

Incidence of VAP in both medical and surgical ICU populations with and without application of Ventilator Bundle Strategy

Abu Bakr Helal Al Asmer¹, Ahmed Hafez Wahba¹
Abdelmaaboud M.M. Omar^{2*}, Omar Abdel Khalek Mohamed¹

¹Department of Chest Diseases, Faculty of Medicine, Al-Azhar University, Egypt

²Department of Clinical Pathology, Faculty of Medicine, Al-Azhar University, Egypt

Abstract : Ventilator-associated pneumonia (VAP) is a major contributor to morbidity and mortality in the intensive care unit (ICU). Many guidelines developed to deal with this serious condition. "The Ventilator Bundle is a series of interventions related to ventilator care that, when implemented together, will achieve significantly better outcomes than when implemented individually." The study included a total of one hundred patients that were intubated and ventilated. Fifty patients were admitted to Al-Hussein University Hospital, they were implemented to ventilator bundle strategy while the remaining fifty patients were admitted to SayedGalal University Hospital; they were not implemented to ventilator bundle. Each main group was composed of both medical and surgical patients as 25 patients for each subgroup. Ventilatorbundle included; elevation of patient's head of bed to 30- 45 degrees, daily sedation vacation and daily assessment of readiness to extubation, peptic ulcer disease prophylaxis, Deep vein thrombosis (DVT) prophylaxis and daily oral care with chlorhexidine. Results revealed Incidence of VAP was decreased from 36 % in ventilated patients not subjected to the ventilator bundle strategy to 16 % in patients subjected to the ventilator bundle with both clinical and statistical difference. VAP incidence was decreased from 36 % to 24 % (reduced by 12%) in medical ICU patients in both groups, and decreased from 36 % to 8 % (reduced by 28%) in surgical ICU patients in both groups. **In conclusion** application of Ventilator Bundle Strategy was practical to reduce incidence of VAP in both medical and surgical ICU population.

Keywords : Ventilator bundle, VAP, Pseudomonas aeruginosa, Klebsiella pneumonia, MRSA, mechanical ventilation.

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