To differentiate significant infection or colonization to treat or not to treat *A. baumannii* isolates in suspected VAP? A study in 2011-2015 (5 years period)

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**Introduction:** Antibiotic resistance *Acinetobacter baumannii* (*A. baumannii*) is a serious problem in clinical settings worldwide, including South Africa. It significantly affects the optimal use of antibiotics. Differentiating colonization from infection/sepsis is also problematic and indiscriminate unnecessary treatment with colistin will induce colistin resistance *A. baumannii*.

**Methods:** A 5 year retrospective study of critically injured patients requiring mechanical ventilation is presently ongoing at our Level 1 Trauma Unit in South Africa. Endotracheal (ETA) samples from patients with suspected VAP are processed using the automatic system (Vitek 2) and as per the Clinical, Laboratory Standards Institute (CLSI) guidelines. The laboratory data and hospital admission data were reviewed between 2011 and 2015. The prevalence of the patients infected or colonization with *A. baumannii* and outcomes were determined.

**Results:** To date a total of 119 patients had *A. baumannii* isolate cultured from ETA who were suspected VAP in 24 (20%) of whom was significance of VAP. All isolates were susceptible only to colistin and 96 isolates were susceptible to Amikacin. The prevalence of Multidrug resistant *A. baumannii* (MRDAB) was 75% and 60% in significant infection and colonized patients respectively. The patients with signs of sepsis and a sole isolate of *A. baumannii* received inhaled nebulization with Amikacin. All deaths of which were directly related to injuries sustained rather than infection with *A. baumannii* during the study period.

**Conclusion:** Our study supported the current individual specific antibiogram approach and continued collaboration between clinicians and clinical microbiologists in order to achieve the effective antibiotic stewardship programs in the hospital setting.

**Biography**

Khine Swe Swe Han has completed her MBBS from Myanmar Medical University and FC Path, MMed (Medical Microbiology), Post graduate studies from South Africa University School of Medicine. She is a Senior Consultant/Lecturer of NHLS, University of KwaZulu Natal and IALCH Academic Hospital. She is a Chair Person of Infection Control Committee and participates as a major role for Antiotics Stewardship Program. She has published 14 papers, 27 oral/poster presentations and is also a Reviewer. She has participated as an Editorial Board Member of SASCM, a Member of FIDSSA and senate of UKZN.

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