

## **Phonological development in Swedish children with otitis proneness – age 3;6 to 4;6 years**

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**Background:** Acute otitis media is a common childhood disease, and a proportion of children get repeated episodes (otitis proneness). One complication of acute otitis media is middle ear effusion, resulting in fluctuating conductive hearing loss. Fluctuating conductive hearing loss has been found to affect children's phonological development. Thus, during a number of episodes of affected hearing ability, fluctuating and degraded acoustic signals are presented to the cochlea, limiting children's ability to discriminate, store and reproduce appropriate acoustic contrasts between speech sounds.

**Aim:** This study focuses on the phonological development in terms of the emerging phonological system and the developmental phonological processes, in Swedish children with otitis-proneness.

**Method:** A total number of 43 children (25 prone to otitis media, and 21 controls) were included. Speech samples were elicited by standardized picture naming tasks at the age of 3;6 and 4;6 years.

**Results:** The results indicate no significant group differences for phonological production at age 3;6 or 4;6 years. The longitudinal result between 3;6 to 4;6 years, however, indicates some differences between the groups in terms of phonological production, for example the production of certain speech sounds and the use of certain simplification processes.

**Discussion:** The overall findings suggests that otitis proneness before the age of 2;6 years is not an indicator for group differences in phonological development at the age of 3;6 and 4;6. However, there is considerable distribution of the result, which indicates that there are individual children who do not follow the typical linguistic development.