## Background

- Histoplasmosis is a systemic mycostic infection caused by the fungus *Histoplasma capsulatum*.
- Endemic in central and eastern United States, especially in the Ohio and Mississippi River Valleys.
- *Histoplasma* is a soil dweller and thrives in areas contaminated with bird or bat excrement.
- Activities associated with high inoculum: construction, caving, cleaning chick coops, and other soil disrupting activities.
- Clinical presentations: primary acute pulmonary disease, chronic pulmonary disease, and disseminated disease.
- Clinical picture depends on infectious load, underlyin immune status and lung function.
- Occurrence of the disseminated form of histoplasmosis is rare in HIV seronegative patients.

Here, we describe a case of disseminated histoplasmosis with both oral and cutaneous manifestations in an immunocompetent patient.

## Past Medical History

- **Past Medical History:**
  - Significant for multiple skin infections with Staphylococcus species
  - No regular medications. NKDA
- **Social History:**
  - 30-pack year smoking tobacco history as well as occasional marijuana use
- **Medical History:**
  - Afebrile, well
  - **Recent Travel:**
    - No recent travel or any travel outside of the U.S.
- **Chronic Pulmonary Disease:**
  - Denied any sick contacts, known exposures to tuberculosis, time spent in prison, recent travel or any travel outside of the U.S.

## Physical Exam and Diagnostics

- **Afebrile, well-built thin (BMI 21.7) male in no acute distress**
- **Right superior gingival white on an erythematous base ulceration measuring 2mm in diameter with poor dentition**
- **2 firm submandibular lymph nodes, no supraclavicular or axillary LAD**
- **Cardiovascular and respiratory exams were unremarkable**
- **Multiple (> 10) small erythematous nodular papules located bilaterally in the inguinal folds**
- **Large erythematous and plaque-like lesion with rolled borders and central erosion in the left inguinal fold measuring approximately 8mm in diameter**
- **Several small non-tender rubbery inguinal lymph nodes palpated bilaterally**
- **Initial CBC was remarkable for microcytic anemia**
- **Negative HIV, RPR, HSV, gonorrhea, chlamydia, T-Spot, acute hepatitis panel and blood cultures**
- **One sputum culture was positive for a Group IV rapid grower. However, the remainder of serial AFB smears and sputum cultures were negative**
- **Negative Blastomycosis antibody and Histoplasma urine antigen**

## Treatment Rendered

- **Bacterial culture:**
  - Initially placed in isolation and started on Doxycycline 100mg PO serving as an alternative to Zosyn 4.5 gm IV 48hrs. Pulmonology and Dermatology consulted.
- **HIV**
  - Based on the above results, Itraconazole 200mg PO TID was started and he was transitioned to 200 mg PO BID x 12 months on discharge.

## Discussion

- The majority of immunocompetent patients exposed to *Histoplasma* are asymptomatic or suffer only from a mild self-limiting infection often dismissed as a viral syndrome or community acquired pneumonia. Disease is rarely fatal.
- Disseminated disease is rare in immunocompetent patients.
- **Lungs findings in the immunocompetent host:**
  - Upper lobe fibrocavitary disease resembling reactivation tuberculosis
  - Disseminated disease: fever, weakness, weight loss, hepatosplenomegaly, and mucocutaneous lesions.
  - Oral lesions (25-45% of disseminated cases) vary from nodules to painful ulcers.
  - Skin lesions (<10% of disseminated cases in the US) are widely varying ranging from papules and plaques to pustules.
  - Amphotericin B is the drug of choice for disseminated or chronic disease, with Itraconazole PO serving as an alternative.
- **Systemic histoplasmosis** has emerged as an important opportunistic infection among immunocompromised patients as well as in immunocompetent patients residing in endemic areas.
- **Biopsy of lung, mucosal or cutaneous lesions is the most rapid method of arriving to the correct diagnosis**

## References

- [Histoplasmosis](http://www.cdc.gov/fungal/histoplasmosis/)