

## **Abstract EFAS/DGA 2007**

### **Musical attitude of implanted children:speech and musical perception results of one year follow-up**

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The purpose of this study is to determine whether children can gain benefit from training on pitch and music perception. Our main goal were to prepare a tool for training pitch and music perception and evaluating musical attitude in children, to determine whether pitch and music perception improve more rapidly with training and to assess the impact of training on speech perception. A family centered habilitation program based on musical training is developed. All children were between 3 and 8 years old to ensure they are old enough to perform the tasks required in the study. 10 newly implanted children whom were switched on in HiRes and trained from the outset and 10 children using HiRes strategy who did not receive training both undergo assessments to determine pitch and music perception skills and speech perception assessments. The speech perception test battery contains a comprehensive range of age appropriate tasks covering detection, discrimination, identification, recognition and comprehension abilities. Musical training program was based on a take-home electric keyboard which is used for listening to different pairs of notes. For this test, three octaves and one extra note at the high end of the keyboard were used. Children were expected to discriminate a pair of notes. Assessments of speech perception and pitch-music assessments at pre-implant, 3-,6-,9-,12-,months post switch-on. Also parents were given the 'Musical Stages Questionnaire' which covers some of the key areas of musical development. Children who were involved in music study demonstrated significant familiarity in both determining pitch differences and in song appraisal. Statistically significant relation between music training and speech perception was observed at music group compared with the non trained group particularly at the rate of being linguistically/developmentally ready to carry out a formal open set speech perception evaluation.

#### Literatur:

- 1 S. Abdi, M.H. Khalessi, M. Khorsandi, B. Gholami, 2001, Introducing music as a means of habilitation for for children with cochlear implants, Int Jour Pediatric Otorhinolaryngology; 59:105-113
- 2 J. Stordahl, 2002, Song Recognition and Appraisal: A comparison of children who use cochlear implants and normally hearing children, Journal of Music Therapy; 39(1): 2-19

