

A rare case report of adult dumb cane poisoning

BS Ramesh¹, Arjun H^{2,*}, Hina Mehra³

¹Senior Consultant, ³Associate Consultant, Dept. of Internal Medicine, Apollo Hospital, Bangalore

***Corresponding Author:**

Email: arjun.hosalli@gmail.com

Abstract

This is a case of 40yrs old male patient who presented with h/o consumption of the stem of the plant, with clinical features of swelling of mouth, face, lips leading to asymmetry of the face, difficulty in talking and change of voice. This was easily mistaken for angioedema/ an anaphylactoid reaction due to unknown plant which later identified as dieffenbachia.

Introduction

Dumb cane (botanical name → Dieffenbachia) is commonly found decorative plant in homes, offices and waiting rooms. It can be consumed accidentally by pets and / or children and rarely by adults who may mistake the stem for either sugar cane / cucumber / for any other vegetable.

Its common names are ‘Dumb cane’, ‘leopard lily’, ‘mother in law’s tongue’, ‘tuft root poison’ etc. is because of the local toxic effects of the juice of the plant which causes temporary inability to speak.⁽¹⁾

This case is presented because of its rarity in adults and as not much medical literature available on the subject.

Case Report

A 40yr male presented with alleged h/o consumption of unknown slice/piece of cucumber, following which he spit that because of weird taste. Within minutes he developed swelling of mouth, lips, face and also burning sensation of mouth, difficulty in talking and change of voice but no breathing difficulty. Immediately patient was taken to the local hospital and referred to Apollo hospital as there was no improvement.

On examination there was swelling of lips, cheek, tongue, redness, facial asymmetry (as there was swelling at the angle of mouth), difficulty in protruding tongue and dysarthria.

Treatment was started empirically thinking that patient could have had angioedema OR any food allergy OR any local irritant mixed in the food (cucumber) and was treated with hydrocortisone IV, anti-histamines IV, adrenaline IM, dexamethasone IV. Patient improved symptomatically on the next day, steroids were stopped and when attenders brought the piece which was consumed, they found it to be as DUMBCANE. Later patient developed 2 ulcers on the tongue for which he was treated conservatively and the patient was discharged after partial recovery.



Discussion

Dieffenbachia is a perennial herbaceous plant with straight stem, simple and alternate leaves containing white spots and flecks (leopard lilly), these are popular attractive decorative plants which can be grown in shade. Additionally it has been attributed to be an indoor air purifier.

Dieffenbachia was named by Heinrich Wilhelm Schott, director of the Botanical Gardens in Vienna to honor his head gardener Joseph Dieffenbach (1796–1863).

The active part is the juice present in the stem and leaves. The toxic effects are attributed to needle shaped crystals of calcium oxalate called ‘raphides’ and asparaginase, a protein which potentiates histamine production. Calcium oxalate which has local inflammatory property on the exposed surfaces like mouth, tongue, hands and skin causing intense numbing, oral irritation, excessive drooling, and localized swelling.⁽²⁾ These effects are rarely life threatening and can be treated.⁽³⁾

This accidental consumption occurred as he got confused by seeing the shaven stem for cucumber which produced local inflammation which later precipitated to form ulcer. It is natural for a medical professional to call it angioneurotic edema and initiate treatment accordingly.

The treatment remains symptomatic and observation for glottis edema and there is no described specific antidote for this.

Conclusion

1. As the plant is commonly seen in and around us in our day today living area, we should be knowing about the plant and its toxic/life threatening effects.

2. As children are more prone for accidental consumption, it should be kept out of reach of children and also it should be educated to the adults who are in and around the circumstances.

Prevention

1. By keeping out of reach of children and pets.
2. By knowing about the plant.
3. By not keeping the plant in the surroundings, if at all using it, then to wear gloves while handling the plant.

References

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