Abstract

Objective. To assess the epidemiologic characteristics of invasive pneumococcal diseases (IPD) among a population in a pediatric hospital in Mexico City and analyze mortality-related risk factors, serotype distribution and antibiotic susceptibility related to S. pneumoniae. Material and Methods. We performed a retrospective review of IPD cases at a third level pediatric hospital between 1997-2004. Results. A total of 156 patients were included. The mortality rate was 27.5% and was associated with six pneumococcal serotypes: 14, 6B, 23F, 6A, 19F and 19A. There was no relationship between mortality and antimicrobial susceptibility pattern. A total of 28.2% of isolates were resistant to penicillin and 24.6% were resistant to cefotaxime. A statistically significant relationship was observed between mortality and previous underlying disease (CI 95%; 2.5-18.3; \(p< 0.05\)) using a multivariate logistic regression model. Conclusions. Our outcomes show that IPD mortality in our population is closely related to underlying disease and to six serotypes, five of which are included in the 7-valent pneumococcal conjugate vaccine.

Keywords

pneumococcal infections, epidemiology, microbial sensitivity tests, Mexico.