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P-1066. Microbiological profile of nosocomial pneumonias in the icu of a third level public health center of the dominican republic

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Background.

- Hospital-acquired pneumonia (HAP) accounts for approximately 22% of all hospital-acquired infections, with an attributable mortality rate reaching up to 33% in critically ill patients.
- HAP increases length of stay, broad-spectrum antibiotic use, costs, and complications, negatively affecting patient outcomes

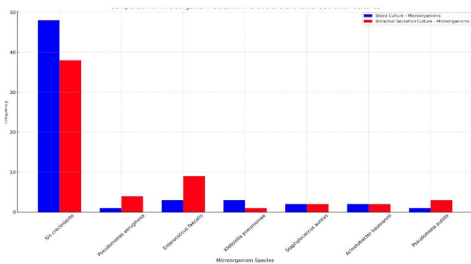


Figure 1. Species of microorganism isolated in blood culture and culture of bronchial secretion

Methods. A retrospective cross-sectional observational study was conducted to analyze the microbiological profile and clinical outcomes of patients diagnosed with HAP/VAP during the period from July 1, 2023, to July 1, 2024.

- HAP and VAP were defined using IDSA guideline criteria, with HAP in those hospitalized >48 hours, and VAP >48 hours of mechanical ventilation
- Patients were required to have at least one culture report from blood or bronchial aspirate obtained via tracheal cannula (MiniBAL).
- Statistical analysis was performed using the Chi-square test (χ^2) and ANOVA for variable cross-analysis

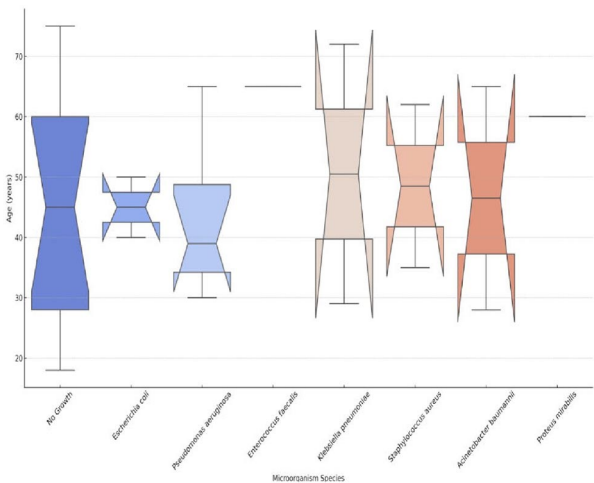


Figure 2. Association between group age and bacterial isolation on bronchial culture

Results. Of a total of 270 records analyzed, only 60 patients met the inclusion criteria, of which 42 (70%) were male;

- The average age was 44.5 +/- 18.42 years, with the range of 18-29 being the most frequent (30%). 60% of the patients had an associated co-morbidity, HTN (30%) followed by DM (23.3%), were the most frequent.
- The average LOS was 22.5 (+/- 9.46) days, where 91.7% of patients were ventilated
- Regarding cultures, 63.3% reported no growth, with *P. auriginosa* being the most frequent (15%), followed by *E. coli* (6.7%) and *A. baumannii* (5%). (Figure 1), we found a statistical relationship between the age groups and the isolated microorganism ($p=0.025$).
- During septic shock events, microorganisms were isolated more frequently, with *P. auriginosa* and *E. Coli* being the most frequent, in 7 and 3 cases, respectively, we did not find a difference between survival and cultures reported without growth (P value 0.334). (Figure 2)

Conclusion. In this study, lack of culture growth was not associated with better survival

- Critical illness with Septic shock had higher likelihood of culture positivity
- These findings reinforce the importance of monitoring specific complications according to age groups and the identified microorganism to improve clinical outcomes.

Disclosures. All Authors: No reported disclosures