2103. Clinical Profile of Patients with Burkholderia cepacia complex Bacteremia and Contaminated Ultrasound Gel as Possible Source of Infection

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Background. Burkholderia cepacia complex (Bcc) is Gram-negative bacteria commonly affecting those with cystic fibrosis, causing pneumonia and also a nosocomial pathogen. We looked at the clinical profile and possible source of Bcc bacteremia in patients without cystic fibrosis, admitted to a tertiary care hospital in South India. Retrospective chart review was done of patients with Bcc bacteremia over the period 2012–2017. Patient risk factors, outcome, sensitivity profile were looked into. Possible sources for Bcc were analyzed.

Results. Twenty-two patients with Bcc bacteremia were identified during this period. Age of patients ranged from 16 months to 83 years, averaging 47 years. 89.5% were nosocomial; 7.3% had indwelling vascular catheter; either CVC, dialysis catheter or permcath. When 30 days mortality was looked at, 17 patients survived and five patients expired. Those who expired had high Pitt's bacteremic score (scoring done either prior to or within 48 hours of positive culture). Four patients had underlying pneumonia, among whom two patient's respiratory sample grew Bcc, three also had underlying vascular catheters. Sensitivity pattern of Bcc was noted as follows—trimethoprim-sulfamethoxazole was uniformly sensitive (100%), ceftazidime was sensitive in 86.5%, minocycline in 73% of isolates. Meropenem was tested in 19 and was found sensitive in 15 isolates (79%), fluoroquinolone was tested only in eight isolates and was sensitive in 7.

As majority was CLABSI, the bundle compliance and common products used for cvc were audited. Feedback and training for bundle compliance were given. The ultrasound gel, even the unreserved bottle used for cvc insertion grew Bcc. Despite sterile cover around the probe after the application of contaminated gel, an associated risk was considered and was replaced with sterile gel sachet. At 3 months follow-up there is no further incidence of Bcc bacteremia, though longer follow-up is needed.

Conclusion. Bcc bacteremia is found to be an important nosocomial pathogen, commonly associated with intravascular catheters with 22.7% mortality in this study. Cotrimoxazole was 100% sensitive. Good infection control practices, including early removal of unnecessary catheters are important to prevent Bcc CLABSI. Ultra sound gels can harbour Bcc and poses a serious risk of infection.

Disclosures. All authors: No reported disclosures.

2104. Impact of a Supervision and Education Directed Bundle in Ventilator-Associated Pneumonia (VAP) on a Pediatric Critical Care Unit of a Teaching Hospital

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Background. Proven measures to prevent VAP include 35–45° inclination of the head, prompt extubation, hand hygiene prior to intubation, oral hygiene with chlorhexidine, minimize secretion pooling above the endotracheal tube cuff. Adherence to these measures, even the unreserved bottle used for cvc insertion grew Bcc. Despite sterile cover around the probe after the application of contaminated gel, an associated risk was considered and was replaced with sterile gel sachet. At 3 months follow-up there is no further incidence of Bcc bacteremia, though longer follow-up is needed.

Conclusion. Bcc bacteremia is found to be an important nosocomial pathogen, commonly associated with intravascular catheters with 22.7% mortality in this study. Cotrimoxazole was 100% sensitive. Good infection control practices, including early removal of unnecessary catheters are important to prevent Bcc CLABSI. Ultra sound gels can harbour Bcc and poses a serious risk of infection.

Disclosures. All authors: No reported disclosures.

2106. What Metrics Should We Use to Evaluate CAUTI Performance for Inpatient Rehabilitation Units? An Evaluation of a Large, National Healthcare System

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Background. Using the NHSN database, we generated a catheter-associated urinary tract infection (CAUTI) TAP Report for all IRFs across the system for calendar year 2017. The standardized infection reporting (SIR) goal was set at 0.3 DUR (0.3 (observed events – predicted events multiplied by SIR goal)) was calculated. A 12-month cumulative urinary catheter SIR was also computed in NHSN.

Results. Data from 26 IRFs were reviewed. Total CAUTIs ranged from 0 to 28 cases per 1,000 ventilator-days (June 2015). The first month of the bundle implementation (July 2015) a 50% VAP rate decrease was evidenced. A constant decrease in VAP rates was reported in the 24 months after the implementation of the bundle, reaching the lowest rate in August 2017 (five cases per 1,000 ventilator-days). For administrative reasons adherence to oral hygiene with chlorhexidine was sub-optimal due to a lack of supplies from August 2017 to December 2017 which coincided with an increase in VAP rates from five to 14 per cases 1,000 ventilator-days.

Conclusion. A notable and constant reduction of VAP rates in the PICU was achieved after the implementation of the bundle. Even though many of the measures included in the bundle were already protocolized in the PICU, a probable lack of adherence could explain the high rates observed pre-intervention. By adding the continuous education and supervision of the personnel by a member of the HIPC team, to previously proven methods, the VAP rates decreased in almost 80%. This makes a strong case for the idea that protocols without continuous enforcement might not be enough to control infections.

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