

INCIDENCE OF INVASIVE PNEUMOCOCCAL DISEASE IN ADULTS IN GALICIA, SPAIN



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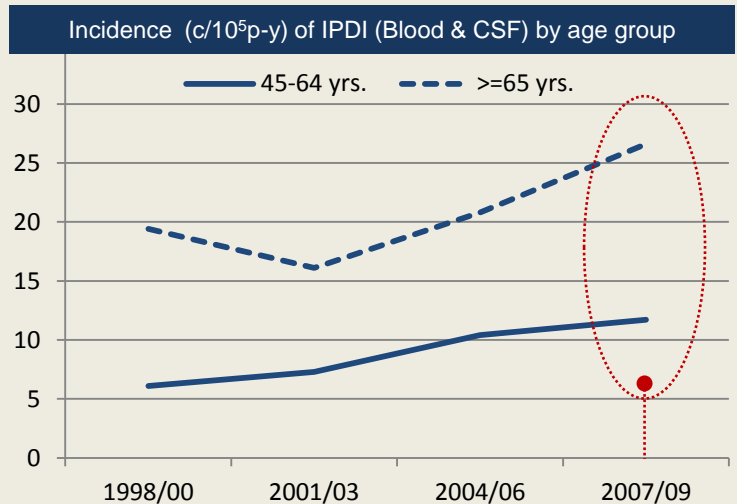
Objectives. Vaccination with the 23-valent polysaccharide pneumococcal vaccine (PPV23) was implemented in Galicia (in the Northwest of Spain) in adults aged ≥ 65 years from year 2000 on, with vaccine coverage reaching around 60% the first year and approximately 20% of new targeted population (those reaching 65 years of age) and 5% of previously unvaccinated targeted population vaccinated per year in the following years. This study analyses evolution of invasive pneumococcal disease (IPD) pre- and post- PPV23 vaccination.



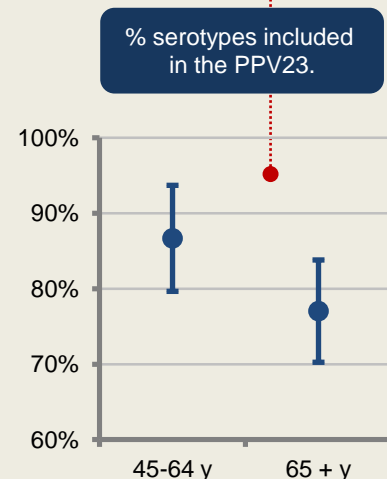
Methods. IPD incidence was calculated using data (1998-2009) on isolation of *Streptococcus pneumoniae* from blood and cerebrospinal fluid (CSF) at clinical laboratories of the *Sistema Galego de Saúde* and population data from the annual census of inhabitants. Incidence was aggregated by triennial periods and expressed as cases/100000 inhabitants per year. The relative risk for the last period (RR) was estimated from changes in incidence between the first and last triennia. Isolates from last triennia were serotyped by Quellung and/or dot blot assay at the Spanish reference laboratory for pneumococci. Prevalence of serotypes included in PPV23 were determined and 95% confidence intervals were calculated.

Results. The table and figure shows per triennia evolution of IPD incidence by age group (45-64 years and ≥ 65 years) separating cases of meningitis from other IPDs.

Age	IPDs (blood & CSF)			
	1998/00	2001/03	2004/06	2007/09
45-64 yrs.	6.1	7.3	10.4	11.7
≥ 65 yrs.	19.4	16.1	20.8	26.6
Meningitis (CSF only)				
45-64 yrs.	1.3	0.9	0.7	1.1
≥ 65 yrs.	2.3	1.1	1.1	1.7



For IPDs, in the ≥ 65 years population, after an initial decrease there was an increase (RR=1.4) while in the 45-64 years population there was a continuous increase (RR=1.9). For meningitis, in both age groups there were initial decreases, more marked in the ≥ 65 years group, followed by increases, with final values not reaching those of the first triennia (RR=0.7 for ≥ 65 years and RR=0.8 for the 45-64 years group). In the last triennia 77% (95% CI: 70-84%) of serotypes isolated from the group of ≥ 65 years, and 87% (95% CI: 80-94%) from the group of 45-64 years were included in the PPV23.



Conclusion. The evolution of IPD incidence over the study period and prevalence of serotypes included in PPV23 in the last triennia in both age groups suggests the absence of significant and maintained impact of PPV23 vaccination.