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Case Report

Camphor induced status epilepticus: a case report

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ABSTRACT

Camphor is very toxic compound, which can be fatal for infants and children even if ingested in very small doses. Around 3-5 ml of 20% camphor oil or >30mg/Kg is a potentially lethal dose. Camphor is used very frequently for house hold purposes. The chances of accidental ingestion by children are high particularly in toddlers. Here author report 2 years old previously well child brought with status epilepticus with no apparent trigger. Child required benzodiazipine, phenytoin and levetiracetam loading for seizure control and was ventilated. Complete evaluation for seizure cause was planned post stabilization, but during intubation camphor odour was noticed and parents accepted a possibility of camphor ingestion. Hence seizure was attributed to camphor toxicity. Further evaluation was withheld. Child had no seizure recurrence and AED was stopped prior to discharge after documenting normal neurological examination and EEG. This case highlights the need for considering camphor poisoning as a cause of status epilepticus in the toddler age group and importance of proper enquiry about possible exposure and complete examination including odour in all cases of unprovoked seizures in children which can help us avoid unnecessary investigations searching for the cause of status epilepticus.

Keywords: Camphor poisoning, Status epilepticus

INTRODUCTION

Camphor is very toxic compound, which can be fatal for infants and children even if ingested in very small doses.[1,2] Around 3-5 ml of 20% camphor oil or >30mg/Kg is a potentially lethal dose.[3,4] Camphor is a substance which is used very frequently for house hold purposes. It is used for religious purposes in solid form and is also a component of many over the counter pain and cold medications.

The chances of accidental ingestion by children are high due to their tendency to explore and to put things in their mouth. It manifests with gastro intestinal symptoms and neurotoxicity in the form of seizures. Here we report a case of prolonged status epilepticus following accidental camphor ingestion.

CASE REPORT

A 2 years girl presented to the ER with generalized tonic clonic seizures. She had no history of fever, vomiting, head injury, drug ingestion or recent immunization. She was previously well with no perinatal asphyxia or neonatal infection. She was developmentally normal and had no family history of seizure.

On examination there were no neurocutaneous markers or dysmorphism. Blood counts, serum electrolytes and blood sugar were tested, and neuroimaging and CSF analysis were planned post stabilization. She was given intravenous lorazepam followed by phenytoin loading but seizure persisted. She was then loaded with levetiracetam after which the seizure subsided. Child had to be intubated due to respiratory failure. During intubation camphor odour was identified and after probing, parents

said that there was a possibility of camphor ingestion as they have seen her playing with camphor frequently.

There were no recurrence of seizure and child was extubated after 4 hours. Blood counts and electrolytes were normal and further investigations were withheld as we had a cause for the seizure. She recovered completely. EEG was normal, and the anticonvulsants were stopped prior to discharge. She is asymptomatic until 3 months follow up.

DISCUSSION

Accidental poisoning is common in toddlers. Camphor is readily available in Indian households as it is used for religious purposes and is also present in varying amounts in many over-the-counter cold and topical pain relief medications. Most of the camphor poisoning occurs accidentally and is usually following ingestion. However, there are reports of camphor toxicity following inhalation or topical application of camphor containing medications.[5]

Camphor is rapidly absorbed in the intestine and hence symptoms usually develop within half an hour of ingestion. Camphor is toxic to liver and brain.[6,7] There are reported cases with postmortem changes of severe anoxia in the neurons. It acts intraneurally affecting the oxidation pathway.[8,9] The usual symptoms are nausea, vomiting, restlessness, confusion, ataxia and convulsion. Death from camphor poisoning results from respiratory failure and status epilepticus.[10] Owing to its rapid absorption there is no role for activated charcoal and gastric lavage.

Treatment is supportive with removal of further exposure by means of removal of clothes and washing skin if the exposure was topical and management of seizures with benzodiazepines and maintaining airway if required. Usually seizure responds after single dose of benzodiazepine.

CONCLUSION

This case highlights the need for considering camphor poisoning as a cause of status epilepticus in toddlers and importance of proper enquiry about possible exposure and complete examination including odour in all cases of unprovoked seizures in children. Detailed history and examination can avoid the need for unnecessary investigations searching for the cause of status epilepticus.

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