

A CASE OF ANTICHOLINERGIC INTOXICATION DUE TO ACCIDENTAL DATURA STRAMONIUM INGESTION

G. COSTANTINO, L. AIROLDI, M. DI STEFANO, P. MELZI, E. TAGLIABUE, A. TETTO, M. VACCARO, A. SALMAGGI

Department of Neurology, San Leopoldo Mandic Hospital, Merate (Lecco)

Datura stramonium (DS) is a hallucinogenic plant that can produce anticholinergic toxicity because of its significant concentrations of toxic alkaloids, such as atropine, hyoscyamine, and scopolamine. DS grows sporadically in rural areas in Europe, Asia and North America, but also in suburban areas. It has been used voluntarily by teenagers for its hallucinogenic effect. Clinical findings are similar to those of atropine toxicity and include tachycardia, hyperthermia, dry skin, mydriasis, delirium ('hot as a hare, red as a beet, dry as a bone, blind as a bat and mad as a hatter').

Treatment is supportive, within the first few hours from ingestion gastric lavage or activated charcoal may be administered. Antidotal therapy, Physostigmine, should be reserved for the most severe cases because of its side effects.

We report the case of a 51 year-old female patient who was admitted to Emergency Department with extreme agitation, disorientation, slurred speech, artual tremors, mild hyperthermia and bilateral fixed mydriatic pupil. The earliest symptoms were confusion and xerostomia, onset was acute. Serum glucose level, blood count, biochemical parameters were within reference ranges. No intracranial pathologic findings were detected on computed cranial tomography. Cerebro-spinal fluid was normal. An electroencephalogram documented normal electrical activity.

An interview was conducted on the patient's relatives, who reported accidental ingestion of unspecified seeds found while on a trekking expedition, approximately 3 hours before clinical presentation. The seeds were later identified as DS seeds. The patient would later declare that she believed the seeds to be coming from the mixed seed bread she brought for her expedition. The patient was administered intravenous midazolam infusion for 12 hours and a complete regression of neurological symptoms was observed within the next 24 hours.

Conclusions

Although accidental DS poisoning is rare, it is important to consider it when evaluating a patient with acute delirium associated with clinical findings suggestive for an anticholinergic syndrome. Accidental ingestion of either unusual seeds or plants should be investigated, and the material ingested should be queried and identified whenever available, before submitting the patient to unnecessary tests and treatments.

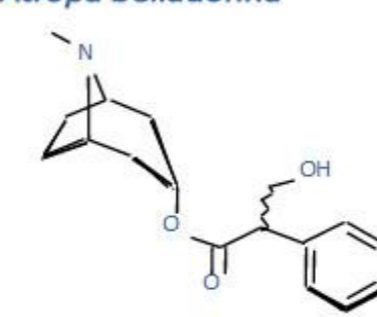
References

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ANTAGONISTI MUSCARINICI



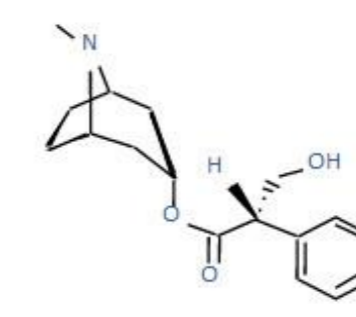
Atropa belladonna



ATROPINA



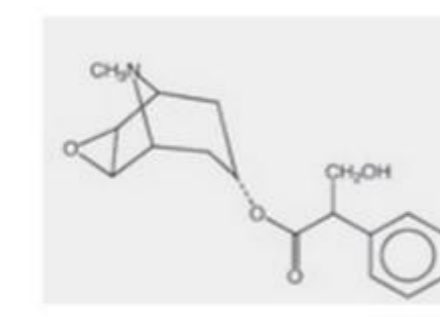
Hyoscyamus niger



IOSCINA



Datura stramonium



SCOPOLAMINA



Datura Stramonium seeds

