

UC Irvine

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health

Title

Topics in International and Travel Medicine

Permalink

<https://escholarship.org/uc/item/7057t7pw>

Journal

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health, 6(4)

ISSN

1936-900X

Authors

Chiao, Alice R
Weiss, Eric L

Publication Date

2005

Peer reviewed

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

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

1. Arnold JL. International emergency medicine and the recent development of emergency medicine worldwide. *Ann Emerg Med* 1999;33(1):97-103.
2. Cardall T, Glasser J, Guss D: Clinical value of the total white blood cell count and temperature in the evaluation of patients with suspected appendicitis. *Acad Emerg Med* 2004;11(10):1021-27.
3. Morris KT, Kavanagh M, Hansen P, et al: The rational use of computed tomography scans in the diagnosis of appendicitis. *Am J Surg* 2002;183:547-550.
4. Ali J, Adam R, Butler AK. Trauma outcome improves following the advanced trauma life support program in a developing country . *J Trauma* 1993;34:890-899.
5. Engels EA, Lau J. Vaccines for preventing typhoid fever. *Cochrane Database Syst Rev* 2000;2:CD001261.