

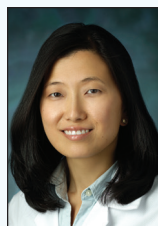
ROUNDTABLE DISCUSSION

Key Questions in Superficial Venous Therapy: Analyzing and Applying Current Options

Moderator Erin Murphy, MD, asks Antonios Gasparis, MD; Misaki Kiguchi, MD; and Marie Josee van Rijn, MD, their thoughts on patient selection for ablations and traditional superficial treatments, whether they treat multiple vessels in single or staged sessions, their approaches to phlebectomy and phlebitis, and their imaging and surveillance protocols.



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In your opinion, which patients do not benefit from ablations and traditional superficial treatments?

Dr. Gasparis: The reality is that most patients do benefit from ablations and traditional superficial treatments, whether it's for symptom relief or cosmetic

reasons. There are some patients who may not benefit or may have limited benefit. Patients whose symptoms are not related to venous disease (eg, leg pain caused by an underlying orthopedic issue) will not have any benefit from varicose vein treatment. A good history, physical exam, and differential diagnosis are critical to

avoid treating patients whose symptoms are from non-venous causes. Patients with venous disease who only have leg swelling are another group who may not benefit or have partial benefit after treatment. Even if the leg swelling is due to underlying venous disease, some patients have lymphatic dysfunction due to chronic venous hypertension, which may be irreversible. In addition, patients with significant postthrombotic deep venous disease may have no benefit or partial benefit. Although it is safe to treat these patients, it is not possible to predict which patients will have improvement, and therefore the patient needs to have appropriate expectations after superficial intervention. Other patients who for the most part will not benefit from superficial venous interventions include those who are morbidly obese, have severe cardiac disease, have advanced malignancy, are bedridden, and have limited life expectancy.

Dr. Kiguchi: The symptoms must match the pathologic findings of the reflux ultrasound first and foremost, and this ultimately drives my decision to treat. Many patients often have severe reflux but minimal symptoms. These patients would not benefit from ablations as much as more symptomatic patients. Although the CEAP (clinical, etiologic, anatomic, pathophysiologic) classification can guide the severity of venous disease progression, ultimately, using a quality-of-life (QOL) measure, such as the Venous Clinical Severity Score (VCSS), guides who would benefit the most from ablations.

Dr. van Rijn: First, patients who have no signs or symptoms should not be treated. We should not treat solely based on results of ultrasound and instead should evaluate patient-reported symptoms. Also, patients with very extensive deep venous problems often have little benefit from superficial treatment. In these cases, I sometimes start with treatment of the deep venous problems first.

Do you address multiple vessels in the same setting? What influences your decisions on when and whether you do?

Dr. van Rijn: I try not to let the patient rotate position in the same setting; therefore, I never treat the great saphenous vein (GSV) and small saphenous vein (SSV) in one setting. If both the GSV and the anterior accessory saphenous vein (AASV) are refluxing, I treat them in the same setting, as long as they both fulfill the criteria for treatment (duration of reflux, length, and diameter), especially when there are tributaries that

originate from the AASV with a coexisting, refluxing GSV. Of course, it all comes down to shared decision-making and identifying the source of the complaints. If signs and symptoms are in an area only related to the GSV or only the AASV, then I might consider treating just that specific vein. I am not in favor of prophylactic treatment.

Dr. Gasparis: Obviously, like many things in the venous space, there are no data to support single-stage treatment of multiple refluxing saphenous veins versus staged treatment. This is based on physician/patient preference. When I have patients with reflux in multiple saphenous veins that I feel need to be treated (ie, GSV and accessory saphenous vein or GSV and SSV), I typically stage them. The main reason I do this is that often there will be varicosities associated with each anatomic segment, and performing ablation on two or three veins and phlebectomies of the associated varicosities of each saphenous can be a long procedure for the physician and patient. In situations where the second saphenous vein does not have varicosities, then an argument can be made to treat both veins in a single session. If this is the case, one needs to reconsider if the vein really needs to be treated or if it is better to stage to determine if the patient has any residual symptoms.

Dr. Kiguchi: It depends. It comes back to symptoms matching the ultrasound findings to maximize treatment benefit. If the patient has refluxing GSV and AASV with associated symptoms, I treat them both at the same time. If the SSV is refluxing and without significant symptoms, I defer intervention or stage—and vice versa.

If you perform phlebectomy, do you do this the same time as vein closures or at a later date? If later, what is your time frame?

Dr. van Rijn: I make this decision based on ultrasound findings, clinical examination, and a conversation with the patient. If a patient has huge tributaries and a relatively small refluxing saphenous trunk, I tend to perform phlebectomy in one setting. However, if there is a 7-mm extensively refluxing GSV with some minor tributaries, I treat the GSV and have the patient return to the outpatient clinic to evaluate if a phlebectomy is still necessary. We know from studies that the concomitant strategy leads to approximately 60% overtreatment. This needs to be explained to the patient because even though a phlebectomy is a low-risk intervention, there will always be a risk of bleeding, infection, or thrombosis. My time frame for reevaluation is 6 to 8 weeks.

Dr. Kiguchi: I am a two-staged surgeon. Approximately 50% of my patients won't need phlebectomies after ablations, so I tend to wait it out for 6 to 8 weeks. Often, patients are satisfied with their symptomatic outcome after 6 to 8 weeks and do not wish to pursue phlebectomies. However, I usually treat CEAP 4 to CEAP 6 patients and do not treat many cosmetic patients.

Dr. Gasparis: As mentioned previously, there are two schools of thought—single-session or staged treatment. There are data to support either treatment preference. Treating only the saphenous vein will result in improvement or resolution of symptoms and/or varicose veins in about 50% of patients. So, when treating all patients in single session, you may be overtreating half the patients. On the flip side, if you stage all patients, you will need to do a second procedure in half of patients.

Patients with superficial venous disease are seeking treatment for clinical symptoms, cosmesis, or both. Understanding the patient's motivation for seeking treatment is important in deciding how you will approach them. Another factor is the severity/size of the varicosities. In patients who care about the cosmetic aspect and/or have large varicose veins, my preference is to treat them in a single session. This is the majority of the patients in my practice. For patients who do not care about the cosmesis and/or have small varicose veins, I will stage if necessary.

How often do you see phlebitis during the delay to phlebectomy? Can you share any tips to avoid and manage this?

Dr. Gasparis: This is one of the major reasons I like to do phlebectomy in many patients in a single session with ablation. One thing that patients dislike more than visible veins after a vein procedure is thrombophlebitis of varicose veins. If you stage patients routinely, this will occur in 10% to 20% of the time in my experience. Some pointers to avoid thrombophlebitis:

- If planning to ablate the saphenous vein in the thigh and there are large thigh varicose veins off the saphenous vein, avoid staging and do phlebectomy at the same time.
- If the saphenous vein is refluxing to the calf and there are large varicose veins in the calf, avoid ablating the saphenous all the way to the calf; stay in the thigh.
- Evaluate the varicosities with ultrasound if there is no reentry perforator in the calf and the varicosities are a dead end; ablating just above the varicosities will most likely result in thrombosis.

Dr. van Rijn: To be honest, I rarely see this. Although phlebitis is not comfortable for the patient when it occurs, it is a spontaneous "treatment" of the tributaries in the end, so I don't think the aim should be to avoid it. For the patients' comfort, I explain that when this occurs they should take pain medications and apply cold compresses.

Dr. Kiguchi: When treating varicose veins off the saphenous veins > 5 mm, I tend to see an increase in phlebitis rates, but I mitigate this with consistent compression to decompress the bulging varicosities.

Do you perform imaging on patients the first week after ablations? What are your thoughts on endothermal heat-induced thrombosis (EHIT) class 2 and 3?

Dr. Kiguchi: Yes, I image the patient within 7 to 10 days after ablations. Most often, I do not give anticoagulation for the treatment of EHIT class 2, but I do surveillance weekly until thrombus resolution. However, in high-risk patients, I often give therapeutic anticoagulation with weekly surveillance. Treatment would cease after thrombus retraction from the junction. For EHIT class 3, I treat with therapeutic anticoagulation with weekly surveillance until thrombus retracts.

Dr. Gasparis: Yes, I image all my patients following the superficial vein procedure. Because many patients may also receive ultrasound-guided foam sclerotherapy and/or phlebectomy, I am not only looking for EHIT but also deep vein thrombosis (DVT). Although the vast majority of these thrombotic complications (EHIT or calf vein thrombosis) are benign, from a medicolegal prospective, I look for them and treat them with a short duration of low-dose anticoagulants. They all resolve within 1 to 4 weeks.

Dr. van Rijn: I do not image patients within the first week—only if they have signs and symptoms of DVT. EHIT class 2 and 3 is not something I typically worry about, and the risk of a DVT or pulmonary embolism is extremely low after superficial treatment. Even if the incidence of EHIT class 2 to 3 were high, which it is not, it does not lead to major complications. However, if you perform a duplex ultrasound shortly after the intervention and see a protruding thrombus at the junction, you might feel the need to start anticoagulation. This will lead to overtreatment with an increased risk of bleeding.

What is your follow-up for patients undergoing superficial procedures? At what point do you dismiss them from the clinic?

Dr. Kiguchi: I set expectations with patients at the

initial consultation visit that venous insufficiency is a chronic condition. After superficial procedures, I tend to see them 6 to 8 weeks after procedures, for C2 to C3 patients, to evaluate improvement in their symptoms. If improved, then I see the patient yearly to assess disease progression, but again, treatment is based solely on symptoms. In C4 to C5 patients, I tend to keep them under surveillance very 6 months.

Dr. van Rijn: I see patients for follow-up once after 2 to 3 months (earlier in case of a staged strategy), and if the treatment was successful, I dismiss them. In cases of combined deep and superficial venous problems, severe skin problems, or active/recently healed leg ulcers, I tend to keep them under surveillance.

Dr. Gasparis: In patients with C2 disease, we see them at 1 week after treatment and tell them to call for follow-up at 6 weeks if there are any concerns or if they develop recurrence in the future. For C3 disease, we have them return at 6 weeks to see if their swelling has resolved, and if not, they may need further evaluation and treatment of their lymphatic system. Patients with C4 disease and above are followed every 6 to 12 months, unless they have an active ulcer.

What tools do you use to track baseline clinical pictures/symptoms and future improvements?

Dr. Kiguchi: In my clinic, I tend to use simple photographs, CEAP score, and VCSS.

Dr. Gasparis: We collect baseline CEAP score and VCSS. In patients with swelling, we measure leg circumferences, and all patients get pictures of their legs.

Dr. van Rijn: I take photographs of the legs before and after the procedure, which are kept in the electronic patient file. We are setting up an automated system through which patients are asked to fill out QOL forms online before and after treatment, but this has not been finalized.

Where are we most lacking in this field from a technology or knowledge standpoint?

Dr. van Rijn: I wish patients could be more efficiently monitored and informed, for example, through an app. This might also create a platform for them to find other patients. Also, we need more patient-related outcome measurement tools. From a knowledge standpoint, I hope in the future we will find a way to better select which patients benefit from a concomitant strategy versus a staged treatment for saphenous ablation and phlebectomy.

Dr. Kiguchi: From a clinical practice standpoint, there are no head-to-head randomized trials available to compare the numerous nontumescent, nonthermal endovenous closure technique outcomes to tumescent, thermal endovenous closure technique outcomes across all CEAP presentations. Patient experience will also need to be considered as a factor in “outcomes.”

Furthermore, understanding and treating recurrence beyond perforator ablation and generalized sclerotherapy still needs to be investigated. What more can we do for these patients who experience recurrence? What risk factors predict recurrence in these patients?

Dr. Gasparis: With respect to technology, we need better treatment options for varicose veins and especially spider veins.

From a knowledge perspective, we need better tools to help us evaluate the severity of disease (reflux and/or obstruction) and its contribution to venous hypertension and correlation to clinical symptoms. This is especially critical in patients with leg swelling. ■

Disclosures

Dr. Murphy: Consultant to BD, Boston Scientific Corporation, Cook Medical, Cordis, Gore & Associates, Medtronic, Philips.

Dr. Gasparis: Consultant to Medtronic, Bard, and Boston Scientific Corporation.

Dr. Kiguchi: Speakers bureau for Medtronic.

Dr. van Rijn: None.