Benign Esophageal Diseases

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Introduction

- At the end of this Presentation , you will be able to :
  - Understand the history related to common esophageal diseases such as GERD
  - Understand the symptoms and signs of esophageal perforation
  - Understand the symptoms and signs of esophageal motility disorder

Case 1

- 50 years old Male Presented to you in the clinic with history of Heartburn and Hoarseness.
- He is obese
- smoker
- What else in the history ?

Clinical Presentations of GERD

- Classic GERD
  - Substernal burning and or regurgitation
  - Postprandial
  - Aggravated by change of position
  - Prompt relief by antacid

Extraesophageal Manifestations of GERD

Pulmonary

- Asthma
- Aspiration pneumonia
- Chronic bronchitis
- Pulmonary fibrosis

Other

- Chest pain
- Dental erosion

ENT

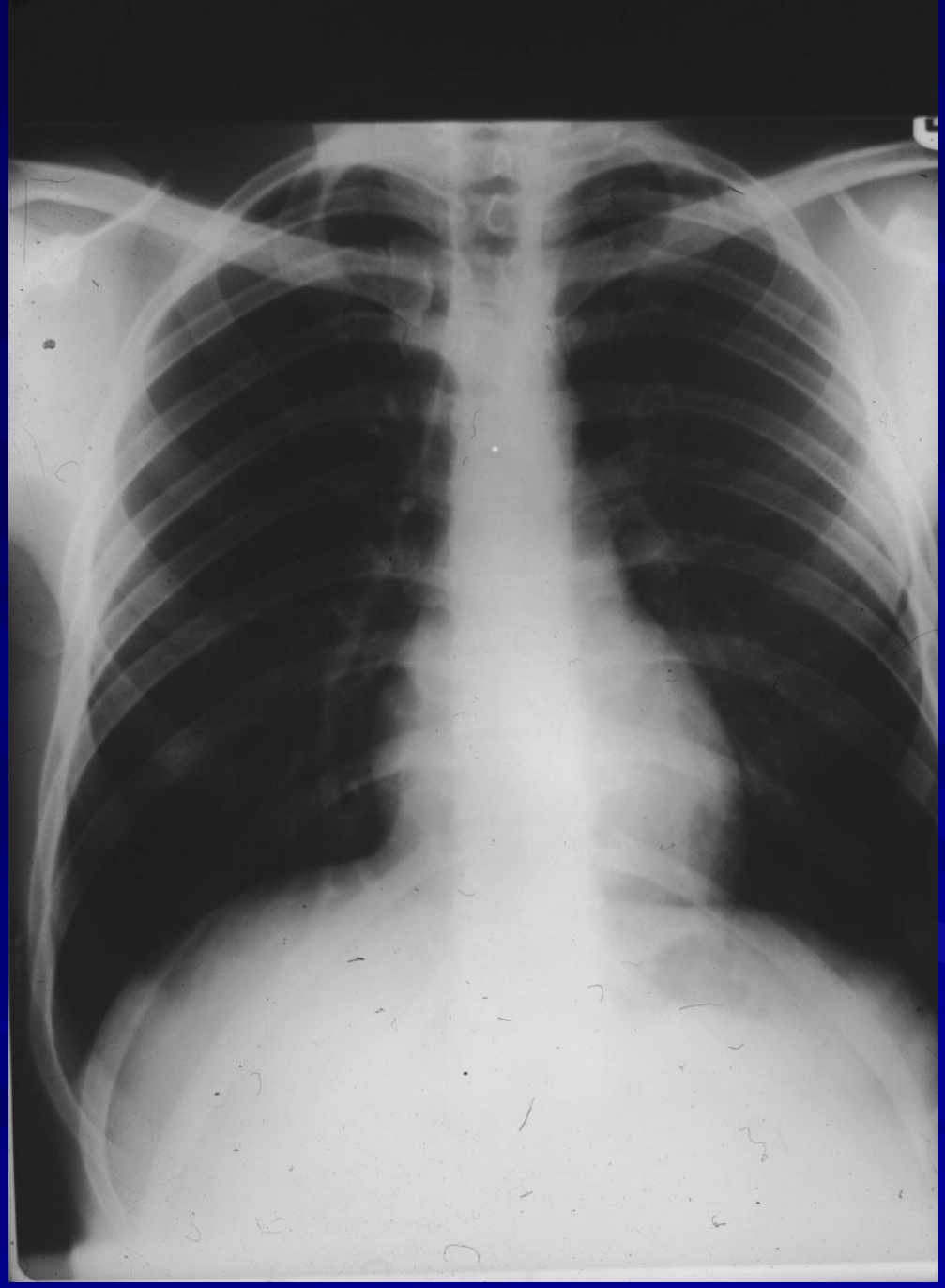
- Hoarseness
- Laryngitis
- Pharyngitis
- Chronic cough
- Globus sensation
- Dysphonia
- Sinusitis
- Subglottic stenosis
- Laryngeal cancer

Clinical Presentations of GERD

- Symptoms of Complicated GERD :
  - Dysphagia
    - Difficulty swallowing: food sticks or hangs up
  - Odynophagia
    - Retrosternal pain with swallowing
  - Bleeding

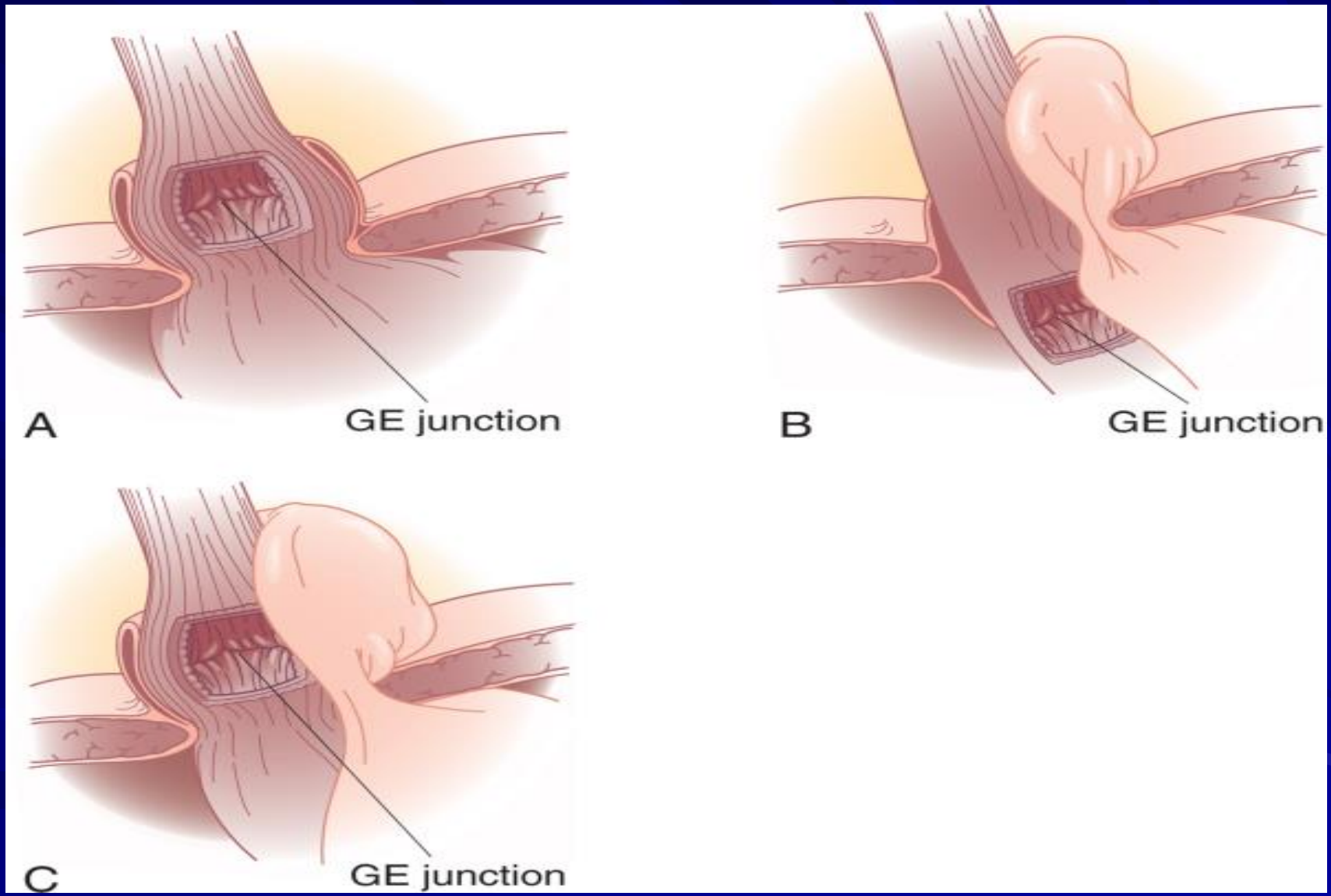
Case 1

- Examination was unremarkable
- What is your next step in the management of this patient ?

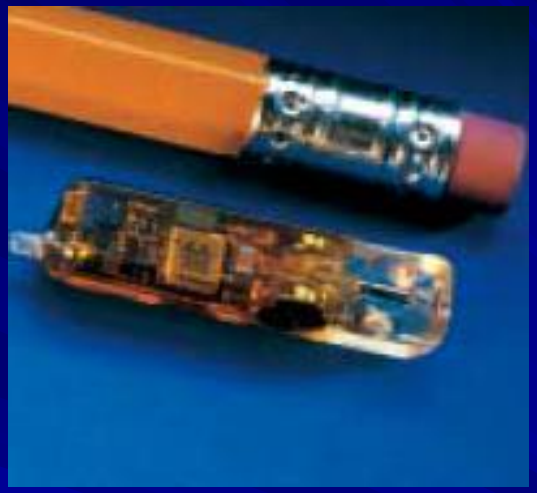


Barium Swallow

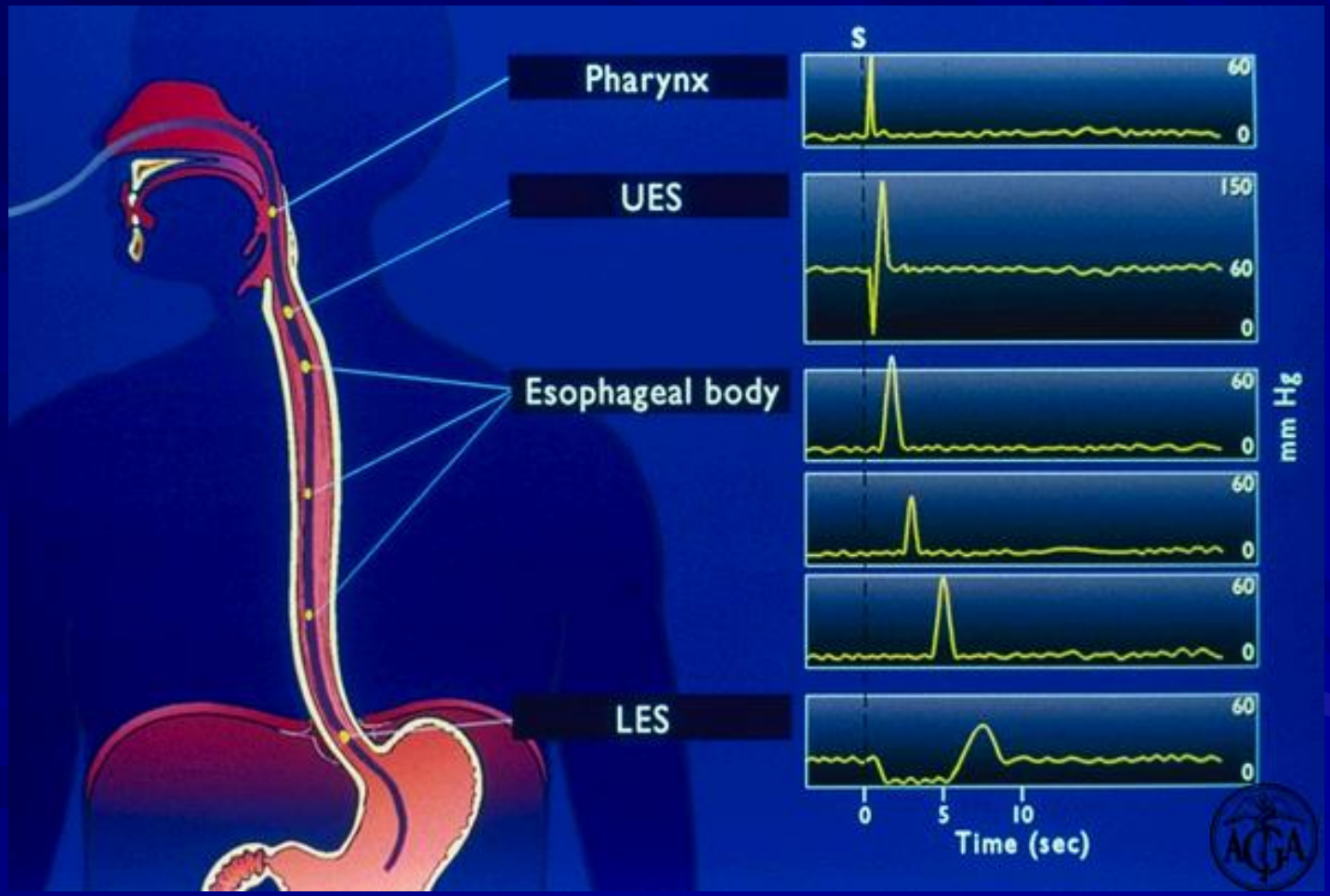
- Barium swallow report :
  - No stricture or tumor
  - Small hiatus hernia
  - Evidence of reflux of the contrast
- What is the types of the hiatus hernia ?


A
GE junction
B
GE junction
C
GE junction

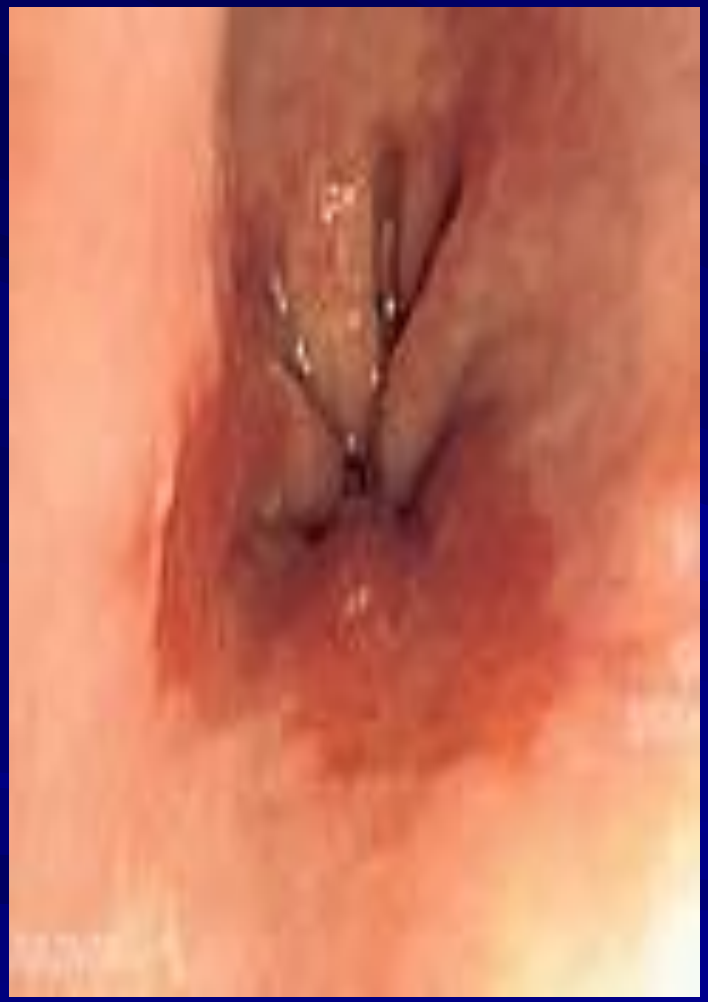
Esophageal pH Monitoring

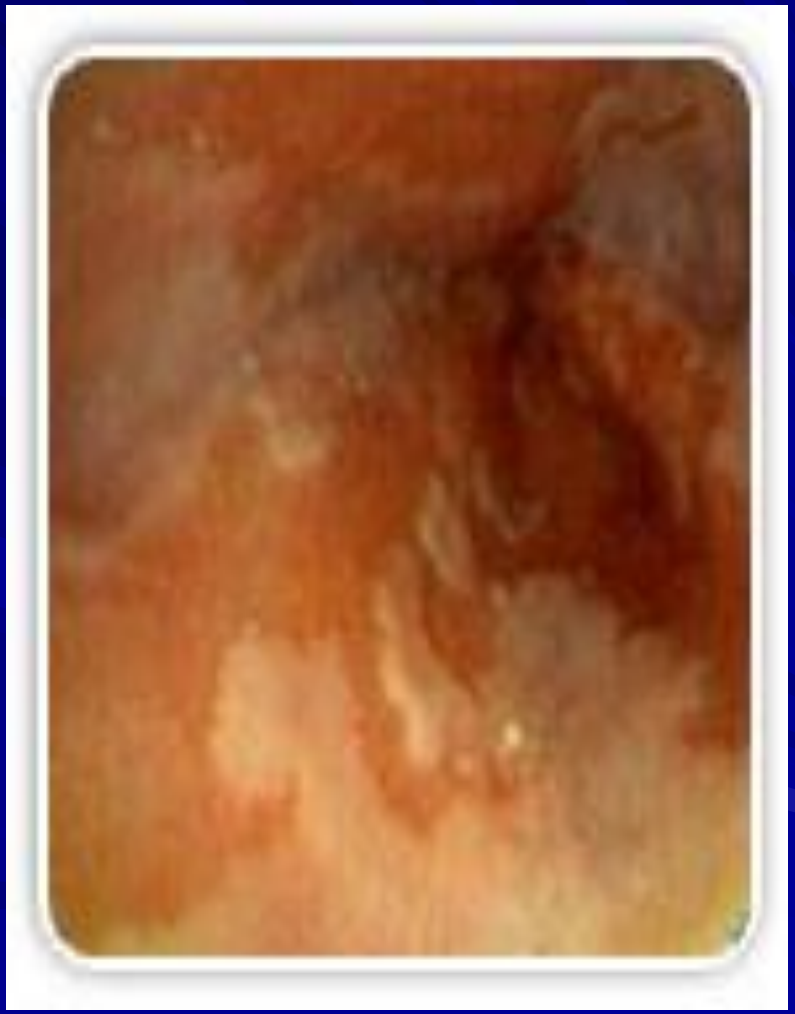


Esophageal Manometry



Endoscopy





Case 1

- Biopsy was done
- Pathology report :
  - **esophagitis with intestinal, columnar epithelium replaces the stratified squamous epithelium (metaplasia) consistent with Barrett's Esophagus,**
  - **No evidence of dysplasia**
- What is next ?

Treatment

- Lifestyle Modifications
  - Elevate head of bed 4-6 inches
  - Avoid eating within 2-3 hours of bedtime
  - Lose weight if overweight
  - Stop smoking
  - Modify diet
    - Eat more frequent but smaller meals
    - Avoid fatty/fried food, peppermint, chocolate, alcohol, carbonated beverages, coffee and tea
  - OTC medications prn

Acid Suppression Therapy for GERD

H_2-Receptor Antagonists (H_2RAs)

- Cimetidine (Tagamet®)
- Ranitidine (Zantac®)
- Famotidine (Pepcid®)
- Nizatidine (Axid®)

Proton Pump Inhibitors (PPIs)

- Omeprazole (Prilosec®)
- Lansoprazole (Prevacid®)
- Rabeprazole (Aciphex®)
- Pantoprazole (Protonix®)
- Esomeprazole (Nexium®)

Anti-Reflux Surgery

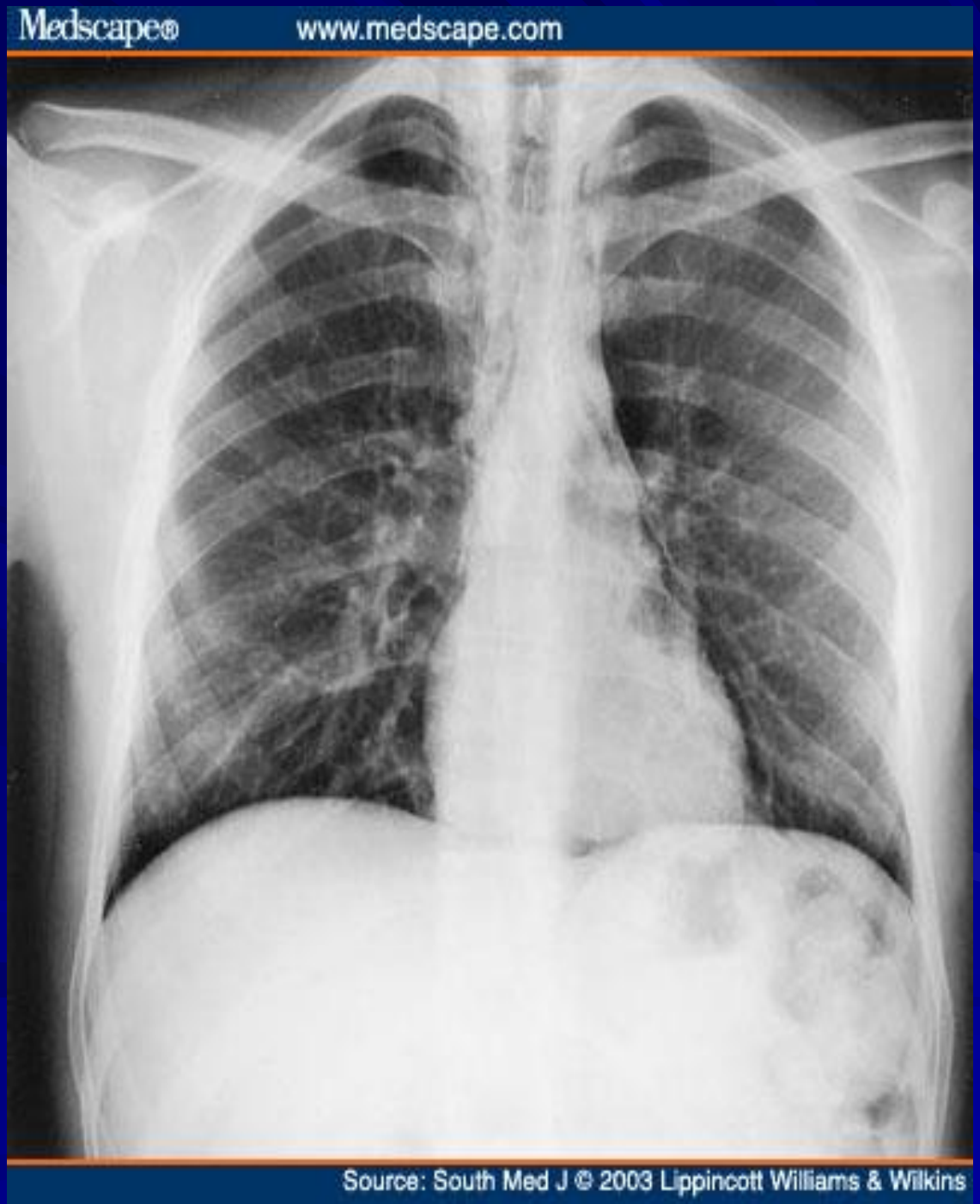
- Indication for Surgery :
  - have failed medical management
  - opt for surgery despite successful medical management (due to life style considerations including age, time or expense of medications, etc)
  - have complications of GERD (e.g. Barrett's esophagus; grade III or IV esophagitis)
  - have medical complications attributable to a large hiatal hernia. (e.g. bleeding, dysphagia)
  - have "atypical" symptoms (asthma, hoarseness, cough, chest pain, aspiration) and reflux documented on 24 hour pH monitoring

Case 1

- you advise the patient t:
  - Reduce wieght
  - Quit smoking
- Started the patient on
  - Nexium 40 mg od
- Advise patient to have
  - Follow up endoscopy

Case 1

- 3 months later , you did endoscopy for the patient , 6 hour post endoscopy patient start to complain of :
  - Chest pain
  - Fever
- What else in the history ?
- What is your management ?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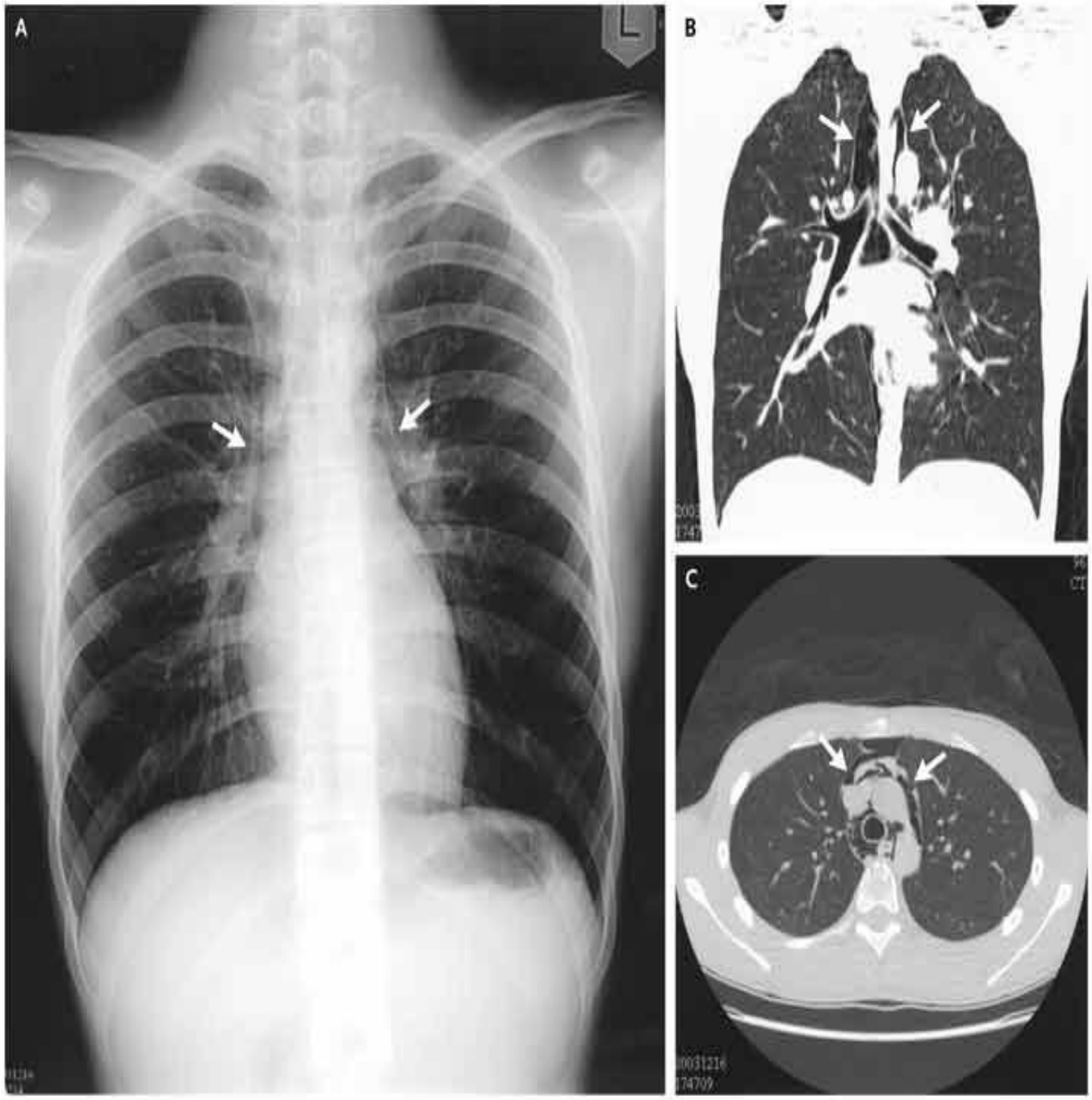
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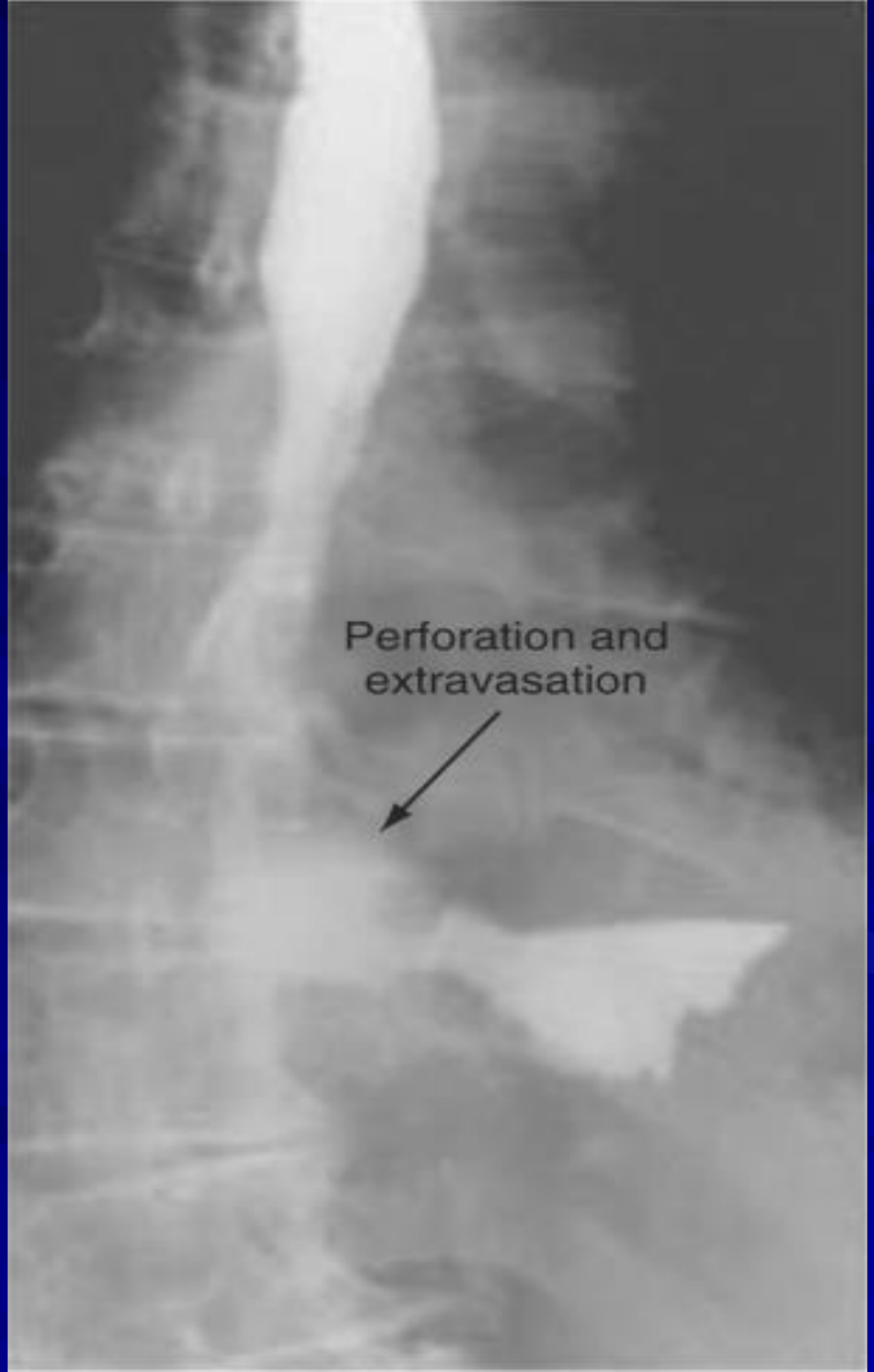
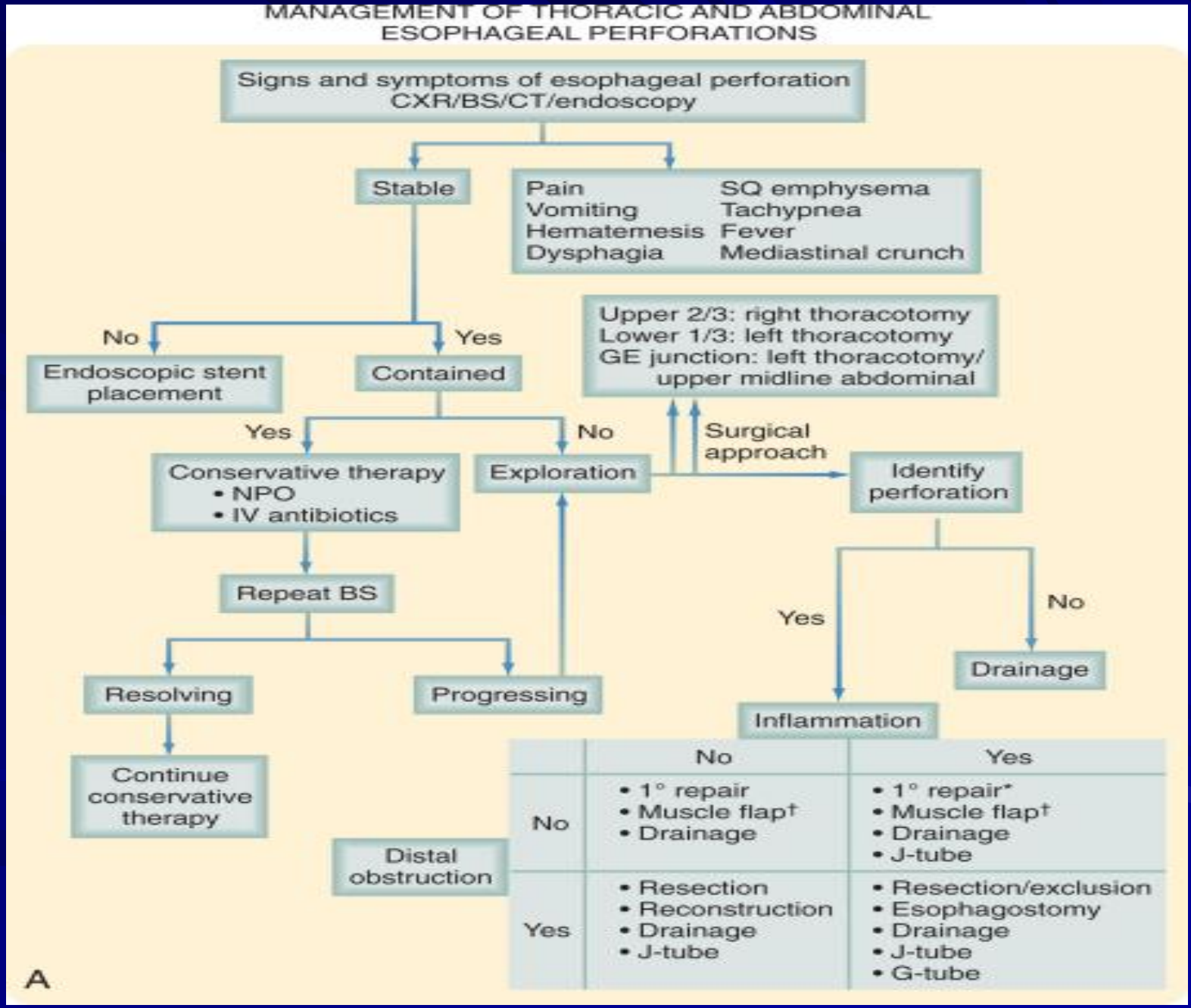

Perforation and
extravasation


MANAGEMENT OF THORACIC AND ABDOMINAL ESOPHAGEAL PERFORATIONS
Signs and symptoms of esophageal perforation
CXR/BS/CT/endoscopy
Stable
Pain
Vomiting
Hematemesis
Dysphagia
SQ emphysema
Tachypnea
Fever
Mediastinal crunch
No
Yes
Endoscopic stent placement
Contained
Upper 2/3: right thoracotomy
Lower 1/3: left thoracotomy
GE junction: left thoracotomy/ upper midline abdominal
Yes
No
Surgical approach
Conservative therapy
• NPO
• IV antibiotics
Exploration
Identify perforation
Repeat BS
Yes
No
Drainage
Resolving
Progressing
Inflammation
Continue conservative therapy
Distal obstruction
No
Yes
No
• 1° repair
• Muscle flap†
• Drainage
Yes
• 1° repair*
• Muscle flap†
• Drainage
• J-tube
Yes
• Resection
• Reconstruction
• Drainage
• J-tube
• Resection/exclusion
• Esophagostomy
• Drainage
• J-tube
• G-tube
A

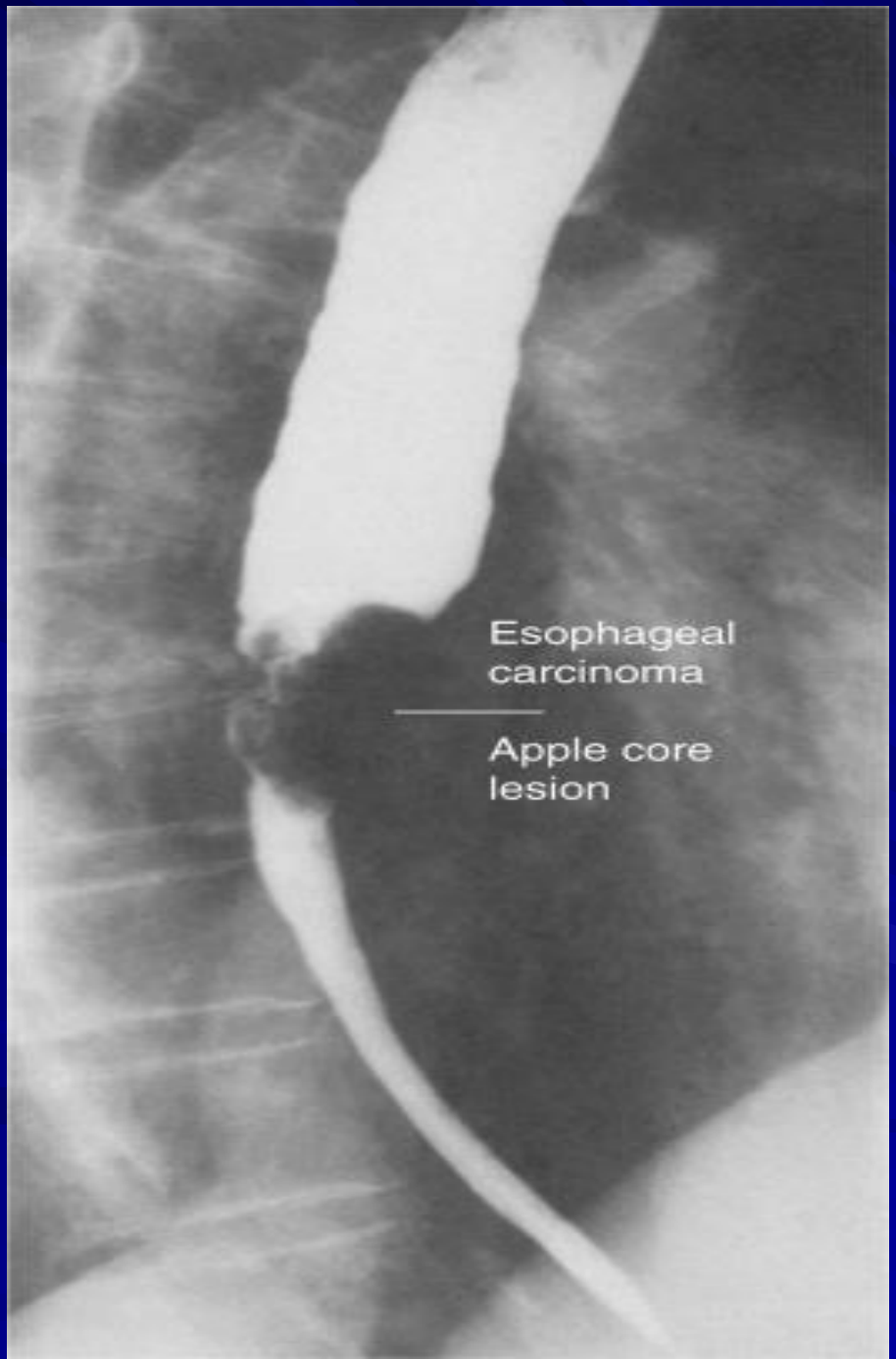
Treatment

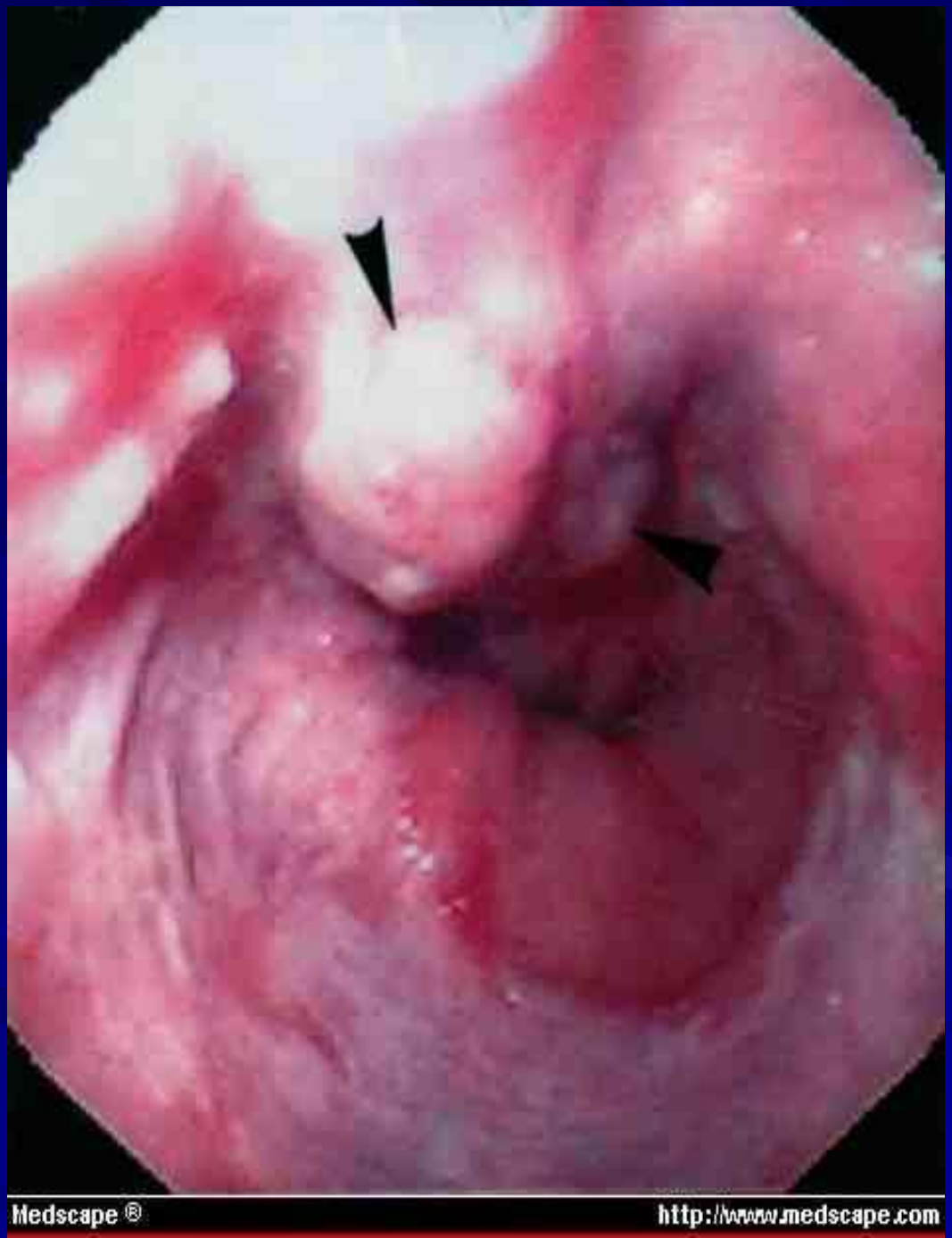
- IV fluids and broad-spectrum antibiotics are started immediately, and the patient is monitored in an ICU

- The patient is kept NPO, and nutritional access needs are assessed
- Patient improved and he was discharged home

Case 1

- 6 years later , he presented to your clinic complaining of :
- Dysphagia
- Weight loss
- What else in the history ?
- What is your differentials?
- How you going to manage this patient?


Esophageal carcinoma
Apple core lesion


Medscape ®
http://www.medscape.com

Case 1

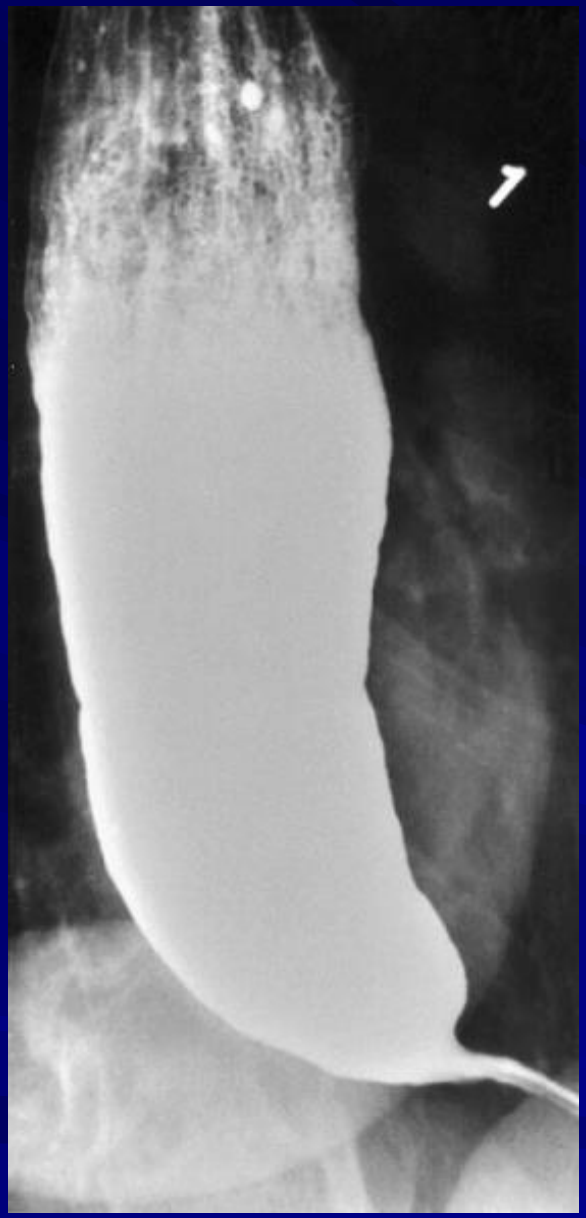
- The biopsy from the endoscopy revealed :
  - Adenocarcinoma
- What is your treatment options ?

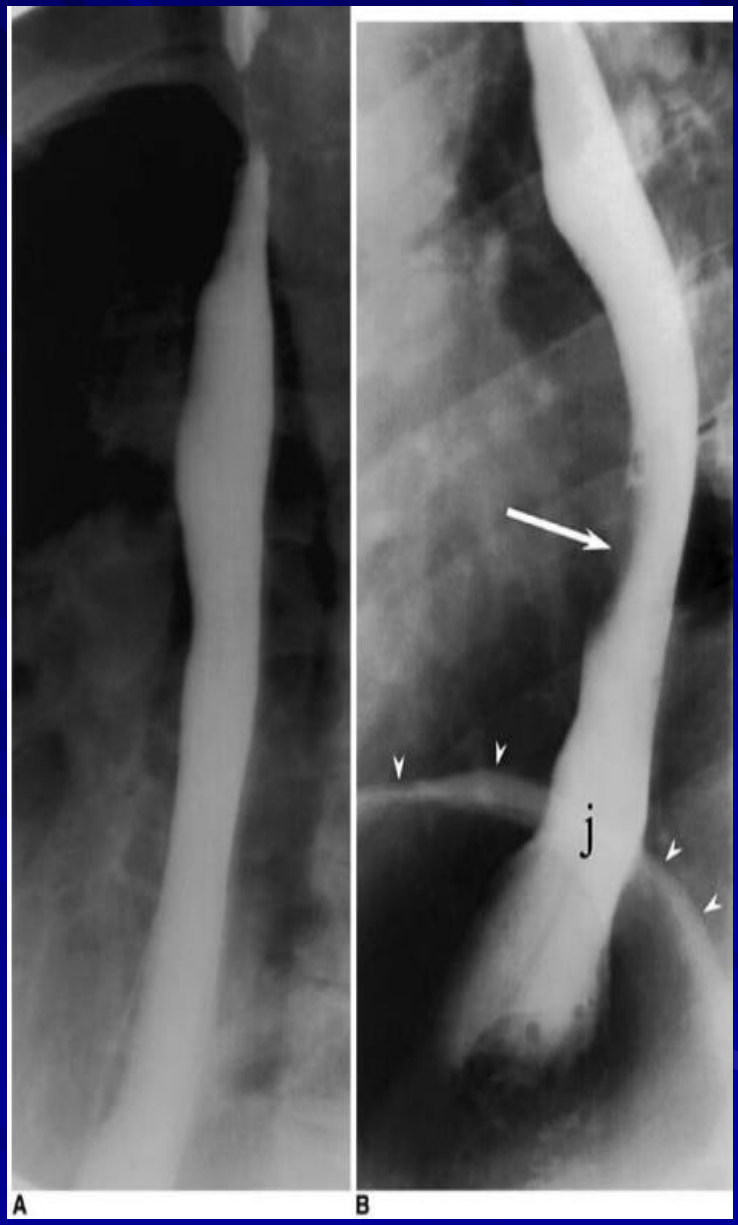
Treatment

- Chemotherpay
- Radiation therap
- Chemo-radiotherap
- Surgical resection

Case 2

- 24 years old , healthy presented to your clinic complaining of :
  - Dysphagia
- How you going to manage this patient?

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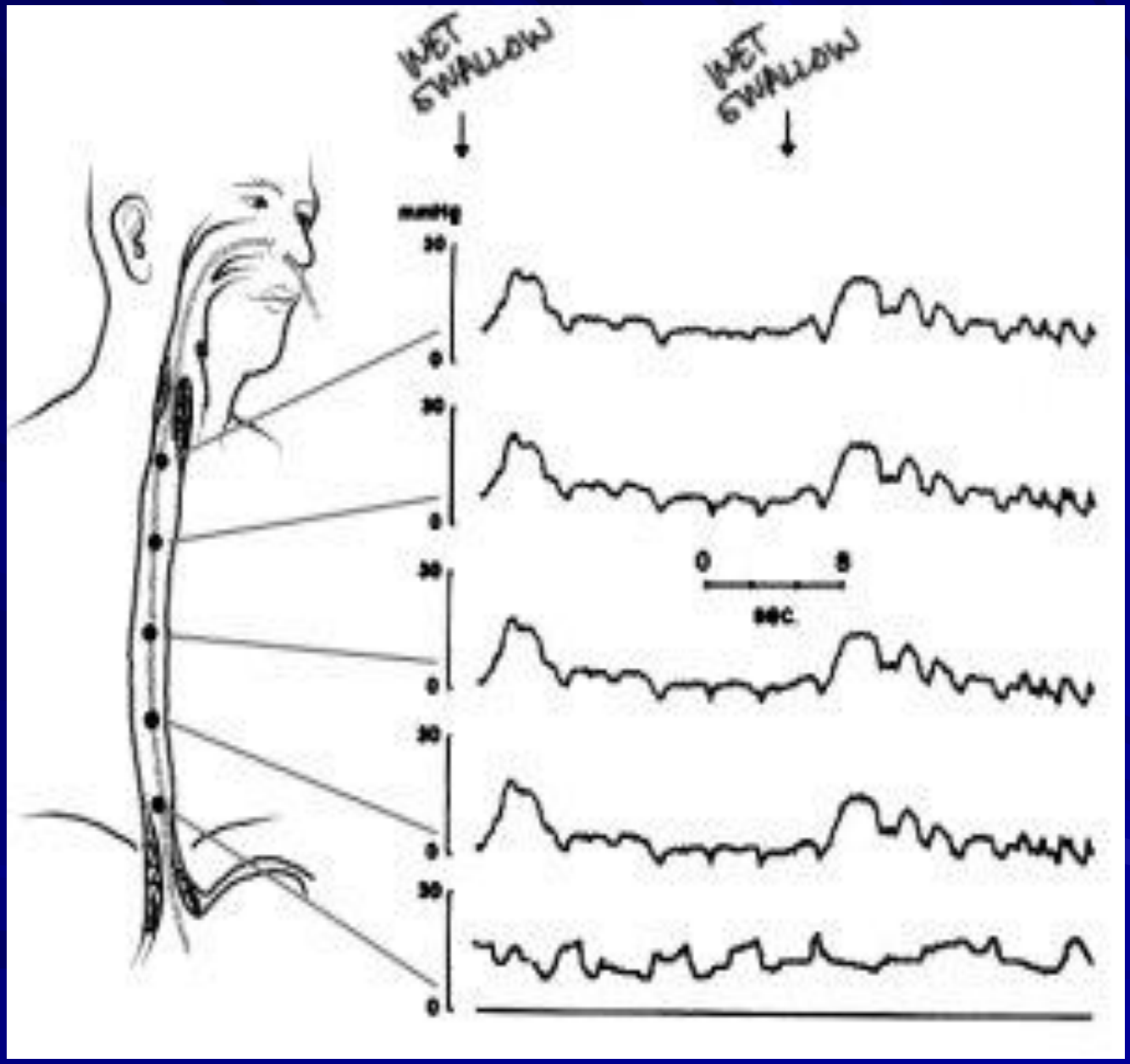
WET SWALLOW
WET SWALLOW
mmHg
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sec

Case 2

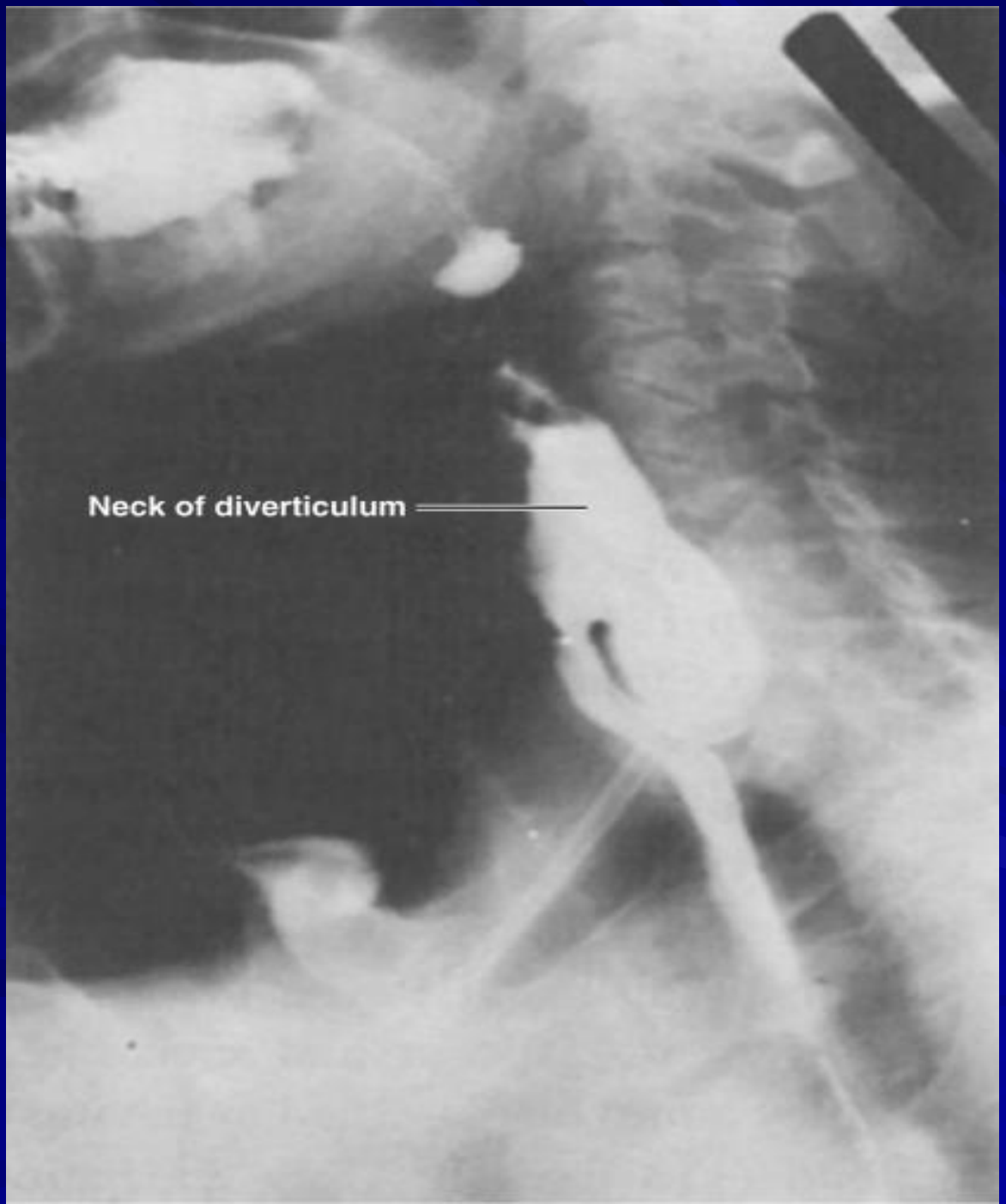
- His manometry consistent with Achalasia
- Endoscopy showed :
  - Dilated esophagus
  - Retained food particles
- How you going to treat this patient ?

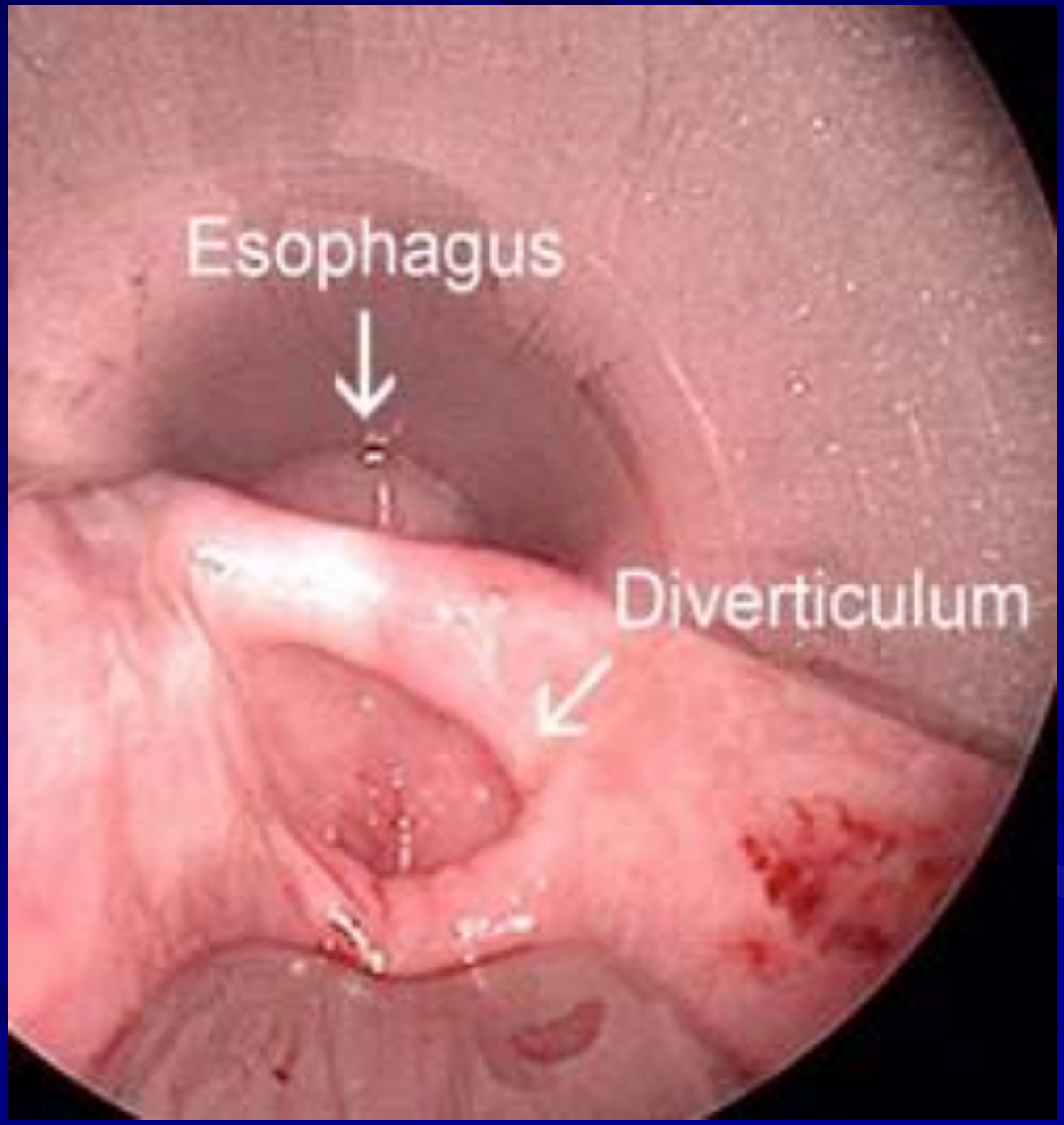
Case 2

- Treatment options :
  - **Medical therapy**
  - **Botulinum toxin injection**
  - **Bneumatic dilation**
  - **Surgical myotomy**
  - **Which option you will advice the patient to choose ?**

Case 3

- 70 years old male , his wife bring him to your clinic Because :
  - Bad breath
  - Chronic cough especially after eating
- How you going to manage this patient ?


Neck of diverticulum


Esophagus
Diverticulum

Treatment

- Surgical or endoscopic repair of a Zenker's diverticulum is the gold standard of treatment
- Open repair involve :
  - myotomy of the proximal and distal thyropharyngeus and cricopharyngeus muscles
  - diverticulectomy or diverticulopexy are performed through an incision in the left neck

Treatment

- An alternative to open surgical repair is the endoscopic Dohlman procedure
- Endoscopic division of the common wall between the esophagus and the diverticulum using a laser or stapler has also been successful

Case 3

- What is the cause of the Esophageal **Diverticula ?**
- **What is the different types of the** Esophageal **Diverticula ?**
- **And what is the most common sites ?**

Esophageal **Diverticula**

- **most diverticula are a result of a primary motor disturbance or an abnormality of the UES or LES**
- **can occur in several places along the esophagus**
- **The three most common sites of occurrence are pharyngoesophageal (Zenker's), parabronchial (midesophageal), and epiphrenic**

Esophageal **Diverticula**

- **Zenker's diverticulum and an epiphrenic diverticulum fall under the category of false, pulsion diverticula.**
- **Traction, or true, diverticula result from external inflammatory mediastinal lymph nodes adhering to the esophagus**