CON

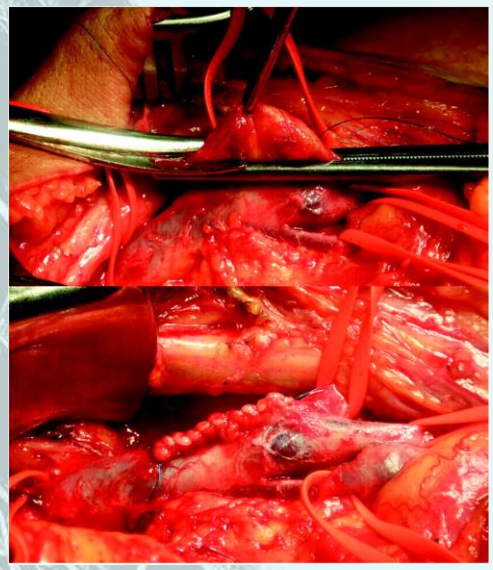
2. There is little evidence (no high quality evidence) supporting surgery for asymptomatic PVAs

Selective case reports are not enough

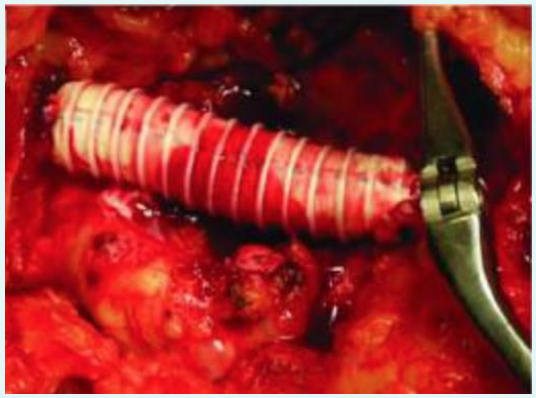


Asymptomatic PVA repair - CON

3. The optimum surgical approach for PVAs is not known



Roberto Gabrielli et al.
Interact CardioVasc Thorac Surg 2010;11:835-837



Norimatsu et al
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Asymptomatic PVA repair - CON

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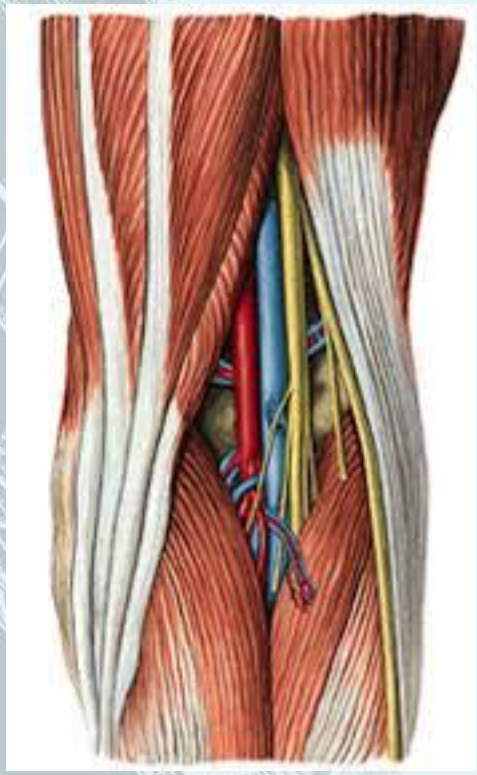
Table IV. Surgical treatment of PVAs

Procedure	*Review of the literature (n = 83)*	*Present series (n = 25)*
Tangential aneurysmectomy with lateral venorrhaphy (two-vein patching)	48	19
Resection and end-to-end anastomosis	5	2
Resection with vein grafting	11	3
Resection and PTFE grafting	1	0
Ligation and vein grafting	1	0
Resection with vein transposition		
Tibioperoneal trunk into the anterior tibial vein	0	1
Medial gastrocnemius vein	1	0
Resection without venous continuity	6	0
Ligation	6	0
Vena cava filter	4	2
Pulmonary artery thrombectomy under circulatory arrest plus vena cava filter	1 (died)	1 (alive)

Sessa et al, J Vasc Surg 2000

Asymptomatic PVA repair - CON

4. Surgical repair of PVAs is associated with potentially serious risks

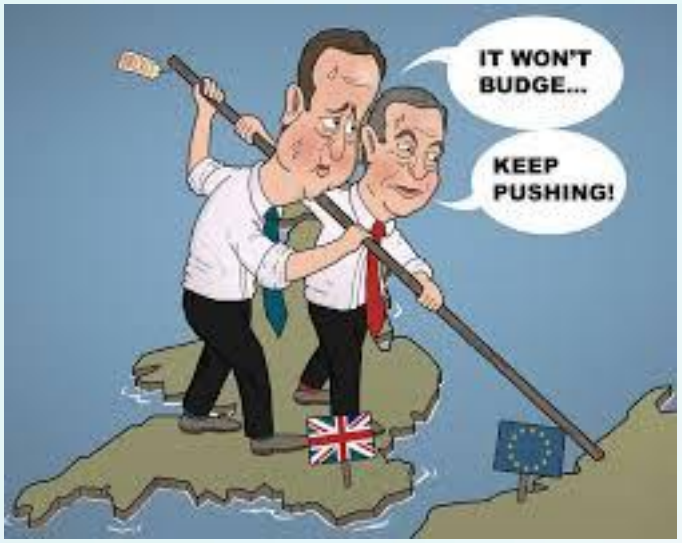


Nerve damage / neuropraxia is notoriously disabling

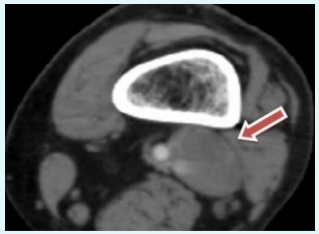
Surgical complications in around 20% of patients after surgery for PVA

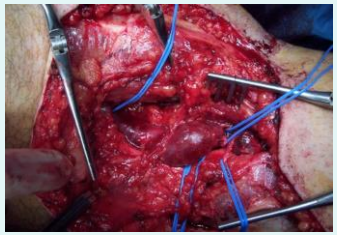
Complications probably underreported

Le monde est à l'envers!



Conclusions





Popliteal vein aneurysms may be a cause of PE, but…

There are strong reasons why we should not operate on patients with asymptomatic PVAs