

Sophono Systems in Radical Cavities

Subtotal Petrossectomy with External Blind Sac Closure and Sophono Alpha 1 System

Presented at the Politzer Society Meeting, November 16, 2013 in Antalya, Turkey

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Patients

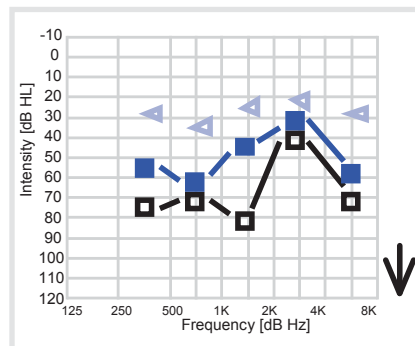
- 10 patients; subtotal petrossectomy and Sophono system application.
- 3 male and 7 female; 5 right and 5 left ears; mean age 49.3 years
- 6 had subtotal petrossectomy for acoustic discomfort due to unilateral hearing loss

Other Parameters

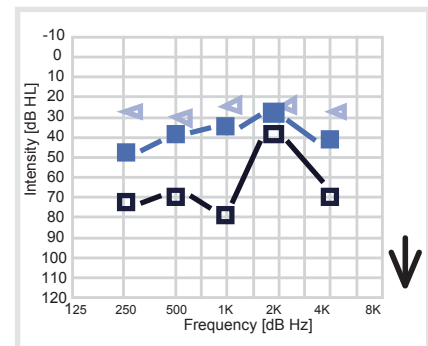
Mean time between subtotal petrossectomy and implantation	29.8 months
Average number of previous surgeries	2.8
Most common middle ear disease	Recurrent chronic otitis

Clinical Results

- No adverse skin reactions, “abutment-related problems,” and no implant losses have occurred. All patients reported positive impact in general health, better social integration, and less psychological discomfort.
- The hearing results showed better outcomes for Sophono vs. conventional bone hearing aids in terms of pure-tone average and speech audiometry.
- Pure-tone averages (PTA) improved by 29.7 dB on average. Speech reception thresholds (SRT) improved 34.1 dB and word recognition scores (WRS) improved by 84.1%.



Performance with a conventional external bone conduction hearing system



Performance with the Sophono Alpha 2 System

Conclusion

- Results in a group of subtotal petrossectomy patients implanted with Sophono were encouraging.