Peter Schneider, MD

Dr. Schneider discusses treating CLI patients, additions to the 2009 VIVA meeting, and what we can expect to see from the vascular field in the next few years.

What is your decision process when confronted with a critical limb ischemia (CLI) patient?

We look for an opportunity to perform a minimally invasive limb salvage procedure whenever possible. The remarkable factor about CLI patients is how the process in the leg is usually just the most outward manifestation of how sick they really are. The disease burden in every vascular bed and the underlying lack of reserve in various organ systems makes this group very likely to benefit from a less-invasive option. The patients I struggle with are those with very poor runoff. Pedal arterial disease, occlusions crossing the ankle, or isolated pedal segments are very difficult to manage with current endovascular techniques. If one of these patients also has major foot damage, you may only have one shot, and therefore bypass is still the best answer in these cases.

What percentage of your CLI patients are now treated with endovascular approaches versus surgical? How has this changed over the past several years?

We currently treat 70% to 80% of CLI patients with endovascular techniques. We have experienced several bursts of progress that have facilitated our endovascular practice. Subintimal angioplasty, including very long segments, has enhanced our practice. The technical aspects of subintimal angioplasty, such as re-entry, have reminded us of the surprising resilience of blood vessels. We have become more aggressive with techniques for tibial recanalization. Part of that is a mindset, and part of it is better equipment, such as chronic total occlusion catheters, better wires, improved sheath access, laser availability, long tibial balloons, etc. We have also used endovascular techniques to enhance the results of open surgery. For example, we might use inflow stenting of the superficial femoral artery to permit a shorter bypass to the foot and avoid vein harvest from the lower leg. There have been a couple cognitive leaps as well. If you can treat CLI patients successfully with endovascular therapy and then aggressively manage risk factors—smoking, cholesterol, diabetes—they often do well, even if the reconstruction does not last for years.

However, we go through flurries of optimism followed by reality checks. We do not do as well as I would like with long occlusions that also cross a joint. The knee and ankle are also areas that tend to be important in the collateral network, so if you attempt recanalization and fail, you might make things worse. Patients with poor distal runoff and major foot damage usually receive an open operation. We tend to operate on common femoral artery disease, especially if there is an occlusion, and this is usually combined with angioplasty proximally or distally to treat the multiple levels that are involved to cause CLI.

What are some of the unique aspects of being a vascular surgeon in Hawaii?

Hawaii has its own culture; there really is an "aloha" spirit. My patients are very kind, and I enjoy treating them. My partners, Michael Caps, MD, and Nicolas Nelken, MD, are fantastic; we work closely with each other, push each other, and help each other. I never hesitate to run a case by either of them. We share the burden of chasing down all the new technologies, which is nearly impossible for one person to do.

That said, the incidence of diabetes in Hawaii is high, and the complications from it are horrendous—renal, ophthalmic, extremity, and cardiac. It seems like every distal target in every organ looks terrible. There is also a challenge in having patients spread across an island chain into some remote areas with ocean to cross to get help.

When you are not at the hospital, how do you like to spend your free time?

I try to surf every morning. I get to work with more clarity and energy that way. I started surfing in the

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early 70s while growing up in San Diego. In the mid-80s, I started using a waterproof beeper case when I was a resident at University of California, San Francisco. Surfing has also been a fun thing to do with my kids. When they go off to the mainland for college, they complain that the surf is not as good, and I just smile and keep quiet. I also enjoy the educational aspect of vascular care; meetings, talks, work with fellows, contributing back to our field, etc., but it does cut into my surfing time a bit—makes me appreciate it even more.

VIVA is now in its 7th year as a meeting. How has it changed, and what new offerings will attendees experience in 2009?

The faculty is handpicked as the best educators in their respective disciplines. The Laptop Learning program's capabilities have increased and have become amazingly sophisticated. The Chalk Talks and Dialog Sessions are extremely popular and are expanded significantly. Sessions with outside entities that influence care, such as the US Food and Drug Administration, have been added. Each day will begin with a VIVA Extreme Case presentation; one of the faculty will present a difficult case that he or she learned from and that highlights the day's topics. This year's VIVA meeting features debates over areas of controversy, which will give us the opportunity to get multiple disciplines involved in each issue. We will debate some things that we all struggle with. For example, "Is the high price of endovascular devices for limb salvage worth the price?" or "Acute stroke intervention can only be broadly applied by non-neurointerventionists." A Fellows Endovascular Case Competition was also added and will be moderated by Kenneth Rosenfield, MD, and Jim D. Joye, DO. Friday is devoted to complications and advanced cases. Even the *VIVA Today* newspaper for attendees has been completely redone. A satellite course on CLI is offered on the day before the meeting, as well as a symposium for the Allied Health Professional. VIVA is becoming *the* multidisciplinary educational experience.

What are the goals of the Allied Health Professionals Symposium that begins the VIVA meeting?

For any of us to be any good at what we do, we need a team of people. I rely every day on the nurses, technicians, physician assistants, nurse practitioners, and other professionals in the operating room, clinic, vascular lab, and research department. The better they are at what they do, the better I am, and the better our patients are treated.

The first time I went to VIVA, it struck me how many physicians brought their whole team of vascular professionals. This year, we wanted to do something specifically designed for these unsung heroes of vascular practice who make many sacrifices and make our practices possible. The Allied Health Professionals Symposium is designed for and presented by these vascular professionals. It will be an opportunity for staff from different disciplines and geographic areas to network with each other, kind of like another version of the multidisciplinary networking that takes place on a larger scale at the VIVA meeting. The faculty is once again handpicked as effective educators from their respective fields, and it is a real mix; our faculty includes physician assistants, catheterization lab technicians, a vascular lab technician, a nurse practitioner, and physicians. We will cover carotid and lower extremity disease: challenging cases will be presented and an in-depth discussion will cover practical and intellectual aspects of practice. Our hope is for outstanding audience participation.

How will the vascular field evolve over the next few years?

I think there will be a few important things that characterize the care of vascular disease over the next few years. Endovascular treatment will continue to improve and become more reliable; however, I think the pace of innovation may slow a lot once the federal government becomes completely enmeshed in daily clinical practice. The use of open surgery may increase a bit, partly because of the cost of new devices, and partly because we have hit a hard stop on the endovascular management of certain problems, such as heavy calcification, severely diseased outflow, etc., in which endovascular therapy has not been very successful.

Vascular care is likely to become more multidisciplinary and more specialized—more specialized in that those with a strong interest will do more, and those with only a passing interest may drop out. There is too much to know now, and higher expectations and bigger challenges come with that. I think there will be dedicated specialists from many disciplines who will work more with each other than with the traditional model of working with those from your original home discipline. There will also be an avalanche of patients who need care, whether it be the aging population or those with conditions identified through new screening programs. The awareness of vascular disease is better now in the general community than at any time in history, and we should continue to explain who we are, what we do, and why it is important. ■