Labyrinthine Venous Vasculature Ablation for the Treatment of Sudden Sensorineural Hearing Loss: Two Case Reports

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Abstract : Objective: To introduce the possible etiological role that the Labyrinthine Venous Vasculature (LVV) has in venous congestion of the cochlear system in Sudden Sensorineural Hearing Loss (SSNHL) patients. Patients: Two patients (62-year-old female, 50-year-old male) presented within twenty-four hours of onset of SSNHL. Intervention: Following failed conservative and salvage techniques, the patients underwent ablation of the labyrinthine venous vasculature ipsilateral to the side of the loss. Main Outcome Measures: Improvement of sudden SSNHL based on an improvement of pure-tone audiometric (PTA) low-tone scoring averages at 250, 500, and 1000 Hz. Word recognition scoring using the NU-6 word list was used to assess quality of life. Results: Case 1 experienced a 51.7 dB increase in low-tone PTA and an increased word recognition scoring of 90%. Case 2 experienced a 33.4 dB increase in low-tone PTA and 60% increase in word recognition score. No major complications noted. Conclusion: Two patients experienced significant improvement in their low-tone PTA and word recognition scoring following the labyrinthine venous vasculature ablation.

Keywords: case report, sudden sensorineural hearing loss, venous congestion, vascular ablation

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