

**PRELIMINARY SPEECH PERCEPTION RESULTS FOR CHILDREN WITH THE 22-ELECTRODE MELBOURNE/COCHLEAR HEARING PROSTHESIS**

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The Cochlear 22-electrode cochlear prosthesis was first implanted in a child at the Cochlear Implant Clinic at the University of Melbourne and Royal Victorian Eye & Ear Hospital in 1985. Since that time, 42 children have received the device in Melbourne. Analysis of patient details shows that the majority of these children have a congenital as opposed to an acquired aetiology of hearing loss. In all but 3 cases, the children use 15 or more electrodes. In order to assist with evaluation of benefits to speech perception across the very heterogenous group of children, a six level hierachical classification scheme for speech perception performance levels was created. All of the children achieved a minimum of Category 2 (discrimination of suprasegmental information). In total, 59 % of the children achieved Category 5 or 6 (open-set recognition for unfamiliar materials). Analysis showed that the majority of these children had more than one year of experience. In contrast, the majority of children in Category 2 are those with less than one year of experience with the device.



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