

## AB217. 76. An audit of ventilator associated pneumonia in the intensive care unit of University Hospital Limerick

Niamh Daly, Ciara Killalea, Catherine Nix

Department of Anesthesia, University Hospital Limerick, Limerick, Ireland

**Background:** Ventilator associated pneumonia (VAP) is a serious hospital acquired infection that prolongs intensive care unit (ICU) stay and increases mortality in adults. A systematic review found that VAP occurs in 10–20% of all patients mechanically ventilated for more than 48 hours. Appropriate antimicrobial treatment significantly improves outcome. Rapid identification of infected patients and accurate selection of antimicrobial agents are important clinical goals. Thus, efforts to prevent VAP, early recognition and diagnosis are vital. The aims of this study were to determine the number of patients who developed VAP using the University Hospital Limerick (UHL) ICU VAP criteria and to assess if the diagnosis is formally recorded. Implement formal recording and re-audit periodically if necessary.

**Methods:** The authors retrospectively audited patients admitted to the ICU between May 1, 2017 and June 30,

2017. An initial list of patients was compiled from the ICU admissions log. Using VAP criteria requiring invasive mechanical ventilation for a period of greater than 48 hours analysis of the identified patient's ICU notes was undertaken. A comprehensive analysis of the patient's medical records, ICU notes, radiology, haematology and microbiology results was undertaken for the period of their stay. Using the HELICS definition of pneumonia a retrospective diagnosis of VAP was made.

**Results:** In total 58 patients (39 males and 19 females) were admitted to ICU UHL between 1st May 2017 and 30th June 2017. Four patients (7%) fit the criteria for VAP diagnosis. This is significantly lower than the expected rate. To date there has been no method of documenting VAP in ICU of UHL.

**Conclusions:** Formal recording of diagnosis should be implemented. The authors recommend recording diagnosis during daily microbiology team meeting. The documentation should be recorded in addition to antimicrobial treatment and any positive microbiology results during daily microbiology round. The record is then placed in the patient's notes.

**Keywords:** Pneumonia; intensive care

doi: 10.21037/map.2018.AB217

**Cite this article as:** Daly N, Killalea C, Nix C. An audit of ventilator associated pneumonia in the intensive care unit of University Hospital Limerick. *Mesentery Peritoneum* 2018;2:AB217. doi: 10.21037/map.2018.AB217