EDITORIAL

Topics in International and Travel Medicine

Alice R. Chiao, MD
Eric L. Weiss, MD, DTM&H, Travel and Tropical Medicine
Division of Emergency Medicine
Stanford University School of Medicine

Correspondence:
Alice R Chiao, MD
Stanford-Kaiser Division of Emergency Medicine
701 Welch Rd, Building C
Stanford, CA 94304-5777
(650) 723-6576; Fax (650)723-0121
achiao@stanford.edu

Emergency Medicine is a relatively young specialty in
the United States, but the concepts and practices of
the American model of Emergency Medicine are
quickly taking root in many countries interested in
developing their own emergency care systems.\(^1\)
International Emergency Medicine presents a unique
opportunity to participate in a vital health care service
developing in different cultural settings. The exchange
of ideas in various formats (conferences, journal
articles) is central to the progress of successful
emergency medical systems worldwide.

In this issue of CalJEM, Osime et al. describe their
experience in a Nigerian hospital with the clinical
diagnosis of appendicitis. This study covered a 4-year
study period in which 56 appendectomies were
performed on patients with clinical diagnoses of
appendicitis. This hospital did not have a CT scanner as
is the case for most hospitals in Nigeria and many
other developing countries. As a result, the diagnosis
of appendicitis relies mainly on clinical acumen,
physical exam, and basic laboratory analysis.

According to the authors, their relatively low negative
appendectomy rate of 16% was attributed to the
experience of the examining senior surgeon. This
finding has actually also been illustrated in a 2002
article on the use of CT in appendicitis; that particular
study found that evaluation by experienced attending
surgeons had an accuracy of diagnosis similar to that
of computed tomography.\(^3\) In the Osime article, all of
the nine cases of negative appendectomies occurred
in females, two of which had reproductive system
pathology. Despite significant challenges and the lack
of sophisticated equipment, the experienced Nigerian
physicians are able to provide a very high level of
care for their patients. Their study also concluded that
an elevated WBC count and neutrophilia were not
found to be particularly useful in confirming or making
the diagnosis of appendicitis. This has also been
suggested by several studies in the United States.\(^2\)

In most countries, Emergency Medicine as we know
it is either in early stages of development or completely
nonexistent. There exist innumerable opportunities for
sharing experiences and exchanging ideas. The
 diagnostic challenges that Osime et al. describe have
and will continue to be experienced by other countries
as Emergency Medicine develops worldwide.
Development has been occurring on various fronts,
including international conferences, print publications,
physician exchange, and the internet. There are already
situations where focused Emergency Medicine training
has improved outcomes. In the 1980s, up to 200
physicians in Trinidad and Tobago received basic
ATLS training. Subsequently, their trauma mortality
rates dropped from 68% to 34%.\(^4\)

Travel Medicine is another aspect of Emergency
Medicine that has become increasingly important as
international travel has become more facile and
common. Consequently, we are seeing an increasing
number of infectious disease cases in the emergency
department that are not endemic to our practice
locales.

Schofer’s case of fever in an international traveler
effectively illustrates such a situation. Typhoid fever is
endemic to many regions in South America, India,
and Africa. Even travelers armed with a typhoid
vaccine are not fully immune to contracting the disease,
although their risk is decreased by 50-75%.\(^5\) In a
patient with a fever and no clear etiology, it is important
to elicit a “travel history.” Given the long incubation

\(^1\) International Emergency Medicine presents a unique opportunity to participate in a vital health care service developing in different cultural settings. The exchange of ideas in various formats (conferences, journal articles) is central to the progress of successful emergency medical systems worldwide.

\(^2\) A case study in the United States shows that an elevated WBC count and neutrophilia are not particularly useful in confirming or making the diagnosis of appendicitis. Several studies have suggested this finding in the United States.

\(^3\) A study found that evaluation by experienced attending surgeons had an accuracy of diagnosis similar to that of computed tomography.

\(^4\) In the 1980s, up to 200 physicians in Trinidad and Tobago received basic Advanced Trauma Life Support (ATLS) training, significantly decreasing their trauma mortality rates.

\(^5\) Typhoid fever is endemic to various regions globally, even in travelers who have received typhoid vaccines. The risk of contracting the disease is reduced by 50-75% in these individuals.
period of many infectious diseases, it is fair to ask, “have you been out of the country in the last year?” If the answer is yes, the clinician should inquire further, always considering malaria in addition to the other infectious diseases of travel. Itinerary, duration of travel, specific risk factors (rafting, animal exposure, tattoos, sexual activity), malaria chemoprophylaxis, and pre-trip receipt of (or lack of) immunizations will help guide the history and work-up.

International and Travel Medicine both present unique and stimulating challenges to the practice of Emergency Medicine. By increasing our knowledge of practices and disease epidemiology in different countries, we gain added perspective into the scope of emergency care worldwide. More exchanges of ideas and experiences are occurring on an international level, and we are only beginning to comprehend the opportunities that exist to both teach and learn.

REFERENCES