Isolated Hypoglossal Nerve Palsy Caused by Neurovascular Compression

Masanari Yamamoto, Keisuke Suzuki, Hidehiro Takekawa and Koichi Hirata

Key words: isolated hypoglossal nerve palsy, MRI, slowly progressive course

(Intern Med 50: 2701-2702, 2011)

(DOI: 10.2169/internalmedicine.50.6209)

Picture

An 80-year-old man presented with difficulty in swallowing and speaking which had progressed over one year. Neurological examination revealed right hypoglossal nerve palsy with ipsilateral atrophy (Picture A). Laryngoscopic examination was unremarkable. Slowly progressive dysarthria and dysphagia with tongue atrophy initially indicated motor neuron disease (MND), but needle electromyographic examination did not show neurogenic changes consistent with MND. Brain MRI showed mild deep white matter lesions without

space occupying lesions. Constructive interference in steady state (CISS) MRI showed right vertebral artery compression in the medulla oblongata, which corresponded to the exit of the right hypoglossal nerve (Picture B). The indication for surgical decompression is currently under consideration. Although isolated hypoglossal nerve palsy can be caused by different etiologies (1), neurovascular compression is an important cause, given that microvascular decompression can resolve hypoglossal nerve palsy (2). Physicians should be

aware of the possibility of neurovascular compression in a patient showing isolated hypoglossal nerve palsy in a slowly progressive manner.

The authors state that they have no Conflict of Interest (COI).

References

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