

Pleural Myiasis Associated With Pleural Angiosarcoma



Mitesh B. Patel, MD; Kurt Munzer, DO; Mary Dougherty, MS; Peter Williams, MD; and Andrea Loisel, MD

Myiasis refers to a parasitic infestation of vertebrate mammals by dipterous larvae (maggots) of higher flies. Infections in humans typically occur in tropical and subtropical regions, regions with limited medical access, and areas with poor hygiene and living conditions. Infestations in humans have been described in subcutaneous, nasal, ocular, oropharyngeal, and orotracheal cases; however, reports of pulmonary myiasis in humans in the United States and other developed countries are extremely rare. We describe a patient with recently diagnosed primary pleural angiosarcoma who presented to our clinic for the management of a thoracostomy tube and was diagnosed with pleural myiasis. CHEST 2016; 149(6):e157–e160

KEY WORDS: angiosarcoma; larvae; malignancy; myiasis

Case Report

A 72-year-old man with a history of depression, tobacco use, and remote ischemic stroke presented to our hospital for follow-up after discovering larvae in his pleurovac container. Two months before this presentation he had presented with a right-sided spontaneous pneumothorax. A thoracostomy tube was placed; however, his hospital course was complicated, and he continued to have a persistent air leak. He underwent video-assisted thoracoscopic surgery with right upper and lower lobe wedge resection and chemical pleurodesis with doxycycline. Gram stain and culture from pleural fluid revealed moderate WBC count and no organisms. Biopsy from the procedure revealed extensive necrosis and a high-grade malignant neoplasm with spindled cell and epithelioid features confined to the pleural surface with focal invasion into

the lung. A final pathologic diagnosis of pleural angiosarcoma was made. The patient had a prolonged hospitalization and was discharged with a right-sided chest tube and water seal drainage container. He received two courses of paclitaxel as an outpatient.

Six days before admission, he presented for a follow up appointment complaining of malodorous and purulent fluid exuding from his thoracostomy tube. Pleural fluid cultures revealed a polymicrobial empyema, including the following bacteria: *Serratia liquefaciens*, *Morganella morganii*, *Klebsiella oxytoca*, *Staphylococcus epidermidis*, *Enterococcus casseliflavus*, *Proteus vulgaris*, *Shewanella algae*, and *Myroides* species. He started taking ciprofloxacin and amoxicillin/clavulanic acid and returned to the clinic the following week, at which time the

AFFILIATIONS: From the Departments of Internal Medicine (Drs Patel and Munzer) and Pathology (Dr Williams), Saint Louis University School of Medicine (Ms Dougherty), and Division of Pulmonary and Critical Care, Washington University School of Medicine (Dr Loisel), St Louis, MO.

CORRESPONDENCE TO: Mitesh B. Patel, MD, Department of Internal Medicine, Saint Louis University School of Medicine, 1402 S Grand, 14th Floor FDT, St Louis, MO 63104; e-mail: patelmb@slu.edu

Copyright © 2016 American College of Chest Physicians. Published by Elsevier Inc. All rights reserved.

DOI: <http://dx.doi.org/10.1016/j.chest.2015.12.022>

surgical team appreciated live larvae in the thoracostomy tube and water seal drainage system (Figs 1, 2). Examination of his chest revealed no cutaneous involvement of the angiosarcoma. Chest radiograph revealed persistent right hydropneumothorax (Fig 3). The patient was then admitted to the hospital for thoracostomy tube removal and management of polymicrobial empyema and larval contamination.

On admission, ciprofloxacin and amoxicillin/clavulanic acid were continued, and the thoracostomy tube was removed with a plan to replace it after the pleural fluid had accumulated again so that a new sample for pleural cultures could be obtained. Live larvae were sent for identification, which revealed *Calliphora* species. A CT of the thorax revealed a new 7.8-cm × 3-cm lobulated mass in the right pleural base (Fig 4).

Given the poor prognosis of his underlying malignancy, the patient declined further invasive procedures, including thoracostomy tube placement and peripherally inserted central catheter for intravenous antibiotics. He was prescribed 12 mg of ivermectin for the treatment of myiasis and was instructed to continue ciprofloxacin and amoxicillin/clavulanic acid after discharge.

Two weeks after discharge the patient was restarted on weekly paclitaxel for his angiosarcoma. He presented to the infectious disease clinic 4 weeks after discharge with persistent cough and dyspnea. A repeat CT scan of his chest showed an increased loculated hydropneumothorax

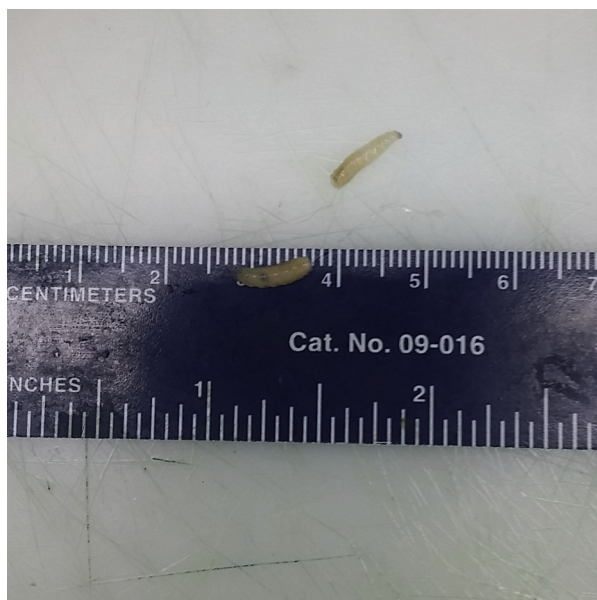


Figure 2 – Larvae extracted from the pleurovac container.

and an ill-defined soft tissue density in the right basal region. He was continued on daily ciprofloxacin, but no further invasive procedures were performed per patient request.

Discussion

Myiasis describes the infestation of vertebrates by dipterous larvae.¹ Although relatively rare in humans,

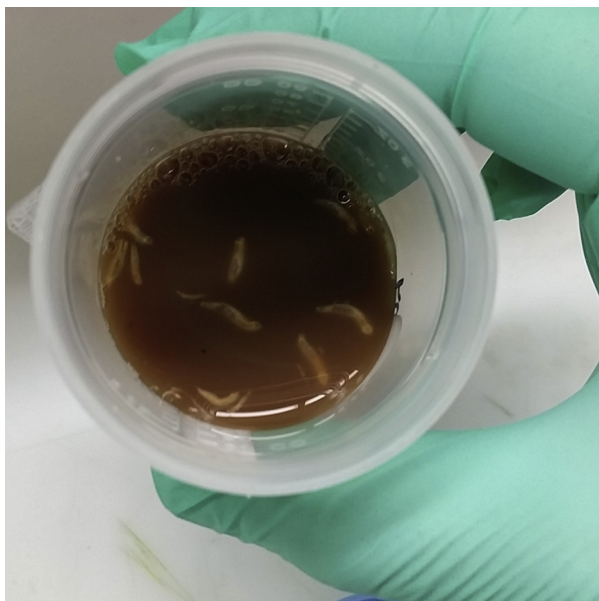


Figure 1 – Larvae and pleural fluid extracted from the pleurovac container.



Figure 3 – Chest radiograph showing persistent hydropneumothorax and thoracostomy tube.

Download English Version:

<https://daneshyari.com/en/article/5952456>

Download Persian Version:

<https://daneshyari.com/article/5952456>

[Daneshyari.com](https://daneshyari.com)