Solomon Islands: In the field with the instructors, Part 1

Nicholas J. Nickl, MD
Professor of Medicine, Gastroenterology
University of Kentucky Healthcare, Lexington, Ky.

It’s been 70 years since the tiny island of Guadalcanal leapt from obscurity to the world’s headlines as one of America’s earliest Pacific victories of WWII. As our plane approached the same airfield that was so strategically important in 1942, it was impossible not to imagine scores of battleships moving full force among the islands below while Marine battalions assaulted the beaches.

**Goals of the trip, meeting the team**
Much has changed in 70 years, and our ASGE Ambassador Program team was there to tend to the healthcare needs of this impoverished nation known as the Solomon Islands. The country’s National Referral Hospital in the capital city of Honiara had received a grant of new GI endoscopes and support equipment. We had arrived for a workshop to introduce the local physicians to modern endoscopy.

Leading our team was Dr. Eileen Natuzzi, a general and vascular surgeon from San Diego, who has worked with the surgeons in the Solomon Islands for many years. She had lined up the equipment grants from Olympus Corporation, Cook Medical and other sources, as well as financial support from the William Moore Stack Foundation to make it all happen.

She also approached ASGE about an Ambassador Program visit. The ASGE responded by sending me and fellow ASGE member Stuart R. Gordon, MD; also on the team were endoscopy nurse Amanda Moore (Mandy) and biomechanical engineer and equipment technician David Knoblock.

Our liaison in-country was Dr. Douglas Pikacha, a general surgeon, who has practiced in Honiara all of his life. He had some previous endoscopy experience between 2005 and 2007, but had never received formal instruction. Our intent was to remedy that lack for him and his colleagues, with a combination of didactic lectures and live hands-on demonstrations.

**Intense three days**
Approximately 20 physicians and nurses attended the three-day course. Mornings consisted of lectures at the nearby conference center, using many of ASGE’s slide sets from the society’s annual First Year Fellows’ training program. By late morning, the lectures were finished, and we moved to the endoscopy room in the hospital’s surgical suite for procedures.

“Stuart performed one of the more unusual exams of the workshop on a teenager with an esophago-pleural-cutaneous fistula caused by a spear injury to the neck. Spear wounds are as common here as BB gun injuries are in the U.S.”

Dr. Nickl, ASGE Ambassador

continued on page 2
The first two days concentrated on esophagogastroduodenoscopy (EGD) and the third day on sigmoidoscopy. All program participants took very seriously the unique opportunity to learn from visiting experts and worked hard to make the most of it. Mandy spent hours with the nursing staff, teaching them the standards of patient care and endoscope cleaning. By the end of the course, she had them boldly shouting, “time out” at the beginning of each case.

Dave introduced everyone to the equipment and provided them with troubleshooting tips. Stuart and I worked alternately to perform the endoscopies, initially completing the exams while describing what we were doing, and then working one-on-one with individual physicians to guide their first tentative exploration of the world of GI endoscopy. It was obviously just an introduction, but it was gratifying to see how the budding endoscopists rapidly improved with each exam.

Severity of cases surprising; spear wound
The range of pathology we encountered took our breath away. Of the 13 EGD exams performed, we found seven cancers, most of which were quite advanced. Clearly the worldwide epidemic of *Helicobacter pylori*-associated gastric cancer is well established in the Solomon Islands. In two cases of hepatitis B cirrhosis, we encountered advanced varices, which fortunately were not bleeding.

Stuart and Doug completed what turned out to be the first full colonoscopy on the Solomon Islands. Stuart also performed one of the more unusual exams of the workshop on a teenager with an esophago-pleural-cutaneous fistula caused by a spear injury to the neck. Spear wounds are as common here as BB gun injuries are in the U.S.

Comprehensive curriculum
By the end of the workshop we had covered a range of topics, from endoscope cleaning to sedation monitoring, from endoscopy techniques to management of complications. Several of our talks whet the participants’ appetite for teaching about advanced endoscopy methods. It may seem hard to imagine that a three-day experience could make the Solomon Islands endoscopy-ready, but Doug’s previous experience has already made him a skilled endoscopist, so he will be a good supervisor for his colleagues.

Eileen is committed to bringing new teams to this hospital every six months for several years to provide updates, new supplies and continued training. It’s an ambitious model for accomplishing sustainable intervention to raise healthcare standards in this poor country, but Eileen clearly has the energy and dedication to make it happen.

Interesting culture, amazing people
We learned much from our brief exposure to this very different culture. For instance, Solomon Islanders hate to wear shoes — no doubt a throwback to simpler times in their history. They constantly kick their shoes off around the hospital, and we never quite got used to seeing barefoot doctors and nurses in the operating rooms.

The more lasting impression was of the incredible energy of these friendly people. We came to respect their dedication as they struggle to provide quality care to their countrymen against impossible odds. Antiquated equipment and scarce supplies lead to imaginative work-arounds to take care of patients. Their broad smiles were everywhere, as was their infectious enthusiasm, which made teaching them a pleasure.

When we departed, it was with a sense of accomplishment of helping the hospital make a big step forward. More than likely, Stuart and I could find ourselves here again on a future trip. International service work, we are discovering, is addictive.
Our last day on the Solomon Islands provided an opportunity to remember that many of those battleships, and the sailors and Marines they carried, are still here in spirit. Eileen’s interest in the Solomon Islands is personal: her uncle Billy Stack was killed at age 17 aboard the USS Quincy when the ship was sunk during the Battle of Guadalcanal. Eileen’s work here honors his memory.

Our tour of the island’s battle sites included a visit to the American War Memorial, where we laid a wreath to remember those who fought and died here. As we surveyed the island’s now-tranquil beauty, it was impossible not to hear faint echoes of the battle or get a lump in your throat at the thought of what sacrifices were made.

Our last day on the Solomon Islands provided an opportunity to remember that many of those battleships, and the sailors and Marines they carried, are still here in spirit. Eileen’s interest in the Solomon Islands is personal: her uncle Billy Stack was killed at age 17 aboard the USS Quincy when the ship was sunk during the Battle of Guadalcanal. Eileen’s work here honors his memory.

Until recently, gastrointestinal endoscopy was not available in the Solomon Islands, a relatively impoverished third-world South Pacific Island nation of one-half a million people. A gastroscope had been previously donated to the main referral hospital in 2004, but no education or training was provided and, as such, very few endoscopies were successfully performed.

Funding, colleagues
As the result of the hard work and tireless enthusiasm of Dr. Eileen Natuzzi (a general and vascular surgeon whose uncle died aboard the USS Quincy in the battle of Guadalcanal in WWII) and the generous support of the William Moore Stack Foundation (named after her uncle), the Olympus Corporation and ASGE, the first ASGE Ambassador Program to the Solomon Islands was recently completed and was a huge success. The team consisted of Dr. Natuzzi, who not only secured the funding but also took care of the logistics including travel arrangements and housing, Amanda Moore (a nurse), David Knoblong (a biomechanical engineer) and two physicians representing ASGE, Nicholas J. Nickl, MD, and me.

Long flights, eager audience
After long flights nearly half-way around the globe, we arrived in Honiara, the capital of the Solomon Islands, on Tuesday, Dec. 13, and went directly to the National Referral Hospital (known locally as “Number 9,” as it was the 9th field hospital during WWII). The hospital is old and relatively poorly equipped, but an extra surgical room was set aside for us. We went right to work setting up the endoscopy equipment donated by the Olympus Corporation (140 series processor, light source, two video gastroscopes and two video colonoscopes) in preparation for the endoscopy program that was to begin Wednesday.

We arrived the following morning to an eager audience of approximately 20 nurses and physicians. (Attendings and trainees are referred to as “registrars.”) The Ambassador team took turns during the first morning session, giving didactic lectures to cover topics such as informed consent, patient care during endoscopy including conscious sedation and monitoring, an overview of endoscopic equipment and an introduction to upper endoscopy. One of the local surgeons, Dr. Doug Pickacha, gave us an overview of common GI diseases seen in the Solomon Islands. We then spent the afternoon in the newly outfitted “endoscopy suite,” performing live upper endoscopies.

With 20 sets of eyes transfixed onto each endoscopic image, we successfully performed four upper endoscopies. Teaching included proper endoscopic technique, as well as instruction on sedation and proper patient monitoring during the procedure. Dr. Nickl and I took turns teaching “hands-on” endoscopy to the
physicians, each of whom was anxious to get their hands on the scope. The need for endoscopy in the Solomon Islands was obvious, as the first three patients examined all had relatively advanced gastric cancers. In addition, Amanda Moore did an excellent job teaching the nurses proper endoscope cleaning and reprocessing.

**Days flew by; first colonoscopy performed in S.I.**
The second day began similarly to the first, with didactic sessions in the morning covering endoscopic tools, common upper GI disorders, including *Helicobacter pylori* and an introduction to therapeutic upper endoscopy. We finished the didactic portion early so that we could begin the eight patient cases that were scheduled for the afternoon.

The endoscopies that were performed on patients included a variety of upper GI disorders, including gastric cancer, two cases of Grade-4 esophageal varices and an esophageopulmonary fistula that occurred as the result of a spear wound to the neck!

Our emphasis was on teaching proper endoscopic technique and allowing the physicians to begin to acquire the skills to perform these procedures independently. We finally finished the last case at 7 p.m., though more patients were ready and waiting for the following day.

We finished the three-day course on Friday, with a didactic session in the morning covering lower GI endoscopic technique, common colonoscopic findings and an introduction to therapeutic colonoscopy. We then proceeded to the endoscopy suite where we assisted in the completion of the first ever colonoscopy in the Solomon Islands! We went on to perform five more colonoscopies and an upper endoscopy that afternoon. Again, our goal was to teach and assist the physicians in proper technique, using a “hands-on” approach.

**Rewarding experience**
After completion of the program, we received heartfelt thanks from all of the physicians and nurses, as well as a round of hugs. While the Solomon Islands’ medical team could benefit from more training and support, we provided them with basic endoscopic techniques and skills during our stay. I am confident that, given their level of enthusiasm, they will eventually have a successful endoscopic program. I believe that this type of program (ASGE Ambassador Program), where we teach the local physicians to perform the procedures themselves, (rather than visiting doctors who come in, do the procedures and then leave a void when they are gone), has the best chance for success.

After completion of the program, Dr. Nickl and I spent a few days touring the island of Guadalcanal, visiting some of the WWII battle sites and meeting many local residents along the way. Though many of the people are impoverished, they are extremely friendly and have a strong sense of family and community. For me, as well as the entire team, this was a truly memorable and rewarding experience.

I am thankful to ASGE for selecting me to participate in the Ambassador Program, and I hope to do it again.