

Acute Cerebral Disease Triggering Takotsubo Syndrome

Josef Finsterer, MD, PhD*; Claudia Stollberger, MD

2nd Medical Department with Cardiology and Intensive Care Medicine, Krankenanstalt Rudolfstiftung, Vienna, Austria



In a recent article, Nasr et al. reported about the clinical characteristics and outcome of 34 patients with Takotsubo syndrome (TTS) triggered by cerebral disease and collected during five years from a neurological intensive care unit (NICU) [1]. We have the following comments and concerns.

We do not agree with the statement that little is known about cerebral diseases other than subarachnoid bleeding, which may trigger TTS [1]. There has been an extensive review of the literature about the central nervous system (CNS) diseases triggering TTS [2]. There are also a series of patients with TTS due to seizures or stroke. TTS has also been reported in association with intracerebral bleeding, migraine, encephalitis, traumatic brain injury, posterior reversible encephalopathy syndrome, and amyotrophic lateral sclerosis [2,3,4]. Cerebral disorders described in the present paper have already been previously reported to trigger TTS.

It is unclear if TTS was the indication for admission to the NICU or if the patients experienced TTS during their stay in the NICU. In case they all developed TTS after admission, we should be informed which cardiac manifestations led the treating physicians to suspect TTS. How many of the patients were under artificial ventilation and how was TTS recognised in this cohort?

Article Information

* **Correspondence:** Josef Finsterer, MD, PhD
Krankenanstalt Rudolfstiftung, Postfach 20, 1180, Vienna, Austria.
Email: ffigs1@yahoo.de

Dr. Finsterer and Dr. Stollberger contributed to this paper equally.

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Among the 13 patients with seizures “during hospitalisation”, it is also unclear if seizures triggered TTS or if they occurred after the onset of TTS. In case they were not the trigger of TTS, did seizures worsen TTS?

In the case of the 12 patients with arrhythmias, it would be interesting to know which types of arrhythmias were recorded and if treatment was required. At which stage of TTS did arrhythmias occur? Did arrhythmias trigger TTS in any case?

Three patients died during hospitalisation [1]. Did they die due to complications of the TTS, or due to complications from the neurological disorder, or due to other causes?

To diagnose TTS and rule out myocardial infarction, coronary angiography is necessary. Did all the 34 patients undergo coronary angiography and was the investigation truly normal in all patients?

In the majority of the cases, clinical, electrocardiographic, and echocardiographic manifestations of TTS resolve maximally within 10 weeks [5]. After which period did TTS resolve in the included patients and in how many of the definite TTS cases did the cardiac dysfunction not completely resolve?

Overall, this interesting paper could be more meaningful if more clinical data were added about the diagnosis, treatment, course, and outcome of TTS patients with cerebral triggers.

Keywords

Apical ballooning syndrome; neurogenic stress cardiomyopathy; subarachnoid hemorrhage; Takotsubo cardiomyopathy.

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