

INVASIVE PNEUMOCOCCAL DISEASE CAUSED BY SEROTYPE-3 DESPITE VACCINATION: A CASE REPORT

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Background: *Streptococcus pneumoniae* (*S. pneumoniae*) has been implicated as an important cause of otitis media, sinusitis, pneumonia and invasive pneumococcal diseases (IPD) such as meningitis, bacteremia, and bacteremic pneumonia. The pneumococcal conjugate vaccines are used in routine infant immunizations to prevent development of pneumococcal disease. Routine infant immunization with a 7-valent pneumococcal conjugate vaccine (PCV7) began in 2000 in the U.S. In February 2010, the Advisory Committee on Immunization Practices (ACIP) issued recommendations for the usage of a newly licensed 13-valent pneumococcal conjugate vaccine (PCV13), which contains the seven serotypes found in PCV7 (4, 6B, 9V, 14, 18C, 19F, 23F) and six additional serotypes (1, 3, 5, 6A, 7F, 19A). PCV13 is recommended for healthy children aged 14 through 59 months who were completely immunized with PCV7. **Case report:** Here, we present a case of a 4-year old boy (B.M.), otherwise healthy, who was diagnosed with a serious invasive streptococcal pneumonia (caused by serotype 3 of *S. pneumoniae*, found in PVC13), in spite of being vaccinated against pneumococcal infections (3 doses of PCV7 in the first year of life and 1 dose of PCV13 in the second year of life). The results of tests for humoral and cellular immunity, which were carried out 5 months after recovery, were normal. **Conclusions:** One dose of PCV13 vaccine can be insufficient to prevent invasive disease caused by *Streptococcus pneumoniae* in some healthy children.

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