Early experience with tigecycline for ventilator-associated pneumonia and bacteremia caused by multidrug-resistant Acinetobacter baumannii.

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STUDY OBJECTIVE: To evaluate early experience with tigecycline alone or in combination with other antimicrobials for treatment of ventilator-associated pneumonia (VAP) and/or bacteremia caused by multidrug-resistant Acinetobacter baumannii. DESIGN: Retrospective case series. SETTING: University-affiliated medical center. PATIENTS: Twenty-five patients with multidrug-resistant A. baumannii who received tigecycline for VAP (19 patients), bacteremia (3), or VAP plus bacteremia (3) between September 1, 2005, and May 31, 2006. Five patients were treated with tigecycline alone. MEASUREMENTS AND MAIN RESULTS: Primary outcomes were resolution of clinical signs and symptoms of the infection and documented microbial eradication of A. baumannii with tigecycline. Overall, 21 (84%) of the 25 patients had clinical resolution. Four had clinical failure: three with VAP and one with VAP plus bacteremia that developed resistance to tigecycline during therapy. Microbial eradication was demonstrated in 12 (80%) of 15 patients in whom repeat cultures were obtained. Three patients with VAP had a recurrence of infection: one patient had two recurrences, and two patients had one recurrence each. All four recurrent episodes led to clinical resolution and microbial eradication. No patients discontinued tigecycline because of adverse events. CONCLUSION: Tigecycline was effective in most of these 25 patients when used alone or in combination with other antimicrobials for VAP and/or bacteremia caused by multidrug-resistant A. baumannii. The emergence of a resistant strain while one patient was receiving therapy, however, is concerning.

PMID: 17594203 [PubMed - indexed for MEDLINE]