Prevalence of Intensive Care Infections and Ventilator-Associated Pneumonia in the Training Center of Kocaeli

Primary Author: CANAN BALCI Asos. Prof.
Health Sciences University, Kocaeli Derince Research Hospital

Co-Authors: Engin Haftaci, Dr;

Introduction: Nosocomial pneumonia is the most frequent infection acquired in the Intensive Care Unit (ICU). ICU infections increase the ICU mortality and length of hospital stay is extended. Microorganisms that cause infections in intensive care vary according to country and type of intensive care. Bacteremia and infections is one of the major causes of nosocomial infection in the intensive care unit (ICU), ICU-acquired bloodstream infection (ICU-BSI) is associated with increased morbidity and length of stay. Diagnosis of ventilator-associated pneumonia (VAP) is a problem that is not yet fully solved. VAP resulting in excess costs and high mortality of critically ill patients. Ventilator-associated pneumonia (VAP) is a serious health care-acquired infection that occurs in up to about 30% of mechanically ventilated patients. The aims of this study were to determine the the intensive care infections (ICI) and ventilator-associated pneumonia prevalence in Derince Kocaeli Training Hospital, to ascertain risk factors, to describe the pathogens associated with intensive care infections.

Methods: In our study, we aimed to identify the infectious agent retrospectively. Point-prevalence survey in March 2012 concerning all patients who had been in the intensive care unit for at least 48 hours. A retrospective analysis of 4555 patients who underwent ICU therapy between 2012 and November 2017 was performed. The primary outcomes of our study, we aimed to identify the infectious agent retrospectively. The secondary outcomes of our study, was to identify areas of infections in intensive care.

Result: Infectious agents are as respectively Pseudomonas aeruginosa, Acinetobacter baumania and Klebsiella pneumoni. The area of infection, respectively: lower respiratory tracts, urinary tract and blood circulation. ICU infectious agents per cent respectively; Pseudomonas auorginosa (%26.5), Acinetobacter baumania ( %14.19), Klebsiella pneumonia (%28,47). The incidence of VAP is variable, ranging from 10 to 27%, and length of mechanical ventilation (MV) is one of the most significant factors. The ICU mortality in patients with VAP is high, ranging from 42 to 75%.

Conclusion: We think that is appropriate to the profile of the factors of intensive care infections in intensive care in Turkey. At the end of the study, there was no resistance in Acinetobacter colistin. Risk factors associated with infection were longer of hospital stay, presence comorbidity and mulitrauma. Still in Turkey, the first in the intensive care unit is located Gram negative factors. VAP is length of mechanical ventilation is one of the most significant factors.

References: