

76. **BREATHLESSNESS IN THE MISSISSIPPI RIVER VALLEY: TREATMENT RESISTANT SEVERE PULMONARY BLASTOMYCOSIS IN AN IMMUNOCOMPETENT MALE**

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BACKGROUND: Blastomycosis commonly presents as a respiratory infection and is endemic to the Mississippi River Valley that causes severe infections in immunocompromised individuals. Here we present a case of an immunocompetent patient with severe pulmonary blastomycosis. **THE CASE:** A 20-year-old male with a history of childhood asthma with worsening cough, sputum production, shortness of breath, left sided neck mass and 40 lb weight loss over 2.5 weeks. Previously diagnosed with pneumonia 2 months prior and treated with levofloxacin and amoxicillin. Failure to improve led to hospitalization and discovery of a cavitary lung lesion. He was started on vancomycin, meropenem, azithromycin, and anidulafungin. Following discharge, outpatient CT imaging showed worsening lung lesions. At this time itraconazole was started due to high suspicion of blastomycosis. He worsened, requiring home oxygen and came to our hospital for further evaluation. On presentation, he was febrile and tachycardia to 139 with physical exam notable for decreased breath sounds and a large palpable mass under his left mandible. Pertinent labs included leukocytosis to 30.9/cmm with a left shift. Repeat imaging found severe peribronchovascular consolidations worse in the left upper lobe. Infectious disease was consulted and initiated amphotericin B due to poor response to itraconazole and possible disseminated disease. Treatment included 10-days of amphotericin B followed by 6-12 months of itraconazole. **CONCLUSION:** Disseminated Blastomyces infection in immunocompetent hosts is exceedingly rare. Targeted therapy was started 6 weeks following symptom onset and we suspect that delays in diagnosis due to being in rural Mississippi contributed to disease progression.

Key words: Blastomyces, Immunocompetence (Source: MeSH-NLM).