

Abstract EFAS/DGA 2007

A verification protocol of fm systems for children with cochlear implant

Zenker Castro, F. (1), Mora Espino, R. (2), Rodríguez Jiménez, M.C. (3), Mesa Suárez, J.L. (4), Coello Marrero, A. (4), Suárez Rodríguez, M. (3), Barajas de Prat, J.J (3).

(1) Fundación Canaria Dr. Barajas para la Prevención e Investigación de la Sordera
(2) Clínica Barajas

(3) Universidad de la Laguna

(4) Consejería de Educación, Cultura y Deportes del Gobierno de Canarias

Children with Cochlear Implants (CIs) can receive significant benefit in speech recognition through the use of an FM system in the educational setting. However, there are numerous settings as well as equipment arrangements that may be selected for a particular child. Therefore, a clinical protocol is needed for verification of performance to determine the optimum settings and arrangement. Evaluation through informal listening checks or electroacoustic measures as conventionally done with Hearing Aids are not possible with CIs. Optimal connections and setting must be ensured by systematic speech recognition measures. This study shows a verification protocol of the benefit of FM systems connected with the Cochlear SPrint processor. Speech recognition is measured in the sound field by live voice with the CI speech processor alone and combined with the FM receiver. Speech perception scores were obtained in quiet and in background noise with portable equipment of speakers in the children's classroom. Benefit of the FM System was established through identification of words and sentences with different lexical and grammatical difficulties. This protocol may be used to behaviourally verify the benefit received when coupling FM systems to CIs.

