

IMAGES IN EMERGENCY MEDICINE

Infectious Disease

Exotic nodules on a patient's leg

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1 | CASE PRESENTATION

A 34-year-old male who was otherwise healthy presents to the emergency department (ED) for evaluation of three inflamed nodules on his right leg that developed 2 weeks ago (Figure 1). The nodules occasionally drain a small amount of serosanguinous fluid. They are accompanied by intermittent episodes of brief “searing” type of pain. He has not improved after 5 days of doxycycline and sought a second opinion in the ED.

2 | DIAGNOSIS: BOTFLY MYIASIS WITH *DERMATOBIA HOMINIS*

The patient had soaked his leg in a bathtub prior to his ED visit and noticed “a tiny yellow worm” emerging from the center of each nodule. A bedside ultrasound was able to visualize a mobile larva within each nodule (Figure 2). A travel history revealed that he had returned from vacation in Costa Rica 10 days ago.

Dermatobia hominis myiasis most commonly occurs in Latin America when a female botfly lays her eggs on a mosquito, and the mosquito bites the human host, thereby conveying the eggs onto the human, a process known as phoresis.¹ Treatment methods remain highly vari-



FIGURE 1 Botfly skin photo. Source: Bryant Nelson, MD. Original photography obtained with patient consent.

able, with surgical removal, manual expression, and other traditional techniques commonly utilized.² Surgical methods for extracting *D. hominis* larvae include injecting local anesthesia, placing a cruciate incision adjacent to the central pore, and removing the larva, usually

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FIGURE 2 Botfly ultrasound.



FIGURE 3 Botfly forceps removal.

with forceps.³ This was attempted on one nodule but was unsuccessful. Local bleeding obscured visualization of the small larva. Another case report described success injecting 2 cc lidocaine into the furuncle underneath the larva to achieve expulsion.⁴ This was attempted and was also unsuccessful, likely because of the anchoring spines at the base of the larva that resist extraction.⁵

In this particular case, the occlusion method proved most worthy. Antibiotic ointment was smothered over the tiny central pores, and an occlusive dressing was placed over each site for several hours. This technique coaxes the larvae out of the central pore via suffocation.⁶ When the larvae came to the surface of the wound for oxygen, they were grasped with forceps and removed with steady traction (Figure 3). The fully intact larva is shown in Figure 4. His lesions healed quickly after removal. The clinician should be mindful of secondary bacterial infection and tetanus risk after larvae removal.



FIGURE 4 Botfly larva closeup, 1 cm length.

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