

producer (68.7%). On the other hand, 38.1% of NFGNB were carbapenem-resistant and 375 out of 396 NFGNB isolates tested by DDST were ESBL producer (94.7%). The resistance rates of Enterobacteriaceae to amikacin were 19.5%, gentamicin 30.5%, and ciprofloxacin 41.6%. The resistance rates of NFGNB to amikacin were 52.7%, gentamicin 54.5% and ciprofloxacin 35.3%.

Conclusion: GNB were the predominant bacteria isolated from patients with BSI. The high antibiotic resistance rate of these bacteria is a warning about a serious health problem. We need immediate actions including implementations and adhesions to infection control practices and antibiotic stewardship programs to overcome this serious health problem.

Disclosure of Interest: None declared

P3

CHLORHEXIDINE BATHING TO PREVENT HEALTHCARE-ASSOCIATED BLOODSTREAM INFECTIONS IN PATIENTS WITH HAEMATOLOGICAL MALIGNANCIES: A PROSPECTIVE CONTROLLED COHORT STUDY

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Background: Patients with haematological malignancies hospitalised for myelosuppressive chemotherapy are at high risk of serious healthcare-associated infections. Chlorhexidine (CHG) bathing decreases incidence of bloodstream infections at intensive care units, but its effect has not been assessed in patients with haematological malignancies at non-critical-care units.

Methods: This is a prospective, concurrent controlled, cohort study at a university medical centre. Adults with haematological malignancies hospitalised for cytotoxic chemotherapy at non-critical-care units were offered daily 2% CHG bathing. We compared outcomes of patients chose to take CHG bathing (CHG group) and that of those chose not to take (usual care group). The primary outcome was gram-positive cocci, skin-flora-related, or central-line-associated bloodstream infections. The negative-control outcome was gut-origin bacteremia. Outcomes were monitored by a rule-based healthcare associated infections surveillance and classification system. Multivariable Cox regression analyses were used to adjust covariates. (registration no: #201508030RIPD)

Findings: The CHG group ($n=485$) had a crude incidence rate of primary outcome 60% lower than that in the usual care group ($n=408$) (3.4 vs. 8.4 per 1,000 patient-days, $p<0.001$) but had a similar crude incidence of negative-control outcome (4.5 vs. 3.2 per 1,000 patient-days, $p=0.297$). In multivariable analyses, CHG bathing was associated with a 70% decrease in the primary outcome (adjusted hazard ratio [HR] 0.3, $p<0.001$). In contrast, CHG bathing had no effect on the negative-control outcome (adjusted HR=1.0, $p=0.923$). CHG bathing was well tolerated by participants in the CHG group.

Interpretation: CHG bathing is a highly effective approach to prevent gram-positive-cocci /skin-flora/central-line-associated bacteremia in patients with haematological malignancies hospitalised for cytotoxic chemotherapy at non-critical-care units.

Disclosure of Interest: None declared

P4

THE USE CHLORHEXIDINE GLUCONATE IMPREGNATED DRESSING AS PREVENTION CATHETER-RELATED INFECTION: INTEGRATIVE REVIEW

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Introduction: Catheter-related infection are associated with increased rates of morbidity, mortality, increased length of hospital stay, and consequent increase in medical costs. It is known that one of the main sources of microbial colonization of central venous catheters is the microorganisms of the patient's own microbiota of the skin (endogenous microorganisms) located at the catheter insertion site.

Objectives: To compare and evaluate the efficacy of chlorhexidine gluconate impregnated transparent dressing compared to conventional dressing (with dry gauze) to reduce the count of skin microorganisms on the site of the catheter insertion, with consequent reduction of the catheter-related infection

Methods: This is an integrative review, performed through the databases: Virtual Health Library, Cranial, Cochrane, Embase, PubMed, using the keywords: antisepsis, chlorhexidine, catheter-related infection.

Results: 68 studies, observational or experimental, of which 2 were included, one (50%) meta-analysis and one (50%) randomized clinical trial, published between 2014 and 2019, in the English language, were produced in the United States and China. The studies analyzed demonstrated that there was a significant reduction of catheter-related infection in patients who used the chlorhexidine gluconate impregnated dressing compared to patients using the conventional dressing because it is believed that the insertion of the catheter to be exposed to continuous antiseptic action, and the easy visibility of the catheter insert.

Conclusion: The use of the chlorhexidine gluconate impregnated transparent dressing has been shown to be effective in reducing infection rates related to the central venous catheter. However, further studies should be conducted to evaluate the cost-effectiveness of chlorhexidine gluconate impregnated transparent dressing in order to provide safe, harmless care to patients who need to use the central venous catheter.

Disclosure of Interest: None declared

P5

Withdrawn

P6

INFECTIOUS COMPLICATIONS RELATED TO THE USE OF CENTRAL VENOUS ACCESS DEVICES AND PERIPHERALLY INSERTED CENTRAL CATHETERS: A COMPARATIVE STUDY

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Introduction: The use of Peripherally Inserted Central Catheters has shown benefits. However, the literature is controversial regarding its superiority for reducing bloodstream infection rates.

Objectives: The objective of the present study was to identify and compare the incidence of infectious complications related to the use of Central Venous Access Devices and Peripherally Inserted Central Catheters.

Methods: This prospective cohort study was carried out in intensive care units and medical and surgical clinics of a university hospital specialized in cardiopulmonology in the city of São Paulo, Brazil. The central venous catheters were evaluated on the day of insertion and monitored on a daily basis *in loco* throughout the hospitalization, up to their removal or hospital discharge (alive or deceased). The medical records of the patients were also reviewed in search of relevant information related to the catheters.

Results: 189 catheters were analyzed, and catheter-related bloodstream infection was confirmed in one (2.6%) patient with whom a Central Venous Access Device was used. Catheter-related bloodstream infection was observed in 0.89/1000 catheter-days in Central Venous Access Devices and in 0/1000 catheter-days in Peripherally Inserted Central Catheters.