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LETTER TO THE EDITOR

Transient global amnesia and Takotsubo syndrome: would cerebral blood flow brain scan be of any help?

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To the Editor,

The article by Quick et al. [1], published online ahead of print on March 31, 2015 in the *Journal*, about the 57-year-old woman who suffered transient global amnesia (TGA) in the setting of Takotsubo syndrome (TTS), is of great interest because it hints at the possible pathophysiologic underpinnings of TTS [2]. The authors succinctly summarize what is currently known about the pathophysiology of TGA and TTS, both of which continue to be elusive. They refer to the laboratory studies of cranial computed tomography and electroencephalography that the patient underwent, both of which revealed no abnormalities. The authors also state that "although the etiology of TGA remains controversial, there is consensus that the areas involved are the hippocampus and the parahippocampus region" [1]. This brought to mind a recent report by Suzuki et al. [3–5], who assessed cerebral blood flow (CBF) in three consecutive patients with TTS, using (99 m) Tc-ethyl cysteinate dimmer single photon-emission computed tomography, on admission and at follow-up, after the myocardial function had recovered, and found that CBF, as a reflection of the underlying brain activity, is enhanced in the hippocampus, brainstem, and basal ganglia in the acute phase of TTS, and decreased in the prefrontal cortex, with partial normalization of these changes at follow-up. The authors did not perform a 3rd scan to evaluate whether these CBF abnormalities were completely reversed in their patients with TTS [4, 5], or if the abnormalities constitute the baseline for patients probably prone to develop TTS. One wonders whether brain scanning for CBF may be of help in elucidating the pathogenetic basis of TGA.

Conflict of interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

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