

Journal of Vascular Surgery Venous and Lymphatic Disorders

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Surgical Care of Venous and Lymphatic Disorders

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Volume 7, Number 2, March 2019

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151 Grading venous stenosis is different from arterial lesions

Ghassan Kassab, PhD, and Seshadri Raju, MD, FACS, *San Diego, Calif; and Jackson, Miss*

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ACUTE VENOUS THROMBOEMBOLISM

153 Outcomes and predictors of failure of iliac vein stenting after catheter-directed thrombolysis for acute iliofemoral thrombosis

Efthymios D. Avgerinos, MD, Zein Saadeddin, MD, Adham N. Abou Ali, MD, Yash Pandya, MD, Eric Hager, MD, Michael Singh, MD, George Al-Khoury, MD, Michel S. Makaroun, MD, and Rabih A. Chaer, MD, MSc, *Pittsburgh, Pa*

This retrospective study of 73 patients with acute iliofemoral deep venous thrombosis (DVT) found that incomplete lysis was associated with loss of primary patency, while stent extension below the inguinal ligament or into the contralateral iliac vein appeared acceptable adjuncts to iliac vein stenting and thrombolysis for acute DVT.

162 Aspiration thrombectomy for acute iliofemoral or central deep venous thrombosis

Ricardo Lopez, MD, Randall DeMartino, MD, Mark Fleming, MD, Haraldur Bjarnason, MD, and Melissa Neisen, MD, *Rochester, Minn*

This single-center retrospective study of 10 patients with iliofemoral or central deep venous thrombosis found that treatment with aspiration mechanical thrombectomy utilizing the Indigo device was safe, with no bleeding complications, and in select patients allowed definitive treatment in one setting, avoiding the need for thrombolysis.

169 Statin therapy associated with improved thrombus resolution in patients with deep vein thrombosis

Charles Hsu, BS, Anand Brahmandam, MD, Kirstyn E. Brownson, MD, Nancy Huynh, MD, Jesse Reynolds, MS, Alfred I. Lee, MD, PhD, Wassim H. Fares, MD, MSc, and Cassius Iyad Ochoa Chaar, MD, MS, *New Haven, Conn; and Allschwil, Switzerland*

This retrospective study of 818 patients with lower extremity deep venous thrombosis suggests that statin therapy promotes thrombus resolution or improvement, but protection against venous thromboembolism recurrence or mortality needs further evaluation.

Cover Image: See Venous Images, page 258

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INFERIOR VENA CAVA FILTERS

176 **Single-session inferior vena cava filter removal, recanalization, and endovenous reconstruction for chronic ilio caval thrombosis**

Kush R. Desai, MD, Nicholas Xiao, MD, Jennifer Karp, RN, Riad Salem, MD, MBA, Heron Rodriguez, MD, Mark Eskandari, MD, Omar M. Uddin, MD, and Robert J. Lewandowski, MD, *Chicago, Ill*

This retrospective study reported successful single-session inferior vena cava filter (IVCF) retrieval followed by stent placement in 25 consecutive patients presenting with IVCF-related ilio caval thrombosis. Clinical and radiographic follow-up up to 1 year suggested that this treatment approach was both safe and efficacious.

CHRONIC VENOUS OBSTRUCTION

184 **Caliber-targeted reinterventional overdilation of iliac vein Wallstents**

Seshadri Raju, MD, FACS, Alexander Knight, BS, William Buck, MS, Corbin May, MS, and Arjun Jayaraj, MD, FACS, *Jackson, Miss*

This retrospective review of patients with symptomatic iliac vein in-stent restenosis or stent compression found that treatment with 2 to 4 mm over dilation of the Wallstent decreased symptoms, improved iliac vein flow channels, and enlarged stent caliber compared to isodilation of the resident stent.

195 **Impact of degree of stenosis in May-Thurner syndrome on iliac vein stenting**

Arjun Jayaraj, MD, William Buck, MS, Alexander Knight, BS, Blake Johns, BS, and Seshadri Raju, MD, *Jackson, Miss*

In 202 patients who underwent iliofemoral vein stenting for May-Thurner syndrome, the severity of stenosis did not predict initial clinical symptoms or stent patency. At 48 months, patients with >90% stenosis experienced recurrence of symptoms.

SUPERFICIAL VENOUS DISEASE

203 **Editors' Choice**

Impact of provider characteristics on use of endovenous ablation procedures in Medicare beneficiaries

John T. Baber Jr, MD, MBA, Jialin Mao, MD, MS, Art Sedrakyan, MD, PhD, Peter H. Connolly, MD, and Andrew J. Meltzer, MD, *New York, NY; and Scottsdale, Ariz*

This Medicare database study indicates high-volume providers and those not traditionally associated with management of lower extremity chronic venous disease are more likely to perform more endovenous therapies (EVTs) per patient and raises the question of financially driven, potentially inappropriate utilization of EVT.

210 **Twelve-month efficacy and complications of cyanoacrylate embolization compared with radiofrequency ablation for incompetent great saphenous veins**

Cengiz Ovalı, MD, and Mustafa Behçet Sevin, MD, *Eskişehir, Turkey*

In this retrospective study, 116 patients treated with cyanoacrylate embolization (CAE) had a 1-year saphenous vein occlusion rate of 99.5%, similar to the 96.6% occlusion rate in 128 patients treated with radiofrequency ablation ($P = .072$). Patients had less pain and ecchymosis after CAE.

COMPRESSION THERAPY FOR CHRONIC VENOUS DISEASE

217 **A pilot study of venous flow augmentation using a novel mechanical graded intermittent sequential compression device for venous insufficiency**

James Wall, MD, Eric Johnson, MS, Bonnie Johnson, RVT, Anup Singh, MD, Raymond Shaheen, MD, and Thomas Fogarty, MD, *Mountain View, Calif*

A novel, wearable graded intermittent compression system improved venous flow augmentation over baseline and standard intermittent pneumatic compression in a study of 10 patients with CEAP 3-6 venous insufficiency. A wearable patient-friendly system with rapid cycles may improve the clinical effectiveness of intermittent compression for venous insufficiency, including management of venous ulcers.

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222 Comparison of patency rates of lymphaticovenous anastomoses at different sites for lower extremity lymphedema

Yushi Suzuki, MD, Hisashi Sakuma, MD, and Shun Yamazaki, MD, *Okinawa and Kanagawa, Japan*

This retrospective study used indocyanine green fluorescence lymphography to evaluate patency of 123 lower extremity lymphaticovenous anastomoses (LVAs) in 36 patients with lower extremity lymphedema and found that patency was greater (49%; 37 of 76) when LVAs were performed in joint areas (knee and ankle) versus nonjoint areas (26%; 12 of 47; $P = .01$).

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228 Prospective study of cryopreserved placental tissue wound matrix in the management of chronic venous leg ulcers

Behzad S. Farivar, MD, Shahab Toursavadkahi, MD, Thomas S. Monahan, MD, Jashank Sharma, MD, Areck A. Ucuzian, MD, PhD, Rishi Kundi, MD, Rajabrata Sarkar, MD, PhD, and Brajesh K. Lal, MD, *Cleveland, Ohio; and Baltimore, Md*

Cryopreserved placental tissue human viable wound matrix healed 53% of 30 venous leg ulcers (VLUs) refractory to standard therapy, suggesting use as adjunctive treatment for difficult to heal VLUs.

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234 Histopathologic differences in the endovenous laser ablation between jacketed and radial fibers, in an ex vivo dominant extrafascial tributary of the great saphenous vein in an in vitro model, using histology and immunohistochemistry

Henry F. Ashpitel, BSc, Emma B. Dabbs, BSc, Francisco J. Salguero, DVM, PhD, DipIECPHM, FHEA, FRCPath, MRCVS, Jaya L. Nemchand, BSc (Hons), MSc, PhD, AMIMEchE, MIET, Roberto M. La Ragione, BSc (Hons), MSc, PhD, FRSB, CBiol, FIBMS, CSci, FRCPath, and Mark S. Whiteley, MS, FRCS (Gen), FRCSEd, MBBS, *Guildford, Surrey, United Kingdom*

This ex vivo experimental study using segments of varicose great saphenous veins found that 1470-nm lasers with radial fibers are likely more efficient since they led to more homogenous thermal injury and less carbonization when compared to jacketed fibers.

246 Invited Commentary — Fedor Lurie, MD, PhD, *Toledo, Ohio*

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**JOURNAL OF VASCULAR SURGERY: VEIN AND LYMPHATIC DISORDERS —
MARCH 2019 AUDIOVISUAL SUMMARY**

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