Abstract:
Background: Outpatient parenteral antimicrobial therapy (OPAT) is a safe, effective, and convenient treatment strategy for patients receiving intravenous antimicrobials in the outpatient setting; however, data is limited describing the use and safety of liposomal amphotericin B (L-AMB).
Methods: Records of patients receiving L-AMB OPAT between 1/1/2015 and 7/31/2018 were retrospectively reviewed. The primary objective was to describe the OPAT patient population discharged on L-AMB and evaluate factors associated with readmission and adverse events (AE). Analysis was performed to evaluate for predictors of worse outcomes.
Results: Forty-two patients (67% male, median age 50 years) were identified, most commonly treated for histoplasmosis. The most common doses of L-AMB were 3 mg/kg (n=16, 38%) or 5 mg/kg (n=14, 33%) based on actual body weight. Twenty-six (62%) patients completed their anticipated course of L-AMB. Twenty-two (52%) patients were readmitted within 30 days of discharge, median time to readmission was 11 days (Interquartile range 5-18). While hypokalemia and acute kidney injury (AKI) were common, occurring in 26 (62%) and 20 (48%), respectively, only 5 (12%) were readmitted to the hospital due L-AMB-associated AE. Ninety percent of patients achieved at least partial renal recovery within 30 days after L-AMB discontinuation. Factors significantly associated with AKI include higher L-AMB dose, lower serum potassium levels after therapy initiation, and receipt of potassium supplementation at discharge.
Conclusion: L-AMB is associated with significant AEs; however, these results suggest treatment is feasible in the outpatient setting with close monitoring, as the majority of AEs were managed effectively as an outpatient without long-term sequelae.
Reference:
Burnett YJ, Spec A, Ahmed MM, Powderly WG, Hamad Y. Experience with Liposomal Amphotericin B in Outpatient Parenteral Antimicrobial Therapy (OPAT). Antimicrob Agents Chemother. 2021 Apr 12:AAC.01876-20. doi: 10.1128/AAC.01876-20. Epub ahead of print. PMID: 33846129.