Shannon Moffett, MD
Charlotte Page Wills, MD

From the Highland General Hospital Department of Emergency Medicine, Alameda County Medical Center, Oakland, CA.

0196-0644/$-see front matter

doi:10.1016/j.annemergmed.2009.06.505

Figure. Patient's eye. Photo by Martin Moran, PA. Used with pemission.

[Ann Emerg Med. 2010;55:578.]

A 25-year-old US-born man, formerly healthy, presented to the emergency department, complaining of foreign body sensation in his right eye for 1 day. Review of symptoms revealed 18 months of intermittent pruritic skin swellings. Travel history was extensive, mainly to Central and South America (including Peru recently), with one 12-day trip to Equatorial Guinea (Central Africa) 2 years before. Physical examination was notable for the findings above, and laboratory studies were notable for marked eosinophilia.

For the diagnosis and teaching points, see page 583.
To view the entire collection of Images in Emergency Medicine, visit www.annemergmed.com

David A. Tanen, MD, USN, MC
Department of Emergency Medicine
Naval Medical Center
San Diego, CA

Julio Lairet, DO, USAF, MC
Department of Emergency Medicine
Wilford Hall Medical Center
San Antonio, TX

Patricia S. Dixon, MS
Sandra Valtier, PhD
Anneke Bush, ScD, MHS
Clinical Research Division
Wilford Hall Medical Center
San Antonio, TX

doi:10.1016/j.annemergmed.2010.01.007

Funding and support: By *Annals* policy, all authors are required to disclose any and all commercial, financial, and other relationships in any way related to the subject of this article that might create any potential conflict of interest. The authors have stated that no such relationships exist. See the Manuscript Submission Agreement in this issue for examples of specific conflicts covered by this statement. There is no prior publication, conflict of interest, or copyright constraints. The US Air Force Office of the Surgeon General funded this study. We did not use other funding; specifically, no industry funding was used. The views expressed in this article are those of the authors and do not reflect the official policy or position of the Department of the United States Air Force, Department of Defense, or the US government.

1. Cyanokit Product Insert. Columbia, MD: Meridian Medical Technologies; 2009.
2. Beckerman N, Leikin SM, Aitchinson R, et al. Laboratory interferences with the newer cyanide antidote: hydroxocobalamin. *Semin Diagn Pathol.* 2009;26:49-52.
3. Curry SC, Connor DA, Raschke RA. Effect of the cyanide antidote hydroxocobalamin on commonly ordered serum chemistry studies. *Ann Emerg Med.* 1994;24:65-67.
4. Bebarta VS, Tanen DA, Lairet J, et al. Hydroxocobalamin and sodium thiosulfate versus sodium nitrite and sodium thiosulfate in the treatment of acute cyanide toxicity in a swine (sus scrofa) model. *ann emerg med.* 2010;55:245-351.
5. Hall AH, Dart R, Bogdan G. Sodium thiosulfate or hydroxocobalamin for the empiric treatment of cyanide poisoning? *Ann Emerg Med.* 2007;49:806-813.
6. Bebarta VS, Pitotti, RL, Dixon P, et al. Hydroxocobalalmin and epinephrine improve survival in a swine model of cyanide-induced cardiac arrest: a randomized trial. *Circulation.* 2009;120:SS652.

IMAGES IN EMERGENCY MEDICINE

(continued from p. 578)

DIAGNOSIS:

Loaiasis (African eye worm). The Figure shows a motile filarial nematode, *Loa loa*, endemic to Central and West Africa. Transmission is by bite of the chrysops fly. Larvae deposited in the human bloodstream mature into worms, which migrate throughout the subcutaneous tissue and the subconjunctivae (pathognomonic for *L loa*). Infection with worms of both sexes allows mating and release of microfilariae, which migrate to the pulmonary circulation at night. The evanescent skin lesions reported are characteristic of Calabar swellings, thought to be hypersensitivity responses to subcutaneous worms.[1-3]

The preferred treatment for loaisis is oral diethylcarbamazine. Before therapy, a midday blood sample must be examined for microfilariae because higher loads (more common in natives to endemic areas than visitors, who are often amicrofilaremic) are associated with posttreatment meningoencephalitis, likely a result of antigen release with microfilariae lysis.[4] In the United States, diethylcarbamazine is available only from the Centers for Disease Control and Prevention, which released it for 10 cases in 2007 (E. D. Kennedy, personal communications, September 2008 and May 2009).

Our patient had an undetectable microfilarial load, was treated with DEC, and remained asymptomatic 6 months later.

REFERENCES

1. Strickland GT. *Hunter's Tropical Medicine and Emerging Infectious Diseases*. 8th ed. Oxford, England: WB Saunders Co; 2000.
2. Padgett JJ, Jacobsen KH. Loiasis: African eye worm. *Trans R Soc Trop Med Hyg*. 2008;102:983-989.
3. Klion AD, Massougbodji A, Sadeler BC, et al. Loiasis in endemic and nonendemic populations: immunologically mediated differences in clinical presentation. *J Infect Dis*. 1991;163:1318-1325.
4. Boussinesq M. Loiasis. *Ann Trop Med Parasitol.* 2006;100:715-731.