

## EPIDEMIOLOGY AND OUTCOME OF INVASIVE STREPTOCOCCUS PNEUMONIAE DISEASE (IPD)

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The rapid decrease of invasive Hib and meningococcal infections in children with the universal immunization has originated that the IPD are currently the main concern of pediatricians. IPD in children, particularly in the very young is associated with substantial morbidity and mortality rates. To assess the outcome of IPD in the Hospital Infantil la Fe we reviewed the clinical and microbiological characteristics of children with IPD diagnosed between 1993-2003. IPD was defined as isolation of invasive *Streptococcus pneumoniae* in a normally sterile biological fluid. In this period, 111 children with IPD aged 1 month old (mo) to 14 yo (mean 36.3 mo) were hospitalised. Of these, 33 children had bacteremic pneumonia, 27 occult bacteremia, 23 meningitis, 12 sepsis, 6 apendicitis / peritonitis, 5 mastoiditis, 2 septic arthritis, 2 cellulitis and one corneal abscess. The majority (82%) were less than 5 yo and 55 children less than 2 yo. Complications were seen in 23 children and sequelae in 6 children, predominantly (4 children) hearing loss. Underlying medical condition was present in one third of cases, including 6 out of the 7 children who died (6.3%). A total of 43.5% of strains were penicillin-susceptible, 42.5% intermediate-resistant and 14% high-level resistant. Because of the high rate of antibiotic resistance, complications, sequelae and mortality cases of IPD, the universal immunization against *Streptococcus pneumoniae* should be included. In addition the vaccine is the best method to decrease the carriage state and therefore the dissemination of the disease.

