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SCIENTIFIC LETTER

Camphor Poisoning: A Rare but Preventable Cause of Status Epilepticus

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To the Editor: A 1.5 y, previously well, male child presented to us with recurrent vomiting and generalized tonic-clonic seizures (GTCS) since 30 min. On admission, the child was afebrile but drowsy (GCS- 10/15). Vital parameters and systemic examination was normal with no focal neurological signs. The child had a repeat convulsion aborted with injection lorazepam followed by phenobarbital loading. Investigations including blood glucose (70 mg %), electrolytes (Na^+ 136 meq/L, K+− 3.5 meq/L), ionized calcium- 1.08 mmol/L, cerebrospinal fluid examination (acellular, protein-32 mg %, glucose – 56 mg%, culture- sterile), computed tomography of head and electroencephalogram were normal. The child had a characteristic aromatic odor from breath and vomitus. On questioning about odor, mother revealed that the child had consumed about two teaspoons of oil used for joint pains about 1 h before. The oil bottle showed camphor as a constituent though concentration remained unmentioned. The child made a complete neurological recovery in 24 h and was discharged on day 3. On follow up at 4 and 12 wk, the child was seizure free.

Camphor is a common household product which can cause seizures in children following ingestion, inhalation and dermal exposure [1]. Although, the exact mechanism of camphor induced seizures is unknown, it is believed to be at neuronal level upon the oxidation cycle of the cytochrome oxidase system leading to rapid oxidation and depletion of high energy phosphorous compounds [2]. GTCS are usually the first sign of neurotoxicity [3]. Treatment is supportive with emphasis on airway management and control of seizures. Induction of emesis or gastric lavage are not recommended as camphor is rapidly absorbed [3].

Our case highlights two important facts. Firstly, camphor toxicity remains an important but under recognized cause of seizure among children. U.S FDA has restricted camphor content in medicinal products to <11 % [4]. However, in India, camphor products continue to be sold over the counter without labeling its concentration or caution regarding its potential harm. Such practices should be strongly discouraged by community education and appropriate legislation. Secondly, all health care providers should be made aware about camphor toxicity when evaluating seizures in a child with no other risk factors.

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