Tanzania, OTP and Me

Marnie B. Robinson, M.D.

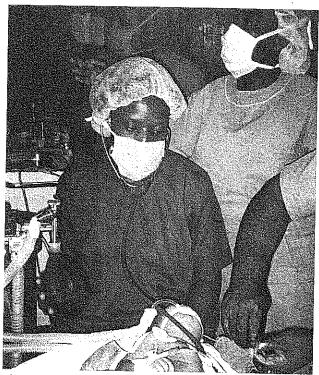
anzania is a land of impressive vistas, beautiful wildlife and amazing people. The scenery ranges from the snow-topped peaks of Kilimanjaro to the vast expanse of the Serengeti, dotted with herds of wildebeest and zebras, not to mention the multitude of wildlife filling the caldera of Ngorongoro Crater. Perhaps most impressive is the diversity and energy of the citizens of this sub-Sahara nation. Although their backgrounds are as different as the 120 tribes they represent, the people of Tanzania are uniformly warm and friendly. Despite the economic hardships and lack of resources emblematic of a third-world nation, the people seem genuinely happy, both optimistic for the future and content with the present.

This attitude is well-represented in the medical community. Although there is a dire shortage of providers, those in medicine work hard to provide excellent care as well as invest time in training future medical providers. There are a mere eight anesthesiologists in a country of 35 million, and there are not enough assistant medical officers (AMOs) or nurses who have completed the requisite anesthesia training to keep pace with the current demand for anesthesia services.

Despite the temptation to be overwhelmed by the present situation, the Tanzanian medical community is cognizant of the need to train for the future. Kilimanjaro Christian Medical Center, or KCMC, is a 450-bed hospital that commands not only a picturesque view of Mount Kilimanjaro but also a key role in medical education. Having just graduated their first class of medical students, KCMC continues its dedication to recruiting and training future medical providers. The anesthesia program currently has 10 students: one physician, two AMOs and seven nurses, all of whom are dedicated, inquisitive and full of hope for a bright future in anesthesia. Wisely, the staff at KCMC recognizes the benefit of outside assistance in attaining their



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Sharing Knowledge and Saving Lives

The ASA Overseas Teaching Program offers education, training and cultural enrichment. Here, students anesthetize a child with myelomeningocoele. Photo courtesy of Mamie B. Robinson, M.D.

simultaneous goals of providing excellent care and quality training. Not willing to relinquish their role as primary anesthesia providers, they have formed a relationship with physicians from developed countries to share the education process for anesthesia students.

Established in 1990, the ASA Overseas Teaching Program (OTP) embraces Lai Tzu's philosophy of "Give a man a fish and you feed him for a day. Teach him how to fish, and you feed him for a lifetime." Thereby, this ASA program sponsors anesthesiologists to travel to Africa for a period of one to three months, where they will become an integral part of the educational process and contribute to more than 60 percent of the anesthesia teaching at KCMC Hospital. Additionally, the OTP supports anesthesia education in West Africa at the University of Ghana Medical School in Accra, sending volunteers to either of these two African locations.

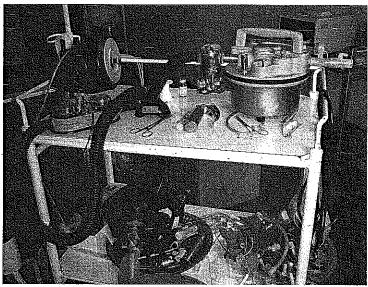
The vice-chair of the committee that oversees this philanthropic effort is Alice A. Edler, M.D., who I am fortunate enough to have as a mentor and attending physician at Stanford University Hospital. Working with Dr. Edler during my residency, I found that her enthusiasm for OTP is contagious, and I quickly sought to accompany her to Tanzania in January 2003.

During my month-long sojourn, I was inundated with African culture and lifestyle, spending my weekends exploring this fascinating country. I spent long days at the hospital involved with conferences, lectures, journal club and cases in the operating theater. While review of cases and preoperative case planning was an important daily activity, the bulk of my effort was spent lecturing on various topics concerning pediatric anesthesia, the topic of the month as well as a personal interest that Dr. Edler and I share.

During lectures, I would present a topic such as fluid management in children, later reinforcing the day's concepts in the operating theater. Although prior to my arrival at KCMC I worried about my ability to teach effectively, my fears

were quickly allayed after following Dr. Edler's example and recognizing the enthusiasm and genuine interest in anesthesia shared by the class of 10 students. Since most of them receive only one or two years of anesthesia training, my two-and-one-half years of anesthesiology residency prepared me to lecture on a variety of topics as well as to engage the students in case discussions.

I soon learned that anesthesia there differs greatly from what I am accustomed to because of different resources, equipment, medications and staffing. Although I expected some differences, such as not performing fiberoptic intubation or transesophageal echocardiography in the operating room, other differences were surprising, such as the paucity of pulse oximeters and lack of pressure transducers for invasive monitoring. Also, the clinical laboratory at KCMC does not have the capability to analyze blood gases or to perform tests of thyroid function, liver function or coagulation status. Generally, only basic medications are available to the anesthesia provider, and no narcotics are given in the operating room at KCMC. These differences not only change the nature of anesthetic technique, they also made it challenging to explain acid-base disturbances or the oxygen-hemoglobin dissociation curve to students who have never even drawn an arterial blood gas!



A typical anesthesia cart in the operating room at Kilimanjaro Christian Medical Center. The equipment is not always top-notch, but the experience using it is priceless. Photo courtesy of Marnie B. Robinson, M.D.

Despite the inherent differences in anesthesia practice between this East African country and the United States, the underlying principles of anesthetic management remain unchanged. I believe that the different backgrounds facilitated discussions between the students and myself. Through the students' energy and questions, I came to realize the true nature of teaching: Teaching is a learning process for all involved. This exchange not only creates a bond between teacher and student but also holds the key to experiencing the joy of teaching.

My experience at KCMC has solidified my desires to pursue academic medicine and to be involved in the process of preparing for the future of our specialty. Perhaps more importantly, the Tanzanian students have taught me some of life's best lessons, specifically about enthusiasm and hope. Their enthusiasm extends beyond the classroom and encourages a fresh perspective on how to embrace life's challenges as well as successes, all the while maintaining hope for a bright future. Although I began this undertaking simply intending to contribute to anesthesia education, I realize now that I learned as much from the experience as I was able to contribute. Therefore, I am certain this is only the beginning of a relationship between Tanzania, the OTP and me.