

[PICTURES IN CLINICAL MEDICINE]

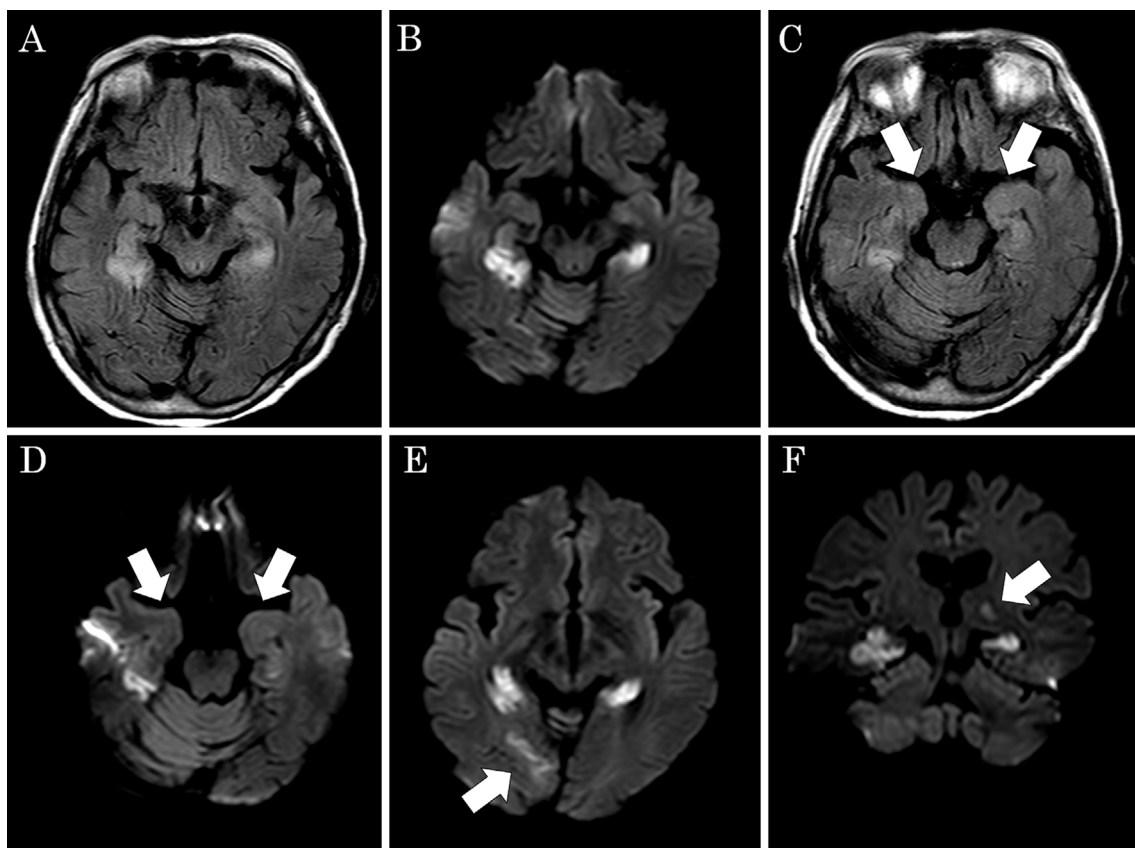
Bilateral Hippocampal Infarction Mimicking Limbic Encephalitis

Satoshi Hosoki, Hitoshi Sato and Sadayuki Matsumoto

Key words: bilateral hippocampal infarction, limbic encephalitis, cardiogenic embolism

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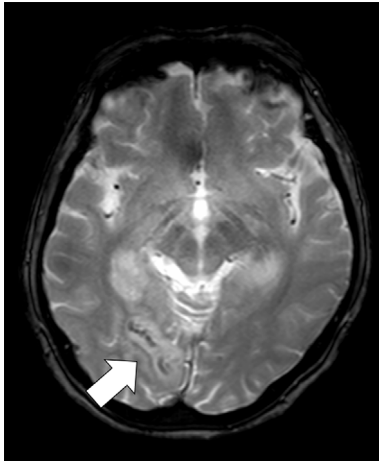
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Picture 1.

A 68-year-old woman with no relevant medical history presented with acute anterograde amnesia without other neurological impairment. Magnetic resonance imaging (MRI) showed high fluid-attenuated inversion recovery (FLAIR) signals with diffusion restriction in the bilateral hippocampus (Picture 1A and B), the right occipital lobe (Picture 1E, arrow) and left thalamus (Picture 1F, arrow), but

not in the amygdala (Picture 1C and D, arrows). The magnetic resonance angiography (MRA) findings were unremarkable. Paroxysmal atrial fibrillation was detected. Echocardiography revealed left atrial dilation and follow-up T2-star MRI revealed a hemorrhagic infarct in the right occipital lobe (Picture 2, arrow). These findings indicated a diagnosis of cardiogenic embolism.



Picture 2.

The reported incidence of bilateral hippocampal infarction is 0.03% (1) and the MRI findings are similar to those of limbic encephalitis, in which the amygdala is also usually

damaged. However, the anterior choroidal artery delivers blood to the amygdala, which is usually preserved in cases of hippocampal infarction, as ischemic lesions occur elsewhere in the posterior circulation (2).

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

References

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2. Szabo K, Forster A, Jager T, et al. Hippocampal lesion patterns in acute posterior cerebral artery stroke: clinical and MRI findings. *Stroke* **40**: 2042-2045, 2009.

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