

Pulmonary Infection with *Irpex Laceratus* in Asthmatic Using Steroid Inhaler

Mathieu Holt^{1*}, Brianna Bailey¹, Serena Maag¹, Danyal Butt², Bibek Shrestha², Ayman Iqbal³, Davontae Willis⁴

¹College of Medicine and Life Sciences, 3000 Arlington Avenue, The University of Toledo, Toledo OH 43615

²Internal Medicine Resident, Department of Medicine, 3000 Arlington Avenue, The University of Toledo, Toledo OH 43615

³Resident, Department of Neurology, 3000 Arlington Avenue, The University of Toledo, Toledo OH 43615

⁴Resident, Department of Anesthesiology, 3000 Arlington Avenue, The University of Toledo, Toledo OH 43615

Email: mathieu.holt@rockets.utoledo.edu

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Introduction: *Irpex laceratus*, a wood rotting basidiomycete, was identified through bronchoscopy in an adult female with pneumonia who uses an inhaled corticosteroids for asthma. There are currently no guidelines for the treatment of *I. laceratus* for pulmonary infections.

Case Presentation: A 54 year-old female with previous medical history of asthma, rhinitis, migraines, nausea, vomiting and one year history of cough due to fungal pneumonia treated with IV Amphotericin B liposome after outpatient oral treatment presents with change in appetite, fatigue, cough, shortness of breath, and serum creatinine elevation found on outpatient labs. Physical exam is positive for wheezing. Labs show hypomagnesemia, hypokalemia, elevated BUN, and elevated serum creatinine. Amphotericin was reduced and IV fluid boluses were added pre- and post- to improve tolerability. Reported cases of *Irpex lacteus* in immunocompromised patients have been treated with Amphotericin, so those cases guided the treatment of *I. laceratus* due to both belonging to the *Irpex* species. The persistent infection and elevation of serum creatinine coinciding with the use of Amphotericin warranted hospitalization while evaluating the elevated serum creatinine and determining appropriate treatment.

Discussion: Existing literature does not provide guidelines for the treatment of *I. laceratus*, leaving case reports of *I. lacteus* as examples to follow. Cases document the use of Amphotericin B to treat *I. lacteus*. This case serves as a reference for the treatment of persistent *I. laceratus* with Amphotericin.

Conclusion: *Irpex laceratus* pulmonary infections are rare and no guidelines outline treatment of this infection, so physicians must refer to case reports of *I. lacteus* for guidance of emerging cases. *I. laceratus* treatment warrants further to establish treatment guidelines.

Keywords: Fungal Infection, Rare, Acute Kidney Injury