A Case of Idiopathic Bilateral Sensorineural Hearing Loss in which Low Dose Immunosuppressive Therapy and Corticosteroid Therapy were Applied

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There have been recent reports that autoimmune inner ear disease (AIED) has been found in some cases of refractory hearing loss such as idiopathic bilateral sensorineural hearing loss. McCabe first reported that patients with AIED responded to immunosuppressive therapy. Corticosteroid therapy alone is effective in the early phase of AIED, but becomes ineffective in a repeated series and immunosuppressive therapy is recommended in such cases. We experienced a case of idiopathic bilateral sensorineural hearing loss in which corticosteroid therapy was not effective after the recurrence and immunosuppressive therapy was applied, although the presence of the inner ear autoantibodies was not tested. In this case, the immunosuppressive therapy seemed effective for preventing the progression of the hearing loss and for improving the speech discrimination scores. This therapeutic strategy may be indicated in some cases of idiopathic bilateral sensorineural hearing loss which have proved refractory to corticosteroid therapy.

**Keywords**: idiopathic bilateral sensorineural hearing loss, immunosuppressive therapy, autoimmune inner ear disease

References

8) McCabe BF: Treatment of autoimmune inner ear disease.

13) Broughton SS, Meyerhoff WE and Cohen SB : Immune-