

[LETTERS TO THE EDITOR]

Involvement of the Abducens Nucleus Results in Adduction Impairment of the Contralateral Eye

Key words: abducens nucleus, internuclear neurons

(Intern Med 58: 2273, 2019)

(DOI: 10.2169/internalmedicine.2466-18)

To the Editor We read with interest the article by Tsukita et al. describing a patient presenting with abducens and peripheral facial nerve palsy in association with pontine infarction (1). According to the schematic depiction of the authors, the pontine lesion seems to involve the left abducens nucleus. However, this article does not mention whether or not adduction of the right eye was impaired in their patient. The abducens nucleus contains not only the abduction motoneurons but also the internuclear neurons involved in the adduction of the contralateral eye (2). The fibers pass through the contralateral medial longitudinal fasciculus before relaying in the oculomotor nucleus in the

midbrain (2). Therefore, if the pontine lesion affected the left abducens nucleus, the patient should present with not only abduction impairment of the left eye but also adduction impairment of the right eye (2).

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

Zen Kobayashi¹ and Yoshiyuki Numasawa^{2,3}

References

1. Tsukita K, Sakamaki-Tsukita H, Suenaga T. Combined abducens and peripheral facial nerve palsy. *Intern Med* **57**: 3223-3224, 2018.
2. Pierrot-Deseilligny C. Nuclear, internuclear, and supranuclear ocular motor disorders. *Handb Clin Neurol* **102**: 319-331, 2011.

The Internal Medicine is an Open Access journal distributed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. To view the details of this license, please visit (<https://creativecommons.org/licenses/by-nc-nd/4.0/>).

¹Department of Neurology, JA Toride Medical Center, Japan, ²Department of Neurology and Neurological Science, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University, Japan and ³Department of Family Medicine, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University, Japan

Received: December 1, 2018; Accepted: February 11, 2019; Advance Publication by J-STAGE: April 17, 2019

Correspondence to Dr. Zen Kobayashi, zen@bg7.so-net.ne.jp

© 2019 The Japanese Society of Internal Medicine. *Intern Med* 58: 2273, 2019