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MIAMI VEIN | Jose I. Almeida M.D. ...experience matters

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Inflow Assessment in PTS Patients

Jose I. Almeida, MD, FACS, RPVI, RVT
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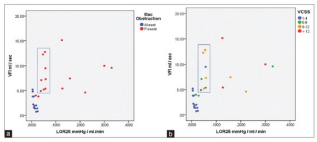
Nothing To Disclose

2

Noninvasive measurement of lower limb outflow resistance and implications for stenting

A. Nicolaides, O. Maleti[1], M. Lugli[1], S. Guerzoni[1]

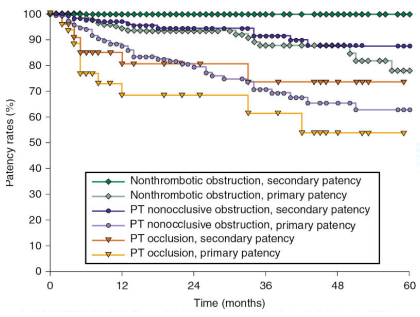
Lifelong antiicoagulation



CONCLUSION: The noninvasive measurement of LOR_{50} provides a quantitative estimation of overall lower LOR. It can indicate which limbs are compensated by the development of a good collateral circulation and which are not. The combination of LOR_{50} with VFI enables the clinician to determine the relative contribution of reflux and obstruction in individual limbs. A low LOR_{50} in the presence of severe iliac stenosis or occlusion is an indication of a well-developed collateral circulation and suggests that stenting would provide little benefit if any. However, this hypothesis needs to be verified by future prospective studies.

Nicolaides A, Vasc Invest Ther 2019;2:88-94

Stent Patency



Neglén P. J Vasc Surg. 2007;46(5):979-990

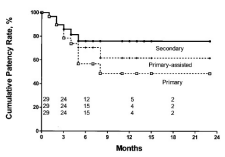
Recanalization of totally occluded iliac and adjacent venous segments

Seshadri Raju, MD, Susan McAllister, PhD, and Peter Neglen, MD, PhD, *Jackson, Miss*

38 postthrombotic limbs 1997 -2001

Distal postthrombotic changes were typically diffuse and extensive, involving 3 axial venous segments- femoral, popliteal, posterior tibial in 62%

Profunda femoris postthrombotic changes in 42%



Early Thrombosis After Iliac Vein Stenting is Related to Disease Severity and Type of Anticoagulation

Retrospective cohort study | 106 patients underwent stenting for chronic femoral, iliac or IVC* occlusion

*inferior vena cava

Stent Thrombosis within 3 months	25.5%
Primary Patency at 3 years	58.5%
Secondary Patency at 3 years	76.1%

Higher Risk for Stent Thrombosis
- ✓ Hypercoagulable state
- ✓ Extensive occlusion

Lower Risk for Stent Thrombosis
- ✓ Treatment with low-molecular-weight heparin >10 days after stenting

JVS-VL Journal of Vascular Surgery Venous and Lymphatic Disorders

Marston et al. *J Vasc Surg Venous Lymphat Disord, November 2021*

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JOURNAL OF VASCULAR SURGERY: VENOUS AND LYMPHATIC DISORDERS
Volume 2, Number 3

Table I. Iliocaval venous outflow obstruction classification system

Classification type	*Disease characteristics*	*Examples*
Type I	Single-segment stenosis	
Type II	Multiple-segment stenosis	
Type III	Single-segment occlusion	
Type IV	Multiple-segment occlusion	

PTS

Classification

- Classification based on anatomical expansion of the postthrombotic trabeculation (> 50 % lumen narrowing)

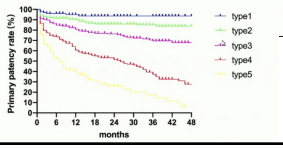
Check for updates

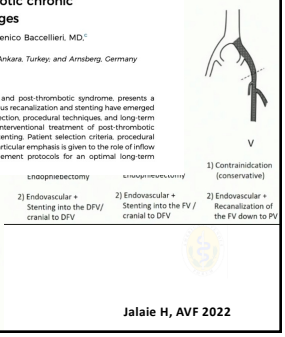
Interventional treatment for post-thrombotic chronic venous obstruction: Progress and challenges

Mohammad E. Barbati, MD,[a] Efthymios D. Avgerinos, MD,[b] Domenico Baccellieri, MD,[c] Suat Doganci, MD,[d] Michael Lichtenberg, MD,[e] and Houman Jalaie, MD,[a] *Aachen, Germany; Athens, Greece, Milan, Italy; Ankara, Turkey; and Arnsberg, Germany*

ABSTRACT

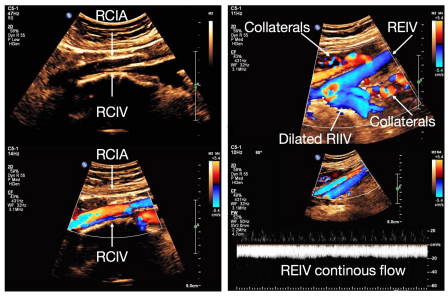
Chronic venous obstruction, including nonthrombotic iliac vein lesions and post-thrombotic syndrome, presents a significant burden on patients' quality of life and health care systems. Venous recanalization and stenting have emerged as promising minimally invasive approaches, yet challenges in patient selection, procedural techniques, and long-term outcomes persist. This review synthesizes current knowledge on the interventional treatment of post-thrombotic syndrome, focusing on the evolution of endovascular techniques and stenting. Patient selection criteria, procedural details, and the characteristics of dedicated venous stents are discussed. Particular emphasis is given to the role of inflow and other anatomical considerations, along with postoperative management protocols for an optimal long-term outcome. (J Vasc Surg Venous Lymphat Disord 2024;12:101910.)





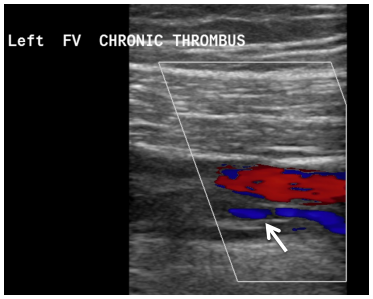
Jalaie H, AVF 2022

RCIV compression by the RCIA



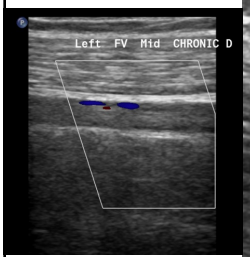
Courtesy Jan Sloves, RVT

Case

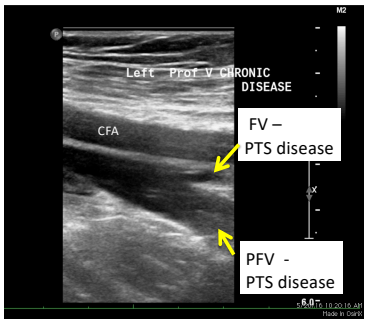


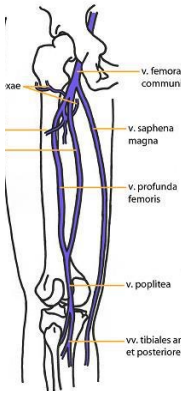
Proximal Femoral Vein PTS

Midthigh FV Occlusion

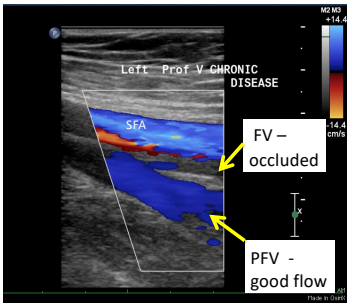


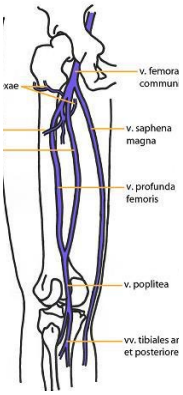
Non-ideal inflow anatomy



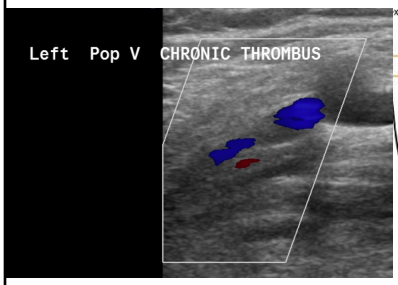


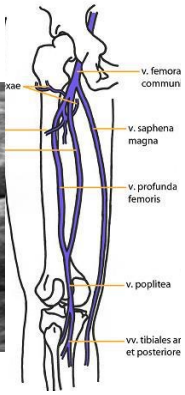
Adequate inflow





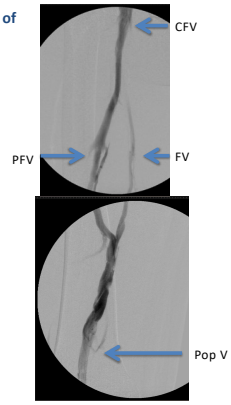
Popliteal Vein PTS



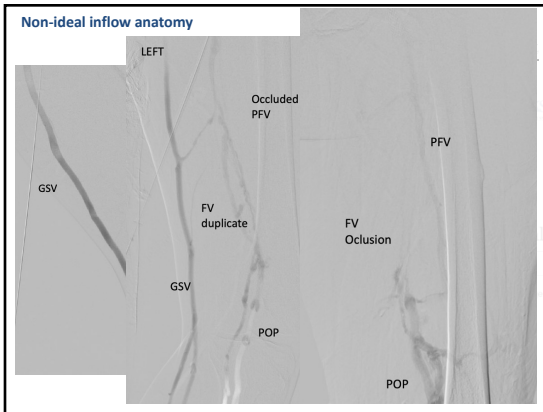


Axial Transformation of the Profunda is key to Stent Patency

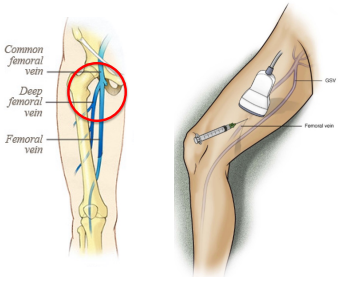
Venogram
Patient prone
Popliteal access



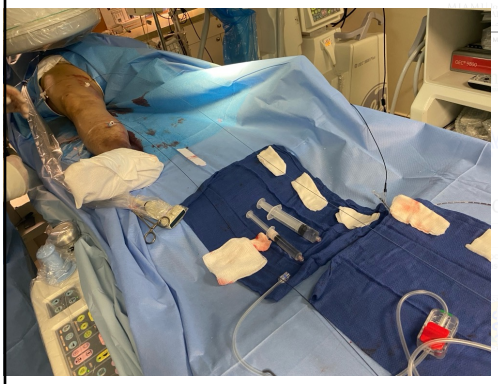
Non-ideal inflow anatomy



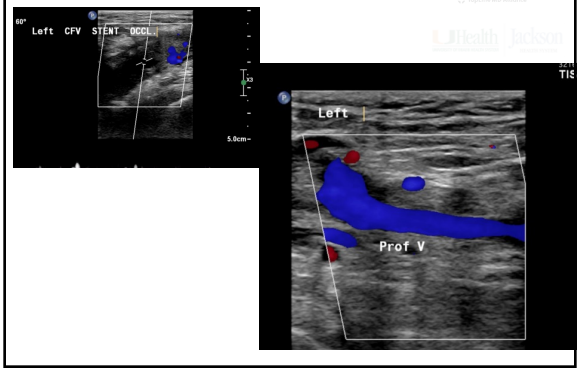
Access Low



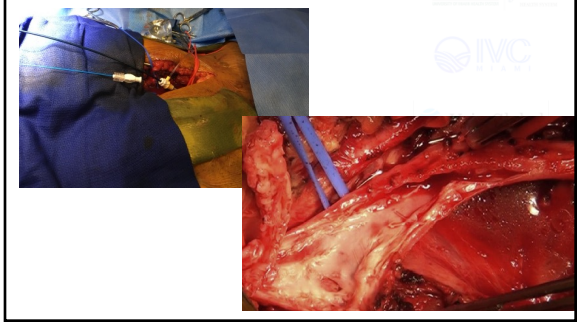
Begin with .035 angled-tip hydrophillic glidewire, spin rapidly with torque device



Could not access low enough



Hybrid –
Open Endovenectomy Femoral
Endovenous Iliac Stent



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Thank you !