

DHATURA POISONING : A CASE REPORT

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SUMMARY

An unusual case of accidental poisoning with Datura seeds (sp. Datura stramonium; Syn: Thorn apple) is reported. Its clinical features are essentially due to its peripheral anticholinergic actions and are briefly discussed.

CASE HISTORY

A seven-year-old boy was brought to Hospital Universiti USM with a history of having ingested a wild fruit six hours before admission.

The history was that the child became agitated and restless and had a generalised fit within minutes after ingesting the fruit.

On examination, the child was mildly febrile (38.5°C), restless with a blood pressure of 110/70, apex beat 110/min. Respiration was normal. The face was flushed and the pupils dilated. He had disorientation, incoherent speech, auditory and visual hallucinations. He was also found to have hair-picking movements of the hands. His mouth and skin were dry, and bladder was not palpable.

The child was diagnosed to have Datura poisoning on the basis of the clinical signs. A gastric lavage confirmed the presence of Datura seeds (Fig. 1).

The child was treated symptomatically with antipyretics and diazepam, and he made an uneventful recovery and was discharged on the third day after admission.

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DISCUSSION

Datura (Thorn apple) is a commonly seen wild fruit in the jungles of Malaysia. However, poisoning with this fruit is unusual, and this is the first reported case of Datura poisoning in the Malaysian literature to our knowledge.

The fruit is spherical and has sharp spikes (Fig. 2). The seeds appear like chilli seeds, but are bigger, brownish-coloured and are kidney-shaped. Both the fruits and seeds are toxic. The active principle is daturine and contains an alkaloid laevoscyamine, hyoscyne or scopolamine and traces of atropine. The alkaloids of Datura act centrally and peripherally, resulting in anticholinergic manifestations.

The onset of action can be immediate. The presentation is colloquially described as "dry as a bone, red as a beet, blind as a bat, hot as a hare and mad as a wet hen".¹ The symptoms and signs include: dry mouth, dysphagia and thirst; flushed face with dilated pupils and loss of accommodation; fever, and dry and hot skin; vomiting, giddiness and unsteady gait; confusion, delirium and violent behaviour; auditory and visual hallucinations; appear to grasp at imaginary objects and cloth-picking movements; drowsiness and coma; and finally, death due to respiratory paralysis.

Fatal dose is 100 to 125 seeds. Each fruit, on an average, contains about 500 seeds. In the absence of a proper history of ingestion of the fruit in children, the condition is likely to be confused with viral encephalitis or Reye's syndrome.²

The immediate treatment consists of stomach-washouts. Injections of pilocarpine and subcutaneous prostigmine are helpful to alleviate peripheral anticholinergic symptoms. In children, the

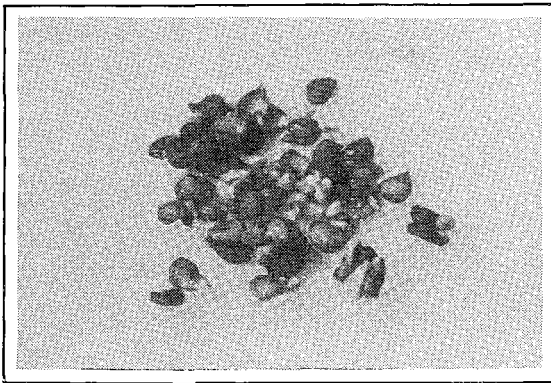


Fig. 1 Datura seeds resemble chilli seeds, only that they are bigger, brownish-coloured and kidney-shaped.

central symptoms are relieved by frequent I/V injections of 0.5 mg physostigmine.³

REFERENCES

¹ Parikh C K. *Parikh's Textbook of Medical Jurisprudence*. Bombay: Medical Publications 1979: 894-898.

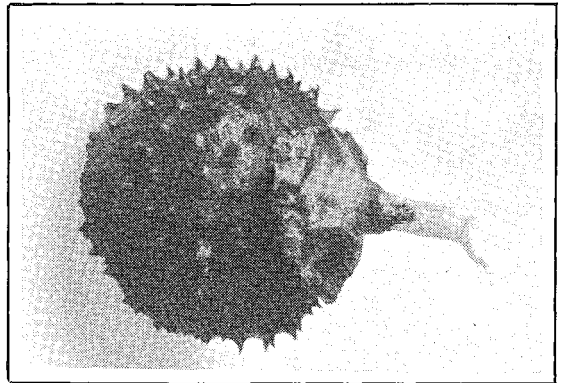


Fig. 2 The Datura fruit is spherical with sharp spikes.

² Godfrank LR, Melinek M. Loeoweed and other anticholinergics. In Godfrank LR (Ed). *Toxicologic Emergencies*. New York: Century Crofts 1982: 75-84.

³ Hall RCW, Popkin MK, McHenry LE. Angels trumpet psychosis: A central nervous system anticholinergic syndrome. *Am J of Psychiatry* 1977; 134 : 312-314.