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Background. Bloodstream infections (BSI) are significant causes of morbidity and mortality in patients with hematological malignancies. Antimicrobial resistance may be increasing among Gram-negative bacteria in this population, with implications for empirical treatment and preventive strategies. Methods. We performed a retrospective study of patients with hematological malignancies and Gram-negative bloodstream infection (GNB-BSI) at the Tel Aviv Medical Center, a 1,200-bed teaching hospital, from 2009 through 2015. Bacteremia was defined as breakthrough if the patient received >48 hours of systemic antibiotic treatment at the time of culture. Patient demographics, disease status and antimicrobial exposure within the prior 90 days were analyzed as potential risk factors for drug-resistant GNB-BSI using bivariate analyses and logistic regression. Results. Three-hundred thirteen episodes of GNB-BSI occurred in 198 patients during the study period. Enterobacteriaceae accounted for 236 (75%) episodes (E. coli, n = 117; Klebsiella pneumoniae, n = 92; 35% ESBL producers) and nonfermenters accounted for 71 (22%) episodes. Susceptibility rates were: Piperacillin/Tazobactam, 75%; Ceftazidime, 66%; Ciprofloxacin, 68%; and Imipenem, 93%. Medical tourism was associated with GNB-ESBL infection (odds ratio 1.5; P = 0.03). Neutropenia and breakthrough infection were risk factors for resistance to Pseudomonas aeruginosa (OR 1.2; P = 0.02) but not to other agents. Breakthrough GNB-BSI was associated with 35% carbapenem resistance (OR 7.8; P < 0.0001). Crude 30-day mortality was 27.9%. Resistance to combinations was the only independent predictor of death (OR 3.3; P = 0.009). Conclusion. Breakthrough infection was the dominant risk factor for resistant GNB-BSI, and was linked with significantly increased mortality. Resistance rates to most first-line antibiotics were high, suggesting that a policy of desescalation should be considered.

Disclosures. All authors: No reported disclosures.

2370. Risk Factors and Prognosis for Multidrug-resistant Acinetobacter baumannii infection in Lung Transplantation Recipients Dong Hyun Oh, MD, Yue Chen, MD, Do Hyung Jang, MD, PhD, Preeti Gopalan, MD, PhD, Division of Infectious Diseases, Department of Internal Medicine, Yonsei University College of Medicine, Seoul, Korea, Republic of (South), 2Division of Pulmonology, Department of Internal Medicine, Yonsei University College of Medicine, Seoul, Korea, Republic of (South), 3Department of Thoracic and Cardiovascular Surgery, Yonsei University College of Medicine, Seoul, Korea, Republic of (South)

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Background. Infection complication is an important cause of poor outcome of lung transplantation (LT). Multidrug-resistant (MDR) Acinetobacter baumannii (A. baumannii) is most problematic due to limited therapeutic option. However, there were few studies about MDR A. baumannii infection in LT recipient. Thus, we aimed to reveal epidemiology and risk factor of MDR A. baumannii in LT recipients.

Methods. The patients who aged ≥18 years and received LT in Severance hospital in South Korea from October 2012 to April 2016 were enrolled in this retrospective cohort study. Risk factors for MDR A. baumannii infection and 90-day mortality were analyzed.

Results. Fifty-one patients were infected by A. baumannii, and 45 patients were uninfected among total 96 LT recipients. The infected group showed significantly higher 90-day mortality rate compared with the uninfected group (2.2 vs. 19.6 %, P = 0.009). In the analysis of risk factors for A. baumannii infection, lower preoperative serum albumin (odds ratio [OR], 0.230, P = 0.014), higher preoperative serum albumin (OR, 1.138, P = 0.033), and longer operation time (OR, 1.577, P = 0.050) were statistically significant. Additionally, moderate to severe thrombocytopenia (hazard ratio [HR], 4.690, P = 0.009) and longer operation time (HR, 1.344, P = 0.031), and higher preoperative serum creatinine (HR, 5.662, P = 0.024), and higher American Society of Anesthesiologists score (HR, 9.167, P = 0.038) were significant risk factors for 90-day mortality.

Conclusion. Preoperative lower serum albumin, BUN, and long operation time were independent risk factors for A. baumannii infection in LT recipients. A preoperative moderate to severe thrombocytopenia, and higher serum creatinine, longer operation time, and higher American Society of Anesthesiologists score were significant risk factors for 90-day mortality. Further studies are needed to demonstrate the independent risk of A. baumannii infection as the LT cases increase.

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2371. Vancomycin-resistant Enterococci: Differing Rates and Patterns of Colonization in Liver vs. Non-Liver Solid Organ Transplant
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Background. Vancomycin-resistant enterococci (VRE) colonization in liver transplant recipients is associated with negative outcomes such as VRE infection, longer hospitalizations, and death. Less is known about VRE colonization in non-liver organ transplant (SOT) recipients. The purpose of this study is to describe the...