

Prevalence of antimicrobial resistance among clinical isolates of haemophilus influenzae in Taiwan

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摘要

Abstract

The purpose of this study was to determine the prevalence of resistance to various antimicrobial drugs among Haemophilus influenzae isolates in Taiwan. Two hundred and ninety-six clinical isolates of H. influenzae were prospectively obtained from nine teaching hospitals throughout Taiwan, from June 1994 to April 1995. All isolates were examined for the presence of type b encapsulation and beta-lactamase production. Antibiotic susceptibility was determined by means of standard broth microdilution procedures. Twenty-three isolates (7.8%) were type b, and the overall rate of beta-lactamase production was 58.1% (172/296). The rates of resistance to antibiotics were 58.1% for ampicillin, 33.8% for trimethoprim-sulfamethoxazole, 20.6% for chloramphenicol, 27% for tetracycline, 6.7% for azithromycin, 3.4% for cefaclor, and 0.3% for cefuroxime. Cefixime, ceftriaxone, and ciprofloxacin were active against all H. influenzae isolates. Thirty (10.1%) of the 296 isolates were resistant to three drugs (ampicillin, chloramphenicol, and tetracycline), 16 of which (5.4%) were resistant to four drugs (ampicillin, chloramphenicol, tetracycline, and trimethoprim-sulfamethoxazole). There was a marked increase in the rates of ampicillin resistance and beta-lactamase production among H. influenzae isolates compared with a previous survey in Taiwan conducted 9 years ago. In addition, isolates with multiple drug resistance were also identified. Continued efforts are needed to monitor antibiotic resistance patterns of H. influenzae in the region.