## Esophageal disease (stricture, diverticula, achalasia)

Surgery department №2, DSMA

## Clinical picture of esophageal diverticula

- Food regurgitation might occur when standing, bending or lying down
- Patients might develop dysphagia (difficulty swallowing)
- Chronic coughing
- Chest pain
- Heartburn
- Weight loss

## Esophageal diverticula classification

#### By acuirence:

- congenital
- acquired

#### By quantity:

- single
- multiple

### By localisation

- crycopharyngeal (or Zencer)
- midoesophageal
- epiphrenic

## Clinical picture of esophageal diverticula

As food collects in the pockets, it promotes bacteria in the esophagus, which also leads to halitosis (bad breath).

A patient's voice also might change.

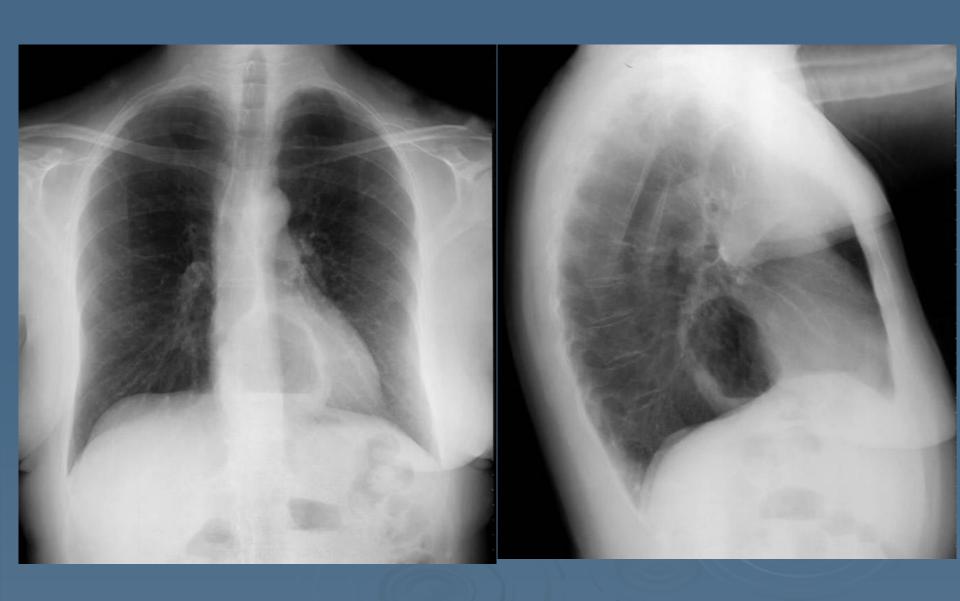
### Diagnostic of esophageal diverticula

Esophagoscopy

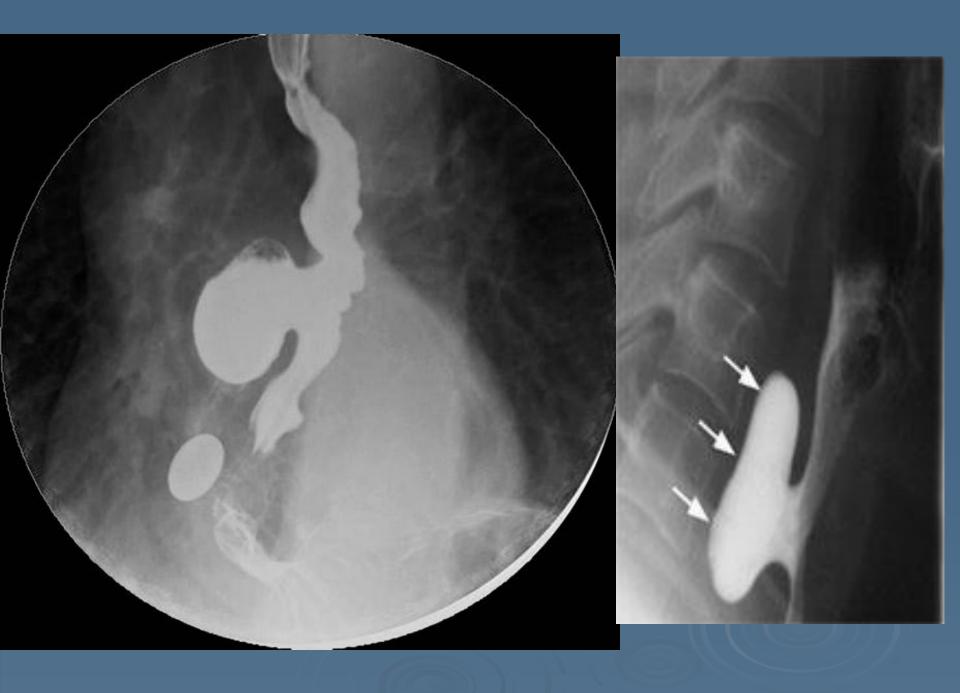
Chest X-ray

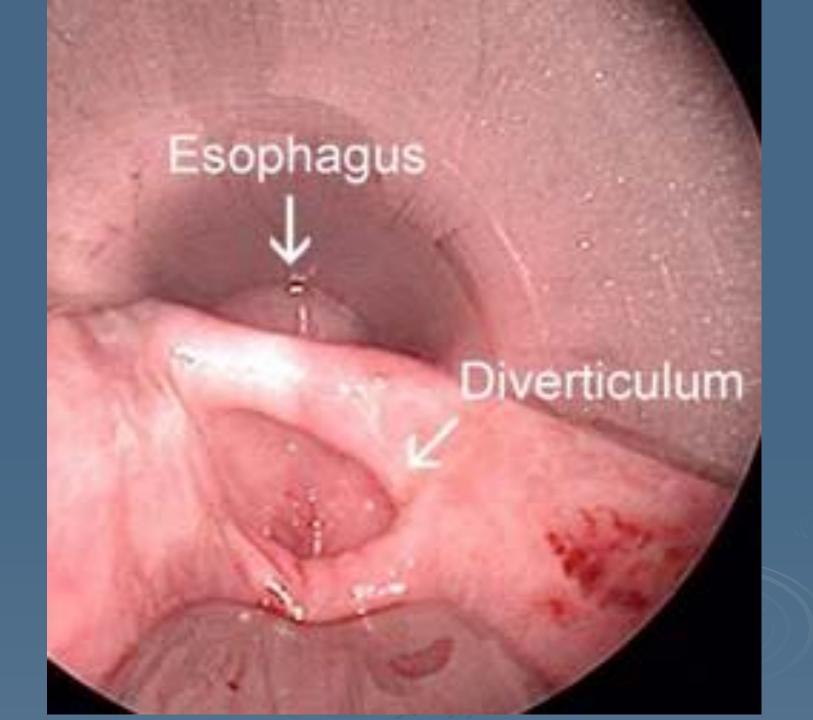
Contrast esophagography

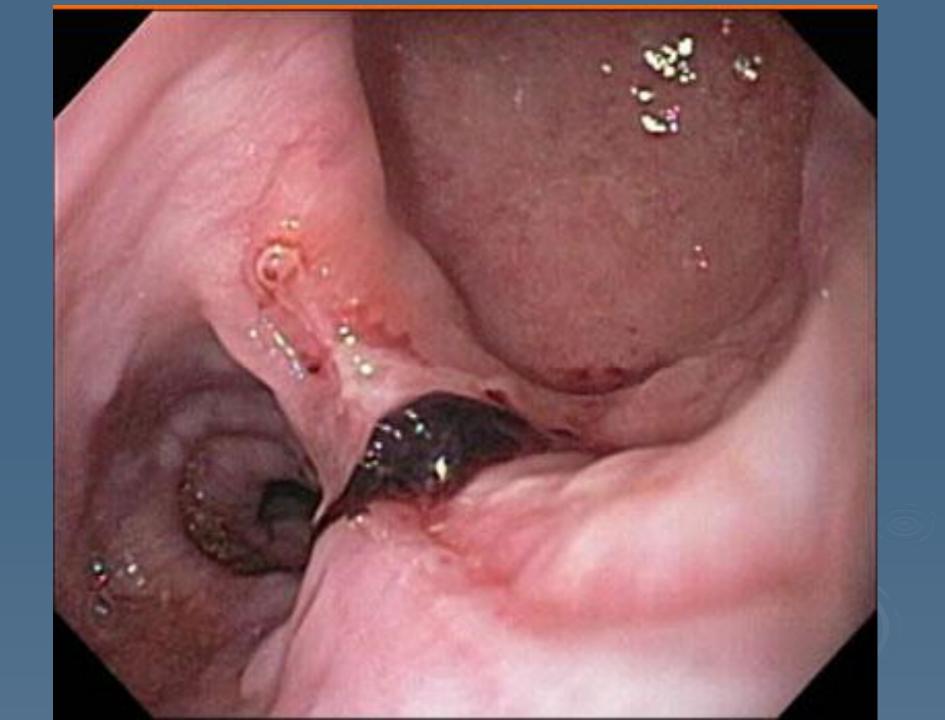
### Chest X-ray





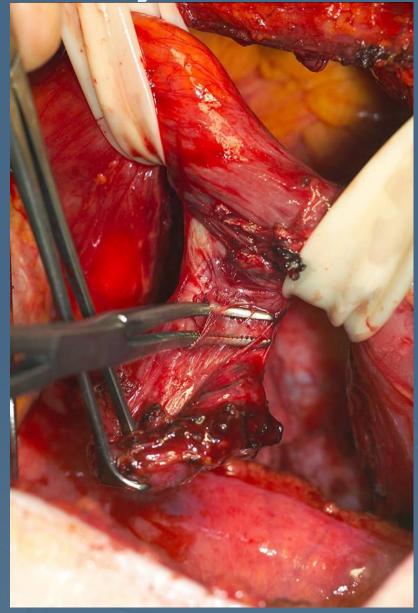




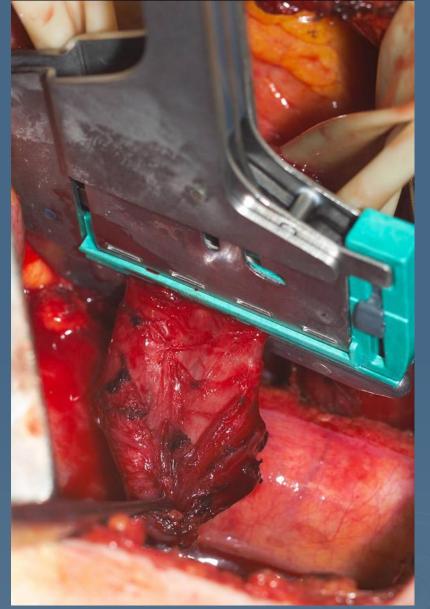


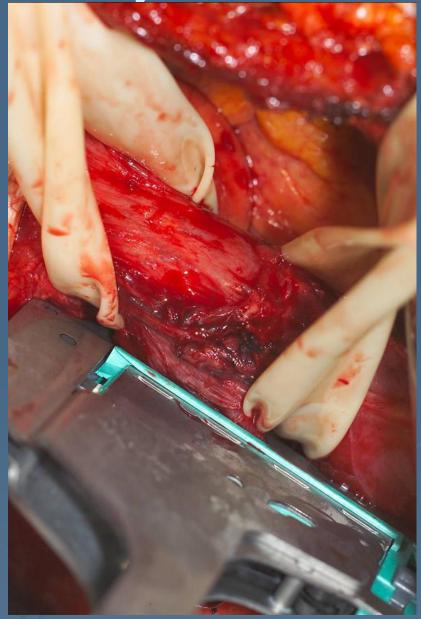
Diverticulectomy



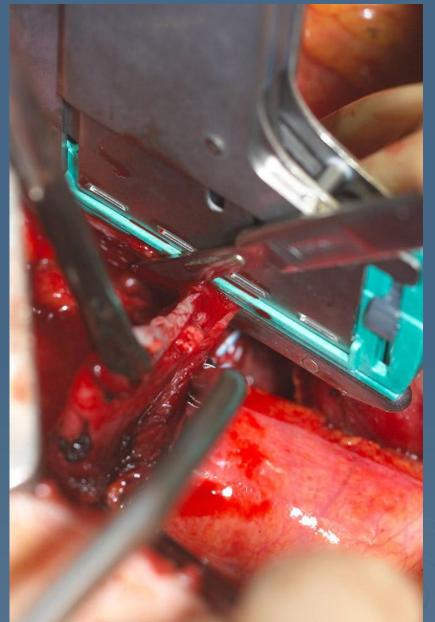


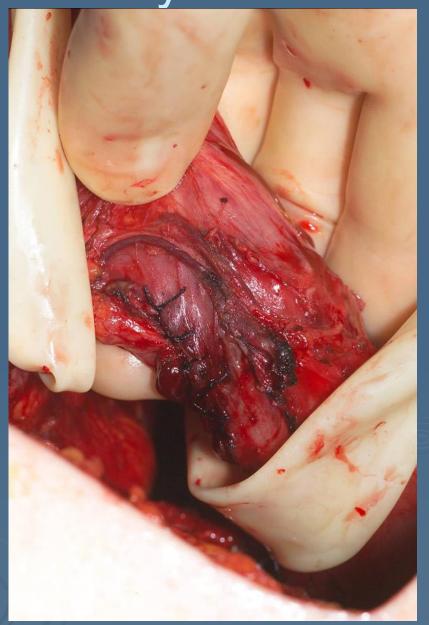
Diverticulectomy





Diverticulectomy





### Esophageal achalasia

A rare motor disorder of the esophagus characterized by inability of the lower esophageal sphincter and esophageal muscle to relax as well as dilation of the esophagus

# Esophageal achalasia clinical picture

- Dysphagia (most common)
- Regurgitation
- Chest pain
- Heartburn
- Weight loss

## Esophageal achalasia classification

### There are four stages:

- Functional spasm with out gullet extension
- Stable spasm with moderate gullet extension but peristalsis is saved
- 3. Scar changes of esophageal wall with pronounced its dilatation, peristalsis is absent
- Pronounced gullet dilatation with its S-type bending and erosive esophagitis

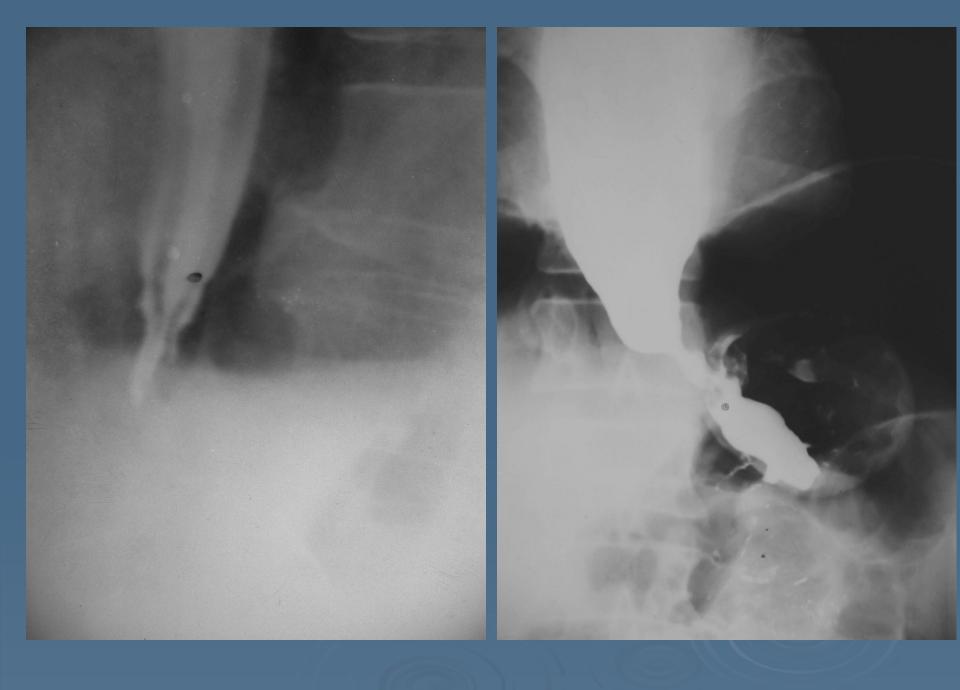
# Esophageal achalasia diagnostic

Contrast esophagography (barium swallowing)

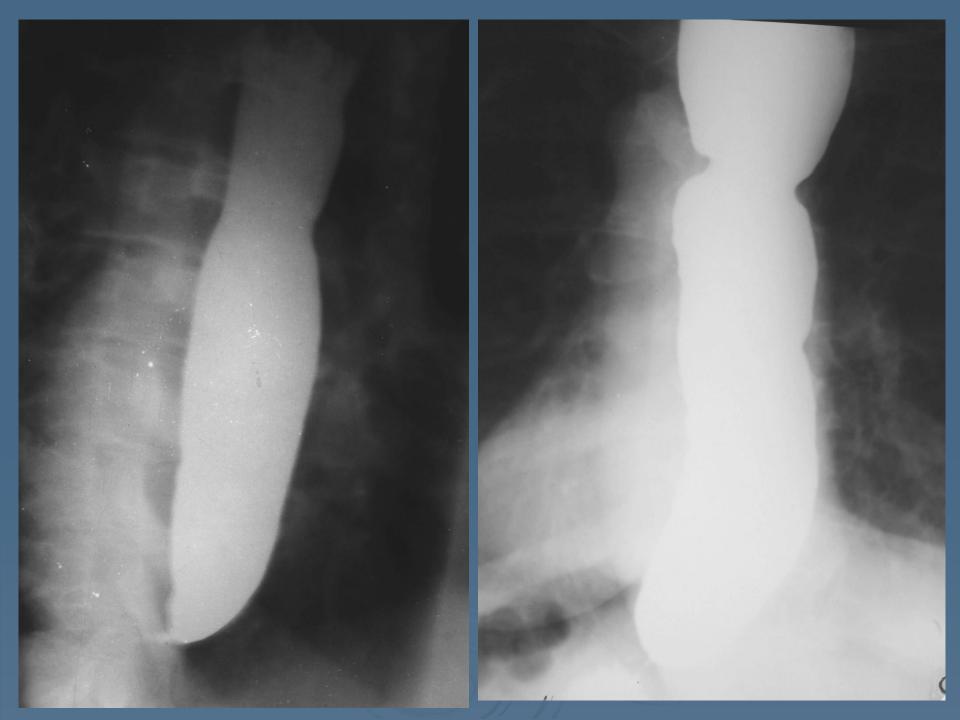
Fibroesophagoscopy

Manometry

Biopsy











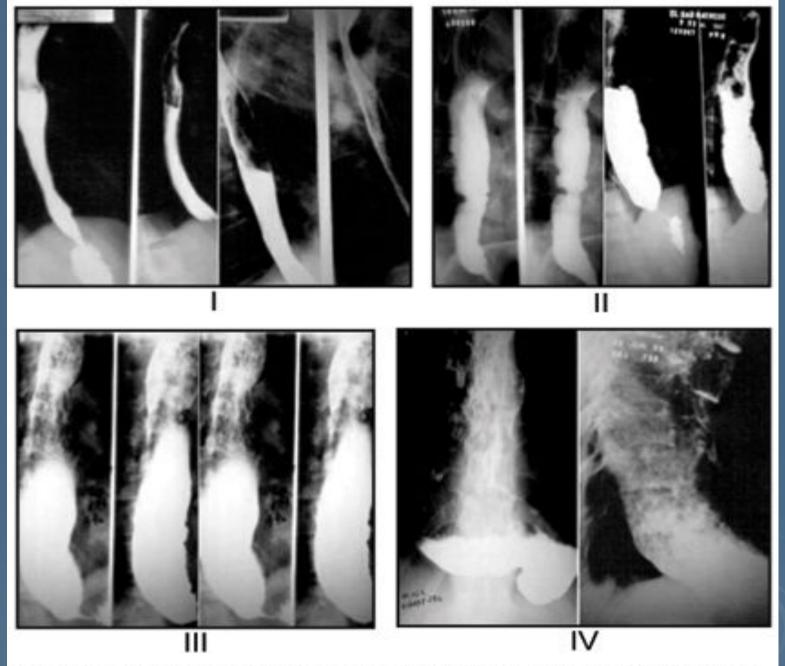
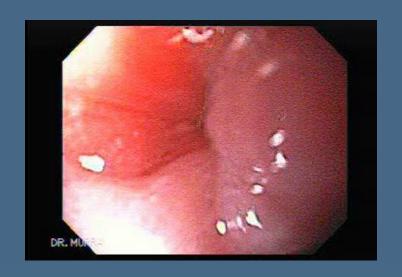


FIGURE 1 - Radiologic classification of achalasia in four groups according to the grade of dilatation motor alterations of the esophagus (Rezende et. al.<sup>(54)</sup>)

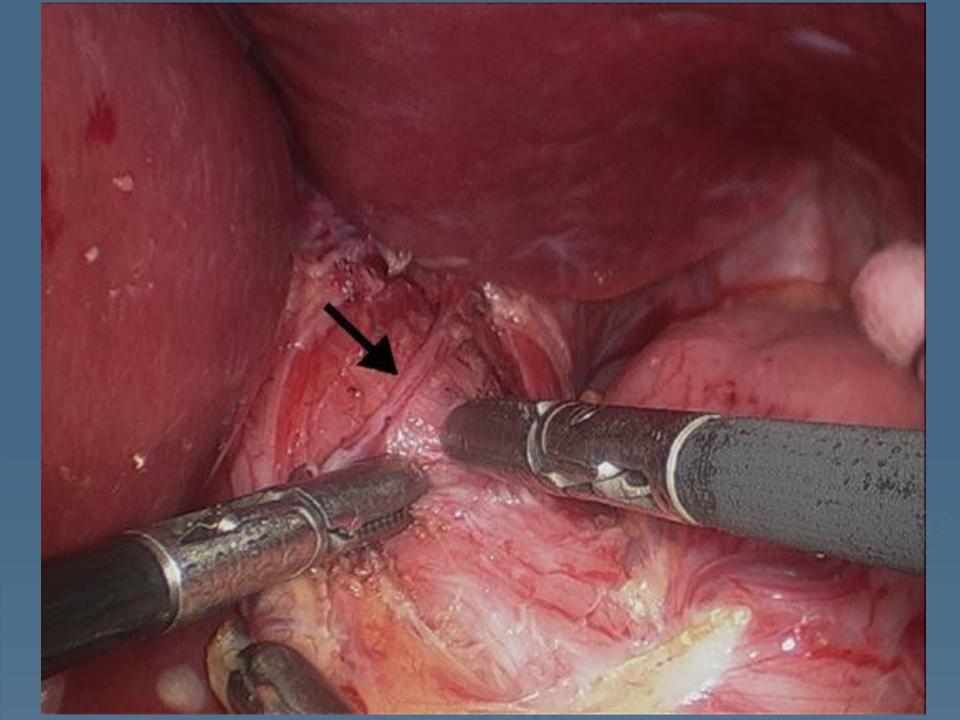


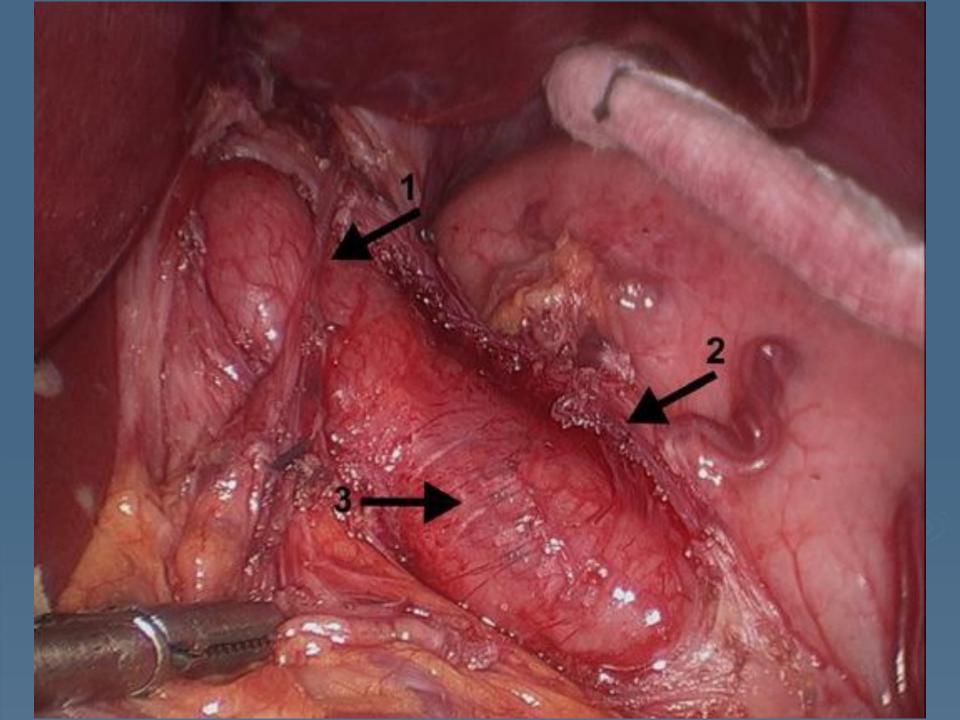
### Achalasia treatment

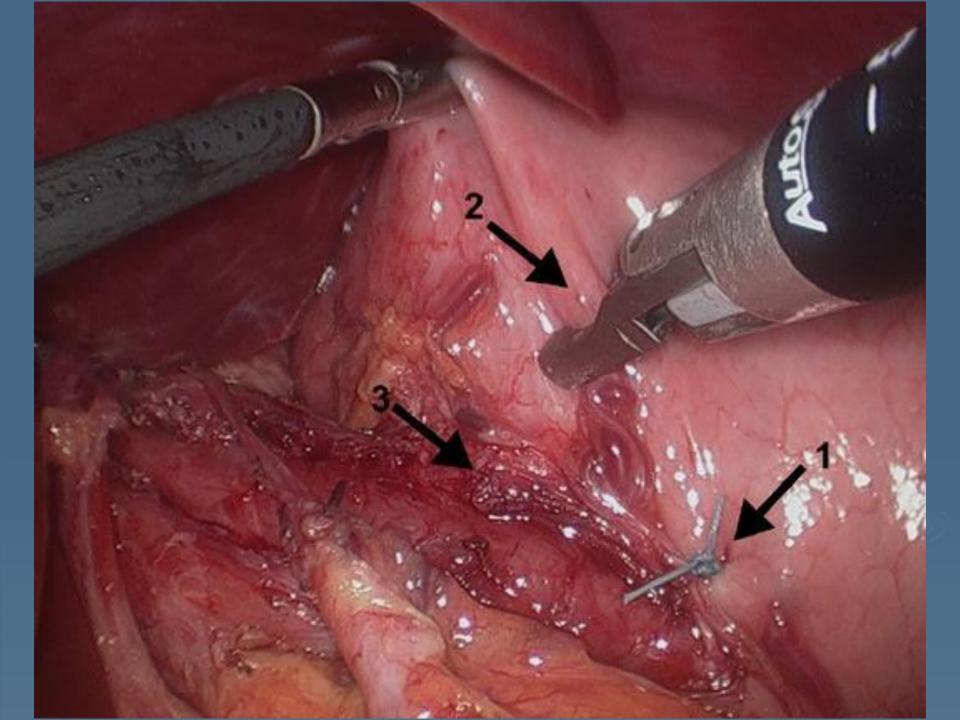
In 1 and 2 stage – conservative treatment with spasmolitics or its combination with submucose botex injection

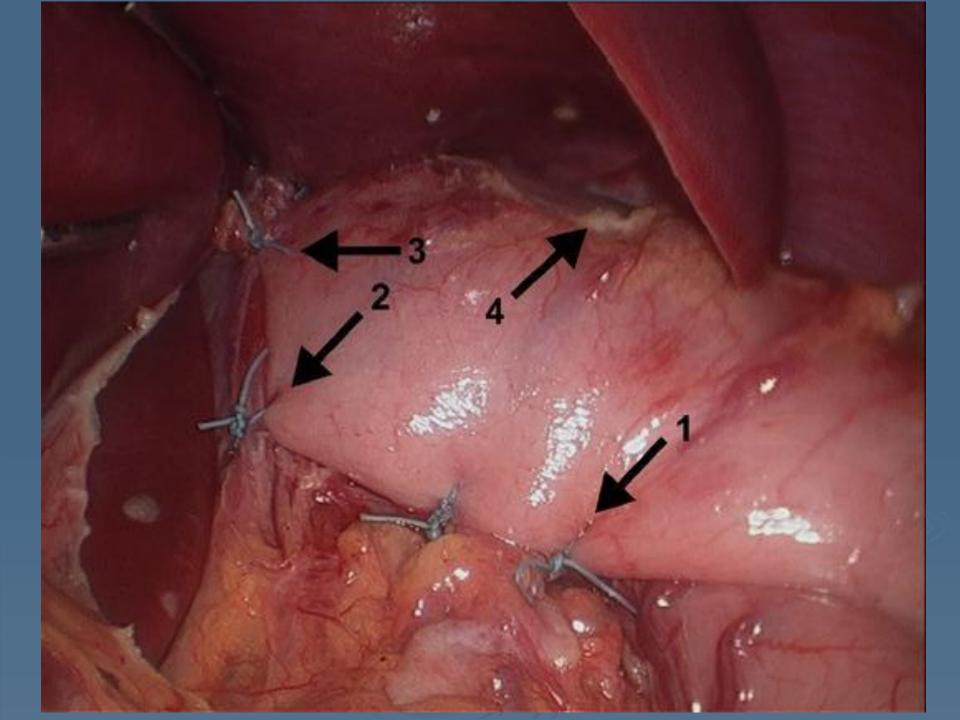
In 1, 2 and 3 stage baloon dilatation is appropriable

 In 3 and 4 stage – just only myotomy by Heller or Petrovskiy could be provided









### Esophageal stricture

An esophageal stricture 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.

### Esophageal stricture

- When the lining of the esophagus is damaged, scarring develops.
- When scarring occurs, the lining of the esophagus becomes stiff.
- In time, as this scar tissue continues to build up, the esophagus begins to narrow in that area.

## Esophageal stricture clinical picture

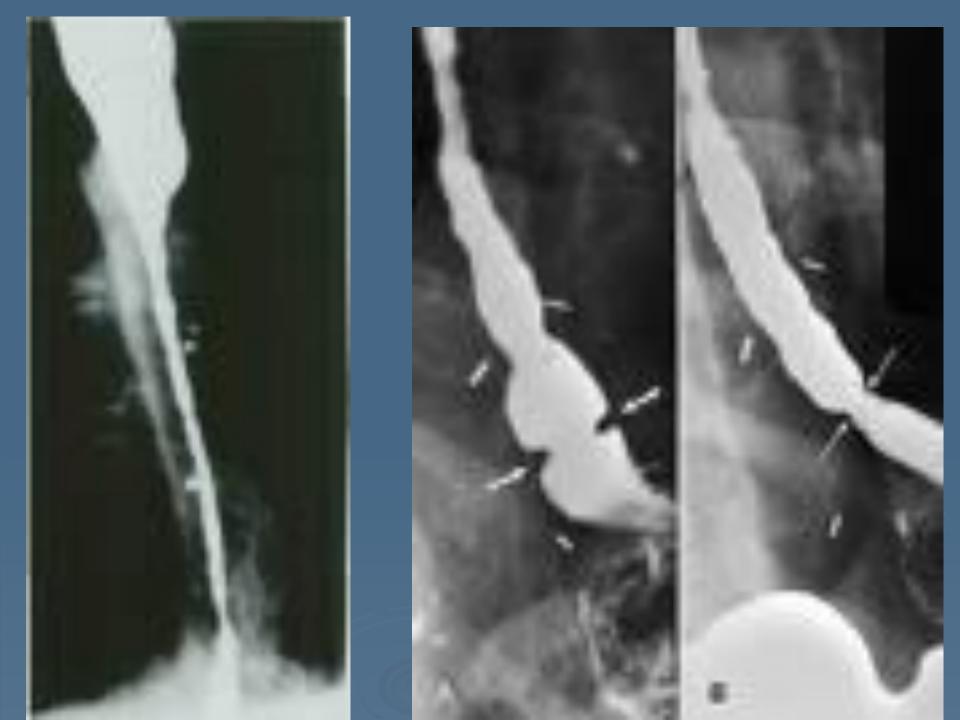
- Heartburn
- Dysphagia
- Odynophagia
- Food impaction
- Weight loss
- Chest pain.

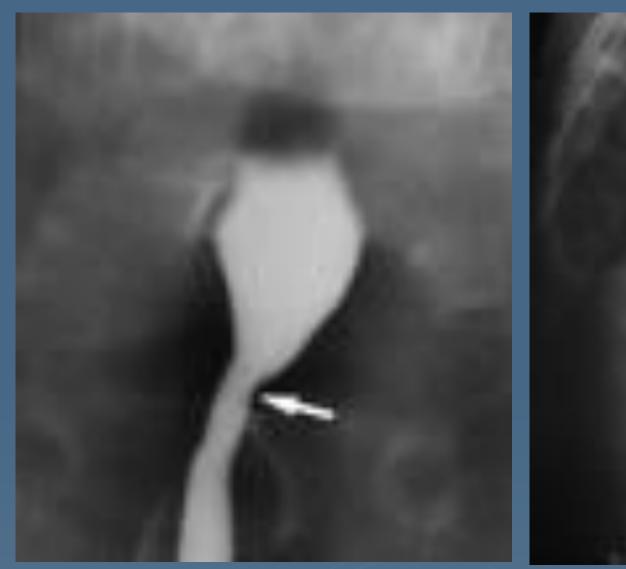
# Esophageal stricture diagnostic

Contrast esophagography (barium swallowing)

Fibroesophagoscopy

Biopsy







### Esophageal stricture treatment

Dilation. The esophagus is stretched by passing a dilator or air-filled balloon is passed through a endoscope.

Repeated dilation may be necessary to prevent the stricture from returning.

### Esophageal stricture treatment

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.

# Esophageal bypass grafting (Esophagoplasty)

Total colonoesophagoplasty

Total gastroesophagoplasty

Total jejunoesophagoplasty

