

# HOKKAIDO UNIVERSITY

Title	Idiopathic Hypoglossal Nerve Laceration Detected by High-Resolution Three-Dimensional Constructive Interference in Steady State Magnetic Resonance Imaging.
Author(s)	Sakushima, Ken; Terae, Satoshi; Tsuji-Akimoto, Sachiko; Niino, Masaaki; Yabe, Ichiro; Sasaki, HIdenao
Citation	Journal of neuroimaging, 21(2), e177-e179 https://doi.org/10.1111/j.1552-6569.2010.00498.x
Issue Date	2011-04
Doc URL	http://hdl.handle.net/2115/49104
Rights	The definitive version is available at www.blackwell-synergy.com
Туре	article (author version)
File Information	JNeuroimaging21-2_e177-e179.pdf



#### 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

**Disclosure**: The authors report no conflicts of interest.

Key words: hypoglossal palsy, laceration, evulsion, three-dimensional CISS MRI

Word counts of manuscript; 97 words

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 nerve laceration with evulsion. In such patients the cause of the defect is not always apparent<sup>1,2</sup>, three-dimensional CISS MRI may resolve this issue.

### Reference

- 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)

