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Total Hemispheric Infarction

Zen Kobayashi^{a, b}, Minoru Kotera^c

^aDepartment of Neurology and Neurological Science, Graduate School, Tokyo Medical and Dental University, and
^bTokyo Institute of Psychiatry, Tokyo, and ^cDepartment of Neurology, Tsuchiura Kyodo Hospital, Ibaraki, Japan

Key Words

Internal carotid artery • Posterior cerebral artery • Total hemispheric infarction

An 84-year-old woman suddenly presented with dysarthria and consciousness disturbance. Brain CT on admission demonstrated no hemorrhages but early CT signs in the territories of the

right middle cerebral artery suggesting ischemic stroke. MRA on the next day poorly demonstrated the right internal carotid artery (ICA) and posterior cerebral artery (PCA) (fig. 1a). MRI demonstrated extensive hyperintensities involving the total right hemisphere (fig. 1b–e). We considered that the ICA occlusion resulted in total hemispheric infarction because the territories of the right PCA had been supplied by the right ICA in this patient [1].

Reference

- 1 Jongen JC, Franke CL, Soeterboek AA, Versteeg CW, Ramos LM, van Gijn J: Blood supply of the posterior cerebral artery by the carotid system on angiograms. *J Neurol* 2002;249:455–460.

Dr. Zen Kobayashi
Tokyo Institute of Psychiatry
2-1-8 Kamikitazawa, Setagaya-ku
Tokyo 156-8585 (Japan)
Tel. +81 3 3304 5701, Fax +81 3 3329 8035
E-Mail zen@bg7.so-net.ne.jp

Fig. 1. **a** MRA poorly demonstrated the right ICA and PCA. **b–e** Diffusion-weighted MRI demonstrated extensive hyperintensities involving the total right hemisphere with marked midline shift.