

Assessment of Effects on Health Due to Consumption of Bottle Gourd Juice

Avikal Sharma¹, Priya Govil², Kishalay Datta³, Aisvarya Girotra⁴, Anand⁵

Author's Affiliation:

^{1,4}MEM Resident, ²Associate Consultant, ³HOD Senior Consultant, ⁵DNB Resident, Department of Emergency Medicine, Max Hospital, Shalimar Bagh, New Delhi 110088, India.

Corresponding Author:

Priya Govil, Associate Consultant, Department of Emergency Medicine, Max Hospital, Shalimar Bagh, New Delhi 110088, India.

E-mail: drpriyasharma5@gmail.com

Received on 30.12.2019

Accepted on 01.02.2020

Abstract

A 48-year-old male came in ER with c/o hematemesis with bloody diarrhea with severe pain abdomen and vomiting after consuming bottle gourd juice. The patient was resuscitated and stabilized with IV fluids, proton pump inhibitors and anti emetics and shifted to ICU under gastroenterology team for urgent endoscopy and further management and evaluation.

Keywords: Bottle gourd (*Lagenariasiceraria*); Cucurbitaceae.

How to cite this article:

Avikal Sharma, Priya Govil, Kishalay Datta, et al. Assessment of Effects on Health Due to Consumption of Bottle Gourd Juice. *Indian J Emerg Med.* 2020;6(1):31-32.

Introduction

Bottle gourd (*Lagenariasiceraria*) is an edible plant in the Cucurbitaceae family. Popularly known as *lauki*, *ghia*. When extremely bitter, ingestion of bottle gourd can cause rapid onset loose stools, vomiting, gastrointestinal bleeding, and hypotension due to release of a substance named Cucurbitacin. Its consumption is advocated by traditional healers for diabetes mellitus, hypertension, liver disease and weight loss bottle gourd belongs to Cucurbitaceae family, which contains toxic tetracyclic triterpenoid compounds called cucurbitacins which are responsible for bitter taste. There is no specific antidote for this toxicity and clinicians treat such cases symptomatically only.¹⁻⁴

Case Study

A 48-year-old male came in ER with c/o

hematemesis with bloody diarrhea with severe pain abdomen and vomiting after consuming bottle gourd juice. The patient was resuscitated and stabilized with IV fluids, proton pump inhibitors and anti emetics and shifted to ICU under gastroenterology team for urgent endoscopy and further management and evaluation.

Physical examination, conscious, oriented, vitally: Pulse: 110/min, BP: 110/70 mm Hg, RR:22/min, Temperature: afebrile, Sp:99% on room air, abdominal examination reveals generalized tenderness was present. Neurological, Cardiovascular, respiratory examinations were insignificant. Endoscopy reveals gastroduodenal erosions, labs TLC counts 12000, RBC-6.29, HB-16.3, ALP-155, SGOT-1228, SGPT-1046.

Patient was treated in ICU with iv fluids, proton pump inhibitors, broad spectrum antibiotics, probiotics and has been discharged in stable condition after 4 days.

Course in the Hospital and Outcome

After initial management and resuscitation and Endoscopy done which shows gastroduodenal erosions, labs TLC counts 12000, RBC-6.29, HB-16.3, ALP-155, SGOT-1228, SGPT-1046.

Discussion

Consumption of glass of bottle guard juice is thought to work as a health tonic and part of traditional healthy living practices in India. The juice may in certain circumstances turn bitter with high level of cytotoxic compounds called cucurbitacin it causes toxic effects in gut, leading to pain abdomen, vomiting, hematemesis and hypotension which may rarely fatal especially person with pre existing comorbidities.

Conclusion

Why should an emergency physician be aware of bottle gourd juice toxicity. This is because it is fatal condition if not treated earlier. An early diagnosis and treatment of bottle gourd juice toxicity is important as a delay in the correct diagnosis

is known to increase the risk of morbidity and mortality.

It has been reported that initial proper medical history, signs and symptoms, blood analysis and endoscopy can give more accurate information about the exact position of the gut involved which can be treated appropriately before complications develop.

References

1. Judith E. Tintinalli, J. Stephan Stapczynski, O. John Ma, et al. Cline. Tintinalli's Emergency Medicine, 8th ed. United States: McGraw-Hill Education; 2016.
2. Rosen's Emergency Medicine: Concepts and Clinical Practice, 9th edition, Ron Walls, Robert Hocksburger, Marianne Gausche Hill, 2017 edition.
3. Moussaissa book of emergency medicine, 2nd edition, Tina Cardoza, Nasir, Zain, Russel hall, 2019 edition.
4. Oxford handbook of emergency medicine, 4th edition, J.P. Wyatt, R.N. Illingworth, C.A. Graham.