



# Surgeon leads Vietnam medical education program

by David Campbell, MD, FACS, Boston, MA

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In 1998, Dr. Cao Van Thinh invited me to give a lecture at a meeting in Ho Chi Minh City to celebrate the three hundredth anniversary of the founding of Saigon. I had met Dr. Thinh the year before, when he spent some time at the Deaconess Hospital. Although no funding was available, I was pleased to have the opportunity to visit Vietnam, and in November 1998, I eagerly traveled to Ho Chi Minh City.

Dr. Thinh was a perfect host, driving me all over the city on the back of his motorcycle. My translator for the lecture was Dr. Nguyen Khue, chief of endocrinology at Ho Chi Minh University. She later took me on rounds at Cho Ray Hospital, and I was amazed to see a ward full of patients with amputated limbs secondary to type 2 diabetes.

This epidemic of diabetic complications clearly was a relatively new phenomenon in Vietnam, similar to the experience in the U.S. in the 1960s and 1970s. At that time, my colleagues at the New England Deaconess Hospital and Joslin Clinic and I had played an important role in teaching physicians and patients in the U.S. about the management of diabetic complications, and it seemed this experience could be put to good use in Vietnam. Hence, plans were put into place to try to raise money from industry and bring a team over to teach the following year.

### **Vietnam 2000**

This project, known as the Harvard Vietnam Medical Education Program, finally came to fruition in June 2000. I recruited Chan Cooppan, MD, from the Joslin Clinic, and Hau Pham, DPM, from the podiatry department of the Beth Israel Deaconess Hospital, to accompany me on this educational experience. Dr. Cooppan is in charge of continuing education at the Joslin Clinic and proved to be a great lecturer and fund-raiser. Dr. Pham had left Vietnam as a teenager in 1975 and was anxious to return because he hadn't seen his family in 25 years. Needless to say, a highlight of this trip would be witnessing the reunion of Dr. Pham with his mother and four sisters.

A onetime grant from Chase Bank and smaller amounts from Eli Lilly and Novartis helped to fi-

nance the trip. Upon arrival we were quickly put to work conducting ward rounds and leading a major seminar for 200 physicians on diabetes and its complications.

I operated on a carotid aneurysm and did a leg bypass at Cho Ray Hospital, and Dr. Pham and I performed foot surgery at Nhan Dan Gia Dinh Hospital. We noted the lack of communication between services and a curious mix of high-tech and primitive conditions. In particular, there seemed to be little understanding or interest in the diabetic foot problems that contribute to a very high amputation rate.

One physician, Dr. Nguyen Khahn, a surgeon at Nhan Dan Gia Dinh Hospital, however, was impressed with our message and promised to set up a diabetic foot unit at his hospital. All of the physicians we met were extremely welcoming and asked us to return annually and requested that we bring a nephrologist next time. They had just opened their first dialysis unit, although few patients could afford the cost of that treatment. We left Ho Chi Minh City feeling we had made a significant difference and looking forward to our return.

### **2001 visit**

Fund-raising continued to be a concern, but Dr. Cooppan and I managed to get backing from Lilly, Novartis, Aventis, and Bristol Meyer Squibb. We took along on this mission Mark Williams, MD, a nephrologist at Joslin Clinic, his wife Meryl LeBoff, MD, an endocrinologist, and Thahn Dinh, DPM, a podiatrist. We left the U.S. on November 16, unsure how difficult travel would be after the tragedy at the World Trade Center on September 11. As it happened, the flight was uneventful, and we arrived in Vietnam November 18.

The next day, Dr. Khue had us lead an all-day seminar on diabetes and its complications. Turnout from the medical services staff was good, but surgeons were notably absent. The low surgical presence was partly due to a scheduling problem but also typified the extreme difficulty we have found in getting the medical and surgical services to cooperate.

We then traveled by minibus to Can Tho in the Mekong Delta, with Dr. Khue offering a sight-seeing tour on the way. We gave another all-day seminar at Can Tho Hospital to a mixed medical-

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Opposite, background: Bridge in Center of Hue. Foreground: the medical team performing the first in situ femoral tibial bypass in Vietnam.

surgical group. They were very receptive and greatly interested in our presentation.

When not lecturing, we toured the hospital, a run-down French colonial building, with members of our respective specialties. The tour clarified for us that the hospitals in Ho Chi Minh and Hanoi are far ahead of those in rural areas. The physicians expressed great interest in having us return, and the surgeons requested that I demonstrate a leg bypass on our next visit. We returned to Ho Chi Minh tired but exhilarated by the trip to the country and the reception we had received.

The next day was the high point of the trip. Dr. Pham and I went to Nhan Dan Gia Dinh hospital. After rounds, we repaired to the library where Dr. Khanh presented a series of cases he had treated during the preceding year. Using the techniques we demonstrated during our last visit, he salvaged more than 20 limbs. This revelation confirmed that our mission in Vietnam was important and worthwhile. Hope was expressed that these cases could be reported in one of the medical journals to encourage other centers in Vietnam to implement our suggestions. Meanwhile, the nonsurgeons met with Dr. Khue at the medical school for a series of case presentations, and the Vietnamese physicians expressed their appreciation for input from the team.

The team regrouped for a visit to a hospital in the industrial section of Ho Chi Minh. This full-service hospital has a large trauma unit. We took particular notice of a young woman who had been admitted every few months with diabetic ketoacidosis because she could not afford

her insulin. The Vietnamese health care system is ostensibly a state-run system, yet people have to pay toward prescriptions and for many other services. For example, meals are not provided by the hospital.



Dr. Campbell rounding with Dr. Khue and her team at Cho Ray Hospital.



Dr. Campbell performing surgery at Cho Ray Hospital.



Left to right: Drs. Cooppan, Khue, Thinh, Dinh, Campbell, LeBoff, Williams, and Pham.



Left to right: Drs. Khahn, Pham, Nam, and Campbell on rounds at Nhan Dan Gia Dinh Hospital.

Dr. Khue and her team. Meanwhile, I went to the airport with Dr. Thinh to catch a plane to Hanoi, where I visited the two main hospitals and gave a small presentation to the endocrine group. Both Dr. Dang Hanh De, professor of surgery, and Dr. Pham Thi Hoa, head of endocrine, expressed great interest in having the team come to Hanoi on their next visit to lecture on the management of diabetes and its complications. We left Vietnam excited to see that our previous visit had generated signs of improvement.

### **2002 visit**

For this trip, Drs. Cooppan and Pham and I planned to visit Ho Chi Minh, Danang, and Hanoi. Drs. Khue and Thinh did a great job of getting Vietnamese companies to sponsor us. We were delighted to hear that Dr. Khue had been promoted to full professor but disappointed to hear that Dr. Khahn, who had so enthusiastically adopted our techniques, was no longer working. No one would say what had happened, but we suspect he was forced out for political reasons having to do with his children remaining in the U.S.

Our first three days were spent in Ho Chi Minh City, and we started with our diabetic complications seminar at the medical school. This workshop was primarily aimed at internists and attracted a good crowd.

For the next two days, the group split up, with Drs.

Furthermore, most physicians supplement their extremely modest salaries by seeing patients at their homes or by moonlighting in another field.

The last day, the rest of the team headed to Cho Ray Hospital for one more case presentation with

Cooppan and Khue joining the medical teams for rounds and seminars, while Dr. Pham and I went to Cho Ray for surgical rounds and then Binh Dan Hospital to meet with Prof. Van Tan and Dr. Thinh. Binh Dan is a surgical hospital, where the staff is

very interested in diabetic foot problems. After rounds and lunch at Professor Tan's house, Dr. Pham and I each gave a formal lecture on our surgical techniques. We then went to Nhan Dan Gia Dinh Hospital, which had so excited us on our last visit. Dr. Nam had clearly taken over the mantle from Dr. Khanh. We were very impressed with their enthusiasm and determination, and we promised to put on a program for them the next year. As we prepared to leave Ho Chi Minh City, we reflected on the great strides under way at the hospital and the physicians' enthusiasm for our continuing education program.

Next we flew to Danang. Dr. Khue's assistant accompanied us and gave us a great tour of Marble Mountain, followed by a hair-raising drive over Hai Van Pass on the only road connecting the north and south. After a relaxing dinner, we spent the next morning giving our seminar to a large group of physicians. The highlight was our interaction with a group of physicians from Hue who spoke about their experience with diabetic foot problems. They clearly recognized the problem and were anxious for us to visit with them the following year. The next day, we went sight-seeing—visiting My Son, the ancient capital of the Champa kingdom, and the medieval port of Hoi An. On the way back, we visited China Beach. Throughout this adventure, Dr. Cooppan shared with us his expertise in Hindu and Buddhist culture.

Hanoi, perhaps the prettiest city in Vietnam, was our next destination. Dr. Duong Duc Hoang met us at the airport, and showed us around the center of Hanoi with its many lakes and pagodas.



Young woman with recurrent episodes of diabetic ketoacidosis.



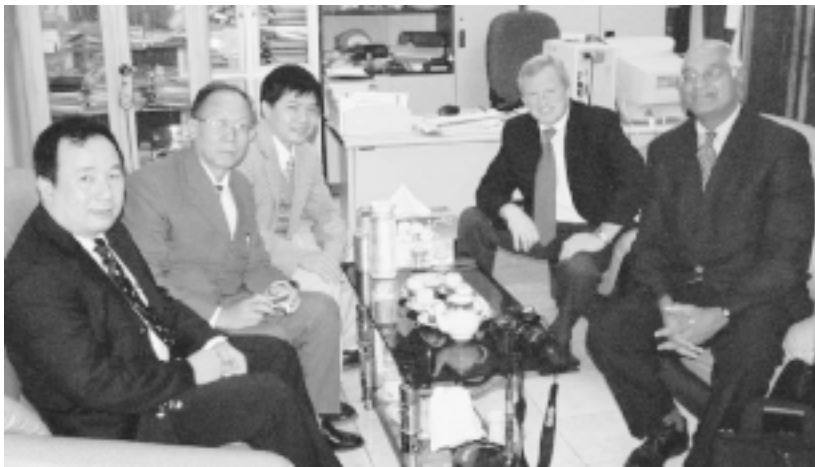
Dr. Cooppan addressing the conference in Ho Chi Minh City.

The next day we met with Prof. Tran Duc Tho and gave our seminar. Again, the turnout was good and the physicians asked plenty of questions that conveyed a genuine interest in our discussion. However, they seemed less well organized in their management of diabetes than their colleagues in Ho Chi Minh and Danang.

Dr. Pham and I meet with Dr. De and his surgical team at Viet Duc Hospital to present our experience with a number of surgical procedures.



Modern bridge in center of Danang.



The team meeting with Professor Tho and Dr. Thang in Hanoi.

### ***India added***

In addition to our usual efforts in Vietnam, in 2003 a group in Chennai, India, asked if we would conduct a seminar there on our way home from that year's Vietnam trip. They had negotiated previously with Harvard International, but the cost of that program was too high. They did offer us some help with transportation expenses, so we agreed to do this program for them on a onetime basis.

The composition of our group was slightly different this year. Dr. Pham had transferred to Boston University Medical Center, so we recruited Tom Lyons, DPM, to the team.

We landed in Ho Chi Minh City November 25. Ho Chi Minh City was the cleanest we had ever seen it because it was the host city for the Southeast Asian Games in soccer. We presented our usual seminar at the university on the complications of diabetes, and physicians from all over southern Vietnam attended.

We asked about Nhan Dan Gia Dinh Hospital, which we had promised to visit on this trip, and got disappointing news. We already knew that Dr. Khahn was no longer at the university, but now we learned

Initially, the surgeons expressed disinterest, but we got their attention, and by the end, they were looking forward to our return and a demonstration of our procedures. During the rest of the visit, we toured the museums with Dr. Hoang, and Drs. Cooppan and Pham took a trip to Ha Long Bay.

On the way back to the U.S., we talked about the impressive efforts that the local physicians had made toward our visit, and we took this as a sign that we were making a difference.

that Dr. Nam had given up medicine to concentrate on real estate, which had always provided most of his income. Unfortunately, everyone who had any interest in our work was gone, largely for socioeconomic reasons.

Nonetheless, we were excited to learn that Dr. Think and Professor Tan had decided to focus on peripheral vascular disease. After the diabetes conference we went to Binh Dan Hospital to see some patients with vascular disease. One patient with Berger's disease was of particular in-

terest to us because we rarely see that condition in the U.S., but consequently, we had no real solutions to offer.

We decided that I would do a femoral tibial bypass the following day using an angioscope and valvulotome we had brought with us on our last trip. Another patient with an abdominal aneurysm was scheduled for a computed tomography scan and surgery in two days.

Dinner that night was at the wonderful home of Professor Tan, and a number of the staff from Binh Dan Hospital joined us.

The next morning after breakfast Dr. Thinh and I went to Binh Dan Hospital, while Drs. Cooppan and Khue conducted a seminar at the university, and Dr. Lyons got to take his first sight-seeing trip in Ho Chi Minh City. I performed the first in situ femoral tibial bypass in Vietnam, using an angioscope in a packed and extremely hot operating room.

At the end of the procedure, which went extremely well, I received a standing ovation, lending new meaning to the British term "operating theatre." Afterward, I lectured the surgical team at Binh Dan Hospital on various aspects of vascular surgery. They were enthusiastic, but because it is only a surgical hospital, it is hard to imagine them developing the multispecialty team needed to treat the complications of diabetes. The day ended with a visit to the Buddhist University followed by dinner at what is known as "the Clinton restaurant" because the former U.S. President ate there a few years ago. We then strolled down "backpackers'" road, where young



Dinner with Professor Tan.



The Hue conference.

travelers from Europe and Australia can find inexpensive lodging.

For our last day in Ho Chi Minh City we split up again. Drs. Cooppan and Lyons went with Dr. Khue to Hospital 115 in the suburbs to do ward rounds. Dr. Lyons demonstrated foot debride-



Conference audience in Chennai.



Dr. Lyons demonstrating foot care in India.

agreed to return in April 2005 to participate in a major endocrine diabetes conference. After an afternoon of shopping, we enjoyed a festive dinner with Dr. Think and his wife and daughters.

The next day we flew into Hue, a small city of half a million people and the ancient capital of Vietnam, filled with buildings and monuments from the Nguyen Dynasty. After a formal meeting with Dr. Thuy, whom we met last year, and his associates to discuss future collaboration, we toured the medical school and presented our conference. This group has the only meaningful statistics on the management of diabetes and its complications that we have seen in Vietnam, and we talked about publishing some of the data with the help of the Joslin Clinic.

After the conference, a plastic surgeon took Dr. Lyons to see a patient with a foot ulcer closed with a rotation flap. It is a sophisticated procedure, which contrasts with the fact that even in Hue, the best center in Vietnam for diabetic foot problems, 30 percent of the patients presenting with neuropathic foot infection will undergo major amputation. One wonders how recurrence can be prevented without a podiatry service to provide good foot care. These sorts of contrasts are a constant theme in Vietnam.

We then took a couple of days to do some sightseeing around Hue. We boated up the Perfume River, toured the tombs of the Nguyen kings, crossed the 17th parallel to visit the Phong Nha caves, and, finally, visited the Citadel before taking a plane to Hanoi. Hanoi was in a state of excitement because Vietnam was playing the fa-

ment at the bedside. I went back to Binh Dan with Dr. Khue to resect the abdominal aneurysm. Given the antiquated instruments and lack of blood availability, the procedure had potential for complications but went very well. The team then regrouped for a farewell lunch, and we

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vorites, Thailand, in the Southeast Asian soccer games. We unpacked and watched the game at dinner.

The following morning, it was back to work, and we went to the Institute of Gerontology at Bach Mai Hospital. This is the hospital that became famous for successfully dealing with an outbreak of Severe Acute Respiratory Syndrome (SARS) in 2003. Despite the absence of the endocrinologists, who were at a meeting in Singapore, we attracted a good crowd, and there was a lively question-and-answer session at the end. I met with Dr. De and his assistant to discuss some possible surgical collaboration during our next visit.

That evening we attended a faculty dinner and again Dr. Thang expressed his desire to work more closely with us in the future. The following day we went with Dr. Thang and his team to visit Chua Huong (The Perfume Pagoda) a few hours from Hanoi. It was a long drive over terrible roads but well worth the effort.


Our last day in Vietnam, we shopped, then had a final meeting with Dr. Thang. All in all, we left proud of what we had accomplished so far in Vietnam, such as ensuring that there is a center for distal bypass surgery and the possibility of obtaining some real data that will allow us to quantify improvement. There was clearly much more enthusiasm for our mission in Hanoi this time than the last, and we are looking forward to working closely with Dr. Thang in the future.

Our next stop was Chennai, formerly Madras—the capital of Tamil Nadu on the southeast coast of India. The two-day seminar we participated in attracted nearly 400 physicians from all over India and Bangladesh and one physician from Israel. It was officially opened by the Minister of Health for Tamil Nadu and then followed by a speech from the U.S. consul. Communication with the Indian physicians was much easier for us than in Vietnam because English is the official language of India. The physicians are generally well educated and very enthusiastic. In fact, we learned as much from the Indian faculty as they did from us.

We were overwhelmed by the size of the problem in India. The total population has reached one billion, and the incidence of diabetes among the urban population has now reached 12 per-

cent—the highest in the world. They have the same congenital issues as South Vietnam, but obesity, due to lack of exercise and a high-carbohydrate diet devoid of fresh vegetables, is an added concern.

One unique feature of this conference was a session in which live patients appeared on stage, allowing us to take a history, examine the patient, and then discuss the case directly in front of the audience. Elliot Joslin, MD, and his colleagues used to do a similar program weekly at the Deaconess up till the mid 1980s.

Vijay Viswanathan, MD, director of the Diabetes Research Centre and the M.V. Hospital, put this conference together. He is a great organizer and is determined to create standards of care for the management of diabetes complications in India. His father, a legend within Indian medical circles, built the institute. We received many invitations to put on a similar conference in other parts of India during our next visit to Asia. Our plan at this time is to work with Dr. Viswanathan to create a health plan for diabetic care in underdeveloped countries and to return to India for a few days at the end of our trip to Vietnam in April 2005. 

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