

# Accepted Manuscript

Abnormal auditory synchronization in stuttering: A magnetoencephalographic study

Yoshikazu Kikuchi, MD, PhD, Tsuyoshi Okamoto, Katsuya Ogata, Koichi Hagiwara, Toshiro Umezaki, Masamutsu Kenjo, Takashi Nakagawa, Shozo Tobimatsu



PII: S0378-5955(16)30168-X

DOI: [10.1016/j.heares.2016.10.027](https://doi.org/10.1016/j.heares.2016.10.027)

Reference: HEARES 7262

To appear in: *Hearing Research*

Received Date: 29 April 2016

Accepted Date: 31 October 2016

Please cite this article as: Kikuchi, Y., Okamoto, T., Ogata, K., Hagiwara, K., Umezaki, T., Kenjo, M., Nakagawa, T., Tobimatsu, S., Abnormal auditory synchronization in stuttering: A magnetoencephalographic study, *Hearing Research* (2016), doi: 10.1016/j.heares.2016.10.027.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

**Abnormal auditory synchronization in stuttering: A magnetoencephalographic study**

*Running title: Increased auditory synchrony in stuttering*

Yoshikazu Kikuchi,<sup>a</sup> Tsuyoshi Okamoto,<sup>b,c</sup> Katsuya Ogata,<sup>d</sup> Koichi Hagiwara,<sup>d</sup> Toshiro Umezaki,<sup>e,f</sup> Masamutsu Kenjo,<sup>g</sup> Takashi Nakagawa,<sup>a</sup> Shozo Tobimatsu<sup>d</sup>

<sup>a</sup>Department of Otorhinolaryngology, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan

<sup>b</sup>Faculty of Arts and Science, Kyushu University, Fukuoka, Japan

<sup>c</sup>Graduate School of Systems Life Sciences, Kyushu University, Fukuoka, Japan

<sup>d</sup>Department of Clinical Neurophysiology, Faculty of Medical Sciences, Kyushu University, Fukuoka, Japan

<sup>e</sup>Voice and Swallowing Center, Fukuoka Sanno Hospital, Fukuoka, Japan

<sup>f</sup>International University of Health and Welfare, Fukuoka, Japan

<sup>g</sup>Department of Special Needs Education, University of Teacher Education Fukuoka, Fukuoka, Japan

**Corresponding author:** Yoshikazu Kikuchi, MD, PhD, Department of Otorhinolaryngology, Graduate School of Medical Sciences, Kyushu University, 3-1-1 Maidashi, Higashi-ku, Fukuoka 812-8582, Japan.

Tel.: +81-92-642-5668; Fax: +81-92-642-5685;

E-mail: kikuci@med.kyushu-u.ac.jp

Download English Version:

<https://daneshyari.com/en/article/5739371>

Download Persian Version:

<https://daneshyari.com/article/5739371>

[Daneshyari.com](https://daneshyari.com)