Bone-anchored hearing implants in patients with single-sided deafness: Long term use and differences in satisfaction by gender

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Objective. To examine the long-term satisfaction of hearing rehabilitation and the possible influences of gender in single sided deafness (SSD) patients that underwent bone anchored hearing implant (BAHI) surgery in our clinic.

Methods. All (n = 145) consecutive SSD patients fitted with a BAHI between January 2001 and October 2011 were asked to fill out a postal-based questionnaire consisting of three instruments: the first to examine hearing disability (APHAB), the second to examine coping behaviour (CPHI) and the third to measure daily use and satisfaction with the BAHI (SSD questionnaire). The APHAB scores were compared for 29 patients, studied in 2005 who were implanted between 2001 and 2003.

Results. A total of 23 of the 135 contacted patients (17%) reported discontinuation over an average follow up time of 61.7 months (5 years, 2 months). No significant statistical differences were found in the degree of disability between men and women according to the APHAB. Men and women with a BAHI for SSD seem to cope equally, according to the CPHI. Improvement in quality of life or the appreciation of the BAHI was not influenced by the following factors: gender, age, directional hearing ability, the appearance of the device and handling the device. A total of 3 of the 29 patients implanted between 2001-2003 were lost to follow up, while 18 of 26 patients were still using their BAHI (69.2%) at the mean follow up time of 117 months (9 years, 9 months). In all domains, the mean APHAB scores were not significantly changed at 3 months, 1 year and 10 years after implantation.

Conclusion. Our study showed the results of BAHI use in SSD patients over a relatively long follow up period, with an average of 5 years (spread 2-129 months). Users (83%) were satisfied. No significant gender differences were found in patients with SSD in terms of reported appreciation, disability or coping with a BAHI.