

Prevention of Nosocomial Pneumonia After Trauma

Introduction Mortality is an important criterion for assessing trauma patients. Nosocomial infection is known to increase the risk of death. Increased morbidity of Ventilation Associated Pneumonia (VAP) in trauma patients implies the need for prevention of VAP.

Objectives Our goal is to review the validity of those strategies for trauma patients in 2021.

Methods Six people conducted a literature survey (2021.04.14-18) and the inclusion criteria were; nosocomial infection after trauma, prevention risk factor, epidemiology, prevention, treatment. The theme was narrowed down to 'VAP'. The keywords were selected from Review Research by Keyt H et al.(2014) Considering how each keyword affects 'VAP', we put together our classified literature.

Results Non-invasive positive pressure ventilation (NIPPV) is useful for severe thoracic trauma patients to lower the risk of VAP. Early tracheostomy is recommendable since it benefits Spinal Cord Injury (SCI) patients with prolonged mechanical ventilation. Subglottic suctioning endotracheal tubes (ETTs) are an effective method to prevent VAP in trauma patients. It reduces probability, delays occurrence, and lowers the sensitivity of pneumonia after trauma. Strictly 'complied' Ventilator Bundle (including Head of Bed Elevation) is an effective method for VAP prevention in trauma patients. Selective Digestive Tract Decontamination (SDD) is a standardized treatment to reduce VAP and appears to contain the mortality of trauma patients. Re-intubation, antibacterial coated ETTs, oral decontamination and probiotic administration lower VAP incidence for ICU patients, not specifically for trauma patients.

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Conclusion To prevent VAP in trauma patients, we recommend non-invasive positive pressure ventilation, re-intubation, early tracheostomy, head of bed elevation, subglottic suctioning endotracheal tubes, selective digestive tract decontamination.