

Table 1: Clinical Parameters

	Patient 1	Patient 2
Age	66	66
Sex	Male	Female
Underlying illness	AML	B cell prolymphocytic leukemia
Chemotherapy (within prior 30 days)	FLAG-IDA induction chemotherapy	Rituximab, Ibrutinib, Bendamustine, Venetoclax, dexamethasone
Clinical manifestations	Productive cough, hypoxemia	Fever, dyspnea
Initial CT chest	Bilateral pulmonary ground-glass opacities	Multifocal, bilateral, irregular nodular opacities
Follow up CT chest	Nodular/mass-like opacities	Worsening pneumonia with multiple areas of cavitation
BAL results	Culture: <i>Rothia mucilaginosa</i> Fungal culture: Negative Path: No fungal elements	PCR: <i>Aspergillus fumigatus</i> , HHV-6 Culture: <i>Prevotella</i> , <i>Streptomyces</i> Fungal culture: Negative Path: No fungal elements
Karius Test	<i>Syncephalastrum monosporum</i> 562 MPM (RR < 10 MPM)*	<i>Syncephalastrum monosporum</i> 575 MPM (RR < 10 MPM)**
Treatment	Posaconazole, Amphotericin liposomal	Posaconazole, Micafungin, Amphotericin liposomal
Outcome	Survival, stable CT imaging, repeat KT negative, underwent haplo-HSCT	Survival, improvement in CT imaging, repeat KT negative, underwent allogeneic PBST

RR = reference range based on the 97.5% of a cohort of 684 healthy individuals.
 **Rothia mucilaginosa* reads were present in the raw data but did not reach the required statistical significance for the commercial threshold
 ***Aspergillus* and *Prevotella* reads were present in the raw data but did not reach the required statistical significance for the commercial threshold; HHV6 reads were not present

References

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1178. Risk factors for death among patients with Candida endocarditis: An observational study in US academic medical centers
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Background. Candida endocarditis is a rare, sometimes fatal complication candidemia. Our understanding of this condition is limited to findings from case series and small observational studies. Using the Vizient clinical database, a repository for clinical and administrative data from 117 academic medical centers and more than 300 affiliated hospitals, we assembled the largest cohort of Candida endocarditis patients to date, reporting patient characteristics and risk factors for death.

Methods. Using ICD-10 code B37.6 (Candidal Endocarditis) we identified 703 inpatients at 179 United States hospitals from October 2015 through April 2019. We examined demographic, diagnostic, and procedural data from each patient's initial encounter. With univariate and multivariate logistic regression analyses we identified predictors of in-hospital mortality.

Results. Of 703 patients, 402 (57.2%) were male, 421 (59.9%) used tobacco, 213 (30.3%) had documented opiate abuse, 128 (18.2%) had other illicit drug abuse documented, and 190 (27.0%) had documented hepatitis C infection. Among the 703 patients, 114 (16.2%) died during the index encounter. On multivariate analysis, liver failure was the strongest predictor of death (OR 8.4, 95% CI 4.4 - 15.9), and female sex (OR 1.8, 95% CI 1.1 - 2.9), transfer from an outside facility (OR 1.7, 95% CI 1.1 - 2.7), underlying aortic valve pathology (OR 2.8, 95% CI 1.5 - 4.9), hemodialysis (OR 2.0, 95% CI 1.0 - 3.8), cerebrovascular disease (OR 2.2, 95% CI 1.2 - 3.8), neutropenia (OR 2.5, 95% CI 1.3 - 4.7) and alcohol abuse (OR 2.9, 95% CI 1.3 - 6.7) were also associated with higher odds of in-hospital death. In the same analysis, opiate abuse was associated with a lower odds of in-hospital death (OR 0.4, 95% CI 0.2 - 0.8).

Table 1. Characteristics of 703 patients with Candida endocarditis

Factor	Alive at Discharge	Dead at Discharge	p-value
N	589	114	
Age			<0.001
≤30 years	134 (22.8%)	20 (17.5%)	
31-50 years	211 (35.8%)	25 (21.9%)	
51-64 years	130 (22.1%)	31 (27.2%)	
65+ years	114 (19.4%)	38 (33.3%)	
Sex			0.28
Male	342 (58.1%)	60 (52.6%)	
Female	247 (41.9%)	54 (47.4%)	
Race			0.27
Unknown/Unavailable/Declined	18 (3.1%)	8 (7.0%)	
White	415 (70.5%)	74 (64.9%)	
Black	98 (16.6%)	19 (16.7%)	
Asian	14 (2.4%)	2 (1.8%)	
Other	44 (7.5%)	11 (9.6%)	
Insurance Payer			0.98
Private	109 (18.5%)	21 (18.4%)	
Medicare/Medicaid	439 (74.7%)	86 (75.4%)	
Uninsured	20 (3.4%)	4 (3.5%)	
Other	20 (3.4%)	3 (2.6%)	
Length of Stay, median (IQR)	19.0 (10.0, 34.0)	19.5 (10.0, 38.0)	0.52
Patient Origin			<0.001
Non-Facility	277 (47.0%)	33 (28.9%)	
Clinic	33 (5.6%)	7 (6.1%)	
Inpatient Medical Facility	269 (45.7%)	74 (64.9%)	
Other	10 (1.7%)	0 (0.0%)	
Diabetes Mellitus (DM)	165 (28.0%)	36 (31.6%)	0.44
Chronic Kidney Disease (CKD)	170 (28.9%)	49 (43.0%)	0.003
Hemodialysis (HD)	52 (8.8%)	21 (18.4%)	0.002
Cerebrovascular Disease (CVD)	75 (12.7%)	29 (25.4%)	<0.001
Chronic Obstructive Pulmonary Disease (COPD)	58 (9.8%)	16 (14.0%)	0.18
Coronary Artery Disease (CAD)	7 (1.2%)	3 (2.6%)	0.23
Other Underlying Heart Condition	41 (7.0%)	11 (9.6%)	0.32
Vascular Disease	77 (13.1%)	19 (16.7%)	0.31
Chronic Heart Failure	140 (23.8%)	40 (35.1%)	0.011
Peptic Ulcer Disease (PUD)	8 (1.4%)	0 (0.0%)	0.21
Liver Failure	27 (4.6%)	30 (26.3%)	<0.001
Cirrhosis	22 (3.7%)	3 (2.6%)	0.56
Hepatitis B Infection	19 (3.2%)	1 (0.9%)	0.17
Hepatitis C Infection	166 (28.2%)	24 (21.1%)	0.12
Human Immunodeficiency Virus (HIV) Infection	13 (2.2%)	1 (0.9%)	0.35
Connective Tissue or Autoimmune Disease	32 (5.4%)	9 (7.9%)	0.30
Long-term Steroid Use	23 (3.9%)	2 (1.8%)	0.26
Hematologic Malignancy (HM) or related	23 (3.9%)	8 (7.0%)	0.14
Neutropenia/Pancytopenia	57 (9.7%)	20 (17.5%)	0.014
Hematopoietic Stem Cell Transplant (HSCT)	3 (0.5%)	0 (0.0%)	0.45
Solid Tumor	58 (9.8%)	14 (12.3%)	0.43
Malignancy, NOS	22 (3.7%)	6 (5.3%)	0.45
Solid Organ Transplant (SOT)	19 (3.2%)	3 (2.6%)	0.74
Homeless	21 (3.6%)	3 (2.6%)	0.62
Tobacco Abuse	371 (63.0%)	50 (43.9%)	<0.001
Alcohol Abuse	33 (5.6%)	12 (10.5%)	0.049
Other Illicit Drug Use	113 (19.2%)	15 (13.2%)	0.13
Opioid Abuse/Dependence	195 (33.1%)	18 (15.8%)	<0.001

Table 2. Factors associated with in-hospital death in multivariate regression analysis

Factor	Odds Ratio	95% C.I.	p-value
Age			
≤30 years	Reference		
31-50 years	0.8	(0.4 - 1.6)	0.483
51-64 years	1.1	(0.5 - 2.2)	0.871
65+ years	1.6	(0.7 - 3.3)	0.238
Sex			
Male	Reference		
Female	1.8	(1.1 - 2.9)	0.014
Race			
Unknown/Unavailable/Declined	Reference		
White	0.4	(0.2 - 1.2)	0.112
Black	0.4	(0.1 - 1.3)	0.124
Asian	0.3	(0.0 - 2.0)	0.202
Other	0.6	(0.2 - 1.9)	0.366
Patient Origin			
Inpatient Medical Facility	1.7	(1.1 - 2.7)	0.027
Hemodialysis (HD)	2.0	(1.0 - 3.8)	0.049
Cerebrovascular Disease (CVD)	2.2	(1.2 - 3.8)	0.006
Chronic Heart Failure	1.6	(1.0 - 2.6)	0.065
Liver Failure	8.4	(4.4 - 15.9)	<0.001
Neutropenia/Pancytopenia	2.5	(1.3 - 4.7)	0.006
Alcohol Abuse	2.9	(1.3 - 6.7)	0.012
Opioid Abuse/Dependence	0.4	(0.2 - 0.8)	0.014
Aortic Valve Pathology	2.8	(1.5 - 4.9)	0.001

Conclusion. We found that for patients Candida endocarditis inpatient mortality was 16.2% and liver failure was associated with a high risk of death while opiate abuse was protective. Further investigation is necessary to better understand these associations.

Disclosures. Michael Z. David, MD PhD, GSK (Consultant)

1179. Septic shock in Coccidioides immitis Infection

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