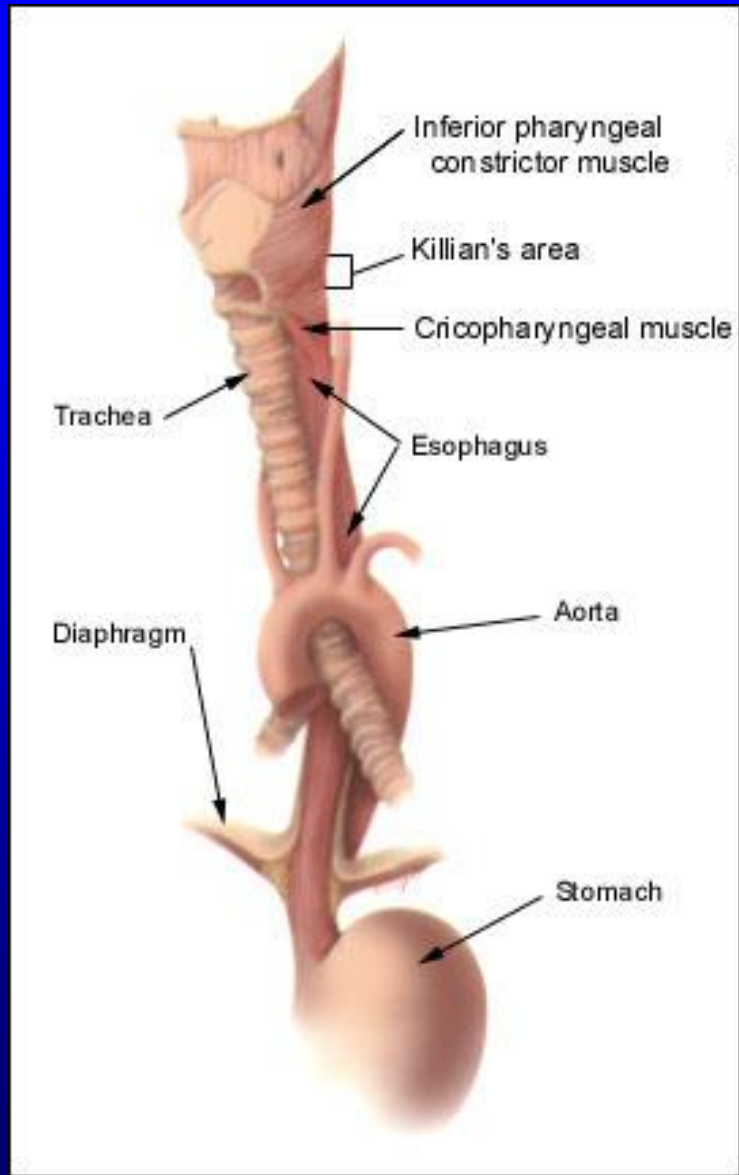


# APPROACH TO DYSPHAGIA

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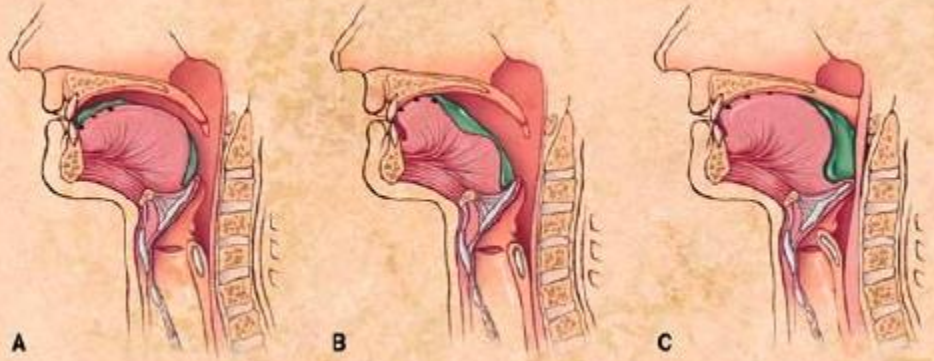
# Lecture outline

- Basic function of esophagus
- Definition of dysphagia
- Mechanism of dysphagia
- Types of dysphagia
- Common causes
- Algorithm to approach dysphagia



# Phases of swallowing

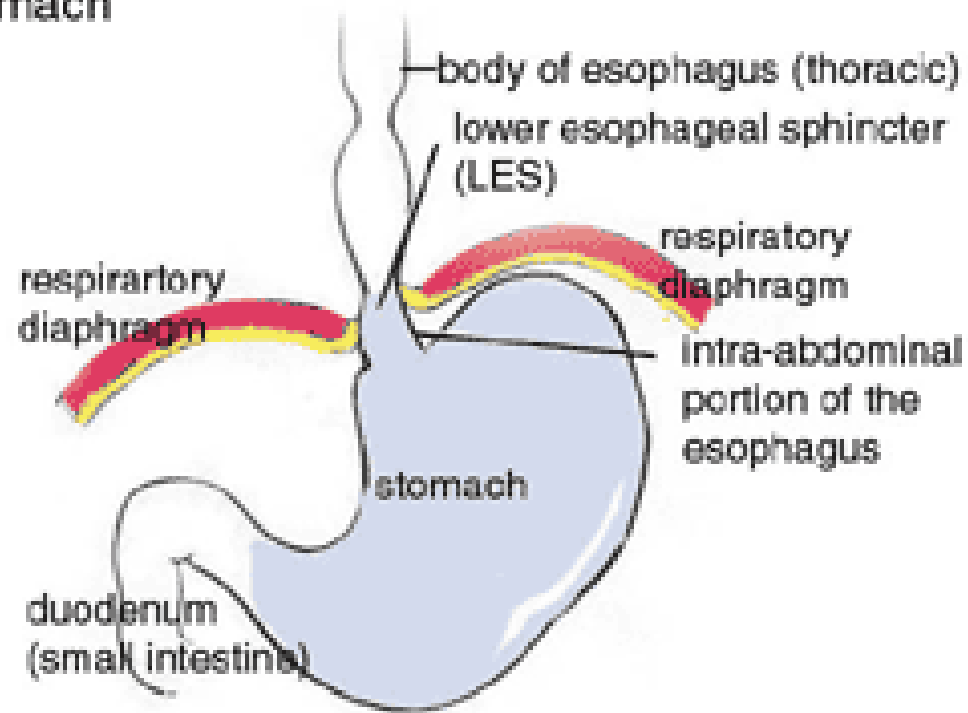
- 3 phases
- Oral phase
- Pharyngeal
- Esophageal



## Two function of esophageal

- Transport of food by peristalsis.
- Prevention of gastric regurgitation by LES/UES.

## Basic anatomy of esophagus & stomach



## Dysphagia:

- \* Sensation of obstruction of food passage.
- \* Difficulty in swallowing



# **Dysphagia is considered an alarming symptom, requiring immediate evaluation:**

Classified as

- Oropharyngeal
- Esophageal

# Oropharyngeal dysphagia also called transfer dysphagia

Arises from disease of

- Upper esophagus
- Pharynx
- Upper esophageal sphincter

# Orpharyngeal dysphagia:

## Diseases of striated muscle

### Striated muscle disease

- \* Motor neuron dis
- \* CVA
- \* Myasthenia gravis
- \* Polymyositis

# Esophageal dysphagia arises from:

- Esophageal body
- Lower esophageal sphincter
- Cardia

# Esophageal dysphagia classify to

A) **Mechanical dysphagia** may be due to

1. Large food bolus.

2. Intrinsic narrowing.

e.g. i) Esophagitis (viral/ fungal)

ii) Stricture (benign)

iii) Tumor

iv) Web/ rings

### 3. Extrinsic compression

e.g. i) Enlarge thyroid.

ii) Diverticulum.

iii) Left atrial enlargement.

## B) Motor dysphagia

Smooth muscles disorder:

- \* Scleroderma
- \* Achalasia
- \* Esophageal spasm

# Questions to ask patients with dysphagia:

1. Do you have problems initiating a swallow or do you feel food getting stuck a few seconds after swallowing?
2. Do you cough or is food coming back through your nose after swallowing?
3. Do you have problem swallowing solids, liquids, or both?
4. How long have you had problems swallowing and have your symptoms progressed, remained stable, or are they intermittent?



## Questions to ask patients with dysphagia: (cont...)

5. Could you point to where you feel food is getting stuck?
6. Do you have other symptoms such as loss of appetite, weight loss, nausea, vomiting, regurgitation of food particles, heartburn, vomiting fresh or old blood, pain during swallowing, or chest pain?
7. Do you have medical problems such as diabetes mellitus, scleroderma, Sjorgen syndrome, overlap syndrome, AIDS, neuromuscular disorders (stroke, Parkinson's, myasthenia gravis, muscular dystrophy, multiple sclerosis), cancer, Chagas' disease or others?

## Questions to ask patients with dysphagia: (cont...)

8. Have you had surgery on your larynx, esophagus, stomach, or spine?
9. Have you received radiation therapy in the past?
10. What medications are you using now (ask specifically about potassium chloride, alendronate, ferrous sulfate, quinidine, ascorbic acid, tetracycline, aspirin and NSAIDs)? (Pill esophagitis can cause dysphagia.)

**Some patients – no cause can be  
identified → functional dysphagia**

## 4 cardinal Q

- Oropharyngeal or esophageal
- Solid or solid and liquid
- Intermittent or progressive
- Associated symptoms

# Physical examination:

- Sign of bulbar paralysis
- Dysarthria
- Ptosis
- CVA
- Goitre
- Changes in skin - CTD

- Common disease

# GERD (Gastro-oesophageal reflux disease)

Reflux esophagitis: Damaged esophageal mucosa by reflux of gastric content.

## Pathophysiology

Antireflux mechanism includes:

- LES
- Esophageal peristalsis
- Resistant of esophageal mucosa.
- Saliva
- Gastric peristalsis



*GERD occurs with stomach  
content reflux up the esophagus*

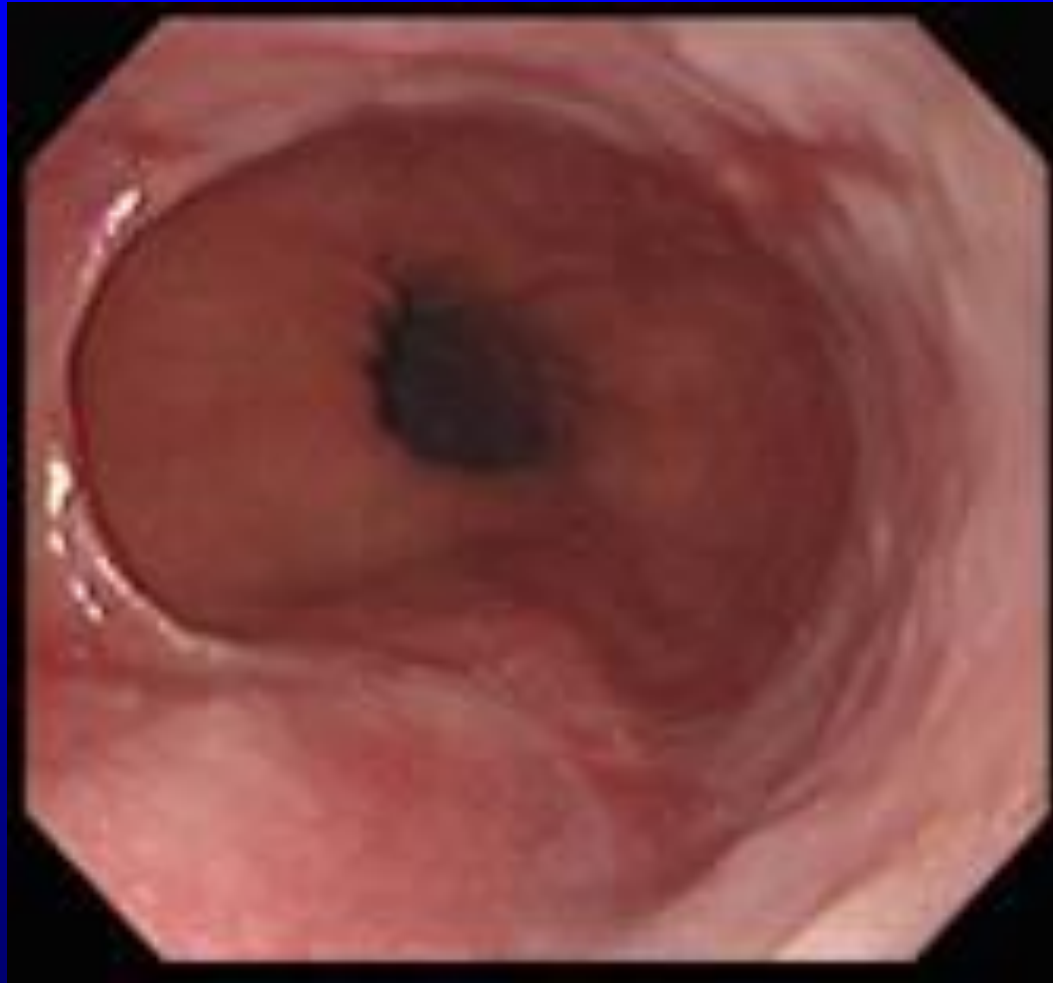


# Major factor involved in GERD

- Loss of LES pressure:
  - TLESR
  - Sustained
  - Increased Intra-gastric pressure
  - Scleroderma
  - Surgical resection
- Hiatus hernia
- Aperistalsis
- Reduce saliva
- Delayed gastric emptying : Mech. – obstruction.  
Motor

# Damage depends on:

- Refluxed material
- Duration of reflux / frequency.



GERD

# Manifestation:

- HB
- Chest pain
- Dysphagia - complication
- Regurgitation

# Diagnosis:



Endoscopy

Barium swallow

24 Hours pH - motility

# Complication:

- Bleeding
- Stricture formation
- Barrett's esophagus

# Treatment:

- Antireflux measure.
- Acid suppressing agent.
- Surgery

# Achalasia: A motor disorder of esophageal smooth muscle

Character by:

- High LES pressure, that does not relax properly.
- Absent distal peristalsis.



# Pathophysiology: Loss of intramural neurons of esophageal body & LES.

## Clinically

- Dysphagia – both liquid and solid.
- Regurgitation and pulmonary aspiration.
- Chest pain.

# Diagnosis:

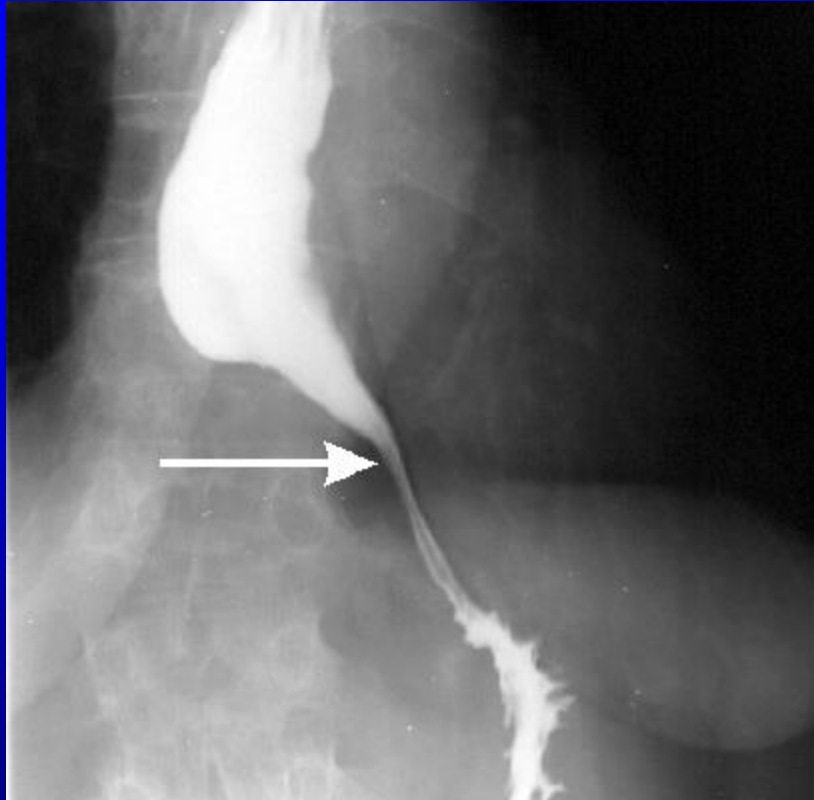
Chest X-ray -

- Absent of gastric bubble.
- Wide mediastinum.
- Fluid level.

Ba. Swallow

Esophageal dilatation

Terminal part of the esophagus is beak like



Terminal part of the esophagus is beak like

# Manometry

Elevated LES P with no or partial relaxation  
amplitude contraction, no propagating  
(simultaneous).

### III. A) Medical

Nitroglucerin

Ca – channel blocker.

B) Pneumatic dilatation

C) Surgical

# Infectious Esophagitis:

## A) Viral esophagitis

- Herpes simplex.
- Varicella Zoster.
- CMV.

B) Bacterial

C) Fungal

- C/o - Dysphagia
- Odynophagia
- Bleeding

# Diagnosis:

Ba. swallow

End.

Bx.



# Diverticula: Outpouchings of the wall of the esophagus

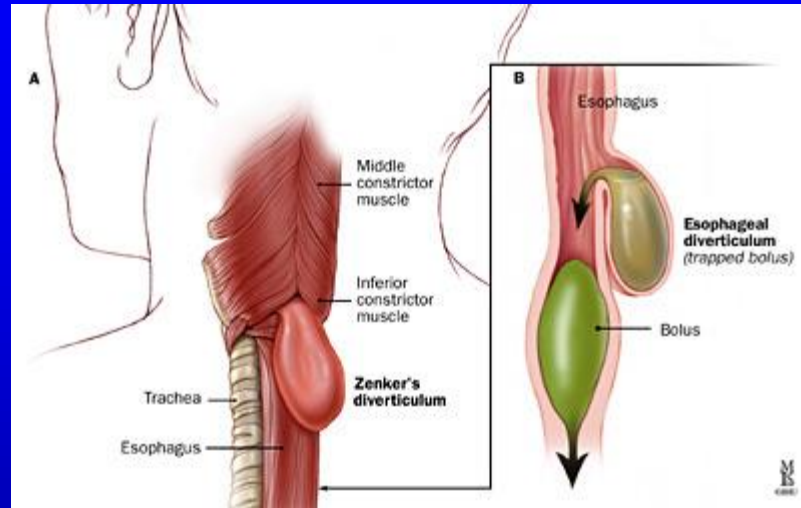
Zenker - upper

Epiphrenic – lower part

C/o - Asymptomatic

Typical – Regurgitation of food consumed several days ago.

– Dysphagia.



# Esophageal Cancer:

Disease more in Males > 50 Y.

Causation factors:

- Excess alcohol.
- Cigarette smoking.
- Fungal toxin.

## Mucosal damage:

- Hot tea.
- Radiation induced stricture.
- Barrett's esophagus.
- Esophageal web.

## Clinically

15% in upper 1/3  
45% in middle 1/3  
40% in lower 1/3

## Pathology

Squamous cell carcinoma > 75%  
adenocarcinoma

- Progressive dysphagia
- Weight loss
- Odynophagia
- Regurgitation
- T-E Fistula

Once symptom appear                      incurable.

    Patient may have Hypercalcaemia

Diagnosis:

- Ba. swallow
- Endoscopy & Bx

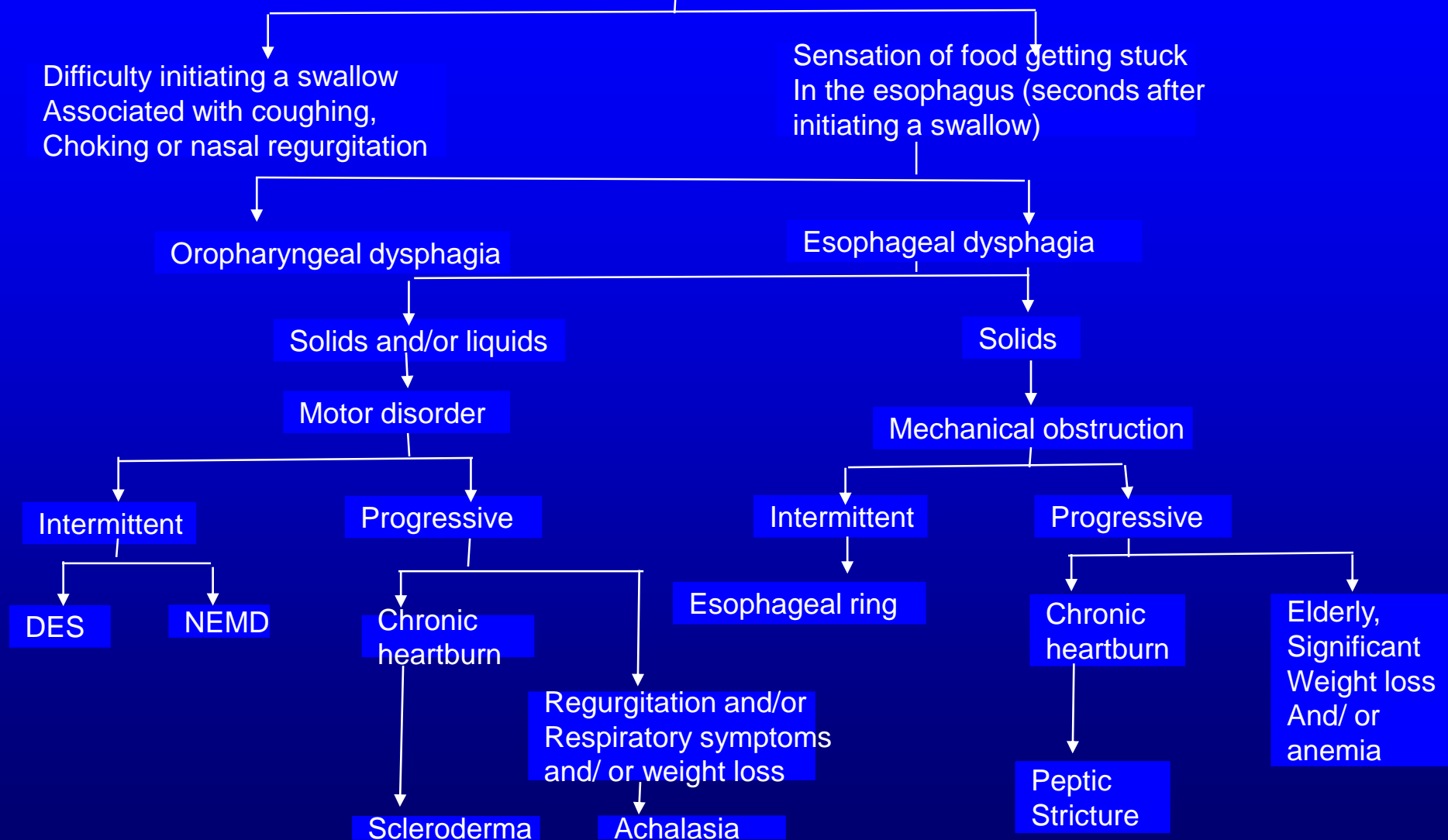
- IV. - Surgical, if localized
- Paliative

Prognosis in poor.

5 Y survival  $\cong$  5%

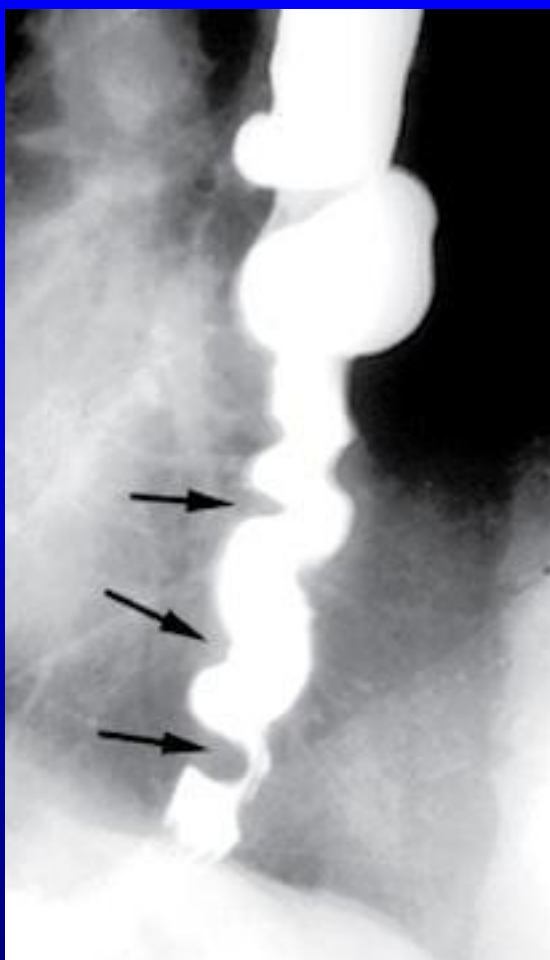
# Diagnosis of dysphagia

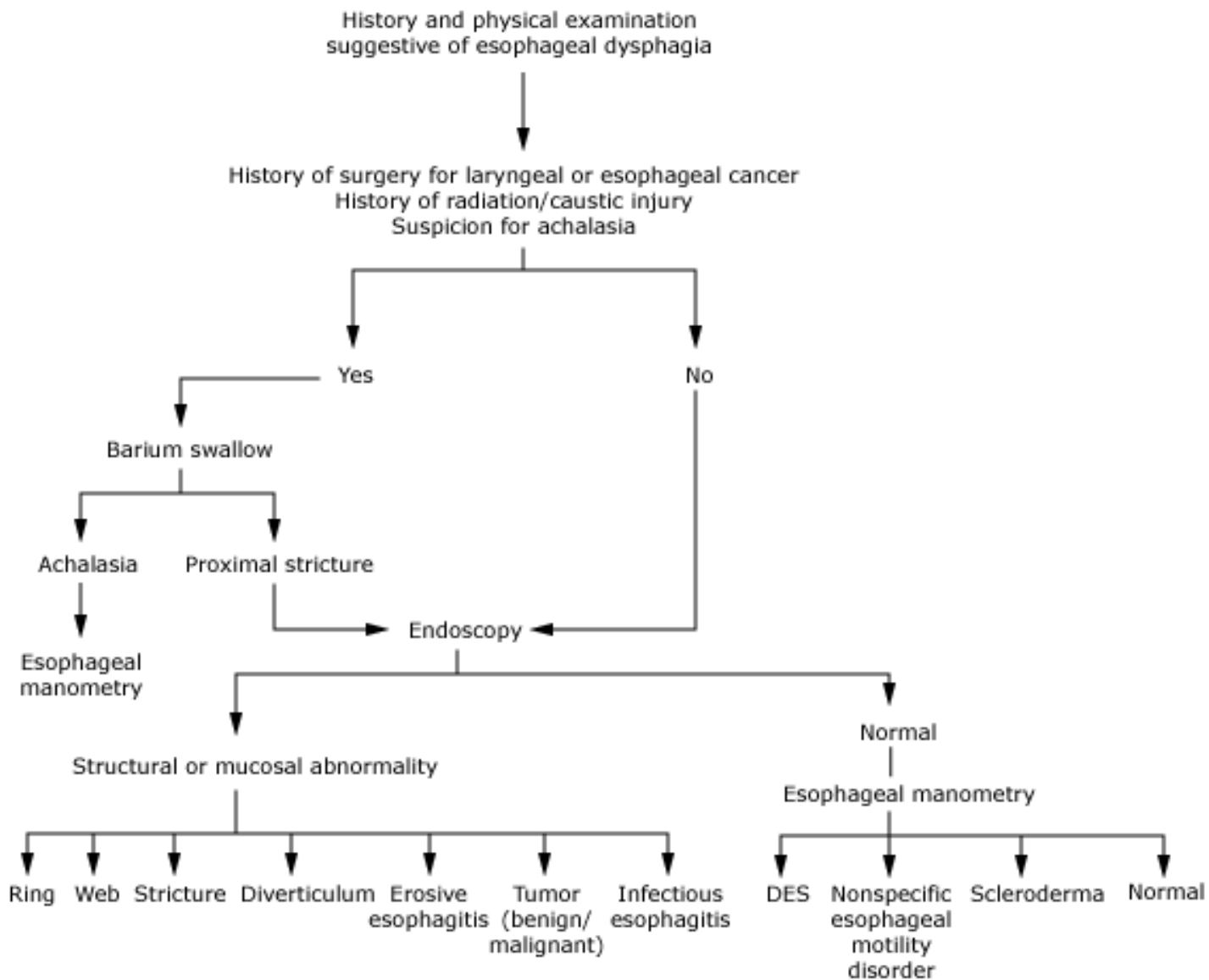
## Approach to the patient with dysphagia



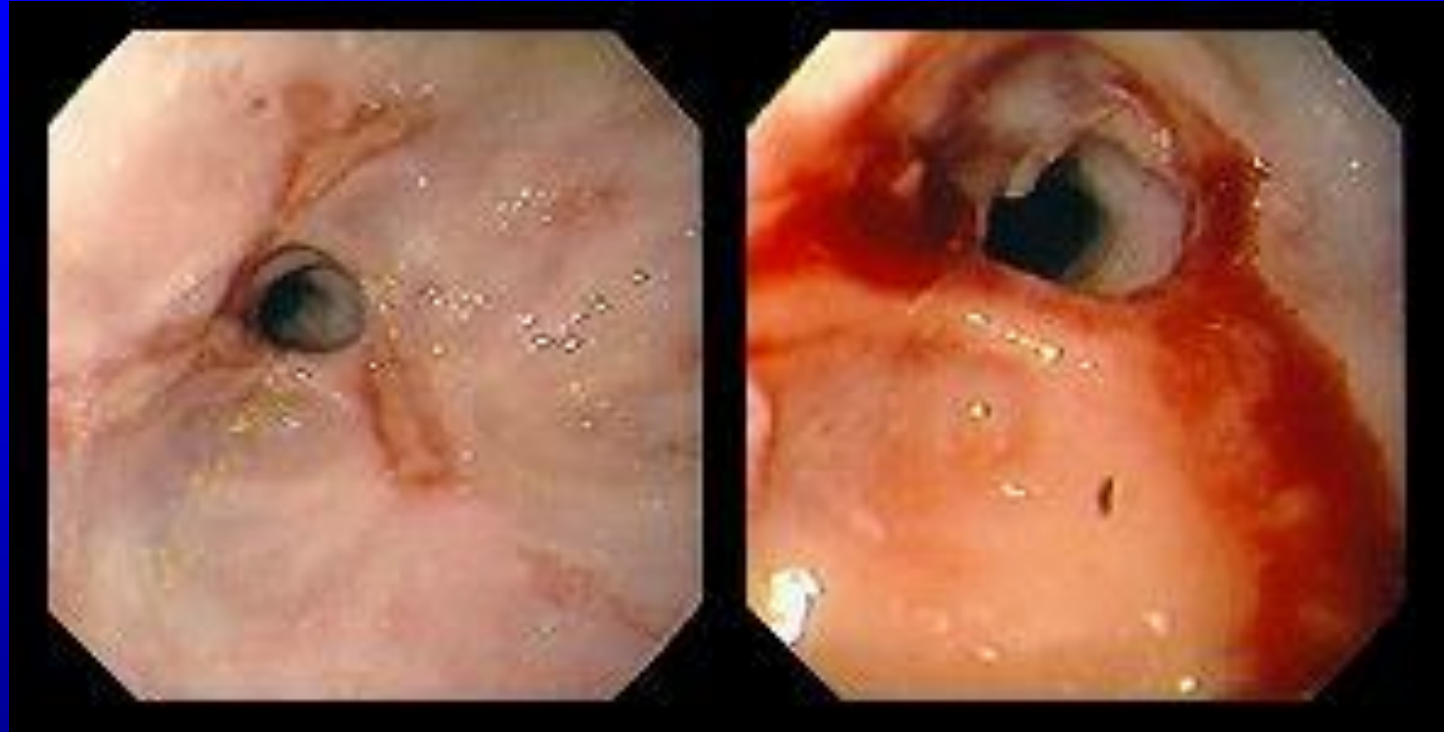
DES: diffuse esophageal spasm; NEMD: nonspecific esophageal motility disorder.

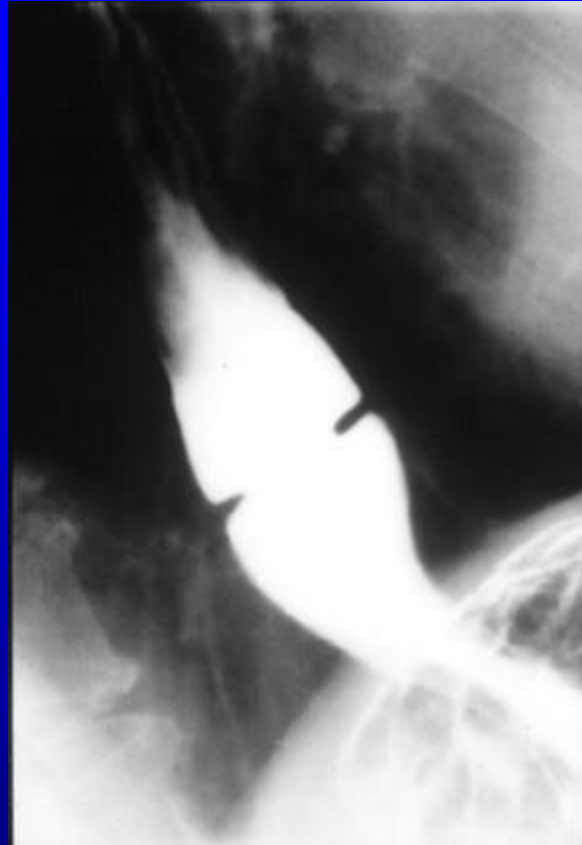






Young lady with intermittent solid  
dysphagia

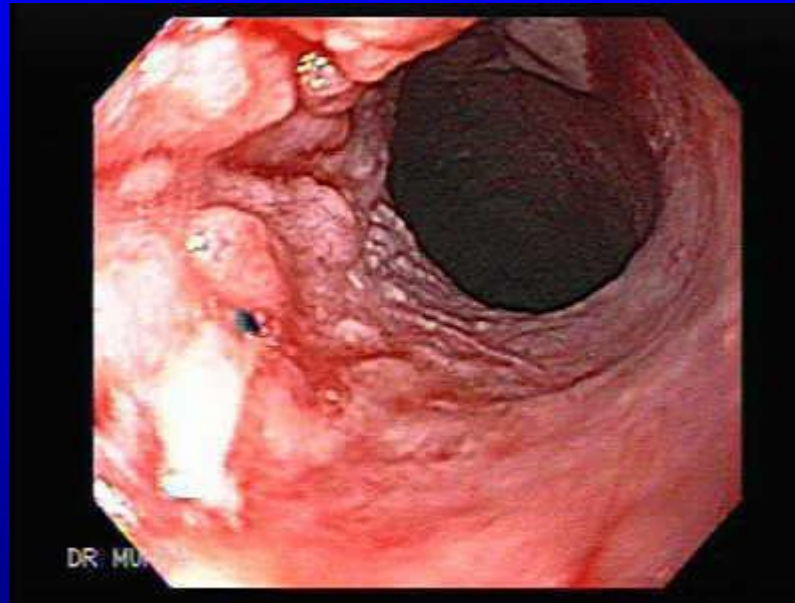




Young lady with progressive  
dysphagia to solid and liquid  
,wt loss



Old man with progressive dysphagia  
to solid only with wt loss



- Thank you
- Questions ???????