ESR 5. The effect of cued speech (CS) perception on auditory processing in typically hearing adults

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Cued Speech (CS) is a communication system that was designed to facilitate lipreading in hearing impaired people (HI). Within this system, manual gestures placed in different places around the face code for syllables that would be ambiguously perceived by lipreading only. In CS production, manual gestures are provided some milliseconds in advance to labial gestures providing predictive information to lipreading. Interestingly, experienced CS speakers fitted with cochlear implants (CI) merge manual gesture information to the audiovisual speech. Moreover, in hard listening conditions, the presence of manual gestures facilitates speech perception enhancing the benefit of CI. Although the advantages of exposure to CS are recognized, the effect of CS expertise on auditory processing in HI and typically hearing (TH) people remains unclear. In the present study, we investigated the effect of CS perception in auditory processing in TH adults that were either experts or naive towards CS. Participants were presented 3 syllables /pa/, /ta/, /ka/ in unimodal (audio or visual) and in bimodal (audiovisual and audiovisual with CS gestures) conditions. We used an auditory Evoked Response Potential (ERP) paradigm to compare the effect of unimodal and bimodal speech perception on the latency and amplitude of the auditory N1-P2. Initial results from this study will be presented in this poster session.