

## CHANGING SVT TREATMENT

### First episodes of SVT may indicate more serious condition

By Gary H. Dworkin, MD

Most physicians, myself included, have practiced medicine under the assumption that superficial venous thrombosis (SVT) is a common, self-limiting condition that only requires local heat, anti-inflammatory medication, compression hose and patient reassurance. I briefly would like to describe why I have changed my view.

There is accumulating evidence that the rate of detectable, often occult, deep venous thrombosis and/or pulmonary embolism in patients presenting with a first episode of SVT is unexpectedly high. Using duplex ultrasound, ventilation/perfusion studies and now ultrafast CT pulmonary angiography, the ability to positively confirm the presence of deep venous system thrombus in patients with SVT suggests that SVT may not be a benign condition for all patients.

As far back as 1996, a William Beaumont Hospital group demonstrated that 11 percent of SVT cases progressed to DVT within two weeks, more so when the SVT was located above the knee.<sup>1</sup>

In 1998, a group from Maimonides Medical Center in Brooklyn, N.Y., showed in patients with SVT who underwent a hypercoagulability evaluation, 35 percent had an abnormal coagulation profile that persisted for at least 5 months.<sup>2</sup>

In 1999, an Italian group found by V/Q scan that 33 percent of their SVT patients had asymptomatic, but high probability, positive scans for pulmonary embolism.<sup>3</sup>

More recently in 2010, a large multicenter study from France demonstrated with current imaging technology that of 844 patients presenting with SVT, a surprising 25 percent were detected to have deep venous thrombosis (DVT) or symptomatic pulmonary embolism (PE). Among those without DVT or PE on presentation, within 3 months, an additional 10 percent developed thromboembolic complications including DVT, PE, recurrence of SVT or documented SVT extension.<sup>4</sup>

Finally, in late 2010, a large international multicenter study was published in the New England Journal of Medicine.<sup>5</sup>

This study demonstrated that in a population presenting with superficial thrombophlebitis that was “scrubbed” of individuals with known predisposing factors for thrombotic complications, a single 2.5mg subcutaneous injection of fondaparinux daily for 45 days profoundly reduced all types of subsequent thrombotic complications in SVT patients when compared to the study’s blinded placebo injection group. This outcome was accomplished with an excellent safety profile.

It is now recommend that all patients who present with SVT undergo a comprehensive bilateral venous ultrasound study that includes deep and superficial vein imaging. This is a rapid, inexpensive and ubiquitous diagnostic technology that is applicable to nearly every patient.

On average, you should expect 10 percent of presenting SVT patients to have a DVT. A recommendation for pursuing CT angiography should be based on the presence of respiratory symptoms, chest pain, tachycardia, low-grade fever or recently diagnosed DVT. In the previously noted French study of SVT patients, 3-4 percent were found to have PE on CT angiography.

Occult malignancy (lung, breast, abdominal/pelvic) or a named hypercoagulable state whether inherited or acquired are conditions discovered in 5 percent of presenting SVT patients. An SVT recurrence or migration of the process should alert the physician to the possible existence of one of these two conditions and prompt an investigation.

#### IN SUMMARY

- Superficial venous thrombophlebitis is not a benign condition for all patients.
- Ultrasound venous exams should be performed for all SVT patients and a lower threshold should exist for obtaining CT pulmonary angiography.
- Treatment of all uncomplicated SVT with anticoagulants for 45-60 days (injection or oral) is not yet standard of care but is safe and be prescribed for patients presenting with SVT above the knee, recurrent SVT and migrating SVT either unilateral or



This patient had migratory superficial phlebitis, but ultimately was found not to have an underlying malignancy or hypercoagulable state. She had three months of Coumadin and a thorough hematologic/oncologic evaluation that was negative. Photography courtesy of Vein Specialists of Tampa

contralateral. A recommendation to treat all SVT patients with anticoagulants must first await cost-effectiveness analysis studies.

- Investigation for occult malignancy and hypercoagulable conditions should be pursued for any episode of SVT that migrates or evolves into a complication. **VTN**

#### References

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- 4 Decousus, H., Quere, I., et al., “Superficial Venous Thrombosis and Venous Thromboembolism.” Annals of Internal Medicine. 2010; 152: 218-224.

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Gary H. Dworkin, MD, is founder of Vein Specialists of Tampa LLC in Tampa, Fla. He can be contacted by calling 813-374- or through TampaVeinSpecialists.com. In addition to information about the clinic and its services, Dr. Dworkin writes a blog for the website.

## Cosmetic surgeon brings ARTAS hair replacement to Texas market

Mark A. Bishara, MD, PA, a cosmetic surgeon specializing in a range of hair restoration treatments, says he is the first to bring the ARTAS System to Texas. Spokesmen say the ARTAS System is the first and only FDA-cleared, physician-controlled, computer-assisted technology that allows

harvesting individual follicular units directly from the scalp. This minimally invasive solution uses sophisticated digital mapping and precision robotics to deliver beautiful, natural looking results.

“I strive to help patients restore or achieve their ideal appearance using the most

advanced and effective hair restoration tools available,” Dr. Bishara said. “The ARTAS Procedure is an exceptional solution to hair loss: it requires no stitches, offers a fast recovery time and natural permanent results.”

Dr. Bishara is a member of the American College of Surgeons (ACS), the American

Academy of Cosmetic Surgery (AACS), the Dallas County Medical Society, and the Texas Medical Association. He is also a cosmetic surgeon with an upscale surgery and consult center based in Mansfield, Texas. **VTN**

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