



HIGH DOSAGE OF TIGECYCLINE IN MULTIDRUG-RESISTANT ACINETOBACTER BAUMANNII: USE ANALYSIS DURING AN OUTBREAK

Abstract number: 5PSQ-033

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BACKGROUND

- Acinetobacter baumannii has become an important hospital-acquired pathogen. With the rise in antibiotic resistance, **tigecycline** has been used frequently against **multidrug-resistant Acinetobacter baumannii (MRAB)**.

PURPOSE

- To analyze the use of **tigecycline** after an **outbreak of MRAB** in a third level hospital.

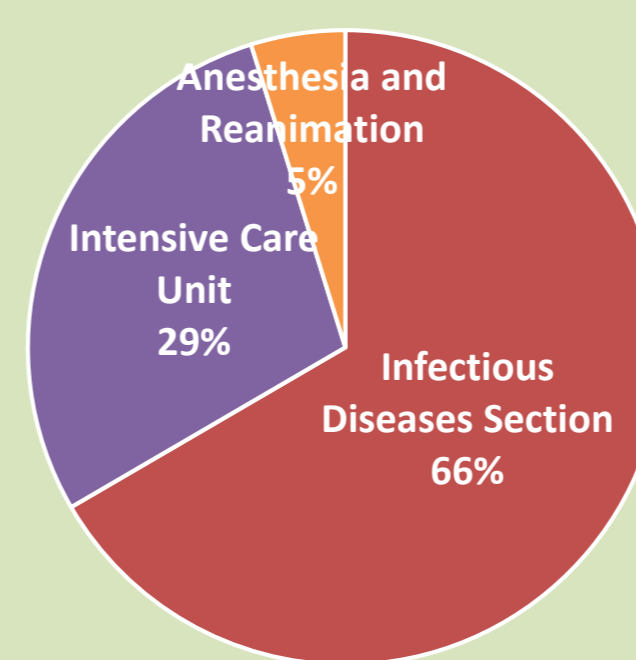
MATERIAL AND METHODS

- Retrospective observational study** performed from January to March 2017 in a general hospital of 330 beds.
- All patients treated with tigecycline** during the study period were included.
- The **adequacy of antibiotic treatment** was analyzed, including the following variables:
 - Demographic
 - Responsible service
 - Antibiotic dosage
 - Duration of treatment
 - Sample for microbiological culture
 - Indication of treatment
 - Mortality during admission.
- Clinical data were obtained from computerized medical records (Selene®).

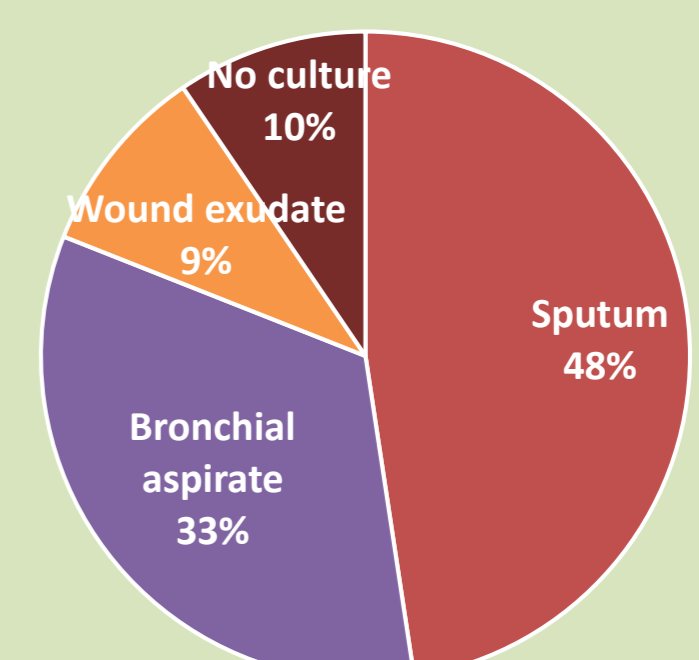
RESULTS

- 21 patients** were treated with **tigecycline**, with a mean age of 70.6 ± 17.8 years. **66.6%** were men.

HOSPITAL ADMISSION SERVICE



TYPE OF SAMPLE



- STANDARD DOSE OF TIGECYCLINE: 12 patients (57.1%)** (100 mg loading dose, followed by 50 mg every 12 hours)
- HIGH DOSE OF TIGECYCLINE: 9 patients (42.9%)** (200 mg loading dose, followed by 100 mg every 12 hours)

CLINICAL RESULTS

- Mean duration** of treatment was 9.7 ± 6.2 days.
- In **23.8%** of patients, **tigecycline** use was **not indicated** (colonization in 60%, or no culture available in 40%).
- Overall **mortality** was **61.9%**:
 - Subgroup treated with **standard dose** showed a **mortality of 58.4%** (7 patients out of 12).
 - Subgroup treated with **high dose** showed a **mortality of 66.6%** (6 patients out of 9).
- Economic expenditure on tigecycline during the study period was 43,000 euros.

CONCLUSIONS

- The use of **tigecycline at high dose for MRAB infections is controversial**, especially in patients with colonization. **Outbreaks have a high economic and clinical impact**, so that the evaluation before starting treatment could optimize economic resources.