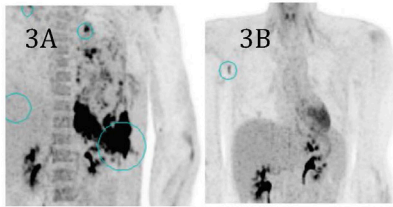


Fig. 3



3A. Pretransplant PET-CT demonstrating involvement of L lower lobe and contiguous structures. 1B. Posttransplant PET-CT with resolution at previously involved sites.

Disclosures. All authors: No reported disclosures.

1690. Risk Factors of Invasive Aspergillosis in Systemic Lupus Erythematosus Patients

Sithichai Kunawathanakul, MD¹; Atibordee Meesing, MD²; Chingching Foocharoen, MD¹; ¹Khonkaen University, Khonkaen, Khon Kaen, Thailand; ²Khon Kean University, Rochester, Khon Kaen, Thailand

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

Background. Invasive aspergillosis (IA) has been reported in systemic lupus erythematosus (SLE) patients. We assessed the risk factors of invasive aspergillosis in SLE patients.

Methods. A retrospective age- and sex-matched case-control study with ratio 3:1 in adult SLE patients from January 2002- December 2017 at Srinagarind Hospital, Khon Kaen University, Khonkaen, Thailand has been conducted. We excluded the patients who were overlap with other immunocompromised condition.

Results. Of 1,585 SLE patients, 22 patients (1.4%) had invasive aspergillosis and 66 controls were included in the study. The mean age was 36.9 ± 11.8 years and 76 (86.4%) patients were female. SLE patients who developed IA had statistically significant lower median total absolute lymphocyte count than control (503 vs. 1342 cells/mm³, P = 0.05) and history of steroid treatment (adjusted OR 21.43, P = 0.006) were the risk factor of IA.

Conclusion. There was a low prevalence of IA in SLE patients. Low total lymphocyte count, renal impairment and history of steroid treatment were significantly associated with invasive aspergillosis in SLE patients.

Table 1. Baseline Characteristics

	IA (n=22)	Non-IA (n=66)	Total (n=88)
Female (%)	19 (86.4)	57 (86.4)	76 (86.4)
Mean age (SD) (years)	36.9 (11.8)	36.9 (11.7)	36.9 (11.7)
Median ALC (IQR) (cells/mm ³)	503 (310-726)	1342 (693-2260)	948 (545-2032)
Median creatinine (IQR) (mg/dL)	1.4 (1.1-2.2)	0.7 (0.6-1.1)	0.8 (0.6-1.3)
Median ESR (IQR) (mm/h)	90 (75-119)	56 (30-79)	75 (44-90)
Median SLEDAI (IQR)	21 (13-25)	6 (4-10)	8 (4-14)
SLE manifestation (%)			
• Cutaneous involvement	4 (18.2)	21 (31.8)	25 (28.4)
• Arthritis	8 (36.4)	22 (33.3)	30 (34.1)
• Serositis	15 (71.4)	9 (13.6)	24 (27.6)
• CNS involvement	8 (36.4)	10 (15.2)	18 (20.5)
• Renal involvement	16 (72.7)	27 (41.5)	43 (49.4)
• AIHA	15 (68.2)	33 (50)	48 (54.5)
• Thrombocytopenia	7 (31.8)	9 (13.6)	16 (18.2)
Co-infections (%)			
• Bacteria	7 (31.8)	1 (1.5)	8 (9.1)
• Mycobacterium tuberculosis	7 (31.8)	0 (0)	7 (8)
• Strongyloidiasis	3 (13.6)	0 (0)	3 (3.4)
• CMV infection	1 (4.5)	1 (1.5)	2 (2.3)

AIHA; autoimmune hemolytic anemia, ALC; absolute lymphocyte count, CMV; cytomegalovirus, CNS; central nervous system ESR; erythrocyte sedimentation rate, IA; invasive aspergillosis, IQR; inter quartile range, SD; standard deviation, SLE; systemic erythematosus, SLEDAI; Systemic Lupus Erythematosus Disease Activity Index

Disclosures. All authors: No reported disclosures.

1691. Cryptococcus Species Other than C. neoformans and C. gattii: Are They Clinically Significant?

Edison J. Cano Cevallos, MD; Zachary A. Yetmar, MD; Raymund R. Razonable, MD; Mayo Clinic, Rochester, Minnesota

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

Background. *Cryptococcus* sp. is a major cause of opportunistic infections in immunocompromised patients, with nearly all cases due to *C. neoformans* or *C. gattii*. There are occasional reports of other *Cryptococcus* species causing invasive human disease. However, their epidemiology and clinical significance are not fully defined. We sought to describe the patients with cultures positive for *Cryptococcus* species other than *neoformans* and *gattii*.

Methods. A retrospective descriptive review of patients with cultures growing *Cryptococcus* species other than *neoformans* and *gattii* from November 2011 to February 2019. Clinical and laboratory data were analyzed.

Results. Out of 177 cases with a culture positive for *Cryptococcus* sp., 54 patients (mean age, 53.3 years; 61% men) had a culture for *Cryptococcus* other than *neoformans* and *gattii*. The most common species were unspecified non-*neoformans/gattii* (10), *magnus* (9), *laurentii* (8), and *ater* (7). Three patients had active malignancies and 15 were on immunosuppressive drugs, 6 due to transplant. The most common sites or specimens were skin (16), respiratory (16), urine (7), joint (3), intravascular catheter (2), cerebrospinal fluid (2), oral (2), peritoneal fluid, donor liver transplant, bone marrow, sinus, nail, and cornea. Whereas 21 (38.9%) cultures were obtained due to local symptoms, there was only one case of invasive disease, affecting the peritoneum, while the majority was either unaddressed (25) or considered contaminants (17). Only 12 patients received antifungal treatment, where sources were skin (4), oral (2), peritoneum, donor liver, respiratory, vascular catheter, urine, and nail. Antifungal drugs were fluconazole, itraconazole, clotrimazole, caspofungin, and griseofulvin, for a mean duration of 37.6 days. Among patients who were not treated, four died within 6 months but mostly of unrelated causes (3) or not known (1).

Conclusion. This large series of patients with *Cryptococcus* sp. other than *neoformans* and *gattii* suggests that these species rarely cause clinically significant infection in humans. Only one case of invasive disease was found.

Disclosures. All authors: No reported disclosures.

1692. Epidemiology, Clinical Characteristics, and Outcomes of Candidemia in a Tertiary Hospital in the Dominican Republic

Rita Rojas Fermin, MD¹; Edwin Germosen²; Alfredo J. Mena Lora, MD³; Anel E. Guzman, MSc¹; Gilda Tolari, MSC¹; Susan C. Bleasdale, MD³; ¹Hospital General Plaza de la Salud, Santo Domingo, Distrito Nacional, Dominican Republic; ²Universidad Tecnologica de Santiago, Santo Domingo, Distrito Nacional, Dominican Republic; ³University of Illinois at Chicago, Chicago, Illinois

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

Background. Candidemia is a major cause of morbidity and mortality in hospitalized patients. The global epidemiology of invasive Candidiasis is changing, with distribution of species and resistance varying in different geographic and healthcare settings. There is a paucity of data on candidemia in the Dominican Republic (DR). Understanding epidemiologic risk factors and resistance rates may improve early diagnosis and empiric antifungal selection.

Methods. We performed a retrospective review of patients with positive Candida blood cultures from January 2017 to December 2018. Data were extracted from medical records. Clinical and demographic information, including co-morbidities, antifungal sensitivities, and outcomes were collected.

Results. A total of 52 cases were identified, 34 in 2017 and 18 in 2018. Ages ranged from <1 to 89 years and was distributed in various groups (Figure 1). The most common comorbidities included DM (38%), nephropathy (37%), cerebrovascular accident (25%), and malignancy (19%). Device use and prior antimicrobial exposure were the most common risk factors (Table 1). There was no antifungal resistance to amphotericin, voriconazole, or echinocandins. No fluconazole resistance was found in 2017, compared with 11% resistance in 2018 in *C. albicans*, *C. glabrata*, and *C. tropicalis* species. Mortality was 64% in 2017 and 61% in 2018.

Conclusion. Candidemia with non-albicans *Candida* species was common (87%). Susceptibilities and species varied by year but did not affect mortality. Resistance to fluconazole is rising but remains low and other antifungals retain susceptibility. Indwelling catheters, mechanical ventilation and antibiotic exposure were common risk factors in our cohort. Mortality for candidemia was high. Rapid diagnostic testing and early empiric therapy with echinocandins for patients at risk may curb mortality.

Figure 1. Age distribution of Candidemia

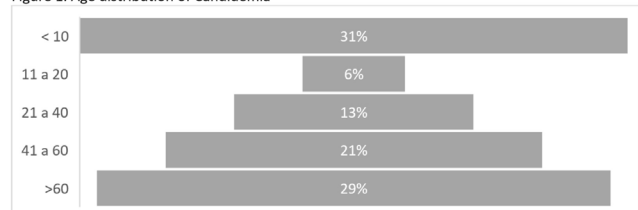


Figure 2. Distribution of *Candida* species in BSI from 2017-2018

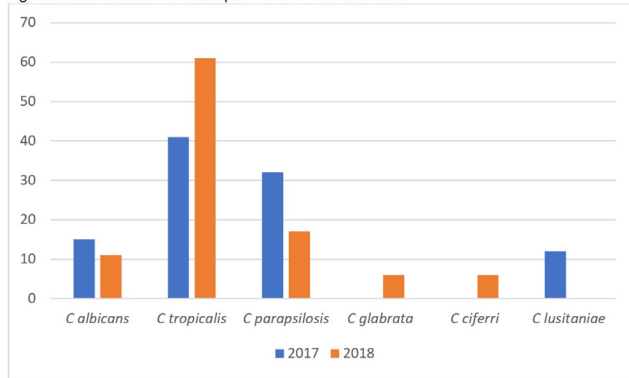


Table 1. Risk factors for Candidemia (%)

Risk factor	2017 (n=34)	2018 (n=18)
Prior antimicrobial use	94%	100%
Mechanical ventilation	91%	72%
Indwelling urinary catheter	88%	88%
Central venous catheter	88%	77%
NG	73%	83%
Corticosteroids	73%	55%
Prior admission	55%	66%
Abdominal surgery	50%	33%
Tunneled CVC	35%	38%
Colostomy	35%	33%

Disclosures. All authors: No reported disclosures.

1693. Risk Factors Associated with Mortality of Invasive Aspergillosis in King Chulalongkorn Memorial Hospital

Kamonwan Jutivorakool, MD¹; Praeapat Tirastittam, MD²; ¹King Chulalongkorn Memorial Hospital, Bangkok, Krung Thep, Thailand; ²Chulalongkorn University, Bangkok, Krung Thep, Thailand

Session: 165. Mycology

Friday, October 4, 2019: 12:15 PM

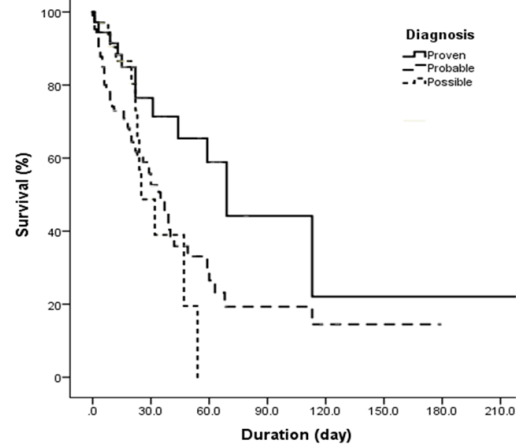
Background. Invasive aspergillosis is the serious fungal infection that often found in the immunocompromised host such as hematologic malignancy, bone marrow transplantation, organ transplantation, and patient who received chemotherapy. Nowadays the patient who diagnosed with invasive aspergillosis has a high mortality rate of 50–60%. There were some studies about the risk factor of mortality of invasive aspergillosis but most of them were not in Thailand. The objective of this study was to identify risk factors related to mortality and the mortality rate of invasive aspergillosis in King Chulalongkorn Memorial Hospital.

Methods. The retrospective study by collected and analyzed the data from medical record by ICD 10, between 1 January 2012 and 30 October 2017.

Results. Total patients were 176 patients; the mortality rate of invasive aspergillosis patient was 46%. The most common underlying condition was AML (27.8%). The risk of invasive aspergillosis was prolonged neutropenia (31.3%), prolonged corticosteroid therapy 27.8% and induction phase chemotherapy 22.7%. The most infection site was the pulmonary system at 80.1%, sinus 13.6%, and CNS 5.7%. The significant factor which affect the mortality rate was cirrhosis [HR 4.21, 95% CI 1.46–11.69, $P = 0.008$], HIV infection/AIDS [HR 3.24, 95% CI 1.03–10.24, $P = 0.045$], tracheal infection [HR 21.81, 95% CI 1.48–320.41, $P = 0.025$] and empirical treatment with itraconazole [HR 11.65, 95% CI 3.14–43.17, $P \leq 0.001$]

Conclusion. The Risk factors associated with mortality of invasive aspergillosis in King Chulalongkorn Memorial Hospital was cirrhosis, HIV infection/AIDS,

tracheal infection, and the empirical treatment with itraconazole. The overall mortality rate of invasive aspergillosis was 46%.



Kaplan-Meier survival analysis in invasive aspergillosis stratified by the EORTC/MSG diagnosis

Disclosures. All authors: No reported disclosures.

1694. Predictors of Septic Shock in Adult Patients with Candidemia: A Single-Center Experience Over 13 Years

Jin Woong Suh, MD¹; Jeong Yeon Kim, MD¹; You Seung Chung, MD¹; Hojin Lee, MD²; Sun Bean Kim, MD¹; Young Kyung Yoon, MD¹; Jang Wook Sohn, MD¹; Min Ja Kim, MD, PhD^{3,4}; Jong Hun Kim, MD¹; ¹Korea University, Seoul, Seoul-t'ukpyolsi, Republic of Korea; ²Korea University Anam Hospital, Seoul, Seoul-t'ukpyolsi, Republic of Korea; ³Korea University College of Medicine, Seoul, Seoul-t'ukpyolsi, Republic of Korea; ⁴Institute of Emerging Infectious Diseases, Korea University, Seoul, Seoul-t'ukpyolsi, Republic of Korea

Session: 165. Mycology

Friday, October 4, 2019: 12:15 PM

Background. Although the incidence of candidemia has been increased recently, factors associated with septic shock in adult patients with candidemia have not been well defined. We performed a study to identify septic shock risk factors.

Methods. This retrospective study was conducted among adult patients ≥ 19 years of age with candidemia who were diagnosed from 2006 to 2018 at a single tertiary care medical center. Clinical data were collected. Patients were excluded if they were noted to have concomitant bacteremia or to have received antifungal treatment < 5 days.

Results. After application of the exclusion criteria, 46 patients (25.1%) were classified as having septic shock presentation out of 183 patients. Between the septic shock and non-septic shock patients, there were no differences regarding comorbidities. Variables associated with septic shock in the univariate analysis were non-remission of candidemia [23/46 (67.6%) vs. 100/137 (83.3%) $P = 0.044$], central venous catheter [41/46 (89.1%) vs. 98/137 (67.9%) $P = 0.005$], hemodialysis [12/46 (26.1%) vs. 15/137 (10.9%) $P = 0.012$], neutropenia [10/46 (21.7%) vs. 14/137 (10.2%) $P = 0.045$], and previous hospitalization to the intensive care unit (ICU) [24/46 (52.2%) vs. 47/137 (34.3%) $P = 0.031$]. The group of other *Candida* species consisting of [*C. guilliermondii*, *C. haemulonii*, *C. famata*, *C. lusitanae*, and unknown] was more common in the septic shock patients (10.9%) than in the non-septic shock patients (1.5%), $P = 0.004$. The mortality of patients with septic shock was significantly higher than that of patients without septic shock [37/46 (80.4%) vs. 59/137 (43.1%) $P < 0.001$]. Multivariate analysis showed central venous catheter (odds ratio [OR] 4.00, 95% confidence interval [CI] 1.12 – 14.30, $P = 0.033$) and abnormal aspartate aminotransferase [AST] (OR 2.76, 95% CI 1.06 – 7.16, $P = 0.024$) were significantly associated with septic shock. Presence of other *Candida* species (OR 6.78, 95% CI 0.87 – 53.03, $P = 0.068$) showed borderline significance.

Conclusion. Our findings suggest that venous catheter and abnormal AST were significant factors associated with septic shock in adult patients with candidemia. Also, candidemia caused by other *Candida* species may need to be monitored closely for the development of septic shock presentation.

Disclosures. All authors: No reported disclosures.

1695. Clinical and Microbiological Characterization of *Candida parapsilosis* Complex Infection in a Tertiary Care Hospital from Cali, Colombia

Luisa F. Martinez; Ana M. Sanz, MD; Diana M. Martinez; Fernando Rosso, MD, MSc; Claudia M. Parra, MD; Fundación Valle del Lili, Cali, Valle del Cauca, Colombia

Session: 165. Mycology

Friday, October 4, 2019: 12:15 PM

Background. Candidemia and invasive candidiasis are major causes of morbidity and mortality among critically ill patients and neonates. Every year more than 250,000 people develop invasive candidiasis, causing more than 50,000 deaths worldwide.