Results. First patient (history of multiple myeloma) underwent endoscopy complicated by aspiration pneumonia and blood culture positive for E. meningosepticum infection. He was treated with ciprofloxacin, cefotaxin, minocycline and metronidazole and was discharged in stable condition after 10 days. The second patient (current acute myelogenous leukemia) had neutropenic fever in the setting of recent chest port infection. Empiric chest port showed E. meningosepticum and was treated with ciprofloxacin, meropenem and minocycline successfully. The third patient (history of esophageal adenocarcinoma and acute myelogenous leukemia) had history of recent pneumonia and cellulitis who came in with recurrent neutropenic fever. Blood culture was positive for E. meningosepticum and was treated with ciprofloxacin and minocycline. However, the infection was complicated by multiorgan failure and required tracheostomy. As these three cases illustrate, E. meningosepticum bacteremia has high 28-day mortality rate (41%).

Conclusion. Early identification of the pathogen along with empiric treatment with a fluoroquinolone and/or minocycline is indicated to reduce morbidity and mortality.

Disclosures. All authors: No reported disclosures.

190. Clinical Presentation of Streptococcus gallolyticus Infections
DON KANNAANGARA, MD, MSC.PH.D, DM, DYTM, H, MARCP1 and Dhyanesh Pandya, MD,2 St Luke's University Health Network, Bethlehem, Pennsylvania

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

Background. There are multiple publications on the association of Streptococcus gallolyticus (SG) with malignancies of the colon. SG has been also found in association with hepatocellular carcinoma, biliary tract infections, meninngitis, endocarditis, urinary and other infections. In a preliminary analysis of SG and other streptococcal infections, we find that any of the GI flora may gain access to the bloodstream when there is a breach of the mucosa due to inflammation or malignant invasion. In our study, the majority of SG infections were polymicrobial and lower urinary tract infections were the most common presentation. Only 2 out of 45 had gastrointestinal malignancies both with polymicrobial blood culture results.

Methods. We evaluated 45 cases of SG seen in our health network hospitals for the past 15 months. The charts of all SG isolates were reviewed for age, sex, clinical presentation, laboratory data and susceptibilities.

Results. There were 34 female and 11 male patients. The majority were elderly, with only 5 patients below age 50. Thirty patients presented with urinary infections, 28 lower and 2 upper tract. All except 4 urinary infections were in females. Sixteen urinary infections were polymicrobial and 14 monomicrobial. Two upper tract urinary infections were monomicrobial. There were 8 bloodstream infections, 4 polymicrobial and 4 monomicrobial. Three gall bladder infections were polymicrobial and 1 monomicrobial. Two liver abscesses yielded polymicrobial flora. Only 4 patients had cancer 1. Metastatic pancreatic cancer 2. Carcinoma of the ampulla of Vater 3. Advanced prostate cancer 4. Anal cancer. Only 1 and 2 had positive blood cultures, both polymicrobial. The other 2 had polymicrobial lower tract urinary infections. One patient had aortic prosthetic valve endocarditis. All SG isolates tested were susceptible to penicillin, ceftriaxone and vancomycin.

Conclusion. The most common presentation was urinary. There was a higher number of females due to a large number of urinary infections. The majority of infections were polymicrobial including all 4 cancer patients. Two bacteremias were associated with gastrointestinal malignancies but none with the colon. SG isolates were susceptible to penicillin, ceftriaxone and vancomycin.

Disclosures. All authors: No reported disclosures.

191. Appropriateness of Empiric Antibiotics for Enterobacteriaceae Bacteremia
Brandon J. Smith, MD, PharmD1; Abigail Kois2; Nathar Gartland3; Joseph Tholany, MD4 and Ricardo Arbulu, MD5, 1University of Pittsburgh Medical Center, Jefferson Hills, Pennsylvania; 2University of Pittsburgh School of Pharmacy, Pittsburgh, Pennsylvania; 3Duquesne University School of Pharmacy, Pittsburgh, Pennsylvania; 4University of Pittsburgh Medical Center Mercy Hospital, Pittsburgh, Pennsylvania

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

Background. Appropriate empiric antibiotic therapy is associated with decreased mortality and recurrence in patients with Enterobacteriaceae bacteremia (EB). Increasing bacterial resistance adds an additional layer to this complex clinical scenario. Swift utilization of appropriate antibiotics is crucial for improved patient outcomes. However, prolonged and excessively broad antibiotic coverage is not without its own complications. Our study aimed to review the appropriateness of empiric antibiotic therapy for EB.

Methods. A retrospective chart review of all patients >18 years of age who were admitted to a single academic community hospital during 2018 EB anytime throughout their hospitalization. The primary endpoint was the appropriateness of empiric antibiotic therapy, defined as receiving active therapy prior to the return of antimicrobial sensitivities that were susceptible to the empiric agents used. Appropriateness was further adjusted for standard of care (SOC) practices. Specifically, despite in vitro susceptibility of piperacillin/tazobactam and ceftazolin, carbapenem therapy is preferred for EB.

Results. Of our study identified 178 patients with EB. Most common organisms included E.coli (64.6%), K. pneumoniae (11.8%) and P. mirabilis (7.3%). Resistance patterns included 1 CRE (0.57%) and 17 ESBL (9.7%) isolates. Most common sources of infection included urinary (63.5%) and intraabdominal (13.5%). Based on the sensitivity reports of tested isolates, 83.7% of patients received appropriate empiric antibiotics. After adjustment for SOC, 11.8% of ESBL patients (2/17) and 0% of CRE (0/1) patients received appropriate therapy. Comparatively 89.0% of patients without ESBL or CRE received appropriate care (P < 0.0001).

Conclusion. The results of this study demonstrate that across our patient population, over 80% of patients received appropriate empiric antibiotics for EB; however, this percentage was dramatically lower for patients with ESBL or CRE infections. This highlights room for improved rapid diagnosis and identification of risk factors predisposing to resistant organisms thereby decreasing the time to appropriate antibiotic therapy.

Disclosures. All authors: No reported disclosures.

192. Augmenting Utility of Rapid Diagnostic Testing in Treatment of Gram-Negative Bacteremia with Stewardship Intervention
Jessica Gerges, PharmD1; Karan Raja, PharmD, BCPS, BCIDP1; Mitesh Patel, PharmD, BCCCP2; Ruben Patel, PharmD, BCPS, BCCP3; Brandon Chen, PharmD, BCPS1 and Mona Philips, RPh, MAS1, Clara Maass Medical Center, RWJBarnabas Health, Belleville, New Jersey

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

Background. Rapid diagnostic tests (RDT) can identify pathogens in bloodstream infections (BSI) in less than 24 hours. Our institution utilizes an RDT for blood cultures (BCx) that can detect various organisms and resistance determinants. A retrospective evaluation conducted in our institution calculated the negative predictive values (NPV) of various Gram-negative pathogens and susceptibility to target antimicrobials in the absence of detected resistance markers. Resultant NPV >90% for E. coli and K. pneumoniae to ceftriaxone support use of RDT with stewardship intervention for more rapid de-escalation of antimicrobial therapy in patients with resistant or negative BSI.

Methods. In our facility, all positive BCx are processed through RDT. In the post-intervention group, pharmacists monitored RDT results and provided recommendations. Our IRB-approved, prospective study assessed time to antimicrobial de-escalation in treatment of resistance marker-negative E. coli and K. pneumoniae BSI before (January 1 to December 31, 2018) and after Stewardship intervention (January 1 to March 31, 2019). Secondary outcomes included days of therapy (DOT) of target narrow-spectrum β-lactams, carbapenems, and non-carbapenem anti-pseudomonal (NCAP) β-lactams, length of stay (LOS), and treatment failure. Data were analyzed.