1712. Candida auris: A Case Series at a Large Tertiary Care Medical System Preethi Veturi, MD1; Amanda Harrington, PhD2; Gail Reid, MD, MSCSTS1; Loyola University Medical Center, Chicago, Illinois; 2Loyola University and Medical Center, Maywood, Illinois; 3Loyola University Chicago, Stritch School of Medicine, Maywood, Illinois

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Background. Candida auris has become one of the most feared pathogens globally, primarily due to its high rate of antifungal resistance. We report cases of C. auris identified over an 18-month period at a university hospital.

Methods. We conducted a retrospective chart review of all patients with C. auris isolates identified from blood, respiratory, and other body sites. We assessed the clinical presentation, laboratory data, and treatment outcomes for these cases.

Results. C. auris was isolated from 14 patients. Most cases were associated with instrumental and invasive procedures. Twelve (86%) patients had positive results on blood cultures, with a median time to positivity of 4 days (range, 1-14). Most patients (11/14) had a primary medical condition associated with an immunocompromised state. Six (42%) patients were on antifungal therapy prior to isolation. Five (36%) patients were treated with amphotericin B, and 3 (21%) were treated with caspofungin. We observed high mortality rates: 5/14 (36%) deaths were associated with C. auris infections. No cases of C. auris were identified in the medical microbiology laboratory.

Conclusion. C. auris is a rising global health threat. Management of these cases is challenging due to the paucity of clinical presentations, laboratory data, and treatment options. Continued surveillance and urgent communication are needed for optimal management.

Disclosures. All authors: No reported disclosures.

1713. Impact of False-Positive Low-Titer Cryptococcal Antigen Testing Mahesh Bhatt, MD, Julie A. Ribes, MD, PhD; Vaneet Arora, MD, MPH; Thein Myint, MBBS; University of Kentucky, Lexington, Kentucky

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Background. Cryptococcal antigen testing is used for the rapid diagnosis of Cryptococcus neoformans. False-positive results can lead to unnecessary investigations, treatment, and laboratory workload. This study aimed to assess the impact of false-positive results on patients.

Methods. We conducted a retrospective chart review of all patients with positive cryptococcal antigen (CrAg) latex agglutination testing (Remel, Lenexa, KS) to IMMY Cryptococcal Antigen (CrAg) LFA between January 2015 and December 2017 at a tertiary care hospital. We reviewed the microbiology laboratory data and clinical information of all positively identified cases over a 17-month period.

Results. C. neoformans was isolated from 14 patients in cultures from blood, urine, wounds, and respiratory secretions. Matrix-assisted laser desorption ionization time-of-flight mass spectrometry (MALDI-TOF MS; Burker, Biotyper RUO) was used for identification in all of the cases and susceptibility testing was performed using microbroth dilution (Sensititre, YeastOne) for all isolates. 7/14 isolates (50%) were considered resistant to fluconazole; however, none were multi-drug resistant. All 14 isolates (100%) were considered susceptible to echinocandins. In addition, all patients were critically ill and had multiple comorbidities.

Conclusion. C. neoformans is an emerging global health threat with increasing incidence of infection. Awareness of the pathogen, appropriate contact precautions, and laboratory methods of identification are necessary. Given increasing drug resistance, we recommend susceptibility testing on all isolates.

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1714. Testing a Novel Clinical Surveillance Case Definition for Invasive Mold Infections Karlyn Beer, MS, PhD1; Hilary Kelly, MPH2; Rebekah Blakney, MS3; Taylor Chambers, MPH4; Lewis Perry, DrPH, MPH5; Sabrina Singleton, MPH6; Eduard Matkovic, MD7; Gillian Hale, MD7; Stepy Thomas, MSPh8; Nora Oliver, MD, MPH9; Alexandra Dretler, MD7; Sharon Tsay, MD2; Monica M. Farley, MD7; Brendan R. Jackson, MD, MPH10; CDC11, Atlanta, Georgia; 1Centers for Disease Control and Prevention, Atlanta, Georgia; 2Emory University, Georgia Emerging Infectious Diseases Program, Atlanta, Georgia; 3Georgia Emerging Infections Program, Atlanta, Georgia; 4VA Health System/Georgia Emerging Infectious Diseases Program, Atlanta, Georgia; 5Georgia Emerging Infectious Program/Georgia VA Health System, Atlanta, Georgia; 6Emory University, Georgia Emerging Infectious Program, Atlanta, Georgia; 7Emory University, Atlanta, Georgia; 8Emory University, Georgia Emerging Infectious Program, Atlanta, Georgia

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Background. Invasive mold infections (IMI) such as aspergillosis and mucormycosis are often fatal among immunosuppressed patients and have caused high-profile outbreaks. Surveillance for IMI is challenging because distinguishing a case from colonization or contamination is complex. The established case definition, Mycoses Study Group (MSG) criteria, lacks sensitivity. Because the need for surveillance remains, we designed a pilot IMI surveillance system within the Georgia Emerging Infections Program. Here, we describe cases identified through this system, using both the MSG criteria and a novel, more sensitive clinical case definition.

Methods. To identify potential IMI cases, we captured fungal cultures positive for mold, histopathology specimens with evidence of fungal tissue invasion, and positive galactomannan results within a 60-day window at three large hospitals in Atlanta during March 2017–2018. We excluded dimorphic fungi and hair and nail specimens. Of 194 potential cases, we selected 24 for complete medical chart review. Two physicians classified cases as proven, probable, or non-case according to MSG criteria. Cases that partially met MSG probable criteria and included antifungal treatment were classified as clinical cases; definitions were mutually exclusive (Figure 1).

Results. Of 24 potential IMI cases, 16 (66%) met an IMI case definition, including 6 (50%) proven, 5 (42%) probable, and 5 (42%) clinical cases. Inter-rater agreement was 92%. Most (5/7) MSG cases involved Aspergillus and were more likely to have cancer, a transplant, or other immunosuppression compared with clinical cases (Figure 2 and 3). Clinical cases included conditions not specified in MSG criteria, including burns (1), wounds (1) or eye (4) infections. MSG and clinical cases more often had antifungal treatment (16/16 vs. 1/8) or died (4/16 vs. 0/8) compared with non-cases.

Conclusion. In this preliminary analysis of potential IMI cases, most represented true invasive infections, indicating effective exclusion of most colonization. Most of the 16 cases were classified as clinical, however, and would have been missed in a system relying on the MSG criteria alone. Results suggest that a less-specific clinical case definition incorporating antifungal treatment may improve the sensitivity and utility of IMI surveillance.

Table 1: Characteristics and Treatment of Nine Patients with False Positive Results

| Characteristics         | N (%) |
|-------------------------|-------|
| Age                     | 3 (33.3%) |
| Male                    | 5 (55.6%) |
| Cirrhosis/Liver disease | 3 (33.3%) |
| Underwent Lumen Puncture| 2 (22.2%) |
| Antifungal Therapy      | 2 (22.2%) |
| Antifungal Therapy for 4 weeks | 2 (22.2%) |

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