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A Multifaceted Approach for Training in Venous Disease Management

Diomed, the endovenous treatment leader, offers a unique multistep program with a mix of didactic, interactive simulation, and clinical experience.

BY DAVID VANDERPOOL, MD

Treatment of venous disease (phlebology) is a rapidly growing specialty, which today draws physicians from multiple specialties including vascular surgery, interventional radiology, interventional/invasive cardiology, general surgery, dermatology, plastic surgery, obstetrics and gynecology, emergency medicine, and internal and family medicine. Given these varied backgrounds, it is not surprising when existing skill sets do not completely align with those required. Treatment of venous disease requires (at a minimum) a solid understanding of:

- Venous anatomy and pathophysiology
- Treatment alternatives, risks, benefits, and indications
- Duplex ultrasound (diagnostic and intraoperative)
- Laser safety, physics, and use
- Interventional surgical skills
- Management and marketing of a venous practice

It is infrequent that a physician has all of these skills, and it is imperative that new phlebologists receive comprehensive training to help acquire and develop these skills. Additionally, support staff and nursing will generally require similar training on many, if not most, of the same skills.

DIOMED'S APPROACH TO TRAINING

Diomed (Andover, MA) offers a multifaceted training program that includes a mix of home study, online training, physician preceptorship, simulation, and on-site clinical support with most resources available to support staff as well. Although not every physician will require every component of the training program, all are available and can be customized to meet the particular needs of each individual (Figure 1).

Diomed's program is unique in the industry in its comprehensiveness and is a reflection of both its experience and singular focus in the area. The program was developed with input and continuing involvement from multiple physician specialties and involves a mix of didactic, interactive simulation and clinical experience. Unique elements include on-line training, simulation (with their exclusive Blue Phantom™ Leg model [Advanced Medical Technologies, Kirkland, WA]), and advanced/specialty training opportunities in ultrasound and compression therapy with Diomed's top-tier industry partners (Sonosite, Inc. [Bothell, WA] and BSN-Jobst [an affiliate of BSNmedical GmbH & Co., Hamburg, Germany]). The program is designed to enable every physician, regardless of experience or specialty, to develop a similar set of skills, diagnostic capabilities, and understanding of procedural issues upon completion.

PROGRAM OVERVIEW

The Diomed Venous Disease Management training program offers multiple learning opportunities at four different stages. These stages can be tailored to meet the unique needs and varying experience of health care professionals. In addition to device-specific training pertinent to Diomed's endovenous laser therapy (EVL™) procedure, there is a significant amount of content focused on understanding and diagnosing venous disease, assessing various treatment options, and implementing a comprehensive venous practice.

Self-Study/Online Training

In the first stage, prior to viewing and performing proce-

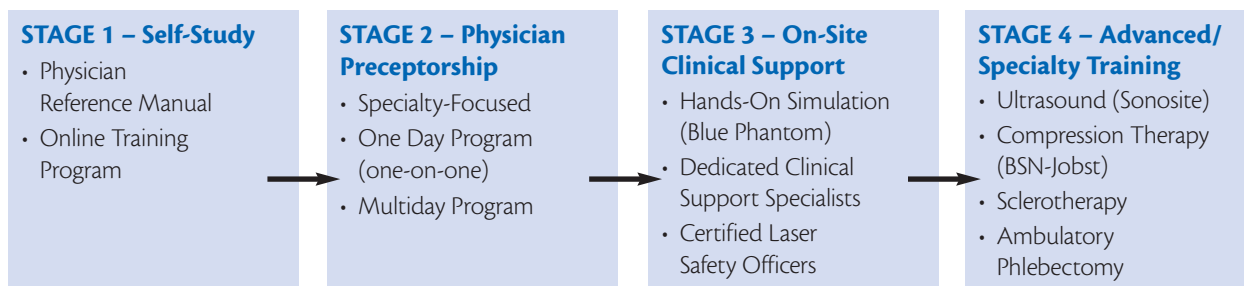


Figure 1. The stages of Diomed's Venous Disease Management training program.

dures, Diomed provides an online training program (see sidebar) and a variety of materials to help develop an initial base of venous disease knowledge. Diomed's *Physician Reference Manual* is a compendium of clinically useful information including phlebology and laser textbooks, procedural descriptions, patient forms, and clinical reference data. These materials are useful both for pre-study and later reference.

Physician Preceptorship

The second stage of training involves a peer-to-peer interaction in which physicians who are new to venous disease treatment can visit a busy phlebology practice, view a variety of diagnostic and treatment sessions, and interact closely with an experienced phlebologist—the proverbial “see one.” Diomed works with a network of experienced phlebologists around the country and is generally able to accommodate physicians’ regional and specialty preferences. Diomed also offers a series of multiple-day training programs (including the one I run), which allows new physicians enhanced interaction with a practicing phlebologist and increased didactic and clinical exposure. The choice of single- or multiday training sessions is driven primarily by new physicians’ educational needs, availability, and preference.

Training objectives include observation and discussion of preoperative evaluation (history, physical presentation, ultrasound mapping, augmentation techniques), treatment preparation, set up of equipment and supplies, treatment techniques (venous access, tumescent anesthesia, intraoperative ultrasound, Seldinger technique, and laser ablation), and postprocedural care and instructions. Once training is finished, Diomed provides a certificate documenting successful completion, and physician trainers remain as a resource for new physicians for later follow-up questions.

On-Site Clinical Support

The third stage of training involves simulation and on-site clinical support for a physician’s first EVLT cases. Diomed has an exclusive relationship allowing them to offer the Blue Phantom Leg, a model containing various saphenous, femoral, and tributary veins that can be used for ultrasound-guided vascular procedure simulation (Figure 2). The Blue Phantom provides a risk-free simulator on which to practice real-life surgical skills, allowing the physician to gain experience and confidence. Future EVLT practitioners can hone their skills for venous access, Seldinger technique, and ultrasound visualization prior to performing actual clinical cases.

ONLINE TRAINING

Diomed will soon launch The Online Venous Disease & Endovenous Ablation Training Course (Figure 1). Available online and separately on CD, this course includes a variety of animated sequences, interactive training simulations, learning self-assessments, and other clinical information that are helpful in understanding superficial venous disease and its diagnosis, choosing amongst available treatment options and, if EVLT is appropriate, understanding the detailed steps involved in patient treatment. The course was designed by a team of leading phlebologists whose specialties include vascular surgery, interventional radiology, interventional cardiology, and primary care. As such, it provides a comprehensive overview that should

prove educational for most specialties. The course is divided into seven modules (Table 1).

For experienced clinicians already possessing some background knowledge, there is the option to focus on those areas that are new. The course has more than 72 screens of content, and completing the entire curriculum should only take 3.5 hours. The course can be completed in any order and in multiple sessions, if desired.

While primarily designed for practicing physicians, the course will also prove useful to nursing and other support staff by enhancing their knowledge of venous disease and treatment protocols. New physicians joining an existing phlebology practice, or others simply needing a quick “refresher,” will similarly find it useful in quickly expanding their clinical knowledge.



Figure 1. Assessment screen from the online training program.

TABLE 1. THE ONLINE VENOUS DISEASE & ENDOVENOUS ABLATION TRAINING COURSE MODULES

- Module 1:** Introduction
- Module 2:** Anatomy and disease state
- Module 3:** Examination and diagnosis
- Module 4:** Treatment options
- Module 5:** Preparation
- Module 6:** EVLT procedure
- Module 7:** Learn more

When physicians are ready to perform their first EVLT cases, Diomed provides support with a team of dedicated clinical support specialists. These specialists all have clinical backgrounds and experience viewing and working with physicians on thousands of EVLT procedures. Thus, they have an intimate knowledge of anatomical variations, venous pathophysiology, equipment operation, potential complications, and troubleshooting strategies and are an invaluable resource in ensuring a smooth and successful procedure. They will work with the practicing physician until they have developed a solid level of comfort with the procedure and remain in contact thereafter on an as-needed basis.

Each of the clinical specialists are also certified laser safety officers, meaning they are capable of providing laser safety training to bring an institution into compliance with all OSHA, ANSI, and JCAHO standards.



Figure 2. Blue Phantom™ Leg ultrasound simulation model.

Advanced/Specialty Training

As a final stage, Diomed offers a series of advanced or specialty training opportunities for those desiring to expand their venous practice. Many of the programs were developed in partnership with other industry leaders in the field of phlebology.

In collaboration with Sonosite (Figure 3), the world leader in hand-carried ultrasound, Diomed offers a series of ultrasound courses tailored to the specific needs of a phlebology practice. Advanced training is provided to physicians, registered vascular technologists, or other support staff and includes detailed instruction on ultrasound physics, modalities, screening and diagnosis, flow measurement, ultrasound-guided venous access, and intraoperative visualization.

Diomed recently entered into a similar arrangement with BSN-Jobst, Inc. (Figure 3). BSN-Jobst is the market leader and number one physician-recommended brand of medical compression garments in the US. Diomed and BSN-Jobst will provide joint training focused on the use of medical compression therapy in the care and management of venous and lymphatic disease. Compression therapy is frequently recommended before and is generally required after endovenous laser treatment.

In addition, Diomed offers a number of training opportunities through its physician trainer network for those seeking to build their skill set in sclerotherapy and ambulatory phlebectomy.

Last, Diomed, in conjunction with other industry partners, will sponsor a Vascular Surgery Fellowship training



Figure 3. Diomed's industry training partners.

program in September 2006. The course will be conducted at Englewood Hospital in New Jersey and will be chaired by Steve Elias, MD, Director of Englewood's Center for Vein Disease. This comprehensive program will feature distinguished faculty from vascular surgery programs around the country. For more information on the Vascular Fellows Course in Vein Disease, contact Diomed at (877) 434-6633 x185, Robin Hoyle, course administrator, at (781) 990-1577, or the Englewood Center for Vein Disease at (201) 816-0666.

Maximizing Business Advantage

Although helping new phlebologists to achieve clinical competency is the primary goal of Diomed's training program, no venous practice will be successful without understanding how to properly manage and market the procedures inherent in a phlebology practice. Diomed has helped more than 800 practices expand through the assistance of their physician trainers, sales consultants, reimbursement consultants, and internal marketing organization. Diomed provides a host of marketing programs and services through its Maximizing Business Advantage (MBA) program, the breadth of which cannot even begin to be covered in this forum.

In summary, in my opinion, Diomed's Venous Disease Management training program is clearly one of the most comprehensive programs available in phlebology from either industry or academia. Partnering with the experience that Diomed offers can only help accelerate one's entry into the treatment of venous disease and will go far in ensuring a healthy and successful practice. For additional details on any of these programs, please contact Diomed directly at (866) 434-2377 or www.evlt.com. ■

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