

Immunogenicity of a 23-valent pneumococcal polysaccharide vaccine in elderly residents of a long-term care facility

Valenzuela, M. Teresa B.

Altuzarra, Rogelio H.

Trucco, Olivia A.

Villegas, Rodrigo R.

Inostroza, Jaime S.

Granata, Paulo S.

Fleiderman, José V.

Maggi, Leonardo C.

S. pneumoniae is a significant cause of community-acquired pneumonia in the elderly, and accounts for the majority of the pneumonia deaths among the elderly. We conducted this randomized double-blind study to evaluate the immune response to a 23-valent pneumococcal polysaccharide vaccine and the persistence of antibodies two years after the vaccination in an elderly population in Santiago, Chile. A total of 118 elderly nursing home residents received either the pneumococcal or a tetanus control vaccine. Serum samples were taken at enrolment, at two months, and at two years post-vaccination. Pre-vaccination anti-pneumococcal antibody geometric mean concentrations (GMC) were similar in both study groups, with increased levels of antibodies found only against serotype 14. The pneumococcal vaccine was highly immunogenic at 2 months, and titers remained high two years after the vaccination for the 10 serotypes studied in this elderly population. The results thus support the benefits of this