

observational trial, the incidence of KS in different organ transplant recipients as well as mortality were investigated.

Methods: Patient information was retrieved from the United Network for Organ Sharing (UNOS) database to identify all liver, kidney, heart, or lung transplant recipients, and those who were subsequently diagnosed with KS. Patients were stratified by transplant organ, clinical and demographic information was obtained to characterize each population. Unadjusted differences in incidence, mortality, and patient characteristics were examined with chi-square or Fisher exact test for categorical variables; continuous variables were examined with the Kruskal–Wallis test which was Bonferroni adjusted for multiple comparisons. Patients < 18 years of age, who had missing information concerning the development of a Kaposi's sarcoma, or who underwent multiple organ transplant were excluded. SAS, v. 9.4, was used for statistical analysis; $P < 0.05$ was considered significant.

Results: Patient demographics are described in Table 1. The development of KS was significantly different among organ transplant types. Kidney transplant recipients had a higher incidence of KS in comparison to liver transplant recipients ($P < 0.001$). Mortality was the highest in lung transplant recipients who developed KS, which was significantly higher than kidney ($P < 0.001$) or liver transplant recipients ($P = 0.005$). Finally, it was determined that there was a significant difference in age and race (white vs. non-white) among the various organ transplants ($P < 0.001$, respectively).

Conclusion: Although incidence of KS is significantly higher post renal transplant, mortality is highest in lung transplant recipients. Further investigation is needed to understand differences in mortality among transplant recipients. This will help identify at risk subjects and develop interventions to reduce mortality.

	Liver (N = 8,913)	Lung (N = 3,913)	Heart (N = 6,490)	Kidney (N = 19,889)
Kaposi's Sarcoma diagnosed (%)	16 (0.18)	11 (0.28)	23 (0.35)	97 (0.49)
Median age (IQR)	54.5 (48.5-66)	60 (59-65)	60 (56-65)	57 (50-66)
Gender				
Male	13 (81.3)	6 (54.6)	19 (82.6)	75 (77.3)
Race				
White	13 (81.3)	9 (81.8)	17 (73.9)	31 (32.0)
Black	0 (0.0)	1 (9.1)	4 (17.4)	31 (32.0)
Mortality (%)	5 (31.3)	10 (90.9)	10 (43.5)	34 (35.1)

Disclosures. All authors: No reported disclosures.

2692. Comparison of Demographics and Risk factors Between *Strongyloides stercoralis* Seropositive and Seronegative Solid-Organ Transplant Candidates: Experience from a Tertiary Acute Care Center in Florida

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Background: *Strongyloides stercoralis* is a nematode endemic to the tropical and subtropical regions. In the United States, it is mostly found at south-eastern states. Most infections are asymptomatic but disseminated and fatal infections have been reported in immunocompromised patients. At our institution, universal screening through *Strongyloides* antibody detection in serum among solid-organ transplant candidates began since 2010 and all seropositive candidates are treated before transplantation. We previously determined our incidence to be about 5%. The aim of this study was to determine demographic characteristics and risk factors that can be used for more cost-effective targeted screening.

Methods: We performed a retrospective cohort study of patients who underwent transplant evaluation from 2014 to 2016. A total of 228 charts were reviewed for *Strongyloides* serology status, eosinophilia, demographics and risk factors. Chi-square and Fisher exact tests were used to do a comparative analysis between *Strongyloides* seropositive and seronegative cohorts.

Results: We identified 113 seropositive (SP) patients and 115 seronegative (SN) patients. There were more males in the seropositive group (79%) compared with seronegative group (62%) ($P = 0.005$). Caucasians predominated in both groups (SP 71% vs. SN 57%; $P = 0.286$). No significant difference was found between both groups with regards to occupation with soil or water contact (SP 38% vs. SN 30%; $P = 0.281$), birth-place outside USA or travel outside of United States (SP 31% vs. SN 36%; $P = 0.732$). Eosinophilia occurred less in the seropositive group compared with the seronegative group (SP 16% vs. SN 30%; $P = 0.030$).

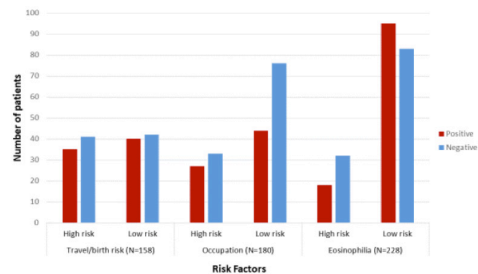
Conclusion: The study did not find any statistically significant difference in the demographic characteristics or risk factors that can be used for prediction of *Strongyloides* seropositivity among solid-organ transplant candidates. Hence, our institution will continue universal screening for *Strongyloides stercoralis* for all our transplant candidates. Our findings further question donor screening for *Strongyloides* that uses a similar questionnaire which may not be reliable to identify those infected with this parasite. This would put recipients at risk for a donor-transmitted infection.

Table 1. Demographic Characteristics of *Strongyloides* Seropositive and Seronegative Solid-Organ Transplant Candidates

Variable	Serologic status for <i>Strongyloides</i>		P Value
	Positive N= 113 N (%)	Negative N= 115 N (%)	
Gender			0.005
Male	89 (79)	71 (62)	
Female	24 (21)	44 (38)	
Age Group			0.696
> 50 years	90 (80)	91 (79)	
< 50 years	23 (20)	24 (21)	
Ethnicity			0.286
Caucasian	80(71)	66 (57)	
Hispanic	18 (16)	22 (19)	
African American	14 (12)	24 (21)	
Asian	1 (< 1)	3 (3)	
Occupation with soil or water contact			0.281
Yes	27 (38)	33 (30)	
No	44 (62)	76 (70)	
Born outside USA or Travel outside of USA			0.732
Yes	35 (31)	41 (36)	
No	78 (69)	73 (64)	
Eosinophilia*			0.030
Yes	18 (16)	34 (30)	
No	95 (84)	81 (70)	

*Eosinophilia defined as eosinophil count more than 5% of total white blood cell count.

Figure 1: Risk factors comparison between *Strongyloides* seropositive and seronegative patients



Disclosures. All authors: No reported disclosures.

2693. Clinical Presentation of Toxoplasmosis and 30-Day Mortality in Transplant Recipients at Two Academic Medical Centers

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Session: 276. Transplant ID: Parasitic Infections
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Background: *Toxoplasma gondii* causes opportunistic infections in transplant recipients after primary, donor-derived, or reactivated infection. Diagnosis in solid-organ transplant (SOT) and hematopoietic stem cell transplant (HSCT) recipients may be delayed due to varied clinical presentations, which can mimic bacterial sepsis. These delays could contribute to significant associated mortality, with a reported rate exceeding 50% in disseminated disease. Further exploration of expanded donor screening, targeted recipient prophylaxis, and enhanced early detection may be warranted. We therefore examined patient characteristics, clinical presentation, time to toxoplasmosis diagnosis, and mortality in transplant recipients at two centers.

Methods: A retrospective chart review of SOT and HSCT recipients diagnosed with toxoplasmosis from 2002–2018 at Emory Healthcare and Duke University Hospital was performed, with cases identified via an electronic query of relevant ICD codes, positive serum or CSF toxoplasmosis PCRs, and pathologic diagnoses. Patient characteristics, including age, sex, race, time since transplantation, method of toxoplasmosis diagnosis, and symptoms, were abstracted. Primary outcomes included time from transplant to diagnosis and estimated 30- and 90-day all-cause mortality.

Results: 16 patients were identified, with a median age of 56 years at diagnosis. 50% were male, and the majority were white (63%) and SOT recipients (56%; see table). Median time from transplant to diagnosis was 295 days, with PCR the most common diagnostic modality (63%). In 31% of cases, toxoplasmosis was diagnosed after patient death. The most common clinical presentations were encephalitis (69%), respiratory

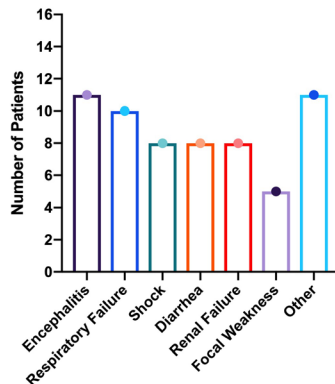
failure (63%), renal failure (50%), diarrhea (50%), and septic shock (50%). The estimated all-cause 30-day and 90-day mortality rates were 56% and 69%, respectively.

Conclusion: Toxoplasmosis has diverse presentations in transplant recipients, likely contributing to diagnostic delays and high mortality. Future study is needed to determine clinical scenarios and risk factors where donor and recipient serologic screening may be beneficial.

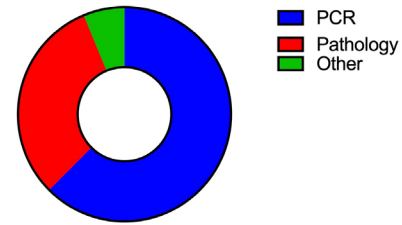
Table 1. Baseline characteristics and outcomes of 16 transplant recipients from Emory Healthcare and Duke University Hospital	
Patient Characteristics	n (%)
Median Age (IQR)	56 (46 - 67)
Sex	
Females	8 (50)
Race	
White	10 (63)
Black	5 (31)
Other	1 (6)
Transplant Type	
HSCT	7 (44)
SOT	9 (56)
DDRT	5 (31)
OHT	2 (13)
Lung	1 (6)
SKP	1 (6)
Time from transplant to toxoplasmosis diagnosis in days	
All patients	295 (57 - 2,160)
SOT	1,595 (304 - 6,187)
HSCT	54 (47 - 2,019)
Diagnostic Modality	
PCR	10 (63)
Pathology	5 (31)
Other	1 (6)
Clinical Presentation	
Encephalitis	11 (69)
Respiratory Failure	10 (63)
Septic Shock	8 (50)
Renal Failure	8 (50)
Diarrhea	8 (50)
Focal Weakness	5 (31)
Outcome	
30-day mortality	9 (56)
90-day mortality	11 (69)

Abbreviations: IQR: Interquartile range; HSCT: Hematopoietic stem cell transplant; SOT: solid organ transplant; DDRT: Deceased donor renal transplant; OHT: orthotopic heart transplant; SKP: Simultaneous kidney pancreas transplant

Clinical Manifestations of Toxoplasmosis Infection

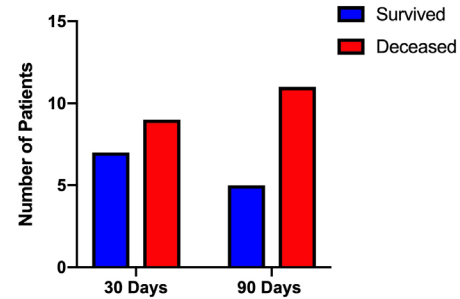


First Available Diagnostic Result



Total=16

30- and 90-Day Mortality



Disclosures. All authors: No reported disclosures.

2694. Incidence of *Pneumocystis jirovecii* (PJP) Infection with 3-Month Prophylaxis of Aerosolized Pentamidine (AP) in Autologous Hematopoietic Stem Cell Transplantation (HSCT)

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Background: HSCT patients are at an increased risk of developing PJP after transplant due to treatment induced immunosuppression. Given the risk of cytopenias with co-trimoxazole, AP is utilized as an alternative for PJP prophylaxis. A prior study revealed a 0% (0/19 patients) incidence when AP prophylaxis was given for one year post autologous HSCT. Current guidelines recommend a duration of 3 - 6 months for PJP prophylaxis in autologous HSCT. The primary endpoint of this study was to assess the incidence of PJP infection within one year post autologous HSCT in patients who received 3 months of AP. Secondary endpoint was a cost comparison of 3 months compared with 6 months of AP.

Methods: A single-center, retrospective study of adult autologous HSCT patients at Yale New Haven Hospital between February 2013 and December 2017 was performed. Patients were excluded if: <18 years of age, received < or >3 months of AP, changed to alternative PJP prophylactic agent or received no PJP prophylaxis, received tandem HSCT, deceased prior to one year post-transplant from a non PJP-related infection, HIV positive, or lost to follow-up. Pentamidine was given as a 300 mg inhalation monthly for 3 months starting Day +15 after autologous HSCT.

Results: A total of 288 patients were analyzed, no PJP infections occurred within one year post HSCT. Additionally, 187 (65%) patients received treatment post HSCT with 135/215 (63%) receiving maintenance immunomodulatory drugs for myeloma and 40/288 (14%) patients developing relapsed disease. 43% of the chemotherapy regimens for relapsed disease included high dose corticosteroids. The cost difference of using 3 months vs. 6 months of AP is \$790, reflecting the cost of drug and its administration. Applying our incidence of 0%, potential cost savings of 3 months vs. 6 months of AP would be \$330,000 over 5 years or \$66,000 per year.

Conclusion: Three months of AP for PJP prophylaxis in autologous HSCT patients is safe and effective as well as cost-effective compared with a 6 month regimen.

Disclosures. All authors: No reported disclosures.

2695. *Pneumocystis jirovecii* Pneumonia in the Era of Effective Prophylaxis Following Hematopoietic Stem Cell Transplant

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