THE RISK FACTORS, CLINICAL AND BIOLOGICAL PROFILES AND PROGNOSTIC FACTORS IN VENTILATOR ASSOCIATED PNEUMONIA (VAP)

Department- Pulmonary Medicine

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OBJECTIVES

To study the clinical-microbiological profile of VAP and to find out the predictive value of the following at diagnosis towards outcome and prognosis. - Modified CPIS, APACHE-III, MOD - Scores, S. Procalcitonin level.

METHODS

Prospective Cohort study. Intubated patients admitted in ICUs during the study period of 12 months, with a normal Chest x-ray at the time of intubation were included once they develop clinico-radiological evidence of pneumonia. Diagnosis of VAP was made based on Modified CDC criteria-2014 guidelines. They were followed up for the rest of the ICU and hospital stay. Logistic regression analysis was done to determine the association between the various predictive factors and the final outcome. A survival analysis was done to calculate the median survival period (ICU stay and Hospital stay) and the association with the predictive factors.
RESULTS

37.18% had early VAP. 57.69% had polymicrobial growth in the ET aspirate culture. Acinetobacter was the commonest organism. The median survival for patients with APACHE-III score <80 was 37 ICU days, and those who had more than 80 had 12 ICU days (p=.0038). The mean MOD Score among survivors was 7.0 and among those who died was 9.6. Those with single organism infection had a median survival period of 26 ICU days, whereas those with multiple organisms, it was 19 ICU days. Early VAP had a mortality rate of 21.4%, whereas Late VAP had 48.98%.