Unusual Poisoning: Wild Berries
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Abstract
Poisoning is one of the common presentations in paediatric emergency. Common poisons encounter in paediatric age group are organophosphate, Kerosene, wild plants like Datura etc. But wild berry poisoning is less common. Coriaria Nepalenesis is a wild berry found in northern India and elsewhere in South Africa, china, japan and northern Africa. It had sweet fruit contain glycoside named Coriamytrin and TUTIN both act on grey Matter of cerebral cortex and cause convulsion. Children attract more towards the colourful wild berries. Some berries are toxic and cause minor GI discomfort, giddiness, seizure and even may lead to death. We, hereby report 18 cases of wild berry poisoning presenting to paediatric emergency of Indira Ganhi Medical College, Shimla. Children were between the age of 5 to 17 years. Most common presenting complaints was vomiting which was present in all the cases, 8 had altered mental status while rest 10 had generalised seizures. All children had history of consumption of wild berries accidently 2 to 4 hours before presenting to the emergency. All children had normal metabolic profile at the time of admission. Convulsions were aborted with Injection midazolam and Injection phenytoin. All were improved after 24 hours and none of them had any complication at the time of discharge. As the children had attitude to try and seek new things they are vulnerable for the exposure of poisonous wild fruit ingestion. Knowledge among children and society may decrease these incidences.

Keywords: Poisoning, paediatric, Coriaria Nepalenesis, Coriamytrin.

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Discussion

Cases of accidental poisoning are not uncommon among the children in all over the world [1]. The incidence of accidental poisoning varies widely ranging from 0.33% as reported by Satpathy et al., [2] and 5 to 7.64% by Buhariwalla et al., [3] Accidental ingestion of plant poisons like datura, caster seeds has been well known in India [4]. In children the major factors involved in accidental poisoning are the inexperienced child, a toxic agent, an unsafe environment, ignorance of the parents and impulsive attitude of the child to try and seek new things. Although the samples were not sent for chemical analysis to find out the toxin present in it but the plant (leaves and fruit) was brought to emergency by parents identified by the parents was a bushy plant Coriaria Nepalensis belong of the Family Coriariaceae, an exotic angiospermus grown as an ornamental in Himachal Pradesh, Kashmir & elsewhere in South Europe, South America, China, Japan, North Africa & New Zealand. The earliest reference with respect to the description of this plant has been recorded in 1773 in New Zealand when two sheep were found to be dead after the consumption of this plant [5]. Since then the plant has been extensively studied in New Zealand, China & Nepal for its varied properties of poisoning. The earliest symptoms of poisoning recorded in humans were vomiting, giddiness, delirium, stupor, coma, convulsions & death. Coriaria nepalensis was most common in sub Himalayan region, many other species was found worldwide like C thymifolia, C ruscifolia. & C.myrtifolia [6,7]. Various poisons were isolated from these plants out of which TUTIN was extensively studied. It is a potent neurotoxin leads to convulsion and even fatal at high doses. TUTIN is poisonous in small doses (0.01gm) & causes convulsions & is fatal in about 5 hours if untreated [8, 9]. Riban also isolated a glycoside named Coriamyrtin from the plantit is also a potent neurotoxin act on grey matter and lead to convulsion [10].

Recommendation

IEC activity should be done to educate parents and children not to consume these kinds of wild berries. The use of these plants as ornamental plant should also be discouraged.

References

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