USE AND EFFECTIVENESS OF TIGECYCLINE IN A PRIVATE CARE HOSPITAL


OBJECTIVES
Evaluation of usefulness, effectiveness and safety of tigecycline after observing an increase in use in the emergency department.

METHODS
Observational and retrospective study carried out in a 300 bed private care hospital. Patients who started tigecycline between February 2013 and February 2017 were selected. Data on usefulness were collected: duration, source of infection, severity, treatment (empirical or directed), adaptation according to local treatment guidelines, isolated microorganisms and resistance profile. Effectiveness was analyzed through the clinical and microbiological response. Safety was assessed with the appearance of side effects during treatment.

RESULTS
Fourty one patients (70% male) were collected. The mean age was 64 years old (standard deviation (SD):13.9). The mean duration of treatment was 12 days (SD:17). In 26 (64%) patients the treatment was directed and in 11 (26%) it was empirical. In 4 (10%) patients the treatment was considered inadequate. Sixteen patients (39%) required intensive care unit (ICU).

Regarding the effectiveness, 25 (61%) clinical responses, 6 (15%) microbiological responses with pre-discharge culture and 27 (66%) without microbiological results. Side effects were observed in 8 (20%) patients and were mostly abdominal (nausea, epigastralgia) and urticarial. A single patient had to finish treatment for severe rash.

DISCUSSION
Tigecycline is an antibiotic used for intra-abdominal infections and in a high percentage in critically patients. Most of the treatments were directed especially for enterobacteria and Enteroroccus sp. The clinical response was observed in the main of the patients, whereas the microbiological response was detected in few patients because of the absence of culture at the end of the treatment. The toxicity of the drug was mostly dermal and abdominal, and it was usually well tolerated.

CONCLUSIONS
Pharmacy department and microbiology department established an antibiotics uses guideline in emergency room. Tigecycline was restricted to internal medicine in hospitalized patients and ICU patients.

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