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FACULTY OF NURSING

# ESOPHAGEAL STRICTURE



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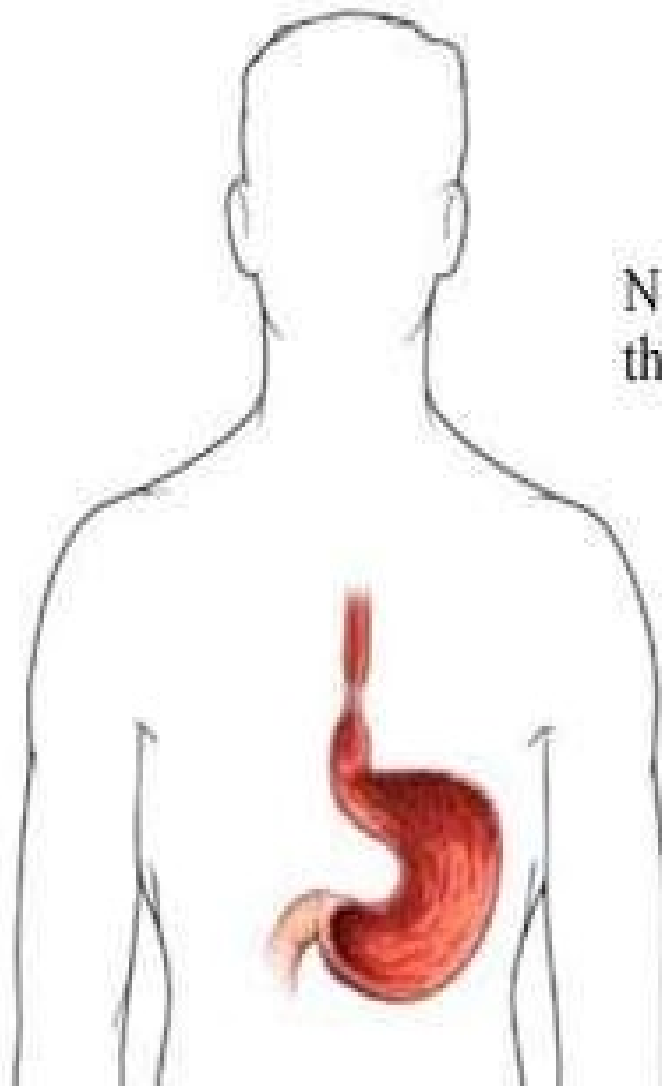
Rama College Of Nursing

# ESOPHAGEAL STRICTURE

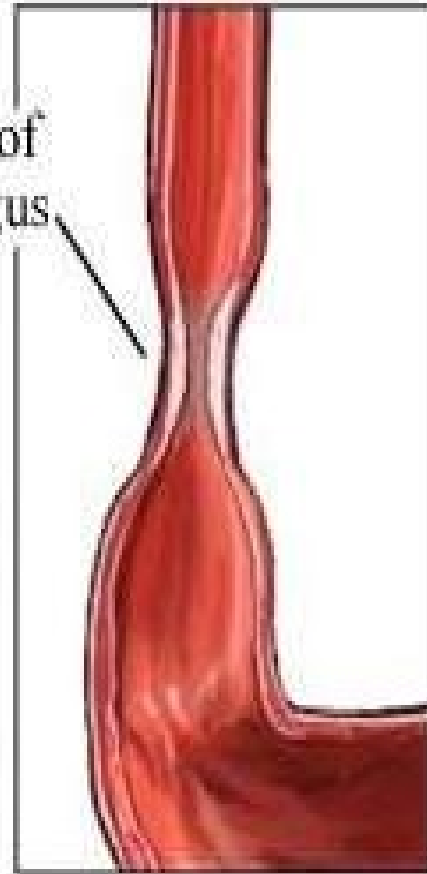
An esophageal stricture is a narrowing of the esophagus, the passageway from the throat to the stomach.

Stomach acid, accidentally swallowed harsh chemicals, and other irritants may injure the esophageal lining, causing inflammation (esophagitis) and the formation of scar tissue.

This may gradually lead to obstruction of the esophagus, preventing food and fluids from reaching the stomach.



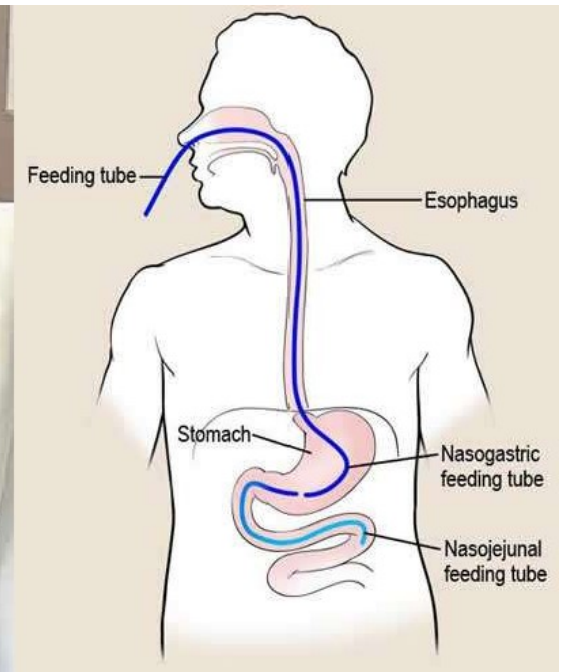
Narrowing of  
the esophagus



# ETIOLOGY

- Persistent reflux of gastric acid
- Systemic sclerosis (scleroderma)
- Swallowing lye or other corrosive chemicals
- Pills lodged in the esophagus or medications
- Esophageal surgery
- Protracted use of a nasogastric tube (used in hospitals for feeding)
- Esophageal cancer
- Frequent exposure to harmful stomach acid can cause scar tissue to form.

- Radiation therapy to the chest or neck
- Esophageal damage caused by an endoscope (a thin, flexible tube used to look inside a body cavity or organ)
- Treatment of esophageal varices (enlarged veins in the esophagus that can rupture and cause severe bleeding)



- Infectious esophagitis - *Candida*, herpes simplex virus (HSV), cytomegalovirus (CMV), human immunodeficiency virus (HIV)
- Acquired immunodeficiency syndrome (AIDS) and immunosuppression in patients who have received a transplant
- Miscellaneous - Trauma to the esophagus from external forces, foreign body, surgical anastomosis/postoperative stricture, congenital esophageal stenosis
- [Crohn disease](#) - **Crohn's disease** is a chronic inflammatory **disease** of the digestive tract.

# PATHOPHYSIOLOGY

- Benign **esophageal stricture** describes a narrowing or tightening of the **esophagus**.
- Benign **esophageal stricture** typically occurs when stomach acid and other irritants damage the lining of the **esophagus** over time.
- This leads to inflammation (esophagitis) and scar tissue, which **causes** the **esophagus** to narrow.



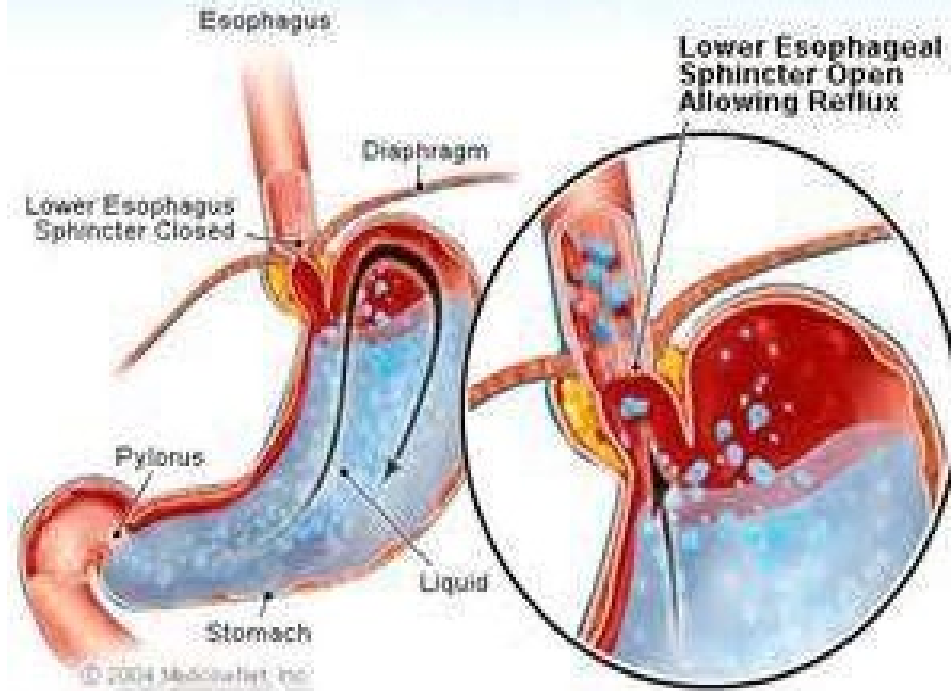
# SYMPTOMS OF ESOPHAGEAL STRICTURE

## SYMPTOMS OF ESOPHAGEAL STRICTURE

- Progressive swallowing difficulty - solid foods, liquids
- Chest pain after meals, increased salivation
- Regurgitation of foods and liquids.
- Regurgitation may aspirate into the lungs, causing cough, wheezing, and shortness of breath.
- Weight loss
- Dehydration
- Cough, particularly at night
- sensation of something stuck in the chest after you eat
- frequent burping or hiccups
- [heartburn](#)



## Gastroesophageal Reflux



# DIAGNOSTIC EVALUATION:

## DIAGNOSTIC EVALUATION:

- A medical history and physical examination are performed.

### Barium swallow test

- A barium swallow test includes a series of X-rays of the esophagus. These X-rays are taken after you drink a special liquid containing the element barium. Barium isn't toxic or dangerous. This contrast material temporarily coats the lining of your esophagus. This allows your doctor to see your throat more clearly.

## Esophageal pH monitoring

- This test measures the amount of stomach acid that enters your esophagus. Your doctor will insert a tube through your mouth into your esophagus. The tube is usually left in your esophagus for at least 24 hours.

## Upper GI endoscopy

- In an upper gastrointestinal (upper GI) endoscopy, your doctor will place an endoscope through your mouth and into your esophagus. An endoscope is a thin, flexible tube with an attached camera. It allows your doctor to examine your esophagus and upper intestinal tract.
- Doctor can use forceps (tongs) and scissors attached to the endoscope to remove tissue from the esophagus. They'll then analyze this sample of tissue to find the underlying cause of your benign esophageal stricture.

## MANAGEMENT:

- Mechanical dilation of the esophagus (esophageal bougienage) may be performed to widen the stricture.
- Proton pump inhibitors or acid-blocking medicines
- **In severe cases** - esophagus may be removed and replaced with a segment of the large intestine.
- Small tube is placed into the stomach (gastrostomy), so that food may bypass the esophagus completely.

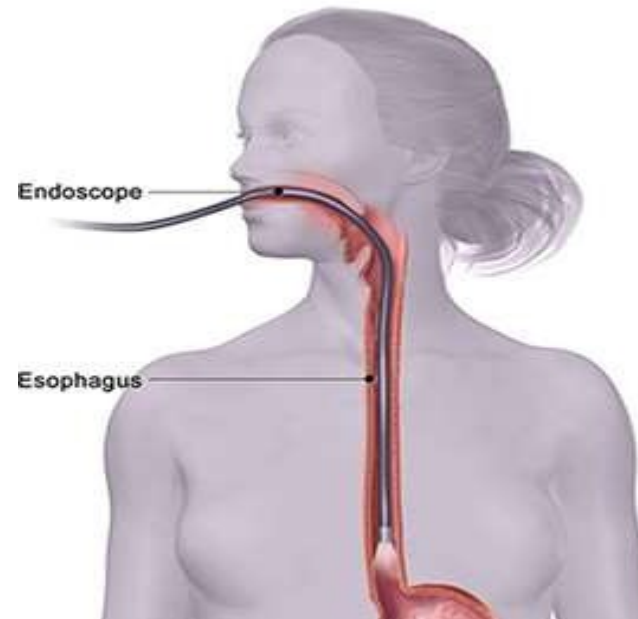
## MEDICATION

- A group of acid-blocking drugs, known as [proton pump inhibitors \(PPIs\)](#),

### The PPIs used to control GERD include:

- [omeprazole](#)
- [lansoprazole](#)
- [pantoprazole](#)
- [esomeprazole](#)
- **Antacids:** provide short-term relief by neutralizing acids in the stomach
- [Sucralfate](#): provides a barrier that lines the esophagus and stomach to protect them from acidic stomach juices
- **Antihistamines** (such as [ranitidine](#) and [famotidine](#)): decrease the secretion of acid

- Your doctor will insert an endoscope through your mouth into your esophagus, stomach, and small intestine. Once they see the strictured area, they'll place a dilator into the esophagus. The dilator is a long, thin tube with a balloon at the tip. Once the balloon inflates, it will expand the narrowed area in the esophagus.
- Your doctor may need to repeat this procedure in the future to prevent your esophagus from narrowing again.

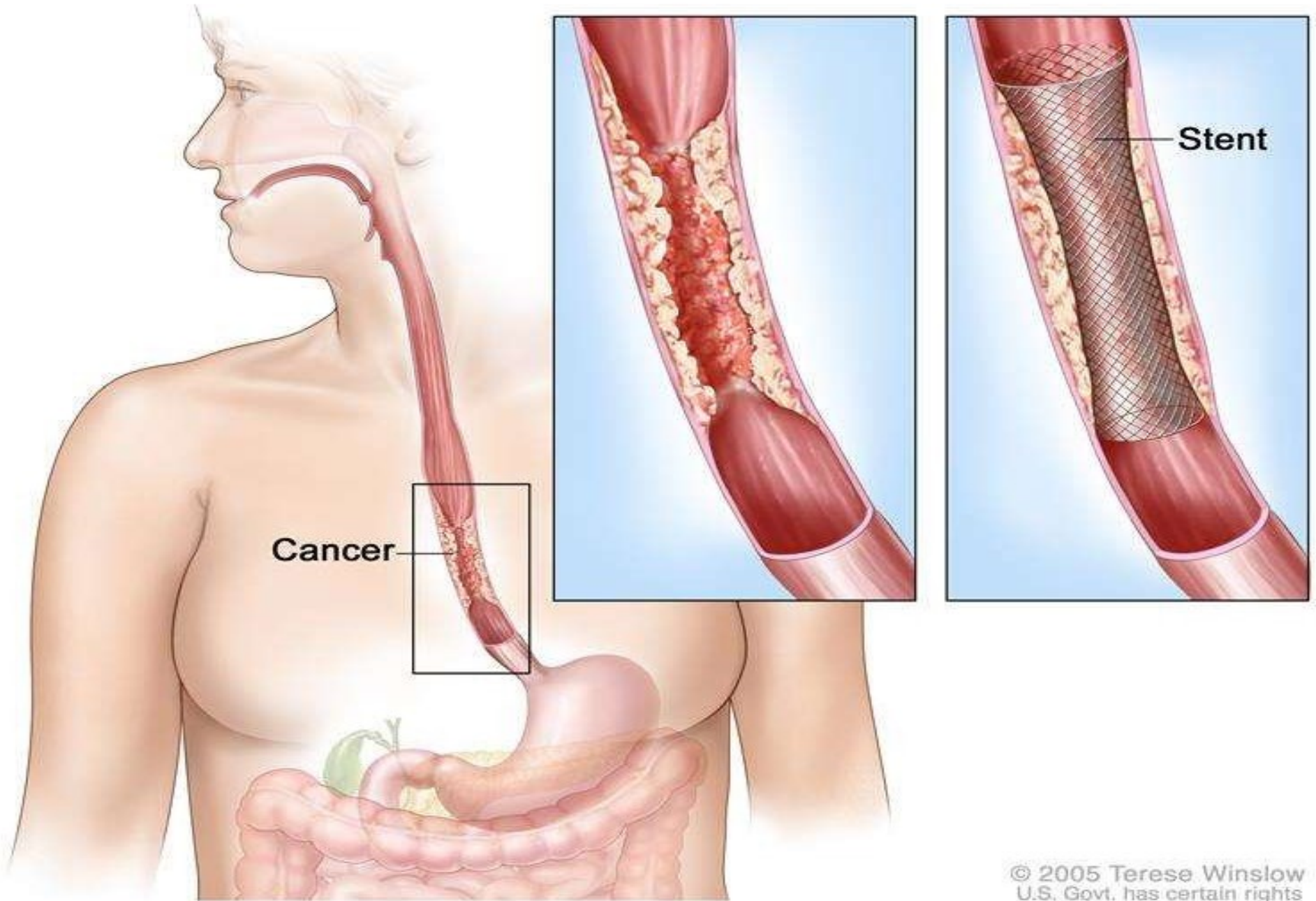


## Esophageal stent placement

- The insertion of esophageal stents can provide relief from esophageal stricture.
- A stent is a thin tube made of plastic, expandable metal, or a flexible mesh material.
- Esophageal stents can help keep a blocked esophagus open so you can swallow food and liquids.
- Patient will be under general or moderate sedation for the procedure.
- Doctor will use an endoscope to guide the stent into place.



# Esophageal Stent



## **DIET & LIFESTYLE**

- elevating your pillow to prevent stomach acid from flowing back up into your esophagus
- eating smaller meals
- not eating for three hours before bedtime
- quitting smoking
- avoiding alcohol

**You should also avoid foods that cause acid reflux, such as:**

- spicy foods
- fatty foods
- carbonated beverages
- chocolate
- coffee and caffeinated products
- tomato-based foods
- citrus products

# PROGNOSIS

## PROGNOSIS

- Poor prognostic factors include a lack of heartburn and significant weight loss at initial presentation.
- The severity of the initial stenosis and the type and size of dilator used have no effect on esophageal stricture recurrence.

# Prevention of Esophageal Stricture

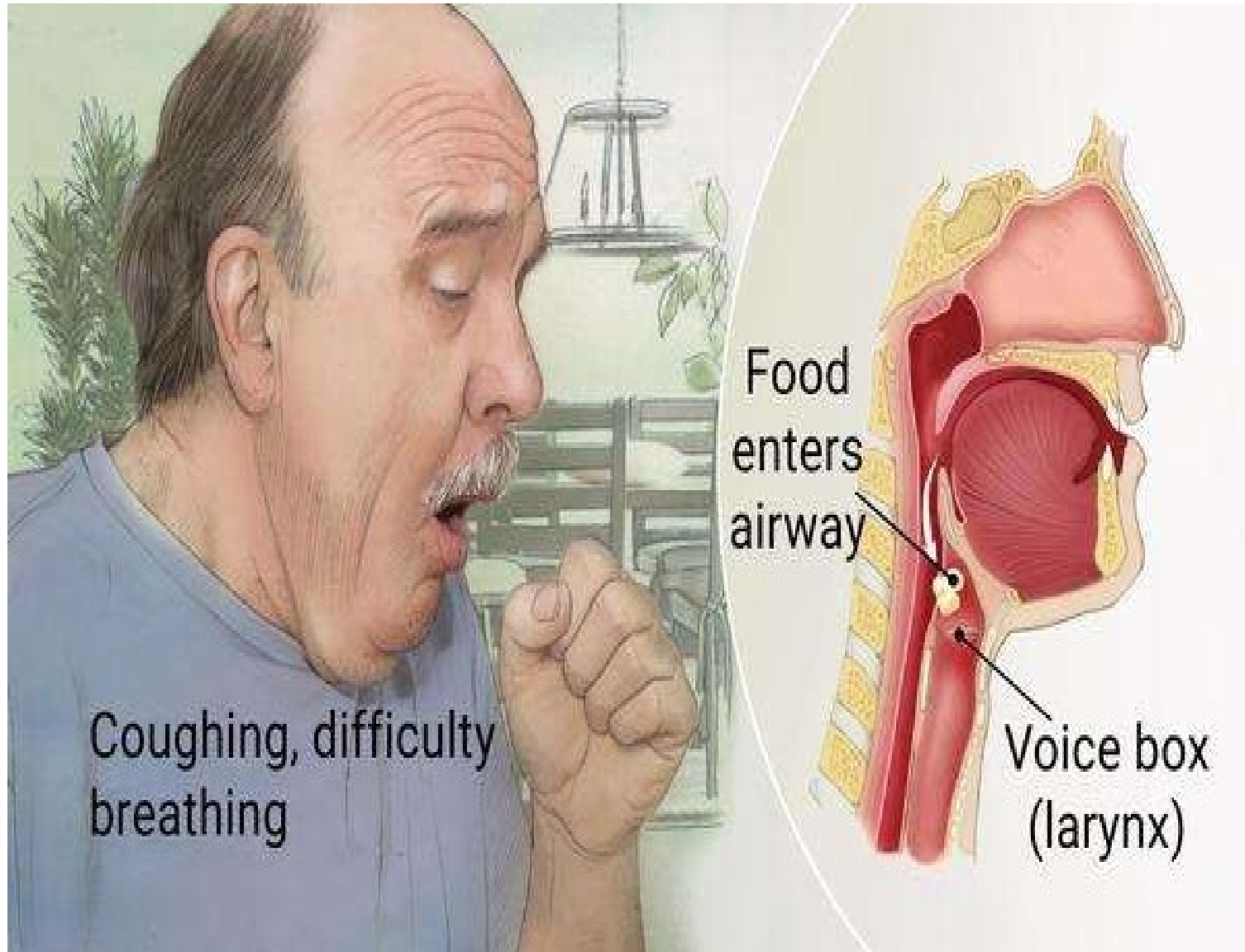
## Prevention of Esophageal Stricture

- Aggressive treatment of chronic gastroesophageal reflux is necessary.
- Store all corrosive chemicals where they will be inaccessible to children.
- Take all pills with a full glass of liquid.
- avoiding substances that can damage your esophagus.
- Managing symptoms of GERD can also greatly reduce your risk for esophageal stricture.
- Follow your doctor's instructions regarding dietary and lifestyle choices that can minimize the backup of acid into your esophagus.

# COMPLICATIONS:

## COMPLICATIONS:

- Dense and solid foods can lodge in the esophagus when it narrows. This may cause choking or difficulty breathing.
- Dehydration
- Malnutrition.
- There's also a risk of getting pulmonary aspiration, which occurs when vomit, food, or fluids enter your lungs. This could result in aspiration pneumonia, an infection caused by bacteria growing around the food, vomit or fluids in the lung.



Coughing, difficulty breathing

Food enters airway

Voice box (larynx)

THANK YOU