Abstract

A 16-month prospective, descriptive study was conducted on pneumococcal serotype distribution isolated from children with acute otitis media (AOM) and invasive infections (IN V). Eighty-nine children with pneumococcal IN V and 324 with a first episode of AOM were included. Bacterial pathogens (N = 326) were isolated from the middle-ear fluid of 250 patients. A total of 30 pneumococcal serotypes were identified. Prevalent serotypes were 14, 19A, 9V, 3, 19F, 6A, 23F, and 18C in AOM and 14, 1, 19A, 5, 12F,6B, and 18C in IN V. Potential coverage with PCV10 vaccine would be 46.5 % and 60.7 % for pneumococci involved in AOM and IN V, respectively; it would be 71.7 % and 73 % with PCV13. PCV10, conjugated with a Haemophilus protein, would have an immunologic coverage of 39.9 % for AOM vs. 18.5 % with PCV13. However, differences in the prevention of IN V were crucial for the decision to include the 13-valent vaccine in the national calendar for children less than two years old in Argentina.

Keywords

Streptococcus pneumoniae, serotype, pediatrics, acute otitis media, invasive infections, vaccines.