Maximising the advantages of bilateral cochlear implantation for speech and language processing

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Receptive and expressive language in children with bilateral cochlear implants (CIs) are considerably better than in those with only one implant. This may be explained by the fact that binaural hearing improves perception of soft speech, speech in noise, and sound localisation, all of which are important for incidental learning.

Despite the success of bilateral cochlear implantation, binaural listening remains problematic. Small mismatches between the input from both ears exists, and these are known to reduce the benefits that may accrue from bilateral CI. Hence, a need exists for a simple objective measure to match CI electrodes between ears. Here, I will present our recent work on a new technique to objectively assess binaural hearing in the clinic.