

**1699. Presentations and Outcomes of *Histoplasma capsulatum* Infection Vary by Immune Status: A Retrospective Cohort Study**

Alexander Franklin, MD<sup>1</sup>; Lindsey Larson, MPH<sup>1</sup>; Sasinuch Rutjanawech, MD<sup>1</sup>; Michael J. Hendrix, MD<sup>2</sup>; William Powderly, MD<sup>3</sup>; Andrej Spec, MD, MSCI<sup>2</sup>; <sup>1</sup>Washington University School of Medicine, St Louis, Missouri; <sup>2</sup>Barnes Jewish Hospital, St Louis, Missouri; <sup>3</sup>Division of Infectious Diseases Washington University in St. Louis, St Louis, Missouri

Session: 165. Mycology  
Friday, October 4, 2019: 12:15 PM

**Background.** Few large cohorts have examined *Histoplasma* infection across patients with varying immune status in the era of modern antiretroviral therapy. We describe the differences in clinical presentation and outcomes of *Histoplasma* infection by immune status.

**Methods.** We conducted a single-center retrospective cohort study of adult patients diagnosed with histoplasmosis from 2002 through 2017. Data included demographics, clinical features, diagnostics, and mortality. Patients were separated into three groups based on their immune status: Immunocompetent (IC), People living with HIV (PLWH), and patients who were HIV-negative but were otherwise immunocompromised (OIC). OIC was defined as the presence of any of the following: cancer, chemotherapy, solid-organ or stem-cell transplant, or immunosuppressive medications. Immunocompetence was defined as the absence of HIV and any of the conditions that defined OIC. Localized histoplasmosis was defined as *histoplasma* infection confined to the lungs and/or hilar and mediastinal lymph nodes. Disease that occurred outside these locations was defined as disseminated.

**Results.** We identified 263 patients with histoplasma infection: 54 (21%) were PLWH, 99 (28%) were OIC, and 110 (42%) were IC. Disseminated disease was more common among PLWH (76%) and OIC (52%) than among IC patients (32%) ( $P < 0.001$ ). For survival analysis the HIV and OIC groups were pooled to create a single immunocompromised group. In localized disease mean survival was longer in the immunocompetent group (12.7 years) than in the immunocompromised group (8.9 years) ( $P = 0.029$ ). For patients with disseminated disease, however, there was no significant difference in mean survival between the immunocompetent group (9.4 years) and the immunocompromised group (9.1 years) ( $P = .838$ ).

**Conclusion.** Disseminated disease was more common among immunocompromised than immunocompetent patients. In patients with localized histoplasmosis, mean survival was longer for immunocompetent patients, whereas for patients with disseminated disease there was no significant difference in mean survival.

Figure 1: Survival probability of patients with disseminated *Histoplasma capsulatum* by immune status

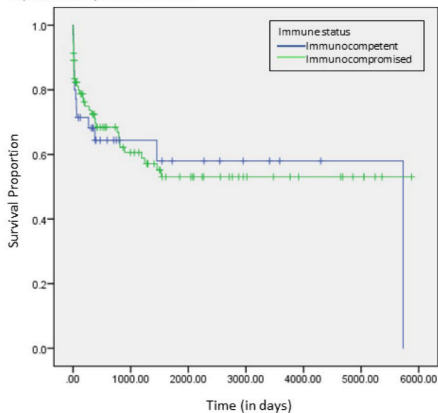
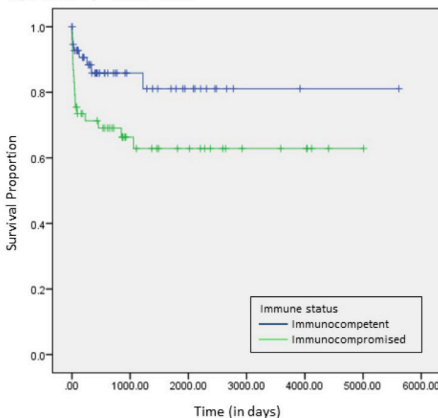


Figure 2: Survival probability of patients with localized *Histoplasma capsulatum* by immune status



**Baseline Characteristics of 263 Patients with *Histoplasma* Infection**

Age (Mean)	49 Years
Age (Std. dev.)	17 Years
Male Gender	157 (60%)
Race (African American)	199 (76%)
Race (Caucasian)	50 (19%)
Race (Other)	14 (5%)
PLWH*	54 (21%)
Immunocompetent	110 (42%)
OIC**	99 (38%)
Solid Organ Cancer	27 (10%)
Hematologic Cancer	21 (8%)
Chemotherapy	23 (9%)
Transplant	28 (11%)
Transplant Lung	9 (32%)
Transplant Liver	8 (29%)
Transplant Kidney	6 (21%)
Transplant Bone Marrow	3 (7%)
Prednisone	68 (26%)
Biologic Immunosuppressant	37 (14%)
NBNC***	54 (21%)
TNF- $\alpha$ Inhibitor	20 (8%)
Disseminated Disease	127 (48%)
Localized Disease	110 (42%)
ALN****	26 (10%)

\*People living with HIV  
\*\*Other Immunocompromise  
\*\*\* Non-biologic Non-Corticosteroid Immunosuppressant  
\*\*\*\*Asymptomatic Lung Nodule

**Disclosures.** All authors: No reported disclosures.

**1700. A Rare Case of *Candida glabrata* Hemorrhagic Cystitis with Empagliflozin Use**

Ly Tran, DO<sup>1</sup>; Mathew Thomas, DO<sup>1</sup>; Jeremy Harvey, MD<sup>2</sup>; Rahul Sampath, MD<sup>1</sup>; Richard Rose, MD<sup>3</sup>; <sup>1</sup>Carolinas HealthCare Systems BlueRidge, Hickory, North Carolina; <sup>2</sup>CHS-Blue Ridge Internal Medicine Residency, Lenoir, North Carolina; <sup>3</sup>Carolinas HealthCare System BlueRidge, Morganton, North Carolina

Session: 165. Mycology  
Friday, October 4, 2019: 12:15 PM

**Background.** Hemorrhagic cystitis is an inflammatory condition of the bladder, infrequently seen after cancer chemotherapy, pelvic radiation, and viral infections in immunocompromised hosts.

**Methods.** We report a case of biopsy-proven *Candida glabrata* hemorrhagic cystitis in an immunocompetent host associated with empagliflozin use. Empagliflozin is a sodium-glucose co-transporter 2 (SGLT2) inhibitor, that increases urinary glucose excretion, and is associated with an increased risk of urogenital mycotic infections

**Results.** A 71-year-old man with a history type 2 diabetes, neurogenic bladder status post transurethral resection of the prostate, developed symptoms of pelvic pain and gross hematuria 3 months after the initiation of empagliflozin. The patient received multiple courses of empirical antibiotic therapy without any relief. Six