Nationwide surveillance of antimicrobial resistance among non-fermentative Gram-negative bacteria in Intensive Care Units in Taiwan: SMART programme data 2005.

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摘要

Abstract

A nationwide surveillance of the antimicrobial susceptibilities of glucose non-fermentative Gram-negative bacteria isolates was conducted from 1 September 2005 to 30 November 2005 in Taiwan. A total of 456 isolates were recovered from patients hospitalised in the Intensive Care Units (ICUs) of ten major teaching hospitals. Rates of resistant pathogens, such as ciprofloxacin-resistant Pseudomonas aeruginosa (19%) and imipenem-resistant Acinetobacter baumannii (25%), were higher than those reported in 2000 (8% and 22%, respectively). Increased rates of isolates with resistant phenotypes correlated with prolonged length of ICU stay (48 h to <= 7 days vs. >7 days) for ceftazidime-non-susceptible P. aeruginosa (20.0% and 29.7%, respectively), imipenem-non-susceptible P. aeruginosa (4.0% and 13.5%, respectively) and imipenem-non-susceptible A. baumannii (15.4% and 29.8%, respectively), but not for ciprofloxacin-resistant P. aeruginosa. Alarming rates of emergence of extensively drug-resistant (XDR) A. baumannii (15%) and XDR P. aeruginosa (1.8%) were found, particularly among those isolates that were not susceptible to tigecycline and colistin. Interhospital dissemination of some clones of XDR A. baumannii in different ICUs was also noted. This study illustrates the crucial nature of continuous nationwide surveillance of resistant pathogens and implementation of effective strategies for ICU infection control and antibiotic restriction. (C) 2008 Elsevier B. V. and the International Society of Chemotherapy. All rights reserved