

Author Response

Shipra Agrwal¹, Pallavi², Urmila Jhamb³, Romit Saxena⁴**Keywords:** Neuroimaging, Paroxysmal sympathetic hyperactivity, Pediatric intensive care unit.*Indian Journal of Critical Care Medicine* (2024): 10.5005/jp-journals-10071-24703

We thank the authors for showing keen interest in our study and providing insightful reviews. We will attempt to address your concerns below.

We agree that PSH can be associated with hyperthyroidism, hypercorticism, or hyperadrenalism due to stimulation of the sympathetic nervous system, which should have been excluded. However, none of our patients was suffering from any of these uncommon conditions. Our patients were continuously monitored. They did not have clinical features of any cardiac comorbidities such as heart failure, malignant ventricular arrhythmias, atrial fibrillation, myocardial infarction, Takotsubo syndrome (TTS), pulmonary hypertension, or stress cardiomyopathy.

We understand the need for the results of cerebral imaging in our study. Computed tomography (CT) or MRI could be done in 28 cases and in the rest 26 either it was not planned or could not be done due to the sickness of the child. [Table 1](#) summarizes the imaging findings.

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The author has highlighted the importance of the medications as a likely cause of the PSH, however, none of our patients received any cholinergic drugs. About 4–5 of our patients were getting

Table 1: Cerebral imaging details

S.No	Diagnosis	Total cases	CT/MRI findings
1	Meningoencephalitis	11	MRI was done in 3 cases (Normal in 1 and suggestive of herpes encephalitis in 2)
2	Bacterial meningitis	5	CT done was normal in 1, Subdural empyema on USG in one and neuroimaging not done in rest 3
3	Tubercular meningitis	3	Basal exudates and hydrocephalous was seen in all 3 cases
4	Traumatic brain injury	1	Skull fracture and intracranial hemorrhage
5	Stroke	1	Infarct in brain
6	Inborn error of metabolism	2	Normal MRI in both
7	Enteric encephalopathy	3	CT was done in normal in 1 case and not done in other 2
8	NCC	1	Multiple granulomas on MRI
9	Metabolic encephalopathy	1	Neuroimaging not done
10	Intracranial tumors	3	The two cases had posterior fossa mass on MRI and one had Pineal gland tumor on MRI. All cases came to the pediatric intensive care unit (PICU) postoperatively
11	Acute encephalomyelitis	1	Changes of ADEM on MRI
12	Brain abscess	2	Frontal lobe abscess on CT in both
13	Hepatic encephalopathy	1	Neuroimaging was not done as patient was sick to be transferred
14	Dengue encephalopathy	3	Neuroimaging was not done
15	Seizure disorder with status epilepticus	2	CT was normal in one and could not be done in other
16	Transverse myelitis	1	Changes suggestive of myelitis in spinal cord and one calcified nodule in brain
17	Acyanotic congenital heart disease with hypoxic brain injury	1	Hypoxic brain injury on MRI
18	Meningomyelocele	1	Hydrocephalous on CT
11	Uremic encephalopathy	1	MRI was normal
12	Gullen Barre syndrome	5	CT was normal in all
13	Post diphtheritic polyneuropathy	5	Neuroimaging not done

adrenergic agents but we do not have complete data on this. Severe kidney injury causing uremic encephalopathy was found in one patient and the rest had mild-moderate AKI which was not causing encephalopathy. Data on acidosis, alkalosis, and electrolyte imbalances was not recorded in these patients.

We agree that incidence is defined as a number of patients/100,000/year and we have calculated the frequency for only a single center, which does not mean "incidence" per definition. Though many similar studies have used this word.¹⁻³ We also accept there has been a typographical mistake in the discussion section and it should be four patients suffered from meningoencephalitis including bacterial, tubercular, and viral (and not viral meningoencephalitis).

Regarding the discrepancy between the "Data collection" section and the "Outcome variables" section, this outcome (i.e., survival) was mentioned for the sake of completeness of data, and it was not the primary or secondary objective of the study.

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