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CORRESPONDENCE

Eating Epilepsy in an Acute Lymphocytic Leukemia Survivor

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To the Editor: A 15-y-old boy, diagnosed with acute lymphocytic leukemia (ALL) at three years of age, currently in remission, presented with right-sided focal seizures (2–3 episodes/day), with each episode lasting for 1–2 min followed by loss of consciousness. He had these episodes only when he ate, due to which he avoided food intake and had weight loss. No episodes were noted while doing other activities or during sleep. There was no significant family history. He had behavioral disturbances, including aggression and hyperactivity. On examination, he had normal general and systemic examination. Neuroimaging was within normal limits. Electroencephalogram (EEG) revealed focal discharges localizing to the left temporal region. A clinical diagnosis of eating epilepsy was considered and initiated on pre-meal clobazam at 0.5 mg/kg/d and subsequently hiked to 0.75 mg/kg/d. On follow-up, the number of episodes significantly reduced (~1/wk) after four months of treatment initiation and weight gain with adequate food intake.

Eating epilepsy (chewing-induced reflex seizures) is a reflex epilepsy characterized by seizures induced by eating [1, 2]. Reflex eating epilepsy is due to the aberrant hyperconnected network between the higher centers of the brain involved with eating, including sensorimotor, lateral parietal, and insular cortex, resulting in epileptogenesis [3]. Seizures predominantly occur during lunch and dinner [1]. The most frequent semiology noted is focal seizures with impaired awareness (60%), and the most common interictal abnormality is focal epileptiform discharges in the temporal/perisylvian area [1, 4]. Neuroimaging is predominantly normal (70%), and gliosis and peritrigonal hyperintensities are frequent cortical malformations [1]. Eating epilepsy is a feature of *SYNGAP1* mutation [1, 2]. In the Indian subcontinent, heavy carbohydrate-rich meals are considered an important influencing factor [4]. Singh et al. reported a significant reduction in seizure frequency (82%), and 36% were seizure-free to pre-meal clobazam at six months follow-up [4]. The index child had a good response to clobazam.

Declarations

Conflict of Interest None.

References

1. Girges C, Vijiaratnam N, Wirth T, Tjoakarfa C, Idaszak J, Seneviratne U. Seizures triggered by eating - a rare form of reflex epilepsy: a systematic review. Seizure. 2020;83:21–31.
2. Vercellino F, Siri L, Brisca G, et al. Symptomatic eating epilepsy: two novel pediatric patients and review of literature. Ital J Pediatr. 2021;47:137.
3. Gautham B, Chatterjee A, Kenchaiah R, et al. Network alterations in eating epilepsy during resting state and during eating using magnetoencephalography. Epilepsy Behav. 2022;137:108946.
4. Singh P, Bansal AR, More A, Bhuyan S, Garg A. Eating epilepsy in north India: case series and its management. J Epilepsy Res. 2019;9:152–6.

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