The mainstay in treating venous insufficiency be it varicose veins, spider veins or advanced skin changes-ulcers, is elastic compression. The elastic compression should be graduated—greater pressure at the ankle, than the upper leg. Adequate compression does not include support hose or TED stockings. TED’s give 15mm Hg compression which is adequate while a patient is lying (thus the name anti-embolic stockings) but is inadequate with the leg in the dependent position. They really have no place other that the hospital setting. Medical grade stockings include compression over 20mm Hg. The most commonly prescribed compression is 20-30mm Hg. For preventative purposes in those who have jobs that entail a lot of standing-beauticians, nurses, cooks, surgeons and others 15-20 mmHg is adequate. The stockings only need to extend over the calf. Compression in the thigh is only useful for those with large varicosities which ache. They are also used with treatment and for considerations of comfort or where a dress would expose the top of the knee high.

Wearing compression hose in Florida is difficult due to the weather and our summertime clothing, but daily usage will usually result in improved hemodynamics and thus symptomatic improvement. In fact, improvement with compression is a good prediction that surgical treatment of the diseased veins will result in long term symptom improvement.

Many changes have occurred in the last 10 years in our approach to treatment of chronic venous insufficiency. Previously surgery was the mainstay for therapy. Sclerotherapy with liquid, although frequently successful in the short term had a high rate of recurrence in 20 to greater than 50% of patients. Surgery, in most cases, entailed general anesthesia and multiple incisions with the attendant problems of wound healing in the obese and when incisions were placed in an area of advanced stasis changes. Dealing with perforator veins—often the underlying culprit in patients with ulcers was often challenging, especially when located under an ulcer or in an area of significant lipodermatosclerosis. Even in the best of hands there was a significant recurrence rate, especially if there was a subsequent pregnancy or the patient had a job that entailed significant standing.

With the new millennium there has been a significant paradigm shift with the advent of endovenous therapy. The two modalities available are radiofrequency closure and laser ablation. There are also devices on the horizon which match the right modality to the patient.

Treatment of spider veins is generally accomplished using sclerotherapy. This is performed using a small 31g needle. Some spider veins, especially those which are very small or those on the face are best treated with the appropriate surface laser. Again, experience and appreciation for the underlying venous pathology is invaluable. Spider patterns in certain locations on the legs often indicate underlying disease which will compromise results if not addressed.

New developments in therapy have made treatment available in many who, in the past, would not be considered because of the risks of general anesthesia. There is still a need for experience that comes from years of training and practice in matching the right modality to the patient.

The keystone to all of the procedures is a complete detailed ultrasound using compression maneuvers with careful attention to the perforators. Nothing can replace experience with venous and arterial disease and an understanding of venous physiology. Patients with significant arterial disease or who lack mobility should generally not be treated. Treatment of patients with ulcers can be gratifying, and should be coordinated with wound care. Not only can wound healing be accelerated but recurrence rates are lowered.

Dr. Daniel Arnold is a board certified General Surgeon and has been serving the Central Florida area for over 31 years. He graduated from the University of Kentucky College of Medicine and did his residency at the University of South Florida. He is a Fellow of the American College of Surgeons and the Southeastern Surgical Congress. Dr. Arnold is also a member of the American College of Phlebology and has been dedicated to the treatment of venous disease for over 5 years.

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