

Evaluation of ventilator-associated pneumonia risk factors in patients admitted to neonatal intensive care unit (NICU) in Ardabil Bou Ali Hospital

Abstract

Background and objective : Ventilator-associated pneumonia is defined as inflammation of the lung parenchyma due to infectious agent activity 48 hours after the start of mechanical ventilation in patients who have tracheal intubation and did not have pneumonia at the time of intervention. Due to the lack of local information available, the high mortality rate and the results of this study can help improve child care standards under mechanical ventilation in intensive care units. The aim of this study was to evaluate the risk factors of ventilator-associated pneumonia in patients admitted to neonatal intensive care unit (NICU) in Bu-Ali Ardabil hospital. The aim of this study was to evaluate the risk factors of ventilator-associated pneumonia in patients admitted to neonatal intensive care unit (NICU) in Bu-Ali Ardabil hospital.

Methods : This is a cross-sectional, analytical descriptive and prospective study. The sampling method was simple random. Patients were randomly selected for three months and all cases were included in the study until the sample size was reached According to Cochran's sample size determination formula based on community size ($N = 250$), Inclusion criteria include infants admitted to the NICU ward of bu-ali Hospital who are connected to a ventilator for any reason. Exclusion criteria include neonatal death before pneumonia and neonatal mechanical ventilation.

Results: In this study, 100 neonates admitted to NICU ward of Ardabil Bou Ali Hospital, 61 of them were boys and the rest were girls. Out of 100 neonates, 48 had ventilator-associated pneumonia. There was a significant relationship between gender, surfactant, steroid medication, enteral nutrition, re-intubation, blood transfusion and mechanical ventilation time with pneumonia. There were no vasoactive drugs and NGT between the incidence of pneumonia and GA

Conclusion : Regarding the relationship between the incidence of ventilator-associated pneumonia , steroid and surfactant intake, blood transfusion, enteral nutrition, re-intubation and intubation time, it is recommended to reduce the above factors to reduce the morbidity and mortality caused by ventilator-associated pneumonia.

Keywords: Risk Factor - Ventilator Related Pneumonia - Mechanical Ventilation - Surfactant - Steroids - - Enteral Nutrition - Nasal Tube, Stomach - Re-Intubation - Blood Transfusion