

When the differential diagnosis of fever is malaria, malaria, malaria . . .

Michael Y. Woo, MD

Mae Sot, Thailand, is a small town located about 6 km from the border between Thailand and Myanmar (formerly Burma). The region is home to many ethnicities, including Thai, Burmese, Indo-Burmese, Karen and Hmong. Along the road to the Thai–Myanmar Friendship Bridge is the Mae Tao Clinic, which was founded and directed by Dr. Cynthia Maung. Dr. Maung has won international humanitarian awards for her work at the clinic, including the 1999 John Humphrey Freedom Award from the International Centre for Human Rights and Democratic Development in Canada. This has attracted increased funding, as well as many international volunteers.

After completing residency, I spent the next few months working in emergency medicine in Canada and paying off some loans. I then left the comforts of home and went to work in New Zealand for several months, followed by volunteer work at the Mae Tao Clinic.

The clinic started as a small house serving students who were fleeing the brutal 1988 police crackdown that followed pro-democracy student demonstrations in Rangoon. Over the years, it has evolved into a comprehensive clinic providing ambulatory and in-patient services, including trauma care, reproductive health, child health, eye care and prosthetics. The clinic works closely with the Médecins Sans Frontières tuberculosis program and the Shoklo Malaria Research Unit, a part of the Wellcome–Mahidol University, Oxford Tropical Medicine Research Programme, which aids in malaria control, as well as with other nongovernmental organizations.

The target population is about 150 000 people who live along the border between Thailand and Myanmar. The clinic provides free health care to the increasing numbers of Myanmar refugees, migrant workers and people crossing the border from Myanmar. Last year the clinic saw



Inpatient clinic in Thailand

35 000 patients. The clinic is staffed with 5 international and local physicians, 80 health care workers, 40 trainees and 40 support staff. It is also a teaching centre for health care assistants, who receive a combination of classroom and clinical training lasting 18 months, with at least 6 more months of practical training in the various clinical departments. Many of the health care assistants then return to villages along the border. They may also take part in the “Back Packers” program that provides outreach health services to remote villages within Myanmar. In addition to their health care responsibilities, the medics also provide cooking, cleaning and security to the Mae Tao Clinic.

Malaria is one of the largest medical threats to this population. I was there during the rainy season, which brings the mosquitoes and malaria. Anyone presenting with a fever has malaria until proven otherwise. Dait, a medic, and I saw a previously healthy 28-year-old Karen man presenting

Department of Emergency Medicine, Ottawa Hospital, Ottawa, Ont.

Received: Aug. 23, 2002; accepted: Nov. 10, 2002

with a fever. He had treated himself with some pills left over from a previous visit, but did not feel any better. He would have come to the clinic sooner except the border between Thailand and Myanmar was “closed” as a result of the increasing tensions between the two countries. However, he, like many others, made the crossing in spite of the risk. He had fevers and chills for 3 days, sore throat, rhinorrhea, nonproductive cough, myalgias and diarrhea. He was weak and pale. The differential diagnosis was malaria, malaria, malaria, typhoid, and then dengue. Viral illness was at the bottom of the list. The laboratory at the clinic is only able to provide malaria smears and hemoglobin levels. His malaria smear was negative, and his hemoglobin was 100 g/L. However, hemoglobin is measured visually, by comparing the patient’s blood with a



Medic pushes an orphan on a makeshift swing

known reference value and holding it up to natural light. The dark clouds make hemoglobin assessment particularly difficult during the rainy season. Based on the clinical assessment, he was given a blood transfusion, treated for malaria and made a rapid recovery within 24 hours.

A more common scenario is delayed treatment, or none at all. I will not forget the mother who travelled with her febrile 5-year-old child for over 4 hours. She carried him in her arms and placed him on the bench in front of us. The child had no pulse. She said calmly that they had initially gone to a clinic near their makeshift village, where her child was diagnosed with malaria and given some pills. He did not improve overnight,

and she decided to use what little money she had left to hitch a ride to the Mae Tao Clinic. We told her he was dead, but she insisted that he had been still breathing at the clinic gates. Without shedding a tear, she picked him up, got back in the truck and drove off.

The clinic is also a community. It is a place of refuge for all the health care assistants, families, patients and support staff. The Thai government strictly controls their movements, and expensive permits must be obtained in order to leave the clinic, even to travel within the town of Mae Sot. In spite of having these permits, many of the long-term health care assistants do not leave the clinic for fear of being deported. They are not permitted to travel within the rest of Thailand. After a long day, the medics take to the fields playing soccer, playing music, taking English lessons or simply reading about what is going on at home.

As the Myanmar government continues its war in the Karen and Shan States, shelling in the distance is relatively common. However, for the first time in many years several “stray” bombs landed on Thai soil for over an hour. To the staff this was nothing new. But there was definitely a more somber atmosphere around the clinic, as the thought of returning home to Myanmar grew more distant. Hope for the future was renewed with the release of their hero, Aung San Suu Kyi, from detention in Myanmar. She is the leader of the National League for Democracy Party, which won more than 80% of the vote in 1990. The military junta refused to recognize the results of the election and placed her under house arrest for 6 years. She won the Nobel Peace Prize in 1991 and has been under some form of detention



Children at the clinic



An English language class

for the last 12 years. The border, however, remains closed, and time will tell if there are truly any improvements within Myanmar. The lack of resources and support is compounded by the refusal of the Thai government to recognize the international definition of refugees. I am told it

is the fear that there will be a flood of refugees from Myanmar that prevents the Thai government from making this declaration. However, in not declaring refugee status, these people are either sent back to Myanmar or denied access to the rights and supports for refugees provided by the United Nations.

I am reminded by my epidemiology class in medical school that the greatest impact to the health of a population is not the physician but the overall development of infrastructure such as clean water, plumbing, shelter and, most importantly, peace. During my short time at the Mae Tao Clinic I found that the clinic does much more than provide health care. It provides a sense of safety, security and community. I am privileged to have worked and learned from the friendly and dedicated staff and hope they will once again be able to live in safety and security in their own homes.

Competing interests: None declared.

Correspondence to: Dr. Michael Y. Woo, Department of Emergency Medicine, Ottawa Hospital – General Campus, 501 Smyth Rd., Ottawa ON K1H 8L6

Order your copy now

To order your copy please contact:

Brenda Brady, Membership Services
Canadian Association of Emergency Physicians
 tel.: (613) 523-3343 or 1-800-463-1158;
 fax: (613) 523-0190; email: drugmanual@caep.ca

