

PERSISTENCE OF *S.pneumoniae* (Spn) IN MIDDLE EAR FLUID (MEF) IN PEDIATRIC PATIENTS WITH RECURRENT ACUTE OTITIS MEDIA (AOM)

V. Reijtman¹, P. Sommerfleck², P. Gagetti³, S. Fossati³, C. Hernández¹, P. Bernaldez², A. Corso³, H. Lopardo¹

¹Microbiology Department, Hospital de Pediatría "Prof. Dr. J. P. Garrahan";

²Otolaryngology Department, Hospital de Pediatría "Prof. Dr. J. P. Garrahan";

³Bacteriology Department, ANLIS "Dr. Carlos G. Malbran"; CABA, Buenos Aires, Argentina

Background and Aims: AOM is the most common disease caused by Spn. Our aim was to evaluate the persistence of pneumococci in patients (pts) with relapses of AOM.

Methods: We included 324pts from 05/2009 to 08/2010 (with follow-up to 02/2011); with first episode (ep.) of AOM diagnosed by otomicroscopy with purulent effusion retained in the middle ear. Tympanocentesis and culture of MEF was performed. Pts were treated with amoxicillin 80mg/k/d during 10 days and evaluated at days: 1, 2, 7 and 30. Resolution of AOM was considered when patients were free of signs and symptoms of infectious disease. Spn strains were serotyped by Quellung reaction. The genetic relatedness was evaluated by *Sma*I PFGE in Spn sharing the same serotype.

Results: A total of 55/324pts (17%) had more than 1ep. of AOM during the follow-up period. Spn was responsible for the relapses in 12/55pts (22%) and the same serotype persisted in 8/55pts (14,5%) (total:20ep). In these 8pts, Spn serotypes were: 14 (N=3pts;9ep)., 19A (N=2pts;5ep). and serotypes 6B, 9V and 23B (1pt each;6ep). Different clonal types were found between pts. The same Spn PFGE type was observed in all episodes of the same patient. All pts resolved AOM between episodes. The median time between ep. was 35 days. After 7 days, purulent exudate in middle ear was not observed in 17/20ep. (85%).

Conclusions: The resolution of AOM between episodes did not discard relapses caused by Spn strains including those carrying the same clonal type. Persistence was not associated to any particular clon.

Despite being cured between episodes, Spn persisted in 22% of the pts with relapses and in 14,5%pts persisted the same clonal type.

None of these 8pts were vaccinated against Spn.

(34pts/2ep.; 12pts/3ep.; 6pts/4ep.; 3pts/6ep.)

belonged to the same clon

(interquartile range: 19–43.25)