NeuroImage

Title:

Idiopathic hypoglossal nerve laceration detected by high-resolution three-dimensional CISS MRI

Authors:

Ken Sakushima, M.D., M.P.H., Satoshi Terae, M.D., Ph.D*., SachikoTsuji-Akimoto , M.D., Ph.D. , Masaaki Niino, M.D., Ichiro Yabe, M.D., Ph.D., Ph.D. and Hidenao Sasaki, M.D., Ph. D.

Department of Neurology, Hokkaido University Graduate School of Medicine, Sapporo, Japan.

*Department of Radiology, Hokkaido University Hospital, Sapporo, Japan

Correspondence:

I. Yabe, M.D., Ph.D.,

Department of Neurology, Hokkaido University Graduate School of Medicine, Kita-15,

Nishi-7, Kita-ku, Sapporo 060-8638 Japan

Tel: 81-11-706-6028

Fax: 81-11-700-5356

e-mail; yabe@med.hokudai.ac.jp

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A 55-year-old man presented with acute onset dysarthria caused by left hypoglossal palsy. He had neither surgery nor injury. We detected no abnormalities with conventional MRI. Three-dimensional CISS MRI showed curling and thickening of the left hypoglossal nerve and fluid accumulation of the hypoglossal nerve canal (Fig. 1). A systemic survey found no malignancy. After 8 months, sustained left hypoglossal palsy and no change in the MRI led to the diagnosis of idiopathic hypoglossal nerve laceration with evulsion. In such patients the cause of the defect is not always apparent[1,2], three-dimensional CISS MRI may resolve this issue.

Reference

1. Keane JR. Twelfth-nerve palsy. Analysis of 100 cases. Arch Neurol 1996;53:561-6.

2. Combarros O, Alvarez de Arcaya A, Berciano J. Isolated unilateral hypoglossal nerve palsy: nine cases. J Neurol 1998;245:98-100.

Legends

Figure 1

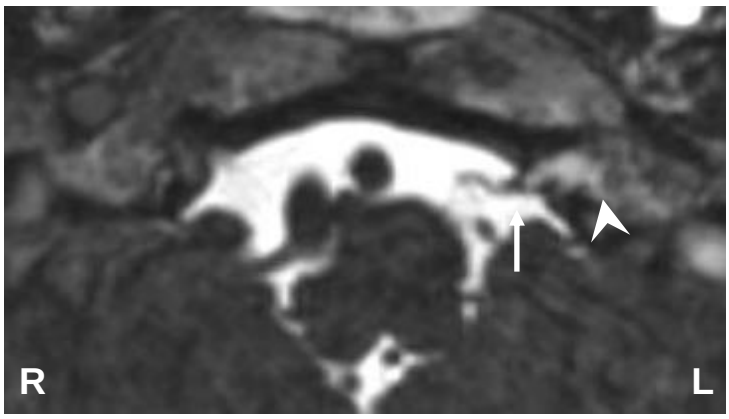
Three-dimensional CISS axial image of left and right hypoglossal nerves

(A); Three-dimensional CISS axial image demonstrated curling and hypertrophy of left hypoglossal nerve (arrow) and fluid accumulation of left hypoglossal nerve canal (arrow head).

(B); Three-dimensional CISS axial image of the normal right hypoglossal nerve and canal (arrow).

Figure 1.

(A)



(B)