The major causes of catheter-related BSI (CRBSI) are microorganisms from the patient’s and medical personnel’s skin and contamination of the catheter hub” Tsereteli et al (2018).

Abstract:

Bloodstream infections (BSIs) are associated with a high mortality rate, additional hospital days and excess hospital costs. Intensive Care Unit (ICU) patients are at high risk of nosocomial BSIs because of their weakened condition caused by underlying disease, frequent invasive diagnostic and therapeutic procedures. Catheterization is the most common cause of hospital-acquired BSIs. The major causes of catheter-related BSI (CRBSI) are microorganisms from the patient’s and medical personnel’s skin and contamination of the catheter hub. From July 1, 2015 through June 30, 2016, were collected blood cultures from patients fulfilling the criteria for systemic inflammatory response syndrome in a tertiary care hospital ICU in Tbilisi. Blood culturing procedures and techniques and antimicrobial susceptibility testing, following methods set out by EUCAST. From microbiologically studied 84 blood samples 21 (25%) were positive for growth, 19 (90.5%) samples were monomicrobial, whereas 2 (9.5%) samples were polymicrobial. On the basis of microbiological, clinical and epidemiological data 21 patients were diagnosed as ICU associated BSI. Among them 16 (76.2%) patients were diagnosed primary BSI and CLABSI, four (23.8%) patients - secondary BSI; three of them were caused with ventilator-associated pneumonia, one - with catheter-associated urinary tract infection. The most common microorganism isolated from ICU associated BSI cases were Coagulase-negative staphylococci (30.4%), A. baumannii (21.7%) and K. pneumoniae (17.4%). Preventing BSIs should be a priority for hospitals and for this they must be introduced to modern methods infection prevention and control.

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