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**11.2**

**The effects of superior semicircular canal dehiscence on hearing:**

**Does size of the dehiscence have an impact?**

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Background: Various effects of the Superior Semicircular Canal Dehiscence (SCCD) on hearing have been described. We investigated whether size of the SCCD has any impact on the frequencies in acoustic-evoked electronystagmography (ENG) responses.

Study: Retrospective study of 14 patients who underwent closure of SCCD out of a group of 22 patients with symptomatic SCCD. The stimulator frequencies pre- and postoperatively during acoustic-evoked ENG were compared and shifts in stimulator frequencies recorded. Size of SCCD preoperatively and postoperatively was calculated radiologically and correlated with any alterations of stimulator frequency in acoustic-evoked ENG.

Results: Out of the 10 patients analysed so far, 7 patients showed resolution of symptoms with effacement of the acoustic-evoked stimulator frequency. 3 patients showed recurrence of symptoms between 3 and 6 months postoperatively, out of these 2 showed shift of stimulator frequency to higher frequencies, radiologically incomplete sealing with smaller than initial SCCD was demonstrated, in the remaining 1 patient no shift of stimulator frequency occurred, radiologically complete breakdown of SCCD sealing was evident.

Conclusion: Our results suggest that size of the dehiscence influences the stimulator frequency in acoustic-evoked ENG for SCCD. Size of dehiscence seems to correlate inversely with the level of stimulator frequency, larger dehiscences displaying lower stimulator frequencies