

## Abstract EFAS/DGA 2007

### Diagnosis of secretory otitis media in otherwise healthy infant as a predictive value for chronic disease in early childhood

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**BACKGROUND** Acute otitis media (AOM) and secretory otitis media (SOM) are among the most common diseases in young children. No single screening examination can detect or characterise middle ear effusion (MEE) in infancy. The criteria for selecting children who are particularly at risk and who should be actively followed-up are not established yet. In order to find these infants we conducted a prospective longitudinal study.

**METHODS** During performing early hearing interventional programme 75 infants, who had no craniofacial or neurological abnormalities and sensory deficits, were selected to be diagnosed for SOM. The diagnosis was established on the basis of pneumatic otoscopy and tympanometry. The children were distributed into two groups according to the presence of SOM. The following diagnostic tools were performed at the age of two months, one year and three years: ENT examination, pneumatic otoscopy, tympanometry, behavioral or tonal audiometry, transit evoked otoacoustic emissions and questionnaire for parents. The data on child's illnesses and speech development were obtained from child's pediatrician.

**RESULTS** 44 children completed the three-year follow-up: 22 children with SOM detected at the age of two months and 22 children without SOM detected. Children from the first group experienced statistically more often AOM and recurrent AOM (21/22, 3/22) than those from second group (9/22, 0/22) ( $p < 0.05$ ). At three years mild to moderate conductive hearing loss was detected in 15 children from first and in 14 from second group. One child had speech development delay.

**CONCLUSIONS** Infants with early onset of SOM are at risk for chronic disease. We have identified age two months as important for detection of SOM. We could not confirm the hypothesis that a history of SOM during the first years of life causes speech and language difficulties. Our results can have substantial impact on designing strategies for prevention and early management of these high risk children.

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