In Vitro activities of tigecycline, ertapenem,isepamicin, and other antimicrobial agents against clinically isolated organisms in Taiwan

劉永慶

Cheng NC;Hsueh PR;Liu YC;Shyr JM;Huang WK;Teng LJ;Liu CY

摘要

Abstract

This study evaluated the in vitro activities of tigecycline, ertapenem, isepamicin, and other comparators against 861 bacterial isolates recovered from patients treated in three major teaching hospitals in 2003. MICs to antimicrobial agents were determined by the agar dilution method. High rates of oxacillin resistance (58%) in Staphylococcus aureus (60 isolates), and vancomycin resistance (21%) and quinupristin-dalfopristin non-susceptibility (39%) in Enterococcus faecium (34 isolates) were found. Carbapenems had excellent in vitro activities (>or=98% susceptibility) against the 419 isolates of Enterobacteriaceae, with the MIC(50) and MIC(90) of imipenem, meropenem, and ertapenem being 0.25 and 4 mg/L, 0.03 and 0.12 mg/L, and 0.03 and 0.5 mg/L, respectively. For, Pseudomonas aeruginosa (74 isolates) and Burkholderia cepacia (21 isolates), meropenem (MIC(90), 0.25, 2, and 4 mg/L, respectively) had better in vitro activities than imipenem (MIC(90), 8, 4, and 32 mg/L, respectively) and ertapenem (MIC(90), 0.5, >32, and 32 mg/L, respectively). Isepamicin had a similar activity with amikacin against all Enterobacteriaceae, Pseudomonas aeruginosa, B. cepacia, and Acinetobacter baumannii, except for C. freundii isolates in which isepamicin had an eight-fold activity better than amikacin. Tigecycline had excellent in vitro activities against all isolates tested (MIC(90),.