MSSAB

Duration of antimicrobial treatment
- - - 6–10 days
—⌐ 11–16 days

Disclosures. All authors: No reported disclosures.

213. A Comparison of Medication Assisted Therapy Treatment Strategies for Opioid Use Disorder in Persons who Inject Drugs and are Hospitalized with Serious Infections

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Session: 37. Bacteremia, CLABSI, and Endovascular Infections
*Thursday, October 3, 2019: 12:15 PM*

Background. Persons who inject drugs (PWID) with opioid use disorder (OUD) are at increased risk of invasive bacterial and fungal infections, which warrant prolonged, inpatient parenteral antimicrobial therapy. Such admissions are complicated by opioid cravings and withdrawal. Comparisons of medications for OUD during prolonged admissions for these patients have not been previously reported. The aim of this study was to evaluate the impact of different OUD treatment strategies in this population, and their impact on ED and hospital readmissions.

Methods. We retrospectively analyzed consecutive admissions for invasive bacterial or fungal infections in PWID, admitted between January 2016 and January 2019 at Barnes-Jewish Hospital. Patients in our cohort were required to receive an infectious diseases consult, and an anticipated antibiotic treatment duration of >2 weeks. We collected data on demographics, comorbidities, length of stay, microbiologic data, medications prescribed for OUD, mortality, and readmission rates. We compared 90-day readmission rates by OUD treatment strategies using Kaplan–Meier curves.

Results. In our cohort of 237 patients, treatment of OUD was buprenorphine (17.5%), methadone (25.3%), or none (56.2%). Among patients receiving OUD treatment, 30% had methadone tapers and/or methadone discontinued upon discharge. Patient demographics were similar for each OUD treatment strategy. Infection with HIV (2.8%), and hepatitis B (3%), and hepatitis C (67%) were similar between groups. Continuation of medications for OUD was associated with increased completion of parenteral antibiotics (odds ratio 2.11; 95% confidence interval 1.70–2.63). When comparing medications for OUD strategies, methadone had the lowest readmission rates, followed by buprenorphine, and no treatment (P = 0.0013) (figure). Discontinuation of methadone during the admission or upon discharge was associated with the highest readmission rates.

Conclusion. Continuation of OUD treatment without tapering, was associated with improved completion of parenteral antimicrobials in PWID with invasive bacterial or fungal infections lower readmission rates. Tapering OUD treatment during admission was associated with higher readmission rates.

Figure. Inpatient initiation of medications for opioid use disorder (MOUD) and continuation at discharge decrease readmissions in PWID with invasive bacterial and fungal infections.

— No MOUD
— Buprenorphine-naloxone
— Methadone
— Methadone not continued on discharge
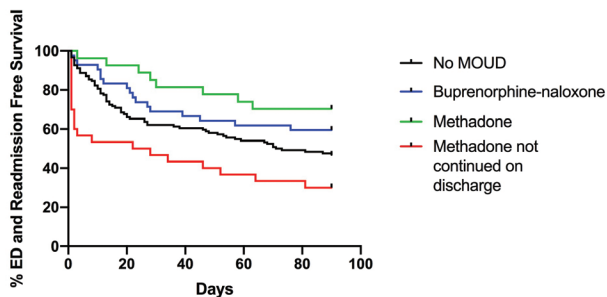
Disclosures. All authors: No reported disclosures.

214. Comparison of Clinical and Laboratory Findings of Human Monocytic Ehrlichiosis (HME) and Human Granulocytic Anaplasmosis (HGA) in Long Island, New York.

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Session: 37. Bacteremia, CLABSI, and Endovascular Infections
Thursday, October 3, 2019: 12:15 PM

Background. Suffolk County reports to the Department of Health the highest absolute number of cases of tick-borne diseases (TBD) for NY State. While Lyme disease and Babesiosis are the most common TBD in this county with more than 600 and 100 cases reported every year, respectively; two other TBD, HME (due to Ehrlichia chaffeensis) and HGA (due to Anaplasma phagocytophilum) are also commonly reported in this county (63 and 37 every year, respectively). There is limited data directly comparing both diseases on acute presentation; the aim of this study was to compare the clinical features, laboratory findings and complications of HME and HGA in the epicenter of TBD in NY State.

Methods. A retrospective study was designed to collect cases with the diagnosis of HME and HGA by using ICD9 or ICD10 codes from 2013 to 2018 at Stony Brook Medicine. Inclusion criteria were patients 18 years or older who had a positive PCR in blood for E. chaffeensis or A. phagocytophilum. Demographics, clinical features, laboratory results, and complications were extracted from patient charts. We used the chi-square test to compare the proportion of symptoms and a two-tailed unpaired student T-test to compare laboratory values.

Results. A total of 40 cases of HME (mean age 67 ± 13) and 27 with HGA (mean age 63 ± 12) met inclusion criteria. Only approximately 50% of cases had a documented history of tick exposure. Clinical presentations were similar in terms of frequency of fever, headache, arthralgia, and myalgia. In contrast, hypotension, confusion, and rash were more common in HME although only the latter was significantly more common. HME patients had significantly greater degrees of leukopenia and thrombocytopenia and elevated AST levels. The majority of patients with HME and HGA were hospitalized >1 day for management of their acute illness (HME, 30/40 and HGA 17/27). Several patients with HME had gastrointestinal (GI) complications including 3 with acute acalculous cholecystitis, 1 with duodenitis, and 1 with acute colitis; 1 patient with HGA had perforated diverticulitis.

Conclusion. Patients with acute HME tend to be more ill than those with acute HGA; however, a substantial proportion of both groups require hospitalization. GI complications were more commonly seen in HME (12.5%) than HGA (3.7%) which deserves further investigation.

	Ehrlichiosis (n=40)	Anaplasmosis (n=27)	P value
Gastrointestinal symptoms	35%	42%	0.5
Confusion	21%	10%	0.2
Systolic BP < 100	17%	5%	0.1
HR> 100	14%	15%	0.9
Fever	75%	70%	0.7
Headache	38%	33%	0.7
Arthralgia	15%	18%	0.7
Rash	30%	7%	0.02
Myalgia	30%	37%	0.6
WBC (mean)	2750/μL	4730/μL	0.001
Hemoglobin (mean)	11.5 g/dL	11.9 g/dL	0.3
Platelets (mean)	68,380/μL	106,650/μL	0.005
Creatinine (mean)	1.54 mg/dL	1.39 mg/dL	0.7
AST (mean)	176 IU/L	93 IU/L	0.025
ALT (mean)	123 IU/L	81 IU/L	0.1

Disclosures. All authors: No reported disclosures.

215. Invasive Group A Streptococcus-Associated Hospitalizations and Risk Factors for In-Hospital Mortality Among Adults in California, 2000–2016

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Session: 37. Bacteremia, CLABSI, and Endovascular Infections
Thursday, October 3, 2019: 12:15 PM

Background. Invasive group A *Streptococcus* (iGAS) causes severe illness and death but is not vaccine preventable or nationally notifiable. We describe the