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Titel des Beitrags:
Clinical Trial Results with the MED-EL Fine Structure Processing Coding Strategy in Experienced Cochlear Implant Users

Abstract:
Objectives: To assess the subjective and objective performance of the new fine structure processing strategy (FSP) compared to the previous generation coding strategies CIS+ and HDCIS. Methods: Forty-six adults with a minimum of 6 months of cochlear implant experience were included. CIS+, HDCIS and FSP were compared in speech perception tests in noise, pitch scaling and questionnaires. The randomized tests were performed acutely (interval 1) and again after 3 months of FSP experience (interval 3). The subjective evaluation included questionnaire 1 at intervals 1 and 3, and questionnaire 2 at interval 2, 1 month after interval 1. Results: Comparison between FSP and CIS+ showed that FSP performed at least as well as CIS+ in all speech perception tests, and outperformed CIS+ in vowel and monosyllabic word discrimination. Comparison between FSP and HDCIS showed that both performed equally well in all speech perception tests. Pitch scaling showed that FSP performed at least as well as HDCIS. With FSP, sound quality was at least as good and often better than with HDCIS. Conclusions: Results indicate that FSP performs better than CIS+ in vowel and monosyllabic word understanding. Subjective evaluation demonstrates strong user preferences for FSP when listening to speech and music.