Adult hemimegalencephaly associated with multiple cerebral aneurysms

Figure 1

T2-weighted MRIs showing an increase in the right hemispheric volume (A) and enlargement of the right lateral ventricle (B)



A 45-year-old woman with normal physical and mental development, who had intractable epilepsy since her childhood, had neither cognitive nor neurologic deficits. Her MRI demonstrated right hemimegalencephaly (HME) with an increase in the hemispheric volume and enlargement of the right lateral ventricle (figure 1),



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and dilated arteries. Her angiography confirmed multiple cerebral fusiform aneurysms in the periphery of the right anterior and middle cerebral arteries (figure 2).

HME is reported to be an abnormality in neuronal/glial development/proliferation with diverse gene mutations.1 Although its association with venous abnormalities has been reported,2 its association with aneurysms has never been reported.

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Author contributions: Dr. Kishima: study concept and drafting the manuscript for intellectual content. Dr. Nakamura: revision of the manuscript for intellectual content. Dr. Oshino: revision of the manuscript for intellectual content. Dr. Tanaka: revision of the manuscript for intellectual content. Dr. Yoshimine: study supervision.

Study funding: No targeted funding reported.

Disclosure: H. Kishima is funded by Grants-in-Aid for Scientific Research (T26462207) from the Ministry of Education, Culture, Sports, Science and Technology of Japan and Grants-in-Aid for Scientific Research (KH24AB004a) from the Ministry of Health, Labor and Welfare of Japan. H. Nakamura reports no disclosures relevant to the manuscript. S. Oshino is funded by Grants-in-Aid for Scientific Research (T26462208) from the Ministry of Education, Culture, Sports, Science and Technology of Japan. H. Tanaka is funded by Grants-in-Aid for Scientific Research (T25461821) from the Ministry of Education, Culture, Sports, Science and Technology of Japan. T. Yoshimine served as an editorial board member of Neurologia medico-chirurgica and is funded by the Strategic Research Program for Brain Sciences, Translational Research Network Program, and Grants-in-Aid for Scientific Research (T22390275) from the Ministry of Education, Culture, Sports, Science and Technology of Japan. Go to Neurology.org for full disclosures.

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- Poduri A, Evrony GD, Cai X, et al. Somatic activation of AKT3 causes hemispheric developmental brain malformations. Neuron 2012:74:41-48.
- 2. Sato N, Yagishita A, Oba H, et al. Hemimegalencephaly: a study of abnormalities occurring outside the involved hemisphere. AJNR Am J Neuroradiol 2007;28:678-682.

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Adult hemimegalencephaly associated with multiple cerebral aneurysms Haruhiko Kishima, Hajime Nakamura, Satoru Oshino, et al. *Neurology* 2015;84;2460-2461 DOI 10.1212/WNL.00000000001685

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This information is current as of June 15, 2015

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