Group 2 HIV lymphoma with HSCT cases and controls characteristics

Group 2. HIV Lymphoma with HSCT, cases and controls characteristics			
		case	control
Number		9	18
Age at HSCT	Mean (sd)	45.8 (10)	43.4 (11.7)
Sex	Male, n (%)	9 (100%)	18 (100%)
Ethnicity	Non-Hispanic, n (%)	8 (88.9%)	17 (94.4%)
Race	Black, n (%)	0 (0%)	4 (22.2%)
	White, n (%)	8 (88.9%)	12 (66.7%)
	Asian, n(%)	0 (0%)	1 (5.6%)
	More than one, n (%)	1 (11.1%)	1 (5.6%)
ECOG	Mean(sd)	0.4 (0.7)	0.8 (0.7)
Type of lymphoma	NHL-DLBCL,n (%)	4 (44.4%)	8 (44.4%)
	NHL-Burkitt's, n (%)	2 (22.2%)	4 (22.2%)
	HL-mixed cellularity, n (%)	2 (22.2%)	4 (22.2%)
	HL-nodular sclerosis, n (%)	1 (11.1%)	2 (11.1%)
Stage of lymphoma	Stage III, n (%)	1 (11.1%)	2 (11.1%)
at diagnosis	Stage IV, n (%)	8 (88.9%)	16 (88.9%)
IPI	IPI-high, n (%)	0 (0%)	5 (27.8%)
	IPI-low, n (%)	3 (33.3%)	2 (11.1%)
	IPI-mid, n (%)	2 (22.2%)	3 (16.7%)
	IPI-miss, n (%)	4 (44.4%)	8 (44.4%)
IPS	IPS-high, n (%)	2 (22.2%)	3 (16.7%)
	IPIS-low, n (%)	0 (0%)	0 (0%)
	IPS-mid, n (%)	1 (11.1%)	3 (16.7%)
	IPS-n/a, n(%)	6 (66.7%)	12 (66.7%)
Number of relapses		9 (100%)	16 (88.9%)
	1, n (%)	0 (0%)	1 (5.6%)
	2, n(%)	0 (0%)	1 (5.6%)

n=number, sd= standard deviation, n/a= not applicable, HSCT= Hematopoletic stem cell transplant, ECOG= Eastern Cooperation Oncology Group, NHL= Non Hodgkin's lymphoma, DLBCL = Diffuse large B-cell lymphoma, CNS= Central nervous system, HL= Hodgkin's lymphoma, IPI= International Prognostic Index, IPS= International prognoctic score.

Conclusion. In patients with HIV and lymphoma treated with chemotherapy with or without autoHSCT, the outcomes are comparable to those without HIV in our single center contempory cohort.

Disclosures. Wissam El Atrouni, MD, ViiV (Advisor or Review Panel member)

1101. Pulmonary Aspergillosis Complicating Non-Influenza Respiratory Virus Infections Among Solid Organ Transplant Recipients

Anna Apostolopoulou, MD¹; Cornelius J. Clancy, MD²; J. Alex Viehman, MD²; Minh Hong T. Nguyen, MD¹; ¹University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania; ²University of Pittsburgh, Pittsburgh, PA

Session: P-49. Infections in Immunocompromised Individuals

Background. Invasive pulmonary aspergillosis (IPA) complicating influenza (flu) has been increasingly recognized. We have shown that IPA occurred in 22% of solid organ transplant (SOT) patients (pts) with flu. Associations between IPA and non-flu respiratory infections (non-flu-RVI) in SOT are unknown.

Methods. Retrospective review of consecutive pts transplanted from Jan 15, 2010-Dec 19, 2017. Pts who died within 100 days of SOT were excluded. Non-flu-RVI IFI was defined according to revised EORTC/MSG criteria. IFI had to occur within 100 days of non-flu-RVI. Colonization (COL) was defined as recovery of mold from airways in absence of IFI.

Results. 3,077 pts were included. 256 cases of non-flu-RVI were identified in lung (28%), multi-organ (16%), heart (6%), liver (1.3%) and kidney (1%) SOT pts. Parainfluenza (PIV) was most common (44%), followed by Respiratory Syncytial Virus (RSV, 60%) and Adenovirus (ADV, 15%). Median time to non-flu-RVI infections was 18.1 mos. 24% of pts with non-flu-RVI had lower tract disease. ADV was associated with longer hospital stay (median 14.5 days) than PIV (6.5 days) or RSV (6 days) (p=0.004). 59% of pts with non-flu-RVI required admission, and 64% received augmented steroids. Aspergillus was recovered from respiratory culture in 17% of non-flu-RVI pts. No other fungi were identified. Median time from non-flu-RVI to + culture was 29 days (Figure). 23% of pts with + culture had proven (7) or probable IPA (3), respectively; 77% had COL. 8% (3/37), 5% (6/114) and 7% (1/15) of pts with ADV, PIV, RSV infections developed IPA, respectively. 36% of pts were treated with a mold-active azole after + culture. Multivariate analysis identified lung transplant (p=0.02), PIV infection (p=0.02) and cumulative steroid dose in preceding 7 days (p=0.015) as independent risk factors for Aspergillus culture positivity. Cumulative steroid dose in preceding 7 days was an independent risk factor for IPA (p=0.03).



Conclusion. IPA and COL occurred in 4% and 13% of non-flu-RVI in SOT recipients. Routine antifungal prophylaxis is not recommended for SOT pts with non-flu-RVI. The value of prophylaxis at time of PIV infection for lung transplant pts with recent steroid augmentation should be studied.

Disclosures. Cornelius J. Clancy, MD, Astellas (Consultant, Grant/Research Support)Cidara (Consultant, Research Grant or Support)Melinta (Grant/Research Support)Merck (Consultant, Grant/Research Support)Needham Associates (Consultant)Qpex (Consultant)Scynexis (Consultant)Shionogi (Consultant)

1102. Reconstitution of CMV-specific cell-mediated immunity during letermovir prophylaxis in hematopoietic stem cell recipients

Maheen Abidi, MD¹; Jonathan Gutman, MD¹; Adriana Weinberg, MD¹; ¹University of Colorado Denver, Denver, Colorado

Maheen Z. Abidi, Jonathan A. Gutman, Adriana Weinberg

Session: P-49. Infections in Immunocompromised Individuals

Background. Patients who are cytomegalovirus (CMV) seropositive (R+) prior to hematopoietic cell transplant (HCT), have 30% incidence of clinically significant CMV reactivation in the absence of prophylaxis. At our institution, letermovir prophylaxis through Day 100 is used in CMV R+ high-risk (HR) (cord blood, haplocord, haploidentical) HCT recipients. We hypothesized that clinically nonsignificant CMV reactivation during letermovir prophylaxis may lead to reconstitution of CMV specific cell mediated immunity (CMV CMI), which may protect the host against CMV disease after letermovir discontinuation.

Methods. Blood samples from CMV R+ HR HCT recipients on letermovir were tested by dual color CMV specific IL2/IFNg FLUOROSpot pre-transplant and on Days 100, 182 and 360 post-transplant. Clinical and virologic information were obtained from medical records.

Results. Among 35 participants enrolled to date, 19 were eligible for this analysis, which included only participants with CMV CMI defined as \geq 20 spot-forming cells/10⁶ PBMC pre-transplantation and follow up \geq 180 post-transplantation. Median age was 51.5 years (range 22-75), 9 were women, 9 were white non-Hispanic, 8 were Hispanic and the most common underlying malignancy was acute myeloid leukemia (n=10). 14 participants had CMV CMI reconstitution at Day 100; including 5 with and 9 without low level CMV DNAemia, defined as <5000 international units/ml in whole blood quantitative polymerase chain reaction assay, while on letermovir prophylaxis. Among the 14 participants, 11 remained free of clinically significant CMV reactivation for a median (range) of 260 (80; 260) days post-letermovir discontinuation, while 3 developed acute graft vs. host disease (aGvHD) followed by clinically significant CMV reactivation. 5 participants did not reconstitute CMV CMI at Day 100 and none of them had DNAemia while on letermovir. 1 of 5 participants without CMI reconstitution.

Conclusion. High-risk patient populations can reconstitute CMV CMI while on letermovir. Ongoing investigation will help establish predictive parameters for CMV CMI that may allow risk stratification for CMV monitoring and letermovir usage.

Disclosures. Maheen Abidi, MD, Merck (Research Grant or Support) Jonathan Gutman, MD, Merck (Research Grant or Support) Adriana Weinberg, MD, GSK (Grant/Research Support)merck (Grant/Research Support)

1103. Respiratory Virus Infections In Solid Organ Transplant Recipients: A Single Center Experience

Maria A. Mendoza, MD¹; Mohammed A. Raja, MD²; Gemma Rosello, MD¹; Shweta Anjan, MD³; Jacques Simkins, MD³; Jose F. Camargo, MD⁴; Michele I. Morris, MD⁵; Neeraj Sinha, MD³; Giselle Guerra, MD, FIDSA³; Lilian M. Abbo, MD, FIDSA⁶; Lilian M. Abbo, MD, MPH⁶; Yoichiro Natori, MD, MPH⁷; ¹Jackson Memorial Hospital, MIAMI, Florida; ²Jackson Memorial Hospital/University of Miami Miller School of Medicine, Miami, FL; ³University of Miami / Jackson Memorial Hospital, Miami, Florida; ⁴Jackson Memorial Hospital/Miami Transplant Institute, University