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Background. Bloodstream infections are a leading cause of mortality amongst hospitalized patients. Optimizing time to pathogen identification and receipt of appropriate antibiotic therapy significantly decreases mortality, morbidity, and length of hospitalization. Rapid diagnostic tests, such as Verigene, assist in the early identification of bacteria and resistance determinants from positive blood cultures; however, Verigene assays are limited to the detection of 13 gram-positive and 9 gram-negative bacteria.

Methods. The purpose of this study was to describe gram-negative and gram-positive aerobic bacteria identified from positive blood cultures with no Verigene target detected and to use the susceptibilities to create an antibioticogram to assist in empiric antibiotic dosing. A total of 2325 blood cultures resulted between January 2017 and October 2018 underwent Verigene testing.

Results. Of the 2325 isolates, 383 (16.5%) had no Verigene organism or resistance mechanism detected. Of these, there were 239 (62.4%) gram-positive isolates, 141 (36.8%) gram-negative isolates, and 3 yeast isolates with 96 unique organisms. Seventy-six (19.8%) of the organisms identified by standard culture, but not Verigene testing, are included on Verigene panel. We analyzed nine common antibiotics active against gram-negative organisms to determine percent susceptibilities against the isolated aerobic pathogens: amoxicillin (92.1%), cefepime (93.5%), cefazidine (94.0%), ceftriaxone (79.7%), ciprofloxacin (88.5%), gentamicin (91.9%), levofloxacin (86.9%), piperacillin–tazobactam (83.8%), and tobramycin (85.5%). Additionally, four antibiotics active against gram-positive organisms were analyzed for gram-positive susceptibilities: cefotaxime (91.8%), ceftriaxone (98.1%), levofloxacin (82.5%), and vancomycin (91.8%).

Conclusion. The results of this study provide clinicians with antibiotic susceptibilities against organisms that were not identified through Verigene testing guide timely and appropriate antibiotic therapy against gram-negative and gram-positive aerobic bacteria.

Disclosures. All authors: No reported disclosures.

195. Descriptive Study of the Use of External Cooling Blankets in Hyperthermia
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Background. Fever is a beneficial physiologic response to infection and is protective in gram-negative bacteremia and invasive candidiasis. Cooling blankets (CBs) are used in fevers due to a perception of providing symptomatic relief. However, external cooling of septic patients has been shown to be an independent risk factor for adverse effects. Here, we present a retrospective analysis of CB use in our institution and the associations of infections with CB duration.

Methods. We reviewed electronic medical records of patients aged ≥18 years admitted to a tertiary care hospital between 2015–2017 and in whom a CB was used. Study variables included demographics and clinical characteristics such as infection and fever duration (time of CB start to first defervescence). Correlations between continuous variables were assessed using the Spearman’s rank correlation test and the associations of infections with CB duration.

Results. This analysis included 548 patients who used a total of 575 CBs during their stay (27% patients used 21 CB). The median age was 61.9 years and 56.9% were male. The most frequent comorbidities were immunocompromised state (40.3%), diabetes mellitus (33.6%) and coronary artery disease (32.3%). Pneumonia was the most common infection within 5 days of CB start (31.9%). Only 174 CBs had a documented discontinuation during hospitalization; for the remaining CBs, such documentation was absent. The median CB duration for these patients was 33.8 hrs (IQR: 18.0–80.9) while median fever duration was only 21.8 hours (IQR: 6.6–52.2). CB duration was highly correlated with fever duration (rho=0.773, p<0.001). Clinician documentation of CB use was poor, only 30.2% recorded a stop time. Documented CB duration exceeded fever duration by more than 1.5 times and led to shivering responses in over 2/3 of patients. These findings suggest that CB use is arbitrary, not in keeping with established protocol or rationale, and its adverse effects may outweigh potential benefits. Their role should be re-evaluated and appropriate institutional protocols formulated.

Disclosures. All authors: No reported disclosures.

196. Impact of BioFire FilmArray® Blood Culture Identification on the Treatment of Septic Bacteremia
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Background. Staphylococcus aureus bacteremia (SAB) is associated with 30-day mortality rates that are as high as 20 to 40%. In order to reduce mortality and treatment failures, SAB management should include prompt infectious diseases (ID) consultation, repeat blood cultures, source control, intravenous antibiotics for the entirety of treatment, and optimal treatment duration. The objective of this study was to determine the impact of BioFire FilmArray® Blood Culture Identification (BCID) on the implementation of these standard of care measures in the management of SAB across a large health system.

Methods. This study was an IRB approved, retrospective chart review evaluating the impact of BCID on the management of SAB before and after implementation of BCID. The composite endpoint consisted of mortality at 30 days, persistent SAB (27 days), and recurrence of S. aureus infection within 30 days. Patients were included if they were ≥18 years old and at least one blood culture was positive with S. aureus. The pre-BCID period was from September 1, 2016 and March 31, 2017. The post-BCID period was between April 1, 2017 and July 31, 2018. Fisher’s exact test, student’s t-test, and descriptive statistics were used in the analysis.

Results. A total of 200 patients met eligibility (pre-BCID, n = 102; post-BCID, n = 98). The composite endpoint was met in 34% of patients in the pre-BCID group and 29% in the post-BCID group (P = 0.45). Mortality at 30 days (17% vs. 17%, P = 1.00), persistent SAB (16% vs. 13%, P = 0.69), and rates of recurrence within 30 days (4% vs. 1%, P = 0.37) were similar between groups. ID consult increased after BCID implementation (83% vs. 92%, P = 0.001). More patients in the post-BCID received appropriate durations of antibiotics (75% vs. 86%, P = 0.04) and had decreased time, in hours, to definitive therapy (7 ± 1.7 vs. 5 ± 0.5, P < 0.05).

Conclusion. The management of SAB after implementation of BCID did not show a benefit in the primary outcome but did show an improved time to appropriate therapy. A larger study is needed to determine whether improved time to appropriate therapy translates to an improvement in patient outcomes.

Figure 1: Clinical outcomes Pre-BCID and Post-BCID

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Background. Ostoid dependence and overdose are at epidemic levels in the United States. Ohio has the third highest rate of opioid-related overdose deaths. Infective complications of intravenous drug use (IDU) include increased acquisition of hepatitis C, HIV and infective endocarditis. In this study, we aimed to characterize cases of infective endocarditis admitted to our healthcare system over a five-year period. We additionally sought to determine the validity of using ICD codes to identify infective endocarditis cases and IDU.

Methods. Patients with ICD-9 or 10 discharge diagnosis codes for infective endocarditis were identified from our institution's electronic health record. ICD codes pertaining to substance abuse were used to classify patients according to IDU status. Readmissions during the same episode of infective endocarditis were excluded. We compared chart review to ICD code for the identification of infective endocarditis and IDU in a random sample of 296 of 1590 cases.

Results. Of 296 charts reviewed, 133 (44.9%) were excluded because they did not meet criteria for definite infective endocarditis by modified Duke’s criteria or because the episode was a readmission. A total of 163 (55.1%) cases met inclusion criteria, of which 88 (54%) met criteria for definite infective endocarditis by modified Duke’s criteria or because of IDU in a random sample of 296 of 1590 cases.

Disclosures. All authors: No reported disclosures.

197. Infective Endocarditis Over a Five-Year Period in an Academic Teaching Center: The Validity of ICD Codes vs. Manual Chart Review
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Methods. Patients with ICD-9 or 10 discharge diagnosis codes for infective endocarditis were identified from our institution’s electronic health record. ICD codes pertaining to substance abuse were used to classify patients according to IDU status. Readmissions during the same episode of infective endocarditis were excluded. We compared chart review to ICD code for the identification of infective endocarditis and IDU in a random sample of 296 of 1590 cases.

Results. Of 296 charts reviewed, 133 (44.9%) were excluded because they did not meet criteria for definite infective endocarditis by modified Duke’s criteria or because the episode was a readmission. A total of 163 (55.1%) cases met inclusion criteria, all of whom were seen in consultation by the inpatient Infectious Disease service. Of these, 52 (31.9%) had ICD 9 or 10 codes linked to substance abuse. Following manual