Unmasking the Culprit: Pulmonary Tularemia Masquerading as an Infiltrating Hilar Lesion in a 50-Year-Old Male – A Case Report

Aggrey Keny, M.D., M.S.[1], Stephen Wanjala, M.D., M.S., MBA[1], Anthony Nickel, MS-4[1], Megan Baumgartner, MS-4[1], Son Troung, M.D.[3], Shelley Jones, M.D.[1,2], Ali Jahansooz, M.D.[1]
[1]The University of Kansas School of Medicine-Wichita, Wichita, Kansas
[2]Infectious Disease Consultants, Wichita, Kansas
[3]Pulmonary and Sleep Consultants of Kansas, Wichita, Kansas

Received Apr. 18, 2025; Accepted for publication Apr. 18, 2025; Published online Apr. 21, 2025
https://doi.org/10.17161/kjm.vol18.23878

Introduction. Tularemia is a zoonotic disease caused by *Francisella tularensis*. Atypical presentations are vital to raise awareness among clinicians and broaden diagnostic suspicions.

Case Report. A 50-year-old male presented with fever, confusion and headache for 11 days, accompanied by night sweats, nausea, vomiting, and diarrhea, and was noted to be sleeping excessively, intermittently confused, and had difficulty speaking. The patient did not have any chest pain, palpitations, cough, dizziness, urinary symptoms, numbness, rashes, or seizures. He had no recent travel, exposure to sick contacts, or hospitalizations. Initial labs were notable for elevated white count and transaminases. Initial chest x-ray was notable for left lung airspace disease. Computerized tomography showed a large area of consolidation within the left upper lobe with soft tissue infiltration into the left perihilar region. The patient did not respond to broad spectrum antibiotics. On day six, a heavy growth of *Francisella tularensis* was isolated in pleural fluid culture. The patient was treated with gentamicin for seven days, in addition to ciprofloxacin and flagyl, which were continued for a total of four weeks for empyema. Fever resolved and his overall clinical status progressively improved.

Discussion. Tularemia was confirmed from pleural fluid culture. Serologic tests were also notable for a positive IgM. The presentation was consistent with pneumonic and typhoidal tularemia with a notable lack of lymphadenopathy and predominance of pulmonary symptoms, fever, and other non-specific systemic symptoms. Maintaining a high clinical suspicion for atypical pathogens - such as Tularemia - in cases of severe pneumonia with atypical findings is important.