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***Streptococcus pneumoniae* (spn) serotypes and antimicrobial resistance: beginning of the National Surveillance Program in adults with invasive pneumococcal disease (IPD) in Argentina.**

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SPN is a major cause of morbi-mortality worldwide. The Laboratory National Surveillance Program was initiated in Argentina in 2013 to collect data about serotype distribution and antibiotic resistance in SPN causing IPD in >18 y.o. The aim of the present study was analyze the period 2013-2014.

354 SPN from sterile fluids were collected in ≥ 18 y.o. from 22 hospitals (9 provinces and Buenos Aires City). Strains received at the National Reference Laboratory were serotyped by Quellung reaction and MICs were determined by agar dilution method (CLSI-2015).

Of the 354 SPN, 42% were >65 y.o. The diagnosis distribution was pneumonia (72%), meningitis (11%), sepsis (9%), others (8%). The 12 most common serotypes represented 70.3%: 1 (11%), 3 (9.3%), 8 (9%), 7F (8.5%), 12F (7.9%), 24 (5.1%), 9V (4%), 4 (4%), 9N (3.1%), 19A (3.1%), 11A (2.8%), 14 (2.5%) and others (29.7%). In meningeal isolates the resistance was 20.1% (MIC $\geq 0.12 \mu\text{g} / \text{ml}$) to penicillin (PEN) and 2.1% for cefotaxime (CTX) (MIC $\geq 1 \mu\text{g}/\text{ml}$). According to breakpoints for non-meningeal site, none of the SPN presented resistance to PEN (MIC $\geq 4 \mu\text{g}/\text{ml}$) and CTX (MIC $\geq 2 \mu\text{g}/\text{ml}$). The resistance was: meropenem 2.7%, erythromycin (ERY) 11.6%, trimethoprim-sulfamethoxazole (TMS) 28.3%, tetracycline (TET) 14.9%. All isolates were susceptible to chloramphenicol, amoxicillin, ceftaroline, levofloxacin, rifampicin and vancomycin. The PCV13/PPSV23 serotypes represented 50%/78% (51%/80% for 18-64 y.o. and 47%/73% in >65 y.o.) and 41%/56% for spn with reduced susceptibility to penicillin. The PEN, ERY, TMS or TET resistance was associated in 53.7% to serotypes 24, 12F, 3, 19A, 14, 9V and 6A.

A continuous National Surveillance Program of SPN serotypes in adults IPD is warranted to assess future changes in the epidemiology and vaccine impact.