

CARBAPENEM DE-ESCALATION THERAPY FOR INTRA-ABDOMINAL INFECTION.

CP-160

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BACKGROUND AND OBJECTIVES

- ✓ Antimicrobial Stewardship Program promotes strategies to improve antibiotic prescriptions, optimize clinical outcomes, minimize costs and avoid adverse effects. Also is recommended to prevent and decrease the appearance of emerging resistant bacteria.
- ✓ The aim of this study was to analyze carbapenem prescriptions and de-escalation therapy in intra-abdominal infections; and determine the impact of de-escalation on hospital stay and in-hospital mortality.

METHODS

- ✓ The prospective observational study of carbapenem prescriptions and de-escalation performance was conducted in a third level hospital between August 1 2013 and July 31 2014.
- ✓ Data were gathered on number of carbapenem prescriptions and patients characteristics, carbapenem treatment duration, culture requests, de-escalation performance, length of hospital stay and mortality rate.
- ✓ The oncology-haematology, traumatology, neurosurgery and neurology departments were excluded.

RESULTS

- ✓ A total of 489 prescriptions for 437 patients were recorded during this period. The mean age of patients was 65.3 years; 57.7% were males. The median of Charlson Index Score was 4(2-6). 76.5% of inpatients from surgical department, 7.6% with sepsis.
- ✓ 78.9% of prescriptions were in monotherapy. 64.4% of carbapenems were prescribed as first election therapy and 35.6% as rescue therapy. 68.9% of microbiologicals cultures were requested, 50.4% were positives. The most prescribed carbapenems were Ertapenem (44.4%) and Imipenem (30.7%).
- ✓ De-escalation was performed in 31.9% of cases, and 53.6% in presence of positives cultures vs 46.4% of negative cultures, $p=0.418$. The median duration of carbapenem therapy was 6(4-9) days, 5 days in de-escalation group vs 6 days no-de-escalation, $p=0.006$. Length of hospital stay was 10 (6-20) days, 10 days in de-escalation group vs 12 days in non-de-escalation, $p=0.052$.
- ✓ Total in-hospital mortality was 10.8%, in de-escalation group 4.7% vs 13.9% in non-de-escalation group, $p=0.003$.

CONCLUSIONS

The de-escalation of carbapenem therapy is related with reduction of patient mortality, exposure to carbapenem treatment and length of hospital stay.