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**“Parental reports of auditory skills in Unilateral,
Bimodal, Bilateral Simultaneous and Sequential
Cochlear Implant children”**

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- **Goal:**
To evaluate and compare auditory skills in everyday life of children with unilateral, bimodal and bilateral cochlear implants (CIs) using parental reports.
- **Methodology:**
Subjects were selected from the population of children with prelingual deafness who were implanted at the “Centro de Implantes Cocleares, Prof. Diamante”, in Buenos Aires, Argentina.

All children have normal cochleae, without other handicaps. All the subjects are receiving auditory, speech and language habilitation, and have parental and academic support.

We evaluated at a whole 105 CI children, divided into 4 groups.

Group 1 (N=33) Unilateral CI children

Group 2 (N=17) Bimodal children (CI+HA in contralateral ear)
Group 3 (N=26) Bilateral Sequential CI children
Group 4 (N=29) Bilateral Simultaneous CI children

All children had more than 12 months of CI use in unilateral, bimodal and bilateral simultaneous CI cases. In Bilateral Sequential subjects, they had more than 12 months of use with the second CI.

A structured interview technique was used to assess the auditory skills in daily life situations of these children, in accordance with parents’ opinion. Parents answered seven questions (Asp et al, 2012) referred to the frequency of a particular auditory behavior, showed by the child. A scale of never (0) to always (4) was used. Seven questions were used in relation with auditory skills

in quiet and noise (localization and listening abilities referred to speech and sounds)

- **Results:**

In accordance with parents' reports, bilaterally implanted children (especially simultaneous) showed better localization and listening abilities than bimodal and unilateral CI children, especially in noisy environments. Statistical analysis will be presented.

- **Conclusions:**

Few studies of cochlear implants in children have included parental reports (Beijen et al, 2007; Galvin et al, 2007 and 2008; Van Deun et al, 2009; Sparreboom et al, 2012, Asp et al, 2012).

In this study, 105 parents of children with CI report that Bilateral CIs produce better overall speech recognition and sound localization for their children using Bilateral CIs daily situations.