218. Evaluation of Clinical Outcomes with Shorter Vs. Longer Duration of Treatment for Common Inpatient Bacterial Infections Associated with Bacteremia

Merve Günel, MD; Damla Tarkan, MD; 1Bryan C. Knepper, MPH, MS 2Matthew A. Miller, PharmD 2Misha Huang, MD, MS 2Randal V. Fugit, PharmD 2Katherine C. Shihadeh, PharmD 2Timothy C. Jenkins, MD 2University of Colorado, Denver, Colorado 2University of Colorado-Denver, Aurora, Colorado 1University of Colorado School of Public Health, Denver, Colorado 2Denver Health Medical Center, Denver, Colorado 3University of Colorado Hospital, Aurora, Colorado 4University of Colorado Hospital, University of Colorado School of Medicine, Aurora, Colorado 2Denver VA Medical Center, Aurora, Colorado 3Denver Health Medical Center, Denver, Colorado 2University of Colorado School of Medicine, Denver, Colorado 2Session: 37. Bacteremia, CLABSI, and Endovascular Infections Thursday, October 3, 2019: 12:15 PM

Background. Pneumonia (PNA), urinary tract infection (UTI), and acute bacterial skin and skin structure infection (ABSSSI) are the most common infections treated in the inpatient setting and often are associated with bacteremia. Though short courses of treatment are advocated for these infections in general, no established guidelines exist for cases involving bacteremia. We evaluated the clinical outcomes of patients receiving short (5–9 days) vs. long (10–15 days) duration of antibiotic treatment.

Methods. A retrospective study was conducted at 3 area hospitals comprising a university-based tertiary care center, a public safety net hospital, and a Veterans’ Affairs hospital. We included hospitalized adult patients with bacteremia associated with uncomplicated cases of PNA, UTI, or ABSSSI. The primary outcome consisted of a composite of rehospitalization or resumption of antibiotic treatment attributed to the original infection or death due to any cause within 30 days of the antibiotic start date. Secondary outcomes included the individual composite components, Clostridioides difficile infection, and antibiotic-related adverse effects leading to change in antibiotic therapy. A propensity score weighted logistic regression model was used to mitigate factors which could bias a patient toward receiving a shorter or longer treatment duration.

Results. Of 411 patients included in the study, 123 (29.9%) received a short duration of therapy and 288 (70.1%) received a long duration of therapy. The median duration of treatment was 8 days in the short group and 13 days in the long group. In the propensity-score weighted analysis, the probability of meeting the composite primary outcome was not statistically different between the short and long groups (Table 1). However, receiving a short course was associated with a higher probability of restarting antibiotics and Clostridioides difficile infection.

Conclusion. Shorter vs. longer courses of antibiotic treatment for bacteremia associated with PNA, UTI, and ABSSSI were not significantly different in a composite of readmission, restart of antibiotics, and mortality; however, further study is needed to evaluate the safety and effectiveness of short-course therapy.

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220. Characteristics and Outcomes of Veterans with Invasive Group B Streptococcal Infection Vary with the Type of Syndrome

Taisa Zappernick, BS 1; Brigid Wilson, PhD 1; Richard Banks, BS 1; Daniel Baschie 2; Sunah Sone 2; Jordan DeLaRe 1; Janet Briggs, RN, MSN, NP 1; Robin L. Jump, MD, PhD 1 and Federico Perez, MD, MS 2 1Louis Stokes Cleveland VA Medical Center, Cleveland, Ohio; 2Case Western Reserve University, Cleveland, Ohio

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Background. Streptococcal infection varies in veterans with a mean age of 66.6 years (±11.7) and 30-day all-cause mortality of 1%. Other common infections, such as bacteremia (20%; N = 972), pneumonia (14%; N = 664), and skin and soft-tissue infections (18%; 853) and were included in our study.

Methods. We used the VA Corporate Data Warehouse to identify patients with invasive GBS infections diagnosed between 2008–2017 using CDC’s surveillance definition. Data on the microbiological source of infection (e.g., GBS in cultures from blood, bone, and sterile fluids) and associated International Classification of Disease (ICD) codes were used to classify the type of invasive infection. We determined asso- ciated comorbidity conditions and 30-day all-cause mortality for incident cases.

Results. Between 2008 and 2017, there were 4780 incident cases of invasive GBS infection among veterans. We analyzed the underlying clinical characteristics and outcomes associated with specific types of invasive GBS infection among veterans. Our analysis revealed that the incidence of invasive GBS infection in patients with qSOFA score of 1, 2, or 3 from 527 patients in Table 1 were significant differences in one-month survival when we performed subgroup analysis in qSOFA score 1, 2, or 3 subgroups, as ≤50 years vs. >50 years (Table, Chi-square test, P = 0.0057). Among the <50 years group, the qSOFA one month survival rate was lower in patients with qSOFA score 3 vs. qSOFA 2 vs. qSOFA 1 (Table, 3x2 Chi Square Test, P = 0.0052). According to modified qSOFA, there was a significant difference for one month survival among SS cases with qSOFA 1 vs. qSOFA 2 and qSOFA 3, respectively (Table, 3x2 Chi square test, P = 0.0003). On the other hand, there was no significant difference in terms of one month survival when we performed subgroup analysis in qSOFA score 1, 2, 3 or 4 subgroups, as ≤50 years vs. >50 years (table, Chi-square test, 12/21 vs. 39/97 P = 0.223). In this study it was aimed to compare the effects of qSOFA (Quick Sequential Organ Failure Assessment) score with modified qSOFA score (PLOs One. 2018 Sep 26;13(9):e0204608) for predicting one month survival in patients with diagnosis of septic shock (SS) in a tertiary-care educational university hospital in a developing country.

Conclusion. The number of patients with qSOFA score of 1 or 2 from Table 1 were in [some of the cases were diagnosed as septic shock according to older definition (without lactate criterion) and there was a subgroup with qSOFA score 1]. Among the <50 year group, the 30-day survival rate was lower in patients with qSOFA3 vs. qSOFA 2 vs. qSOFA 1 (Table, 3x2 Chi Square Test, P = 0.0057). Among the <50 year group, the qSOFA one month survival rate was lower in patients with qSOFA score 3 vs. qSOFA 2 vs. qSOFA 1 (Table, 3x2 Chi Square Test, P = 0.0052). According to modified qSOFA, there was a significant difference for one month survival among SS cases with qSOFA 1 vs. qSOFA 2 and qSOFA 3, respectively (Table, 3x2 Chi square test, P = 0.0003). On the other hand, there was no significant difference in terms of one month survival when we performed subgroup analysis in qSOFA score 1, 2, or 3 subgroups, as ≤50 years vs. >50 years (table, Chi-square test, 12/21 vs. 39/97 P = 0.223). Issa, 12/25 vs. 75/244 P = 0.575).

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