Candida albicans is the most frequently isolated species worldwide. However, species distribution, epidemiology, and resistance have changed. C. parapsilosis complex (CPC), which has a global rate of fluconazole (FCZ) resistance range between 2 and 5% and has been related to echinocandins resistance, is the second most isolated species at Fundación Valle del Lili (FVL). We aim to describe the clinical and microbiological characteristics of fungal infections by C. parapsilosis and determine FCZ resistance rates.

**Methods.** An observational prospective study was conducted. The study included patients with CPC isolations attended at FVL from 2016 to 2017. The strains were identified by mass spectrometry (MALDI TOF® Bruker, Biolyzer 3.1). Minimal inhibitory concentrations (MIC) were determined by broth microdilution (M27 A3 CLSI). Statistical univariate analysis was performed; Differences between resistant cases and nonresistant cases were assessed through U Mann–Whitney test, Pearson chi-squared test or Fisher exact test.

**Results.** 55 patients had CPC isolations during the study period: 18 newborns, 13 children, and 24 adults. Most isolates were from blood cultures (n = 31) (14 of them newborns); bronchoalveolar lavage (n = 9), peritoneal fluid (n = 8), and catheter tips (n = 3). The resistance was 36%. 52 strains were C. parapsilosis so, of them, 20 were FCZ resistant; 3 strains were C. orthopsilosis, all them from FCZ sensitive. The MIC50 = 1 μg/mL and MIC90 = 16 μg/mL. Patients with previous antifungal treatment had a higher risk of FCZ resistance (RR = 2.14, 95% CI 1.07–4.26). The mortality brute rate was 30%. Patients with diabetes and renal failure death risk (RR = 3.1, 95% CI 1.4 – 6.9) and (RR = 2.96, 95% CI 1.4 – 6.4), respectively. Candidemia was present in 50% of deaths among children with parenteral nutrition.

**Conclusion.** Fluconazole resistance in CPC has increased in the last decade. Newborns receiving parenteral nutrition had a higher proportion of CPC fungemia; we also found higher mortality rates among this population.

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

**1696. Epidemiology, Clinical Characteristics and Outcomes of Invasive Aspergillosis in a Tertiary Care Hospital in Mexico**
Carla Marina Román-Montes, MD; María F. Gonzalez-Lara, MD, MSc; Alfonso Pérez-Domínguez, MD; Andrea Rangel-Cordero, BCh; Instituto Nacional de Ciencias Médicas y Nutrición, Mexico City, Mexico; Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubiran, Mexico City, Distrito Federal, Mexico

**Session:** 165. Mycology

**Friday, October 4, 2019: 12:15 PM**

**Background.** Invasive aspergillosis is an important cause of life-threatening infection in immunocompromised patients. The objective was to describe the epidemiology, clinical characteristics, and outcome of patients with invasive aspergillosis (IA) in a tertiary care center in Mexico.

**Methods.** A laboratory-based survey was done to identify patients with positive Aspergillus culture or galactomannan from 2014 to 2018. The medical records were reviewed to include patients with proven and probable IA, according to the EORTC criteria. Descriptive analysis of clinical characteristics and risk factors for 6-week mortality was made through X2, T-test or Mann–Whitney test. A multivariate logistic regression model including variables with a P-value of <0.2 in univariate analysis was made.

**Results.** 240 cases of IA were identified: 193 (80%) probable, 27 (11%) proven, and 20 (8%) definite cases. Most had hematological neoplasias and low prevalence of antimalarial prophylaxis due to economical reasons. Six-week mortality was 35% (n = 85), peritoneal fluid (n = 8), and catheter tips (n = 3). The resistance was 36%. 52 strains were C. parapsilosis so, of them, 20 were FCZ resistant; 3 strains were C. orthopsilosis, all them from FCZ sensitive. The MIC50 = 1 μg/mL and MIC90 = 16 μg/mL. Patients with previous antifungal treatment had a higher risk of FCZ resistance (RR = 2.14, 95% IC 1.07–4.26). The mortality brute rate was 30%. Patients with diabetes and renal failure death risk (RR = 3.1, 95% CI 1.4 – 6.9) and (RR = 2.96, 95% CI 1.4 – 6.4), respectively. Candidemia was present in 50% of deaths among children with parenteral nutrition.

**Conclusion.** Fluconazole resistance in CPC has increased in the last decade. Newborns receiving parenteral nutrition had a higher proportion of CPC fungemia; we also found higher mortality rates among this population.

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

**1697. Comparison of Candidemia in Patients in Neonatal Intensive Care Unit and Pediatric Patients and Big Data Analysis on Candidiasis and Candidemia in Korean Children**
Joon-sik Choi, MD; Yoonsoon Yoon, MD; Soon Jun Kwak, Researcher; Yae-Jeon Kim, MD, PhD; Department of Pediatrics, Sungkyunkwan University School of Medicine, Samsung Medical Center, Republic of Korea; Gangnam-gu, Seoul–teukyulpy, Republic of Korea; 2Department of Pediatrics, Seoul, Seoul–teukyulpy, Republic of Korea; 3Samsung Biomedical Research Institute, Seoul, Seoul–teukyulpy, Republic of Korea

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**Background.** Fungal infection is a serious health threat in high-risk pediatric populations. Big data on pediatric epidemiology of candidiasis in Korea are limited.

**Methods.** A retrospective chart review was performed in patients aged 0–18 years who were diagnosed with candidemia from 2009 to 2018 in a tertiary teaching hospital. Patients were divided into two groups: the neonatal group was comprised of babies with postnatal age ≤ 28 days or younger and any patients hospitalized in neonatal intensive care unit and rest of the patients were grouped into pediatric group. Only the first candidemia episode for each patient was included. In addition, the number of patients with candidemia and candidiasis and health cost was estimated among patients 19 years or younger who requested reimbursement to Health Insurance Review and Assessment Service (HIRA) Korea during the 9 year period from 2010 to 2018.

**Results.** Total 81 patients with candidemia were identified; 42 in the neonatal group and 39 in the pediatric group. In neonatal group, prematurity was 95.2%, while hematologic oncology diseases were the most common underlying conditions in pediatric group. A strong cultivated candida spp., C. parapsilosis was the most common pathogen (34.6% followed by C. albicans (32.1%) and C. glabrata and C. tropicalis (11.1%, respectively). In neonatal group, C. parapsilosis (n = 17, 40.5%), C. albicans (n = 16, 38.1%), C. glabrata (n = 5, 11.9%) and unidentified species non-albicans candida (n = 4) were isolated. In pediatric group, C. parapsilosis (n = 11, 28.2%), C. albicans (n = 10, 25.6%), C. tropicalis (n = 4, 10.3%), C. krusei (n = 2), C. orthopsilosis (n = 1), C. lusitaniae (n = 1), C. kefyr (n = 1) were isolated. From HIRA data analysis, 47 patients were found to have candidemia and health cost was estimated at 1.27 million dollars and 66,286 patients were found to have candidiasis and health cost was 2.14 million dollars.

**Conclusion.** Discrepancies in numbers for candidemia between national reimbursement data and our retrospective data implies a significant underestimation of candidemia. Increased awareness for fungal infection documentation is needed to better estimate the true burden of invasive candida infection in the pediatric population.

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**1698. Epidemiology and Antifungal Susceptibility of Candidemia Among Adult Patients at a Tertiary Care Hospital in South Korea During an 8-Year Period**
Jong Hun Kim, MD; Jun Woong Suh, MD; Jeong Yoon Kim, MD; Hojin Lee, MD; Sun Bean Kim, MD; Jang Wook Sohn, MD; Min Ja Kim, MD, PhD1,2; Korea University, Seoul, Seoul–teukyulpy, Republic of Korea; 2Korea University Anam Hospital, Seoul, Seoul–teukyulpy, Republic of Korea; 3Korea University College of Medicine, Seoul, Seoul–teukyulpy, Republic of Korea, 4Institute of Emerging Infectious Diseases, Korea University, Seoul, Seoul–teukyulpy, Republic of Korea

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**Background.** Candidemia continues to contribute to significant morbidity and mortality in the hospital. This study aimed to evaluate the epidemiology and antifungal susceptibility at a tertiary care hospital in South Korea during an 8-year period.

**Methods.** Adult patients ≥ 19 years with candidemia at a tertiary care hospital in South Korea from 2006 to 2018 were reviewed, and cases of candidemia with antifungal susceptibility data were included for the analysis.

**Results.** There were 270 cases of candidemia with fluconazole susceptibility data from 2011 to 2018. Overall, fluconazole resistance rate of candidemia was 8.5%. Between period 1 (2011–2015) and period 2 (2016–2018), fluconazole resistance rate was significantly higher in the period 2 (14.3%) than in the period 1 (0.9%), P < 0.001. Among candidemia caused by different Candida spp., a significant increase of fluconazole-resistant C. parapsilosis candidemia was noted in the period 2 (12 out of 34 cases; 35.3%) when compared with the period 1 (0 out of 17 cases; 0.0%), P = 0.004. Although there was a trend of higher fluconazole resistance rate for candidemia caused by C. albicans (9.1% vs. 1.8%), C. tropicalis (2.7% vs. 0.0%), and C. glabrata (11.1% vs. 0.0%) in the period 2 than in the period 1, no statistical significance was observed. Echinocandin (caspofungin and micafungin) susceptibility data were available for 211 cases of candidemia from 2013 to 2018. There were no cases of caspofungin-resistant candidemia except for 2 cases of C. utilis candidemia. However, there were 9 cases of micafungin-resistant candidemia (1 case of C. tropicalis candidemia out of 51 cases [2.0%], 6 cases of C. glabrata candidemia out of 18 cases [33.3%], and 2 cases of C. utilis candidemia out of 2 cases [100.0%]). Micafungin-resistant C. tropicalis and C. glabrata candidemia cases were susceptible to caspofungin.

**Conclusion.** A significant increase of fluconazole-resistant candidemia in recent years was noted, particularly among C. parapsilosis cases. Echinocandin resistance among candidemia cases is rare. However, close monitoring needs to be considered for the possible emergence of differential echinocandin resistance.

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