

# Fellows Training in Venous Disease

The importance of exposing fellows to all aspects of venous disease.

BY STEVE ELIAS, MD

All vascular surgery fellows and most interventional radiology fellows know a lot about the endovascular, minimally invasive management of arterial disease. For these physicians, it is now second nature to perform an endovascular aneurysm repair. However, venous disease is a whole other world—a world many fellows have not experienced or do not understand. Most fellowship training programs focus on the arterial world even though the vein world is at least five times as large.

Traditions die hard. Surgeons prevent loss of life or limb. They stop hemorrhage and stroke. Tradition and history relegated the management of venous patients to residents in their first and second postgraduate years. They would take care of the minor cases until they got further along in training, at which point they could take on the more difficult cases, such as those involving arterial and aneurysmal disease.

Throughout the last 5 to 8 years, the vein universe has experienced a big bang. New worlds have evolved. The modern management of venous disease has become more complex and complete. Diagnostic and therapeutic options are often minimally invasive or completely noninvasive. Most procedures are done on an ambulatory basis, and most treatment options involve technologies that did not exist 10 years ago. The understanding of venous pathophysiology is now a science unto itself, and the management of end-stage venous disease does not solely involve the application of an Unna's boot. The treatment of thrombotic disease consists of more than simply anticoagulation and caval filters; we can do much more now in a minimally invasive way that is better for patients and better for physicians.

## FELLOWS COURSE

The fellows' position in medical life is unique. As they make the transition from training to practice, their needs and skills are unique. Most of today's fellows have excellent catheter skills and different hand-eye coordination than traditionally trained surgeons. They have been using laparoscopic, radiologic, and ultrasonic visualization during their

training to a greater extent than those trainees of 10, 15, or 20 years ago. Accordingly, we believed they should also know how to integrate the management of venous disease into their overall vascular practice as they enter the world of practice and leave the training world behind.

However, most vascular or interventional radiology fellowship training programs do not allow for extensive experience in venous disease. Approximately 2 years ago, we identified a void in training and a real need to educate fellows about all aspects of venous disease. We believed they should gain a global understanding of the modern state of affairs. We wanted them to know there is more to caring for the venous patient than stockings, stripping, and an Unna's boot.

After a year of planning, the Fellows Course in Venous Disease was inaugurated in September 2006 by The Center for Vein Disease at Englewood Hospital and Medical Center, New Jersey. Initially, we wanted to limit attendance to 20 fellows to enable the faculty and fellows to interact more personally as compared to other courses. An overwhelming demand occurred; 42 fellows wished to attend. The course number was thus increased to 30 attendees and seven faculty members.

## COURSE GOALS

The theme of the course was "teaching new dogs new tricks." The faculty consisted of some experienced vascular specialists, as well as some newer ones who already knew most of the tricks and were eager to pass them on to the next vascular generation. Founding industry sponsors were Diomed Inc. (Andover, MA), BSN-Jobst Inc. (Charlotte, NC), SonoSite Inc. (Bothell, WA), and Organogenesis Inc. (Canton, MA). Unrestricted educational grants defrayed the fellows' expenses, and fellows were able to attend without charge.

The intent was to expose the fellows to the components of a modern vein practice, provide clinical and case examples with video and live ultrasound duplex imaging studies, and allow for maximum attendee/faculty interaction. With larger courses, fellows may get lost in the shuffle, and many feel inhibited to ask questions. Keeping attendance small and limited to fellows broke down this barrier. In the post-

course evaluation, aside from exposure to modern vein care, the fellows rated the extensive personal interaction with the expert faculty as one of the best aspects of the course.

The ultimate goals of the course are to expose fellows to all aspects of venous disease, highlight many of the modern concepts, and let the fellows know the various technologies and techniques available. Data and results are presented in an unbiased manner. The fellows gain a lot of information in less than 3 days, but they do not learn everything in complete detail. They are exposed to most concepts, techniques, technologies, and results so that they have an idea of what they need to know to best manage the venous patient.

This course emphasizes the importance of venous disease and serves as an introduction to the knowledge base they need to acquire. To that end, the American Venous Forum (AVF) has created a core venous curriculum, which builds on this course. It is our hope that fellowship program directors will incorporate this curriculum into their training programs. We are working with the AVF and Association of Program Directors in Vascular Surgery to accomplish this goal.

In addition, most of the faculty and I are involved with one-on-one training of various techniques and technologies at our own institutions. Fellows may return for more extensive and intensive training by attending these sessions.

## THE SECOND FELLOWS COURSE

Due to the success of the first course and the continued need to train other fellows, the second Fellows Course in Venous Disease will be held in May 2007. More industry supporters are involved. Sponsoring industry now includes Diomed Inc., BSN-Jobst Inc., SonoSite Inc., Bacchus Vascular Inc. (Santa Clara, CA), and Sanofi-Aventis (Paris, France). The number of attendees will be limited again. The course agen-

da has changed somewhat in response to the evolving technology and understanding of venous pathophysiology. As new concepts in venous management are introduced, they are added to the agenda. The management of deep vein thrombosis with chemical and mechanical thrombectomy has been added as well as stenting of occult proximal venous lesions (iliac/caval). A list of the 2007 agenda is available (Sidebar).

## COURSES FOR PRACTICING PHYSICIANS

There are many other courses held throughout the year that practicing physicians can attend to gain knowledge about the modern, minimally invasive management of venous disease. Many of our faculty and I participate in these courses, which I highly recommend for physicians already in practice because we address the needs of practicing physicians rather than fellows. I believe the fellows' needs are different and that they require their own course to meet these goals. Thus, we started the Fellows Course, an investment in the future care of venous disease.

## THE FUTURE

The AVF and the Association of Program Directors in Vascular Surgery have expressed interest in endorsing the Fellows Course in Venous Disease so that we all work together to attain the goal of training fellows in a cohesive manner. Industry continues to be increasingly supportive. This investment in our vascular future—the fellows—is important because without the future, there is only the past. When teaching, we hope the fellows adopt the concepts of respecting their predecessors, embracing the new, and encouraging the improbable and impractical—and to do so without bias.

If you are interested in attending the ongoing Fellows Course, which is a semiannual event, please contact me or Robin Hoyle. Fellows or Fellowship Directors will receive mailings regarding upcoming courses. Also, if any program directors of vascular or interventional radiology programs wish to host the Fellows Course at their institutions in 2008, please contact me personally. The future belongs to the fellows. ■

*Steve Elias, MD, is Director, Center for Vein Disease Englewood Hospital and Medical Center, in Englewood, New Jersey, and Assistant Clinical Professor of Surgery at Mt. Sinai School of Medicine, New York, New York. He has disclosed that he is a paid consultant to Diomed. Dr. Elias may be reached at (201) 894-3252; veininnovations@aol.com.*

*For more information, contact Robin Hoyle, Administrator of the Vascular Fellows Course, at (617) 320-6748; robinhoyle@comcast.net.*

### SECOND FELLOWS COURSE AGENDA

#### Monday, May 7, 2007

History of Venous Disease; Venous Disease and Evidence-Based Medicine; Anatomy and Pathophysiology; Noninvasive Testing, Thrombophilias: Important and Simplified; Sclerotherapy: Spider, Reticular, and Varicose; Varicose Veins: Phlebectomy, Manual, and Powered; Vascular Lab Live Cases and Video Cases Endovenous Ablation; Endovenous Ablation: Technology or Technique

#### Tuesday, May 8, 2007

Perforators: SEPS to PAPS; Wound Care and Skin Substitutes; Video: PAPS and Endovenous Ablation; Proximal Deep Obstruction: Balloons, Stents, Real Surgery; Deep Venous Repair: The Holy Grail; Venous Thrombolysis Prevention and Caval Filters; Upper- and Lower-Extremity DVT; Thrombolysis: Chemical, Mechanical, Stents; Venous and Arterial Disease: The Balance and The Mix, How To Do It; Summary and Evaluation