

R222

Publication Only

Antimicrobials: Antibiotic usage

Colistin infusion over 12 hours plus ampicillin/sulbactam in *Acinetobacter baumannii*-related VAP

A. Perrella¹, C. Esposito², L. D'Alessio², D. Fraganza³, M. Conte⁴, G. Amato⁵, O. Perrella¹

¹VII Dpt Infectious Disease and Immunology, D Cotugno Hospital, Naples, Italy ; ²Liver Intensive Care

Unit, A.Cardarelli Hospital, Naples, Italy ; ³Intensive Care Unit, D Cotugno Hospital, Naples, Italy ;

⁴Microbiology Laboratory, D Cotugno Hospital, Naples, Italy ; ⁵Microbiology Laboratory, A.Cardarelli Hospital, Naples, Italy

Objective:Multi drug resistant Gram negative related VAP represent an important infectious issue in patients admitted in ICU. *Acinetobacter baumannii* related VAP is one of the most severe infection. The study was managed to compare efficacy of in vein colistin methanesulfonate (CMS-Colistin) plus aerosolized Colistin and prolonged infusion of colistin plus ampicillin/sulbactam for the treatment of multidrug-resistant (MDR) *Acinetobacter baumannii* VAP in intensive care units (ICUs).

Methods: Study started in 2009 throughout 2011 and was managed on 45 patients receiving mechanical ventilation for 48 hours or more days and free of pneumonia at admission to ICU, having received diagnosis of VAP due to *acinetobacter baumannii*, according to microbiological culture test in BAL.

Patients were randomly assigned to the following treatment

Group A: 15 pts treated with Colistin 9 MU Loading dose there after 2MU three times/day

Group B: 15 pts treated with Colistin 9 MU prolonged infusion over 12 hours plus Ampicillin/Sulbactam 3gr three times per day

Group C: 15 pts treated with Colistin 9 MU prolonged infusion over 12 hours plus plus Ampicillin/Sulbactam 3gr three times per day plus aerosolized Colimicin (1 MU twice per day).

Results: Mortality was about 60% in group A while 37% in Group B and 38,5% in Gorup C. Septic Shock was present in about 70 % of patients not responsive to treatment.No *acinetobacter baumannii* strain sensible to Imipene was found.

Conclusion:

Prolonged infusion of Colistin plus Ampicillin/Sulbactam seems to be more effective than standard colistin schedule infusion in patients with VAP. Aerosolized colistin does not to seem to improve the efficacy when used with colistin over prolonged infusion.