

eP150

ePoster Viewing

Vaccines for pneumococci, Haemophilus and meningococci

PER-SEROTYPE CLINICAL PRESENTATIONS OF INVASIVE PNEUMOCOCCAL DISEASE IN ADULTS IN SPAIN (2010-2013). THE ODIN STUDY GROUP

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Objectives: To analyse by serotype clinical presentations of invasive pneumococcal disease (IPD) and coverage by PCV13 in adults in Spain.

Methods: A prospective, hospital-based surveillance of culture-confirmed IPD episodes in hospitalized adults (≥ 18 years) was performed in 9 Spanish hospitals (August 2010-June 2013). IPD was considered *S. pneumoniae* isolation from sterile fluids. Clinical presentations: complicated pneumonia - CP- (pneumonia with pleural effusion and/or empyema and/or multilobar presentation), non-complicated pneumonia (N-CP), meningitis (M), primary bacteremia (PB), severe sepsis/septic shock (S), peritonitis (P) and others (O). All isolates were sent to the Spanish Reference Laboratory for Pneumococci for serotyping by Quellung reaction and/or dot blot assay.

Results: 637 cases were included (mean age 63.05 ± 17.10 years; 74.4% with ≥ 50 years, 49.1% ≥ 65 years and 31.1% ≥ 75 years; males: 60.0%). Table shows clinical presentations - n (%) - by serotype for serotypes with $\geq 2.5\%$ isolates. Four isolates were non-typeable (1 CP, 2 N-CP and 1 S).

	CP (n=219)	N-CP (n=199)	M (n=70)	PB (n=46)	S (n=42)	P (n=22)	O (n=35)	Total (n=633)
1	19 (8.7)	8 (4.0)	1 (1.4)	2 (4.3)	2 (4.8)	-	1 (2.9)	33 (5.2)
3	37 (16.9)	24 (12.1)	6 (8.6)	2 (4.3)	5 (11.9)	1 (4.5)	1 (2.9)	76 (12.0)
4	12 (5.5)	4 (2.0)	2 (2.9)	-	-	-	-	18 (2.8)
6C	9 (4.1)	10 (5.0)	5 (7.1)	6 (13.0)	1 (2.4)	1 (4.5)	-	32 (5.1)
7F	21 (9.6)	18 (9.0)	2 (2.9)	-	3 (7.1)	2 (9.1)	2 (5.7)	48 (7.6)
14	9 (4.1)	15 (7.5)	-	-	3 (7.1)	2 (9.1)	2 (5.7)	31 (4.9)
19A	25 (11.4)	18 (9.0)	5 (7.1)	1 (2.2)	7 (16.7)	1 (4.5)	2 (5.7)	59 (9.3)
19F	4 (1.8)	4 (2.0)	5 (7.1)	-	1 (2.4)	1 (4.5)	4 (11.4)	19 (3.0)
PCV13 + 6C	149 (68.0)	110 (55.3)	32 (45.7)	13 (28.3)	24 (57.1)	9 (40.9)	15 (42.9)	352 (55.6)

Serotypes not included individually in the table accounted for 317 (50.1%) isolates and belonged to 35 different serotypes

Conclusions: Invasive pneumonia accounted for 421 out of 637 (66.1%) cases. Up to 80.3% of

serotype 3 and 72.9% of serotype 19A episodes were invasive pneumonia. Coverage by PCV13+6C was 55.3% in global and 61.5% for invasive pneumonia.