

Acute Delirium with Anticholinergic Toxidrome from *Datura stramonium* Ingestion

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Introduction

Datura stramonium (DS), more commonly known as Jimson weeds, Devil's Trumpet or Kecubung, is a wild plant containing various alkaloids including atropine, scopolamine and hyoscyamine, which have both hallucinogenic and anticholinergic properties. Ingestion of its seeds, flowers, roots, or the entire plant can lead to acute delirium with anticholinergic toxidrome.

Datura stramonium



Plant

Fruit

Matured seeds

Case Report

We report a 60-year-old male with underlying gouty arthritis who presented to Emergency Department with sudden onset of disorientation, blurring of vision, generalised lethargy, and urinary retention. His GCS was E4V5M5, BP 155/81 mmHg, HR 92 bpm, temperature 37°C, SPO2 100% under room air. Stroke protocol was initially activated however he did not have definite focal neurological deficit. His pupils were dilated but reactive. There was no facial asymmetry, reflexes were normal with bilateral down-going plantar response. Urgent CT brain and angiography were normal.

He was agitated and clinically dehydrated with lactate 2.4 mmol/L, intravenous fluid was administered. Urine toxicology screening in ward was negative for opioid, amphetamine, benzodiazepine, and tetrahydro-cannabinol. His electrocardiogram showed sinus rhythm, no prolonged PR interval, bundle branch block or ischaemic changes. His liver function, kidney function and blood gases were within normal. With supportive management, he had regained full consciousness after 12 hours from the presentation. He recalled experiencing visual hallucinations and restlessness 3 hours after ingesting 10 raw seeds of DS (recommended by his friend as traditional use for renal protection). He experienced dissociation sensation but no loss of consciousness. He was fit to be discharged after consulted neurology team and was informed on the potential serious adverse effects of DS.

Discussion

Studies have shown that one DS seed contains approximately 0.1mg of Atropine³. DS toxicity usually occurs within 60 minutes after ingestion and symptoms may persist up to 24 to 48 hours due to delayed gastric emptying³. This patient presented with signs of anticholinergic toxidrome as shown.



Blind as a Bat (Blurring of vision)



Dry as a Bone (Clinically dry, lactate 2.4)



Mad as a Hatter (Delirious, hallucinations)



~~Red as a Beer~~ (No facial flushing)



~~Hot as a Hare~~ (No fever)

With adequate hydration and symptomatic relief, the patient recovered completely. This is similar to most of the reported cases described in the literature which have good prognosis after given supportive treatment.^{1,2}

Conclusion

Clinicians should have a high index of suspicion of *Datura stramonium* poisoning when encountering a delirious patient with anticholinergic toxidrome. Early recognition and symptomatic treatment is the mainstay of therapy.

Acknowledgement

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References:

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