A prospective etiologic study of community-acquired pneumonia in Taiwan

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摘要

Abstract

BACKGROUND AND PURPOSE: The treatment of community-acquired pneumonia (CAP) is complicated by the growing threat of antimicrobial resistance and the tendency to rely on empirical therapy. This study investigated the etiologic agents of adult CAP in Taiwan and the susceptibility of Streptococcus pneumoniae isolates from these patients. METHODS: A collaborative group was established in the emergency department to conduct a prospective study of the etiology of adult CAP. The etiologic agent was determined by a combination of microscopic, culture, serologic and antigen detection methods. Pneumococcal susceptibility testing was performed to determine the extent of penicillin resistance. RESULTS: A total of 100 consecutive cases of mild to moderate adult CAP prior to the severe acute respiratory syndrome epidemic were enrolled. The etiologic agent was determined in 72% of cases. The 5 most common causative pathogens were S. pneumoniae (26%), Mycoplasma pneumoniae (20%), Chlamydia pneumoniae (13%), Haemophilus influenzae (9%), and Klebsiella pneumoniae (5%). Atypical pathogens accounted for 40% of CAP. Bacteremic pneumonia was diagnosed in 6.2% of cases. Co-infections with 2 or more pathogens were found in 16% of the cases. Among the 20 isolates of S. pneumoniae, 85% (17/20) were susceptible to penicillin, 3 (15%) were intermediate, and none were resistant to penicillin. CONCLUSION: S. pneumoniae, M. pneumoniae and C. pneumoniae were the 3 leading causes of mild to moderate CAP in Taiwan. This study indicates that penicillin-resistant S. pneumoniae play a very limited role in this condition in adults.