

Corrosive Stricture in Oral Cavity- A Rare Presentation

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1. Abstract

1.1. Introduction: Corrosive injury of the upper gastrointestinal tract has been commonly reported in medical literature. It can be due to ingestion of acid or alkali and may be accidental or suicidal. The extent of injury varies from involving the esophagus, stomach, and duodenum either individually or together but oral cavity is rarely involved.

1.2. Case Report: We present a young male of twenty-six years who presented with complaint of dysphagia for last two months. He had history of incidental ingestion of corrosive six months back and was symptomatically treated for the same for one month by some local private practitioner. He remained asymptomatic after that and now developed inability to swallow solid food for last two months and was surviving on liquids only. He was seen by ENT specialist at our institute and was then referred to our department for opinion. On evaluating in detail, patient admitted that he is not able to swallow solid food into food pipe and it sticks in oral cavity and then he has to throw out the solid food but he is able to take liquid diet but in small amount and that too slowly. He was hemodynamically stable and his baseline routine investigations were essentially normal. He was subjected to upper gastrointestinal endoscopy which revealed a tight stricture in oral cavity at level of uvula and scope could not be negotiated beyond it. The patient underwent surgical intervention by parent ENT department and has now completely recovered.

1.3. Conclusion: Rare presentations are rarely seen but merits vigil for timely diagnosis and proper line of management.

2. Introduction

Corrosive injury of the upper gastrointestinal tract has been commonly reported in medical literature. It can be due to ingestion of

acid or alkali and may be accidental or suicidal. The extent of injury varies from involving the esophagus, stomach, and duodenum either individually or together but oral cavity is rarely involved. The sequelae of oral cavity caustic injury that have been reported include microstomia, shallow vestibule, ankyloglossia, speech impairment, loss of teeth and impairment of facial expression. There is case report of corrosive injury of the oral cavity following accidental ingestion of caustic alkali leading to bilateral submandibular gland enlargement following the development of corrosive stricture of the submandibular ducts. Thus, necessitating removal of scar tissue in the anterior floor of mouth along with the submandibular salivary glands and concomitant release of the contracture in the gingivo-buccal sulcus [1].

3. Case Report

We present a young male of twenty-six years who presented with complaint of dysphagia for last two months. He had history of incidental ingestion of corrosive six months back and was symptomatically treated for the same for one month by some local private practitioner. He remained asymptomatic after that and now developed inability to swallow solid food for last two months and was surviving on liquids only. He was seen by ENT specialist at our institute and was then referred to our department for opinion. On physical examination, the patient was conscious, co-operative, afebrile. The general physical examination revealed mild pallor. The systemic examination including chest, abdomen, cardiovascular, central nervous system, ophthalmological and dermatological was essentially normal. The complete haemogram revealed hemoglobin of 10.8 g/dL, white blood cell counts 9,300/L, microcytic hypochromic anemia with no malaria parasite. The liver function test, renal function test, blood sugar, serum electrolytes, serum vitamin B12, D3, folic acid levels,

thyroid & lipid profile, anti HCV, anti-HIV antibody, electrocardiogram and chest x-ray were normal. On evaluating in detail, patient admitted that he is not able to swallow solid food into food pipe and it sticks in oral cavity and then he has to throw out the solid food but he is able to take liquid diet but in small amount and that too slowly. He was hemodynamically stable and his baseline routine investigations were essentially normal. He was subjected to upper gastrointestinal endoscopy which revealed a tight stricture in oral cavity at level of uvula and scope could not be negotiated beyond it. The patient underwent surgical intervention by parent ENT department and has now completely recovered.

4. Discussion

Children mainly from developing countries constitute 80% of all corrosive ingestion cases. Accidental ingestion is common in younger children (< 5 years) while suicidal ingestion is more common in adolescents. The severity of injury depends on nature of corrosive (alkali or acid), pH, amount of ingestion and site of exposure. Acute ingestion leads to skin, respiratory tract or upper gastrointestinal damage which may range from trivial to life threatening complications. The clinical presentation depends upon the type, amount, and physical form of the substances. Solid alkali adheres to the mouth and pharynx producing maximum damage to these areas while relatively sparing the esophagus. Liquid rapidly passes through the mouth and pharynx and produces its greatest caustic effect on the esophagus (Figure 1).

Hoarseness and stridor suggest a laryngeal or epiglottic involvement, and may be a harbinger for aero digestive and high pharyngeal sequelae. Respiratory complications from caustic ingestion may result in laryngeal injury and upper airway edema, which may ultimately

require a tracheotomy. Only 10- 30 percent of patients with esophageal burns have no oropharyngeal damage [4-7]. Endoscopy is an essential investigation to decide for further course of management. Upper gastrointestinal stricture is a common long-term sequela of severe corrosive injury which usually develops after three weeks of ingestion [2]. Once acute complications are managed, strictures may develop at any site starting from the oropharynx, laryngeal inlet, esophagus or stomach, depending upon site of maximum contact. Strictures can be single or multiple, short or long and may involve multiple sites (e.g., combined esophageal and pyloric strictures). The overall rate of esophageal stricture formation after caustic ingestion is reported between 2%-63% [8-10]. The cornerstone of management of esophageal strictures is endoscopic bougie or balloon dilations. In patients with resistant strictures, newer adjunctive therapies like intralesional steroids, mitomycin and stents can be utilized along with endoscopic dilatation. Surgery is the final resort for strictures resistant to endoscopic dilations and adjunctive therapies. Patients with post-corrosive strictures should be kept in long term follow-up due to significantly increased risk of carcinoma [2]. The history is very important in determining the site and level of dysphagia, like in our case where patient categorically documented that he is not able to transfer food bolus from oral cavity into esophagus, meaning by transfer dysphagia at level of oral cavity. Moreover, an Endoscopist should always bear in mind that it is more important to understand that what is not to be done during endoscopy, so as to avoid complications. In our case also, after two three attempts, once we were unable to negotiate endoscope beyond stricture, then we decided to abandon the procedure, for avoiding any complication and wisely patient underwent successful surgical intervention.



Figure 1: Endoscopy Showing Post Corrosive Stricture at Level of Uvula In Oral Cavity

5. Conclusion

Rare presentations are rarely seen but merits vigil for timely diagnosis and proper line of management.

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