Comments on "Reversal of Abulia with Atomoxetine in Unilateral Basal Ganglia Infarct: A Case Report"

To the editor,

read with interest the article by Jha et al. about a 64-year-old female with a small ischemic stroke in the left globus pallidus who subsequently developed abulia. Abulia was treated with atomoxetine, starting at 18 mg/d, with dosage escalating to a maximum of 72 mg/d. Abulia improved with this therapy at one-month follow-up. The study is impressive, but some points require discussion.

The first point is that the etiology and pathophysiology of ischemic stroke have not been reported.1 According to the TOAST classification, stroke pathophysiology is divided into five major subtypes (atherosclerosis, cardiac embolism, small vessel disease, other causes, and undetermined causes).2 Therefore, we should know the cause of stroke in the index patient. Did the patient have carotid artery stenosis, stenosis or occlusion of intracerebral arteries, atrial fibrillation, endocarditis, intraventricular thrombus formation, myocardial infarction, cardiomyopathy, heart failure, or Takotsubo syndrome? Have all causes of primary (hereditary) and secondary (acquired) small vessel disease been completely ruled out? In particular, we should know whether arterial hypertension was well or poorly controlled, whether the patient had experienced a hypertensive crisis before the onset of abulia, whether the HbA1c was normal, whether hyperlipidemia was present, and whether

the patient was a smoker. We should also know whether the patient has developed a hematologic disease or a malignancy.

The second point is that it was not reported whether the patient fully recovered or residual symptoms persisted at the three-, six-, and 12-month follow-ups, which are recommended according to international guidelines. When was atomoxetine completely stopped or replaced with another antidepressive drug? The third point is that unilateral basal ganglia infarction provides a weak explanation for the clinical presentation. Thousands of patients suffer a unilateral basal ganglia stroke but do not develop abulia. What was the explanation as to why this particular patient developed one? What specific condition led to the described clinical picture in this individual patient?

A fourth point is that a SARS-CoV-2 infection or a SARS-CoV-2 vaccination has not been sufficiently ruled out as a cause of stroke and abulia. Since the patient had suffered a stroke and abulia during the pandemic, it would have been imperative to rule out these two causes.

A fifth point is that non-convulsive status epilepticus (NCSE) has not been sufficiently ruled out. Since seizures can be a complication of stroke,³ it would have been imperative to exclude NCSE as a cause of the clinical presentation. The recording of a standard electroencephalogram is recommended, particularly in patients with abulia of unknown cause.

In conclusion, the interesting study has limitations that put the results and their interpretation into perspective. Before attributing abulia to an unilateral globus pallidus ischemic stroke, it is important to consider other causes. In addition, the stroke mechanism needs to be clarified in a patient with abulia due to stroke.

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References

- 1. Jha S and Tiwari M. Reversal of abulia with atomoxetine in unilateral basal ganglia infarct: a case report. *Indian J Psychol Med* 2024; 46(2): 185–187. DOI: 10.1177/02537176231201559.
- 2. Chen PH, Gao S, Wang YJ, et al. Classifying ischemic stroke, from TOAST to CISS. CNS Neurosci Ther 2012; 18(6): 452–456. DOI: 10.1111/j.1755-5949.2011.00292.X.
- Scoppettuolo P, Gaspard N, Depondt C, et al. Epileptic activity in neurological deterioration after ischemic stroke, a continuous EEG study. Clin Neurophysiol 2019; 130(12): 2282–2286. DOI: 10.1016/j. clinph.2019.09.005.

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