

Clinical outcomes of pneumococcal pneumonia caused by antibiotic-resistant strains in Asian countries: a study by the Asian network for surveillance of resistant pathogens

ABSTRACT

To evaluate the clinical outcomes of pneumococcal pneumonia caused by antibiotic-resistant strains in Asian countries, we performed a prospective observational study of 233 cases of adult pneumococcal pneumonia in 9 Asian countries from January 2000 to June 2001. Among 233 isolates, 128 (55%) were not susceptible to penicillin (25.3% were intermediately susceptible, and 29.6% were resistant). Clinical severity of pneumococcal pneumonia was not significantly different between antibiotic-resistant and antibiotic-susceptible groups. Mortality rates among patients with pneumococcal pneumonia caused by penicillin-, cephalosporin-, or macrolide-resistant strains were not higher than those with antibiotic-susceptible pneumococcal pneumonia. Bacteremia and mechanical ventilation were significant risk factors for death, but any kind of antibiotic resistance was not associated with increased mortality due to pneumococcal pneumonia. Outcome of pneumococcal pneumonia was not significantly affected by drug resistance, and current antimicrobial regimens are mostly effective in the treatment of pneumococcal pneumonia, despite the widespread emergence of in vitro resistance.

Keyword: Pneumococcal pneumonia; Antibiotic-resistant strains; Asia; Disease severity