

An Short note on Tinnitus for Cochlear Implant Users

Tushar MD

ABSTRACT

Cochlear implants (CIs) have been reported to help decrease tinnitus while aiding the user's hearing. Initially, she did not seek treatment for her hearing issue as it was considered to be a side effect of her ongoing chemotherapy treatment and Vigilance tasks.

Keywords: Tinnitus; Audiology; Hearing Disorders; Bibliometrics

¹Department of audiology and speech Therapy University of medical Sciences India

*Send correspondence to:
Tushar MD

Department of audiology and speech Therapy University of medical Sciences India. E-mail: gabriel@milley.edu Phone: +1890126128
Paper submitted on April 25, 2021; and Accepted on May 28, 2021

Editorial Note

studies have shown that about 50 percent of CI users remain aware of their tinnitus and about 25 percent still experience troublesome tinnitus. “Interestingly, it is reported that a substantial amount of unilaterally implanted patients with bilateral hearing loss reported their tinnitus to be their primary concern after implantation.

The majority of IAC and cerebellopontine angle (CPA) lesions are benign tumors, such as meningioma and vestibular schwannoma. Less than one percent of CPA lesions involve metastases to the IAC, with the most common sources being breast cancer, lung cancer, gastric cancer, and melanoma. The possible routes of temporal bone metastasis are hematogenous dissemination, direct extension from local preexisting lesions, and leptomeningeal carcinomatosis through CSF spread. Although leptomeningeal carcinomatosis occurs in only five percent of cancer patients, it is being diagnosed with increasing frequency as both patient life expectancy and quality of neuroimaging studies have improved over the years. For metastases involving the IAC, neoplastic spread into the meninges and CSF is generally considered the primary mechanism of bilateral tumor deposits. To address this issue, a recently published study by Remo, van Heteren, and colleagues suggests that sound therapy using common background sounds may relieve tinnitus in some CI users who still experience this problem. The study was split into two phases: first, to determine the acceptability of six natural background sounds for therapy, and second, to determine the efficacy of sound therapy in relieving patient's daily experience of bothersome tinnitus. In both phases, the study's sound therapy strategy used water-based background recordings—Shoreline, Beach Surf, Breaking Waves, Calming Waves, Ocean, and Water Creek—that were played directly from the sound processor of a patients' CIs via an algorithm called Cochlear Active Relief from Tinnitus (CART). Of the 32 participants in the first phase, 30 (93.8 %) found at least one background sound to be “acceptable at their preferred volume” and 19 (58.4 %) found all six background sounds acceptable.