



Research Journal of Pharmaceutical, Biological and Chemical Sciences

Esophageal Fibrosis: A Case Study.

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ABSTRACT

A gradual narrowing of the esophagus especially occurred after constant irritation to the esophagus. Since it is not a common case to see, and occurs patients among GERD and post corrosive poison consumption. Since it affects the normal ingestion of food and needs immediate medical attention.

Keywords: Esophagus, fibrosis, reflux, GERD, irritation, dilatation

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INTRODUCTION

An esophageal fibrosis is a gradual narrowing of the esophagus, which can lead to swallowing difficulties. The strictures are caused by scar tissue that builds up in the esophagus. Gastroesophageal reflux disease (GERD) affects approximately 40% of adults. Strictures occur in 7 to 23% of patients with GERD who are untreated. GERD is the one of the predominant causative factor that can end up with esophageal fibrosis. Dilatation of esophagus is the treatment modality used to treat esophageal fibrosis. After treatment, a patient can usually go back to regular routines and diets. The patient may develop the stricture again in the future [1-4].

Case study of Master X:

Master X, a 14 year old male, presented with history of difficulty in swallowing both liquid and solid food items for past 2 years. He also complained of pyrosis. There is no significant familial history. He is having the history of accidental consumption of toilet cleanser one year back.

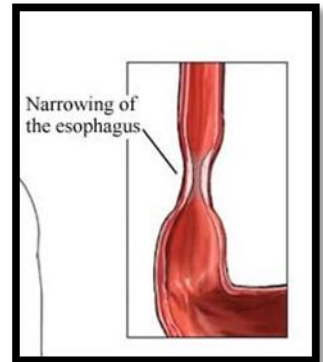
Esophageal fibrosis is a gradual narrowing of the esophagus, which can lead to swallowing difficulties, usually occurs after consuming corrosive poisons.

Incidence/Prevalence:

Gastroesophageal reflux disease (GERD) affects approximately 40% of adults. Strictures occur in 7 to 23% of patients with GERD who are untreated.

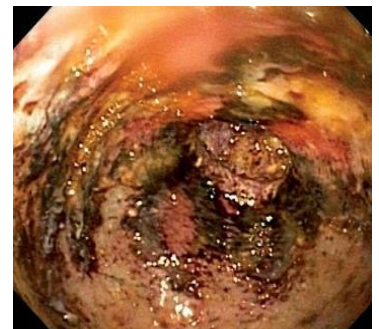
Etiology:

- Gastroesophageal reflux (GERD)
- Prolonged use of a nasogastric tube
- Ingestion of corrosive substances
- Viral or bacterial infections
- Injuries caused by endoscopes
- Esophagitis
- Dysfunctional lower esophageal sphincter
- Disordered motility
- Hiatal Hernia.



Pathophysiology:

Exposure to chemical agent into the oesophagus causes inflammation and thus leads to erosion of mucous membrane. This damage to the oesophagus can end up with formation of fibrosis and gradually started to obstruct the passage of esophagus causes difficulty in swallowing.



Clinical manifestation:

Book Picture	Patient Picture
<ul style="list-style-type: none"> • Difficulty swallowing • Discomfort with swallowing • Regurgitation of food • Weight loss • Heartburn • Vomiting, sometimes with mucus or blood. • coughing • shortness of breath 	<ul style="list-style-type: none"> • Dysphagia • odynophagia • • Weight loss • Heart burn • Vomiting • Coughing •

Diagnostic evaluation:

- Barium Swallow.
- Computerized Tomography Scan
- Biopsy

Book picture	Patient picture
History collection	Corrosive poison intake
X Ray	Normal
Barium swallow	Not possible
Endoscopy
CT scan	Corrosive fibrotic changes was noted
Biopsy

Management:

Medical management:

- Proton pump inhibitors, such as Omeprazole, Lansoprazole or Rabeprazole, can keep strictures from returning.

Surgical cal management:

- Surgical treatment is rarely necessary. If is performed if a stricture can't be dilated enough to allow solid food to pass through. Surgery is also performed if repeated dilations do not keep these strictures from returning.

Dilatation:

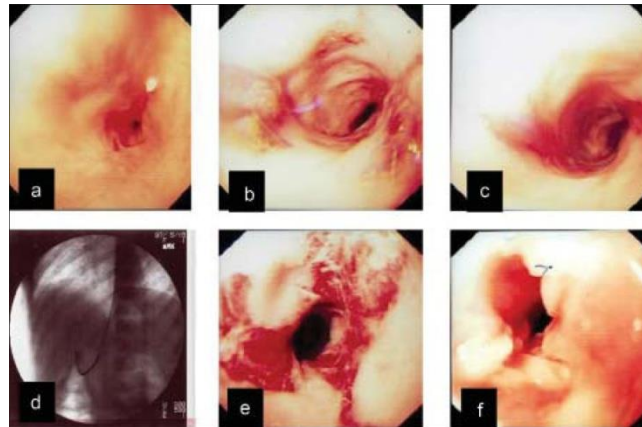
- Dilation. The esophagus is stretched by the use of one of several methods. Two of the methods of dilation are performed by passing a dilator or air-filled balloon is passed through an endoscope. Repeated dilation may be necessary to prevent the stricture from returning.



Balloon dilatation



After balloon dilatation



Steps of balloon dilatation

Management for Master X:

- Inj. Metrogl 400mg IV Tds
- Tab. Ranitidine
- Balloon dilatation

Steps of balloon dilatation

Complications:

Swallowing difficulties may keep the patient from getting enough fluids and nutrients. Increased risk of regurgitated food, fluid, or vomit entering the lungs and cause choking or aspiration pneumonia.

Prevention:

To avoid strictures, one should eat solid foods which naturally stretch the esophagus. However, one can still develop a stricture even if they do eat solid foods.

Nursing intervention:

- ♣ Imbalanced nutritional status less than body requirements related to the disease condition. Small frequent fluid diet was provided for the patient, patient’s bowel movement was assessed and diet was planned according to the likes and dislikes of the patient.
- ♣ Risk for infection related to altered immunological status due to malnutrition.

Clean, calm and infection free environment was provided for the patient, Inj. Metronidazole 500mg IV TDS was given.

Summary:

Master X was cooperative with health personnel. Although his symptoms were disgusting, but he did not develop further complications

CONCLUSIONS

Prevention is better than cure, but certain conditions and situations are unavoidable. But appropriate care and management may help the patient to lead a comfortable life at the most possible. Patients with esophageal fibrosis are a condition in which the rate of prognosis is very less and the chance of recurrence is also high. The role of nurses and other health care personnel and family members’ in care of such patients is very essential for better prognosis.



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