Case Report

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Esophageal Corrosion after Drinking a Dangerous Cocktail

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Abstract

Background: Unintentional ingestion of a corrosive acid or alkali is rampant in India due to inadequate legislature that regulate the sale of such substances. While all esophageal corrosives are due to acid and alkali chemicals used in materials, very few cases have been attributed to drinks and none to a cocktail. **Case description:** This report describes one 34-year-old male who presented to the emergency medicine department with a history of burning sensation in the chest for 2 days. The patient was a known alcoholic and had consumed a mixture of country liquor, energy drink and "Shirka" (a form of Indian Vinegar). Six hours following the ingestion, the patient started developing dyspepsia and abdominal discomfort. He experienced dysphagia and occasional bouts of severe chest pain. Upon endoscopy of the upper GI tract, a diffuse esophageal ulceration along the entire length of the esophagus along with the hypopharynx was observed. **Conclusion:** This case highlights the importance of understanding the risks associated with consuming alcohol and other substances in combination.

Keywords:

Esophageal corrosion, Endoscopy, Esophageal ulcer, Country Liquor

Introduction

Corrosive injuries to the esophagus are a devastating injury which carries significant morbidity. Liquids with extremes of pH of acid or alkali are corrosive and severely injure the Upper Gastro-intestinal Tract (UGIT). The severity of injury depends on the following aspects ie: the concentration of agent, the amount consumed, the duration of tissue contact, and the pH of the agent [1]. Unintentional ingestion of a corrosive acid or alkali is rampant in India due to inadequate legislature that regulate the sale of such substances. In the acute stage of corrosive injury, the endoscopy may reveal linear ulcers and necrosis in the esophagus closely followed by bleeding form the ulcers [2]. In the chronic stage, endoscopy images show esophageal stricture after 3 months of corrosive injury.

According to a review article on corrosive substances ingestion, corrosive chemical substance ingestions are a public health problem not just in developing but also developed countries [3]. Intake of the liquid may be intentional as seen in suicide attempts (mostly observed in adolescents and adults) or unintentional/accidental (mostly observed in children). The term "corrosive" rather than "caustic" is used in this report as it is more inclusive of the totality of chemical ingestions that can cause acute injury to the GIT.

Complications include but not limited to GIT (esophagus, stomach, pylorus, and duodenum) stricture formation, GI tract perforation, and hemorrhage. Systemic complications occur often late, such as disseminated intravascular coagulation (DIC), multi-organ system failure, and sepsis [3]. Esophageal reconstruction is to be performed in those patients having had emergent esophageal resection and for those who developed esophageal strictures not responsive to dilation.

Case Description

A 34-year-old male presented to the emergency medicine department with the history of burning sensation in the chest since 2 days. Vitals on examination were within the normal limit. Airway was clear, breathing tachypneic and circulation normotensive. The patient was a known alcoholic since many years. ECG of the patient was normal. Upon detailed history it was revealed that the patient had consumed a mixture of country liquor, energy drink and "Shirka" (a form of Indian Vinegar) **(Figure 1).** 6 hours following the ingestion patient started developing dyspepsia and abdominal discomfort. He has experienced dysphagia and occasional bouts of severe chest pain. It was understood that he had never consumed this cocktail previously and was done only as a part of a bet. Troponin levels of the patient were reported normal and the patient was sent for an endoscopy of the upper GI Tract. Endoscopy suggested a diffuse Esophageal ulceration along the entire length of the esophagus along with the hypopharynx **(Figure 2).**

Fundus, cardia, body and the antrum of the stomach appeared normal. The patient was managed conservatively with sucralfate 1 g QID and was called for a follow-up after 3 months to look for strictures.

Discussion

The treatment of the patient early can always reduce the tissue damage. However, improper management of acute

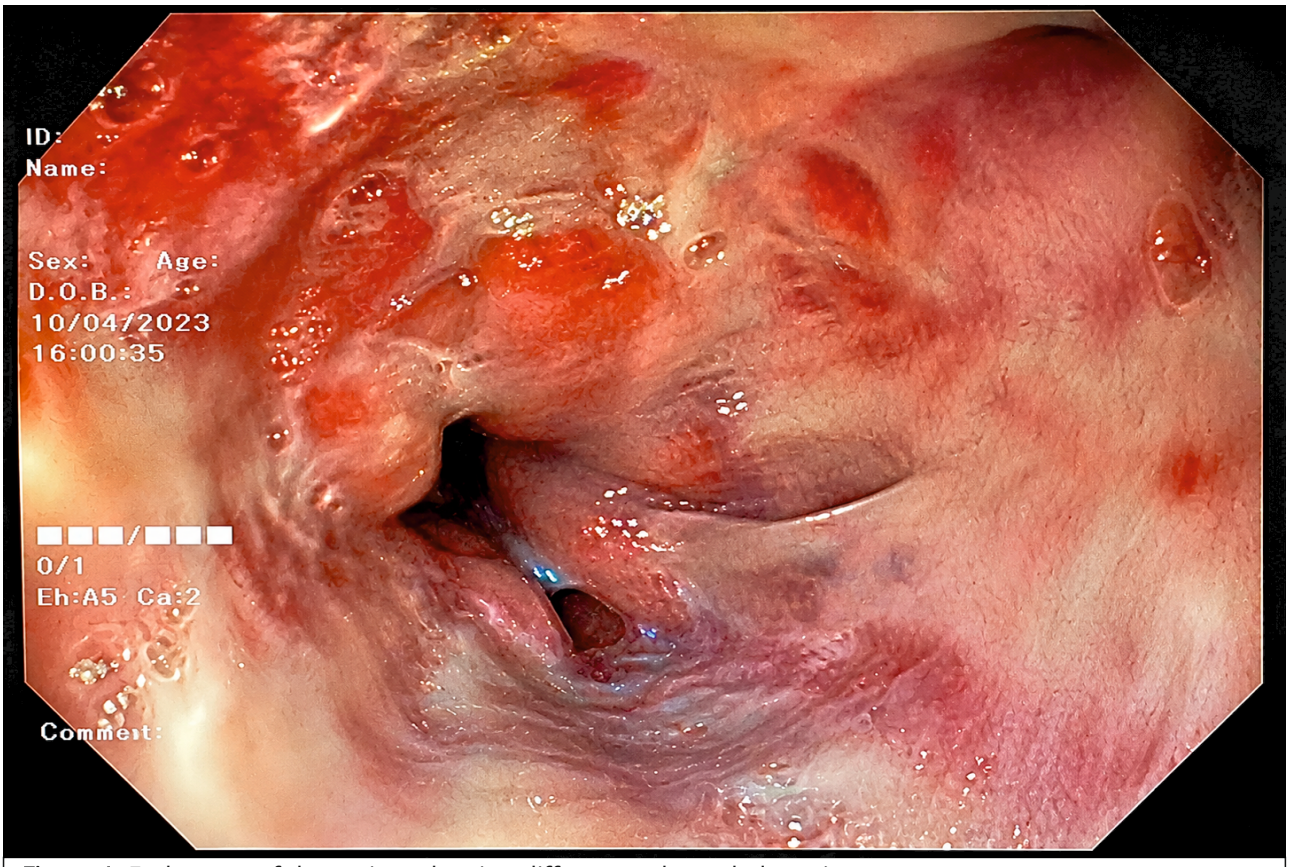

Figure 1: Endoscopy of the patient showing diffuse esophageal ulcerations.

Figure 2: The mixture from right to left used by the patient Shirka, Energy drink and Country Liquor.

corrosive injury is widely prevalent due to limited experience in managing this condition [4-5]. Gastrointestinal tissue is injured in 3 phases after injuries after ingestion of a corrosive agent. Cell necrosis and thrombosis occurs in phase 1, approximately 48–72 hours after the event. In the next phase there is mucosal sloughing with ulceration of the esophageal wall along with colonization of fibroblast and ultimately granulation. Liquefaction necrosis occurs when the is the esophagus comes in contact with alkaline agents. Thromboarthosis occurs also [1-6]. To the best of our knowledge there are very few cases reported of esophagitis following consumption of country liquor [7-8]. This is the first case reported that has been caused by a mixture of country liquor, energy drink and a variant of vinegar.

CLINICAL, ETHICAL AND SOCIAL IMPLICATIONS

1. This case emphasizes the need for community education by social outreach which can be done by physicians and social workers.
2. Reducing the dependence on country made liquor especially amongst poor.
3. A need for referral to deaddiction and behavioral counseling should become a norm.
4. Even when acute phase is managed conservatively ED physicians should recognize the importance of follow up to monitor for esophageal stricture formation.

Conclusion

This case highlights the importance of understanding the risks associated with consuming alcohol and other substances in combination. We hope the medical fraternity takes note and educates patients to the harmful effects of consuming country liquor.

Declarations

Acknowledgment: None.

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Author Contribution: DG and GA conceptualized the case report. HA, MK and HA made the initial draft. DG, PG, SA and AN contributed to literature review, interpretation of findings and critical revision of manuscript for intellectual content. All authors approved the final version of manuscript and agree to be accountable for all aspects of work.

Patient Consent: Appropriate written consent for the publication was obtained for this case report.

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References

1. De Lusong MA, Timbol AB, Tuazon DJ. Management of esophageal caustic injury. World journal of gastrointestinal pharmacology and therapeutics. 2017 May 6;8(2):90.
2. Agarwal A, Srivastava DN, Madhusudhan KS. Corrosive injury of the upper gastrointestinal tract: the evolving role of a radiologist. The British Journal of Radiology. 2020 Oct 1;93(1114):20200528.

3. Hall AH, Jacquemin D, Henny D, Mathieu L, Josset P, Meyer B. Corrosive substances ingestion: a review. Critical reviews in toxicology. 2019 Sep 14;49(8): 637-69.
4. Kalayarasan R, Ananthakrishnan N, Kate V. Corrosive ingestion. Indian journal of critical care medicine: peer-reviewed, official publication of Indian Society of Critical Care Medicine. 2019 Dec;23(Suppl 4):S282.
5. Zargar SA, Kochhar R, Nagi B, Mehta S, Mehta SK. Ingestion of corrosive acids: spectrum of injury to upper gastrointestinal tract and natural history. Gastroenterology. 1989 Sep 1;97(3):702-7.
6. Elkaramany M. An overview of corrosive injury of the upper gastrointestinal tract: Discussion of types, clinical evaluation, and management procedures. Advances in Digestive Medicine. 2018 Dec;5(4): 115-20.
7. Somasundaram A, Ravi R, Venkataraman J. Corrosive injury of the stomach: an unusual presentation. Endoscopy. 2009 Nov;41(S 02):E92-.
8. Kiviranta UK. Liquor adulterated with lye as a cause of dysphagia and stricture of the esophagus. New England Journal of Medicine. 1950 Aug 10;243(6) :220-2.