

Abstract

Special Article

**Prevention of Pneumococcal Disease in Patients with Chronic
Cardiometabolic Diseases**

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Abstract

Pneumococcal disease is caused by *Pneumococcus* (*Streptococcus pneumoniae*) and includes infections of various severity, not rarely fatal. It is grouped into invasive and non - invasive disease. The first class includes meningitis and bacteremia, while the second one includes otitis media and sinusitis. Pneumococcal pneumonia is considered non – invasive, unless there is concurrent bacteremia in which case it is considered invasive. Severity and invasiveness of the disease depend on the pneumococcal serotype (there are more than 90 different serotypes). Patients at increased risk for pneumococcal disease and especially invasive one are those of advanced age, patients with asplenia, chronic lung disease, diabetes, cardiac disorders, cochlear implants, ESF leak, HIV infection, various immunodeficiencies etc. The prevention of pneumococcal disease is through vaccination. There are two pneumococcal vaccines available to the adult population. The 23-valent polysaccharide vaccine and the latest 13-valent conjugate one. Both are included in the current official recommendations. The conjugate vaccine should be administered first, followed by the polysaccharide one, with an interval of at least 8 weeks. A recent study of the 13-valent conjugate vaccine (CAPITA study) showed that it can reduce the incidence of community-acquired pneumonia and the invasive pneumococcal disease caused by the serotypes included in the vaccine. Despite the documented protection of vaccination against pneumococcal disease, the vaccination coverage of patients with chronic cardiometabolic diseases is far from being sufficient. It is an important task of treating physicians to promote the vaccination coverage of vulnerable patients.

Keywords: Pneumococcal disease; Cardiometabolic diseases; Prevention