Ten Year Prognosis of Low-frequency Hearing Loss
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ABSTRACT

OBJECTIVES: Investigate the clinical course of low-frequency hearing loss (LFHL), typically caused by hydrops, in cases followed up for more than 10 years.

RESULTS: In patients presenting with LFHL, the incidence of acute LFHL without vertigo, occurring at 42.8-65.7 per 100000 persons, was found to be approximately 2-3% of total sensory hearing loss. LFHL may have a lower incidence than that of high-frequency hearing loss (HFHL). LFHL may have signs of cochlear hydrops and postulated as a precursor of Meniere's disease. Not all LFHL cases, however, are caused by cochlear hydrops. Although the long-term hearing outcome of patients with Meniere's disease has been reported, determination of the long-term prognosis of LFHL has received little attention. One study reported that 39 patients with acute LFHL recovered almost completely. However, the lack of attention to the following case scenarios: (1) cases that show complete recovery at first but display hearing fluctuation during the first year; (2) cases with residual hearing loss after initial therapy; (3) cases that progress to high-frequency HL and (4) cases that progress to total-frequency HL. Ten-year outcomes according to initial therapy results and hearing fluctuations during the first year probable experience HFHL or TFHL (100%, 7 of 7 cases). Our data indicate that the long-term prognosis could be predicted by initial therapy results and the occurrence of hearing fluctuations during the first year.

CONCLUSIONS

The hearing of about half of the LFHL patients in our study progressed to HFHL or TFHL within 10 years after LFHL onset. Our data indicate that the long-term prognosis could be predicted by initial therapy results and the occurrence of hearing fluctuations during the first year.

INTRODUCTION

Investigate the clinical course of low-frequency hearing loss (LFHL), typically caused by cochlear hydrops, in cases followed up for more than 10 years.

METHODS AND MATERIALS

In patients with sudden idiopathic sensorineural hearing loss, the incidence of low-frequency hearing loss (LFHL) is known to be better than that of high-frequency hearing loss (HFHL). LFHL may have lower incidence than that of high-frequency hearing loss (HFHL). LFHL may have signs of cochlear hydrops and postulated as a precursor of Meniere's disease. Not all LFHL cases, however, are caused by cochlear hydrops. Although the long-term hearing outcome of patients with Meniere's disease has been reported, determination of the long-term prognosis of LFHL has received little attention. One study reported that 39 patients with acute LFHL recovered almost completely. However, the lack of attention to the following case scenarios: (1) cases that show complete recovery at first but display hearing fluctuation during the first year; (2) cases with residual hearing loss after initial therapy; (3) cases that progress to high-frequency HL and (4) cases that progress to total-frequency HL. Ten-year outcomes according to initial therapy results and hearing fluctuations during the first year probable experience HFHL or TFHL (100%, 7 of 7 cases). Our data indicate that the long-term prognosis could be predicted by initial therapy results and the occurrence of hearing fluctuations during the first year.

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REFERENCES