

Journal of Vascular Surgery: Venous and Lymphatic Disorders – July 2019 Audiovisual Summary

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Welcome to the July issue of the *JVS-VL*. There are four papers that we would like to highlight this month.

The first paper, which is the Editors' Choice, "Treatment of popliteal vein aneurysms," is by Noppeney and co-authors from Germany and Switzerland.¹ Thirty-nine patients were diagnosed with a popliteal vein aneurysm, defined as 2x the normal vein diameter, over a 25-year period. All were offered lifelong anticoagulation or surgical repair for venous aneurysms >2x the size of the normal popliteal vein. The mean size of the aneurysms in their series was 23.3 mm and 79% selected treatment with either anticoagulation or surgery, while 21% only agreed to surveillance alone. In follow-up, patients with an aneurysm >20 mm had a greater risk of popliteal vein deep venous thrombosis. Those who elected treatment rather than surveillance chose surgery in 94%. The authors concluded that popliteal aneurysms are a rare disease that should be treated when >20 mm due to the risk of deep venous thrombosis. Either surgery or anticoagulation are appropriate treatment options.

The next paper, "Defining the utility of anteroposterior venography in the diagnosis of venous iliofemoral obstruction," by Lau and coauthors from New York,² compared the accuracy of venography in the anteroposterior view to intravascular ultrasound (IVUS) in patients treated for iliofemoral chronic venous insufficiency who had a >50% stenosis of a proximal vein. They evaluated venograms for stenosis location, thinning of contrast, collaterals, and vein "pancaking" in 86 patients who had imaging studies of the right and left iliofemoral veins available for review, prior to iliofemoral vein angioplasty and stenting. The accuracy of venography at each location, using a stenosis of >50% as IVUS criteria of proximal obstruction, demonstrated that the venogram had a <50% sensitivity in all locations on the right and left, while venography combined with other findings of pancaking and collaterals had a sensitivity of >90% in the left common iliac vein. IVUS changed the treatment plan in up to 50% of patients. These studies indicate that venography provides indirect evidence of left common iliac vein stenosis but has a low sensitivity in most iliofemoral locations. IVUS is superior in demonstrating iliofemoral stenosis when the threshold for angioplasty and stenting is a stenosis >50%.

The third paper for this month is by Bademci and coauthors from Turkey and is entitled "Single-center retrospective review of early outcomes of radiofrequency ablation vs cyanoacrylate ablation of isolated great saphenous vein insufficiency."³ They compared their initial experience with cyanoacrylate glue and compared it to radiofrequency ablation in a retrospective study of 159 patients, with similar numbers receiving each treatment. Saphenous veins were of similar size (~7 mm) in each treatment group and had similar lengths of vein (30 cm) treated with each modality, but the treatment time was 10 minutes longer with radiofrequency ablation due to the need for tumescence. Closure rates were similar up to 1 year, and complications, consisting primarily of reversible paresthesia, were slightly higher in the radiofrequency ablation group. The authors concluded that both procedures are effective, significantly improve symptoms, and are durable up to 1 year.

The final paper highlighted in this month's journal is entitled "Routine use of ultrasound to avert mechanical complications during placement of tunneled dialysis catheters for hemodialysis," by Aurshina and coauthors from New York.⁴ They reviewed their experience with 1600 tunneled dialysis catheters placed in the proximal neck veins under ultrasound guidance. Using ultrasound and a micropuncture technique for patients with low intravascular volume, they had no hemo- or pneumothoraces, with only rare nonlife arterial branch injury after placement which required revision. The authors advocate routine use of duplex ultrasound routinely during tunneled catheter placement and believe that this procedure can be routinely accomplished with a negligible risk of hemothorax, pneumothorax, or carotid artery injury.

We hope you enjoy this month's *JVS-VL* and the many other excellent articles in it.

The video accompanying this article may be found online at www.jvsvenous.org.

REFERENCES

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