HEARING PRESERVATION WITH LONG ELECTRODE ARRAYS

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Disclosures

• None
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- LeSonia Mason
SHORT ELECTRODES FOR HEARING PRESERVATION

Multicenter Clinical Trial of the Nucleus Hybrid S8 Cochlear Implant: Final Outcomes

Bruce J. Gantz, MD; Camille Dunn, PhD; Jacob Olesen, PhD; Marlan Hansen, MD; Aaron Parkinson, PhD; Christopher Turner, PhD

The Laryngoscope 2018 The American Laryngological, Rhinological and Otological Society, Inc.

Long-Term Outcomes of Cochlear Implantation in Patients With High-Frequency Hearing Loss

J. Thomas Roland Jr, MD; Bruce J. Gantz, MD; Susan B. Waltzman, PhD; Aaron J. Parkinson, PhD

Multicenter US Clinical Trial With an Electric-Acoustic Stimulation (EAS) System in Adults: Final Outcomes

Investigation of the effect of cochlear implant electrode length on speech comprehension in quiet and noise compared with the results with users of electro-acoustic-stimulation, a retrospective analysis.

Büchner A¹, Illg A¹, Majdani O¹, Lanarz T¹.
ELECTRODE SELECTION CAN BE CHALLENGING

Particularly for patients who are borderline EAS candidates...even relatively small threshold shifts can preclude EAS device fitting.
NOT ALL COCHLEAS ARE THE SAME...

CDL = 37.5 mm
FLEX28

CDL = 33.5 mm
FLEX28
NOT ALL COCHLEAS ARE THE SAME...

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THEREFORE ANGULAR INSERTION DEPTH SHOULD BE USED

Noble et al. (Submitted)
OBJECTIVE

• Analyze hearing preservation rates with various lateral wall electrode arrays as a function of angular insertion depth
RESULTS

- 67 patients: 11 Flex24, 45 Flex28, 11 Flex SOFT
- Overall, 63% maintained aidable hearing and could be fit with EAS
- Mean LFPTA shift 27 dB
RESULTS

Threshold Shift at 125 Hz

Threshold Shift at 250 Hz

Threshold Shift at 500 Hz

Δ Threshold (dB HL)

Angular Insertion Depth (°)