

Abstract EFAS/DGA 2007

Estimation of abnormalities of Cochlear Implant electrode placement using Spread of Excitation measurement

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Objectives:

To evaluate possible dependence between Spread of Excitation measurement results and electrode placement assessed by CT scans in Nucleus 24 implant user.

Method:

Postoperative Spread of Excitation profiles recordings were made for electrode number 5, 10, 18. CT scans according to cochlear view technique was performed for 2 selected patients.

Results:

Abnormalities in implant electrode placement in the cochlea was found, accompanied by disturbed spread of excitation profiles.

Conclusions:

A clear dependence between disturbance of Spread of Excitation profile and abnormalities in implant electrode placement for selected patient was confirmed. Further investigation in bigger group of Nucleus 24 implant users is planned to check if it is a general correlation. A possible confirmation of mentioned correlation would provide an useful, objective tool to assess implant electrode position and placement and provide important information, crucial for speech processor fitting.

