

Images in Neurosciences

Transient Global Amnesia

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A 65-year-old afebrile female patient was brought to magnetic resonance imaging (MRI) suite, with a history of memory loss for the past 8 h. She spoke fluently but could not recognize her family members and kept asking about her whereabouts. Her neurological examination was otherwise unremarkable. She did not have a history of epilepsy, stroke, similar past episodes, hypertension, dyslipidemia, diabetes, or smoking. Laboratory testing (blood counts, biochemistry, and electrolytes) and electrocardiogram were normal. MRI showed punctuate nearly symmetrical hyperintense foci showing restricted diffusion in the bilateral hippocampal region on diffusion-weighted imaging (DWI) [Figure 1a and b]. Rest of the sequences showed no demonstrable findings. Carotid Doppler and echocardiogram were unremarkable. She recovered spontaneously 24 h after onset of clinical symptoms but was not able to remember events during the period. Diagnosis of transient global amnesia (TGA) was considered. MRI with DWI repeated after 10 days showed no abnormality [Figure 1c].

TGA is characterized by acute onset reversible memory disturbances (usually within 24 h) without alteration of consciousness or personal identity. Possible hypothesis includes ischemia, epilepsy, migraine, and emotional stress.^[1] DWI usually shows restricted punctate foci in CA1 region in the hippocampus.^[1,2] Abnormalities in DWI are highly variable in TGA cases (0%–84%), but it has a benign outcome and does not require any treatment.^[1] However, restricted punctate foci in CA1 region in the hippocampus in appropriate clinical setting

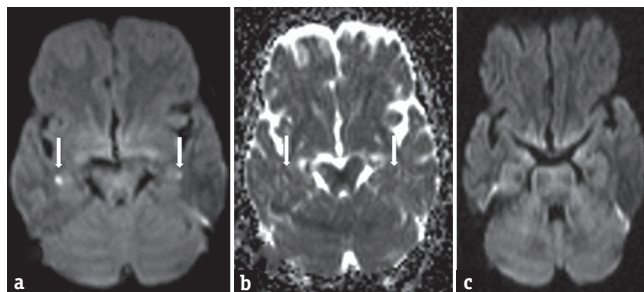


Figure 1: Axial diffusion-weighted magnetic resonance imaging (diffusion-weighted imaging) showed punctuate nearly symmetrical hyperintense foci showing restricted diffusion in the bilateral hippocampal region (a and b). Diffusion-weighted imaging repeated after 10 days showed no abnormality (c)

of anterograde amnesia are a very good pointer toward TGA.

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Conflicts of interest

There are no conflicts of interest.

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