

APPROACH TO DYSPHAGIA

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Objectives

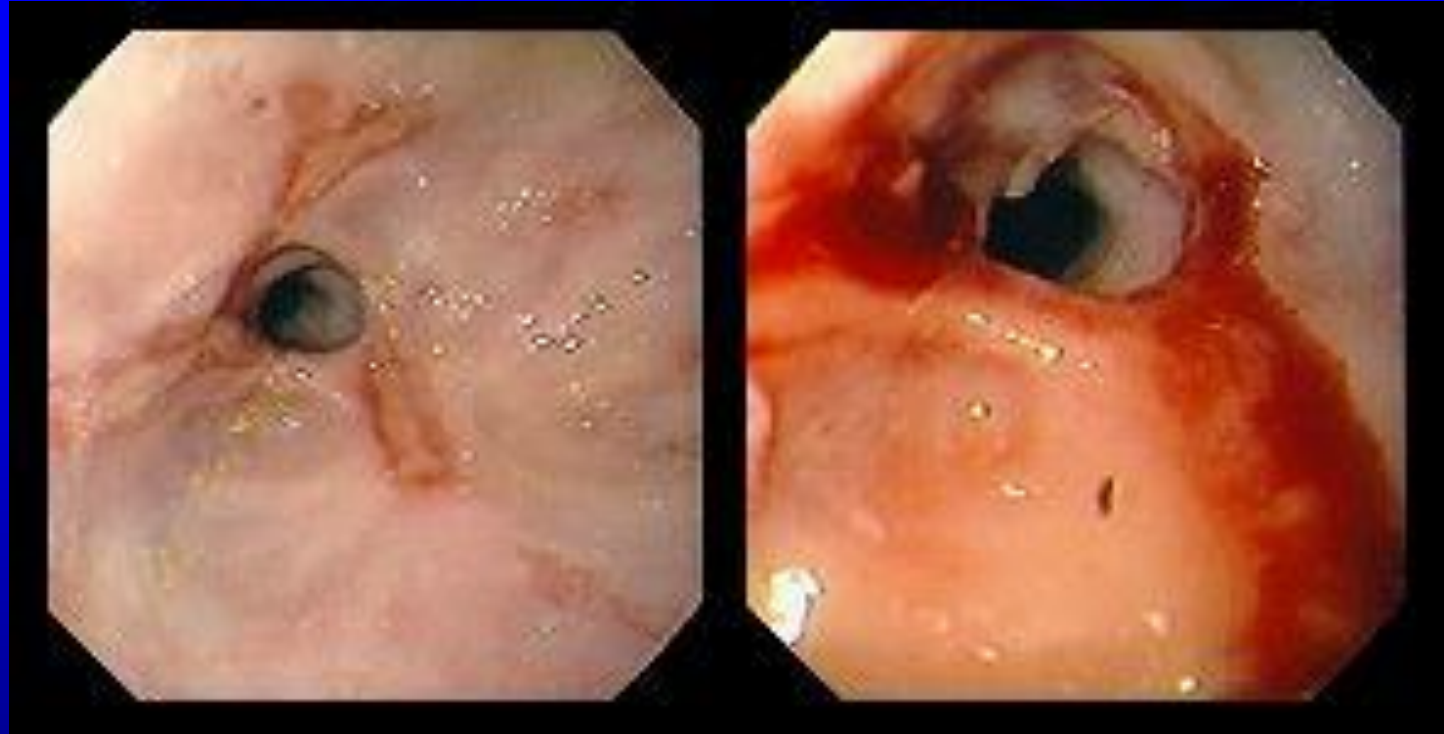
- Understands the mechanism of swallowing
- Defining dysphagia and it's common etiology
- Approach patient with dysphagia
- Common esophageal disorders

Ca esophagus

Which one of the following is the most common risk factor for adenocarcinoma of esophagus ?

- a. Smoking
- b. Corrosive
- c. Eosinophilic esophagitis
- d. Barrett's esophagus

What is the most likely presenting symptom for this lady?



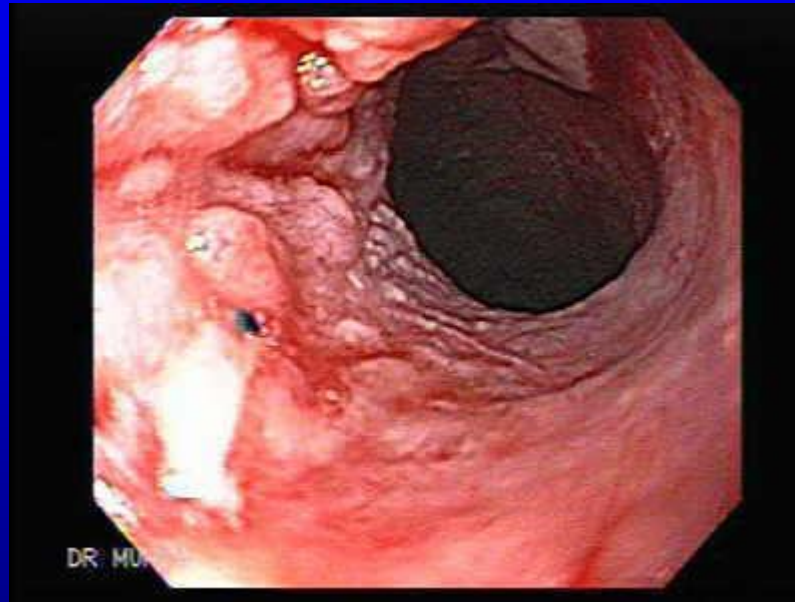
- A. Progressive dysphagia for liquid
- B. Progressive solid dysphagia
- C. Intermittent solid dysphagia
- D. Acute dysphagia for both

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

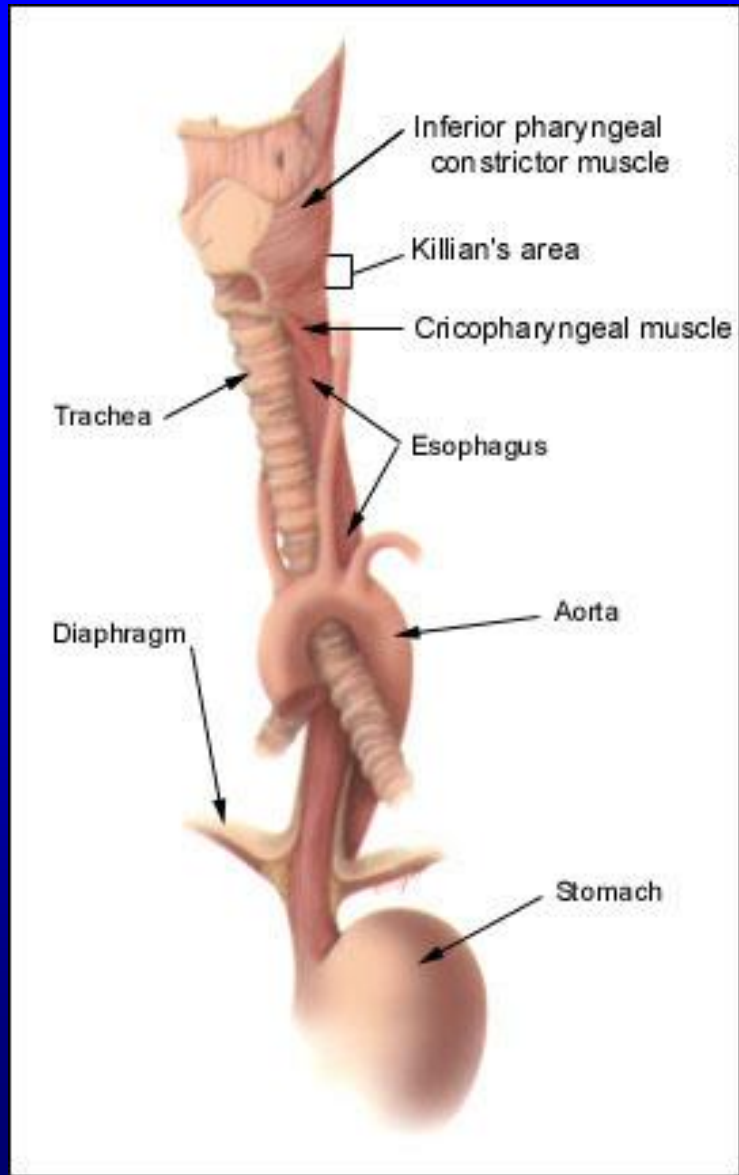


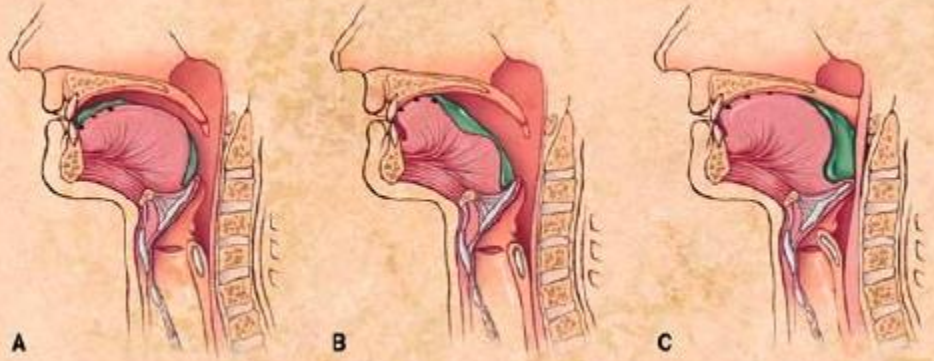
- The next step in the management of this patient is
- A. dilatation
- B. manometry
- C. myotomy
- D. PPI

Old man with progressive dysphagia
to solid only with wt loss



- The above patient his 5 years survival is ?
- A. 5 %
- B. 10 %
- C. 15 %
- D. 20 %





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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.)

4 cardinal Q

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

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

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



- Age>50 Y
- GERD >5 years
- Central obesity
- Male
- 1st degree relative with Barrettes
- Smoker
- Caucasian race
- Hiatus hernia

- Surveillance will be for those with high risk
- Male
- Female with short history of GERD didn't need it as they are low risk
- Progression to cancer is low 0.5 annually
- OGD Q 3 years then based n BX

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:

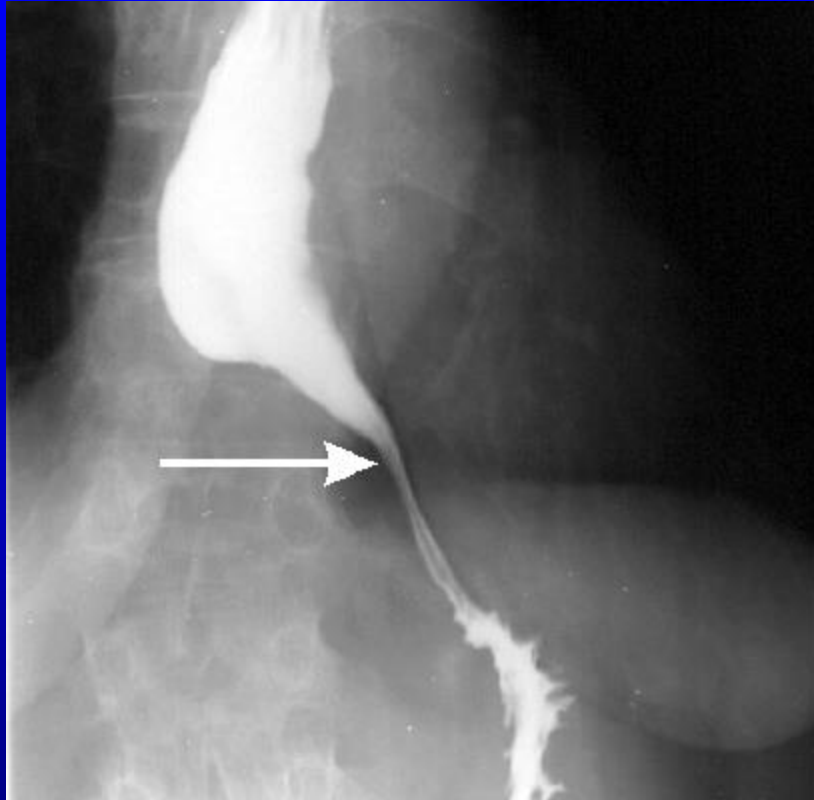
Chest X-ray -

- 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

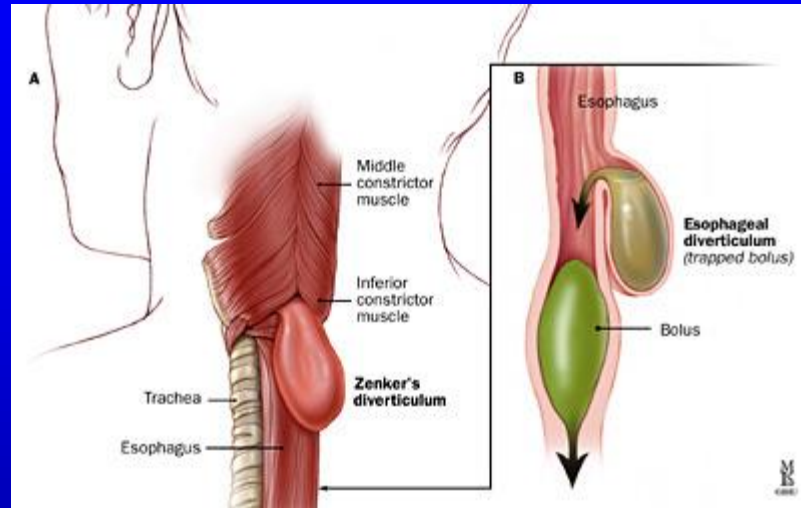
Zenker - upper

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

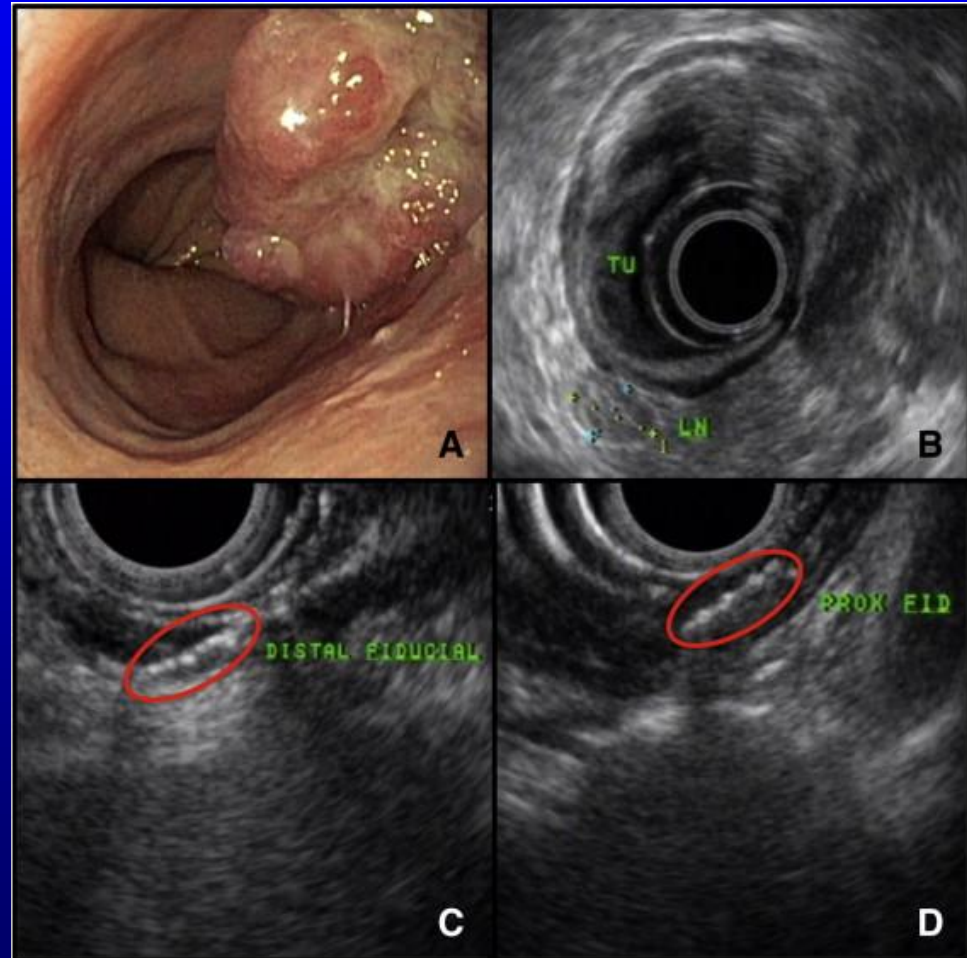
- Although the incidence of squamous cell esophageal cancer has decreased over the past two decades in most Western countries and in parts of Asia, including certain high-risk areas of China
 - In the 1960s squamous cell esophageal cancers comprised approximately 90% of all esophageal cancers. However, because of an alarming rise in the incidence of esophageal adenocarcinoma, esophageal adenocarcinoma is now the predominant type of esophageal carcinoma in the United States. This reversal pattern has also been recently noted in some European countries such as Denmark and Scotland.
-
- 6.. Brown LM, Devesa SS, Chow WH: Incidence of adenocarcinoma of the esophagus among white Americans by sex, stage, and age. *J Natl Cancer Inst* 2008; 100:1184-7.
 - 7.. Pera M, Manterola C, Vidal O, Grande L: Epidemiology of esophageal adenocarcinoma. *J Surg Oncol* 2005; 92:151-9.
 - 8.. Brown LM, Devesa SS: Epidemiologic trends in esophageal and gastric cancer in the United States. *Surg Oncol Clin North Am* 2002; 11:235-56.
 - 9.. Bollschweiler E, Wolfgarten E, Gutschow C, H?lscher AH: Demographic variations in the rising incidence of esophageal adenocarcinoma in white males. *Cancer* 2001; 92:549-55.

Esophageal CA -- pre-op staging

- Wall penetration
 - “High grade dysplasia” = 43% occult adeno CA
 - Tumor limited to submucosa --> 19% LN involvement
 - 3% had more than 4 nodes
 - Nodes limited to peri-esophageal, not spleen or peri-gastric => no need to resect these
 - Invasion of muscularis propria --> 80% LN involvement

Eus

- Survival benefit T3

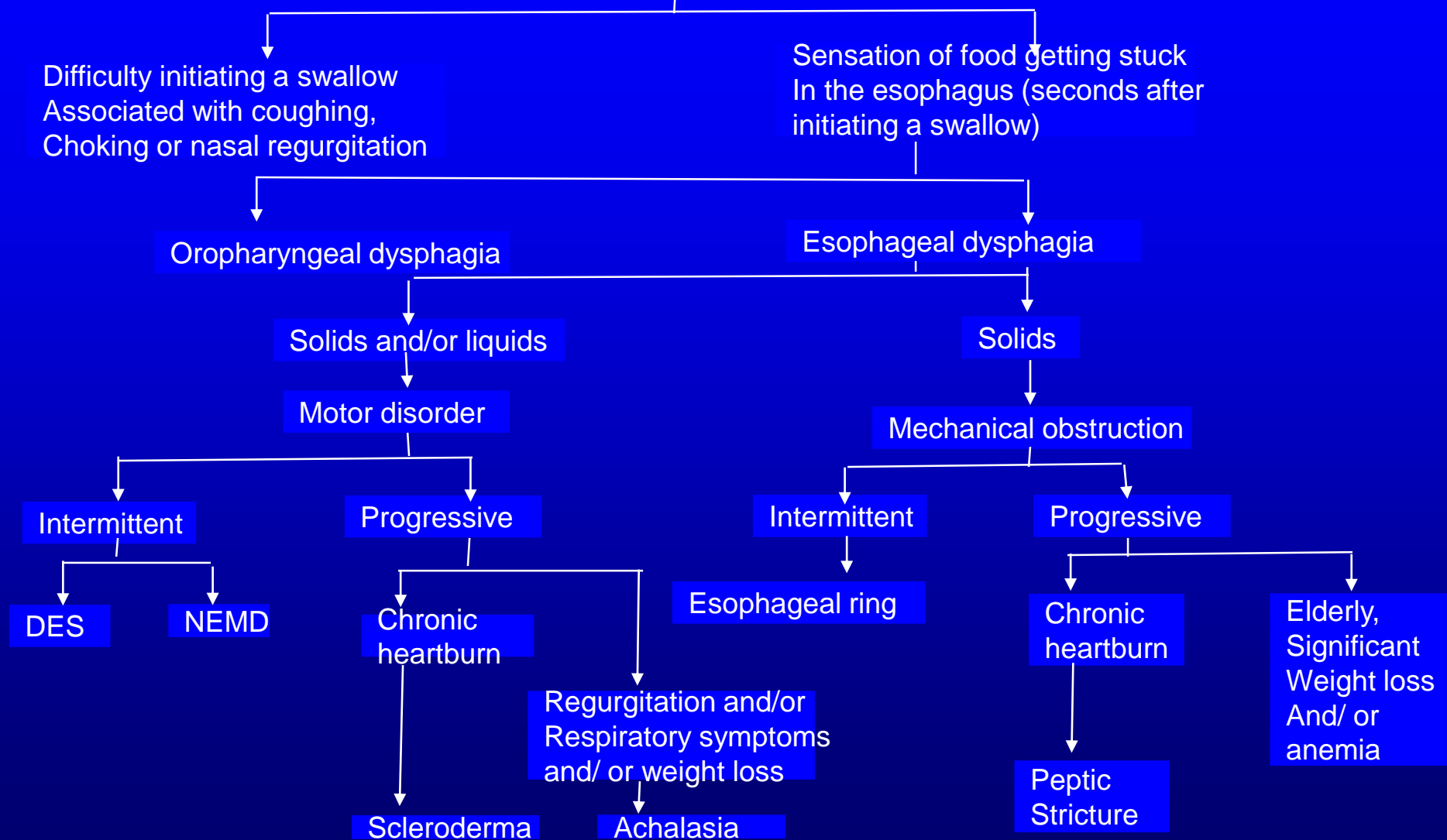


Esophageal Cancer

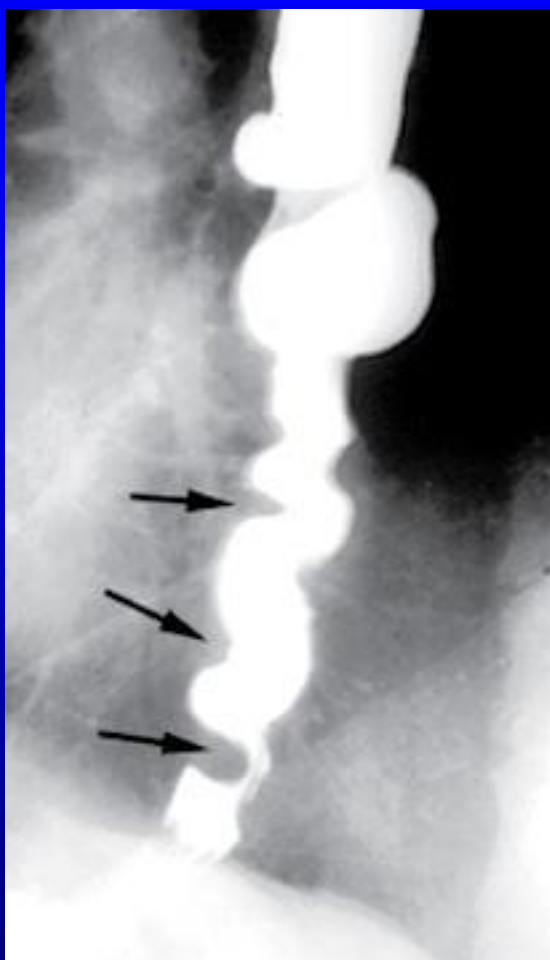
- Approx. 13,000 cases/year in USA
- Post-esophagectomy overall 5 yr survival = 18%
 - At presentation, 57% patients are **Stage 3**, with a **10%** post-esophagectomy surv.
 - At presentation, 24% patients are **Stage 2**, with a **35%** post-esophagectomy surv.
 - At presentation, patients who are **Stage 1**, have an **80%** post-esophagectomy surv.

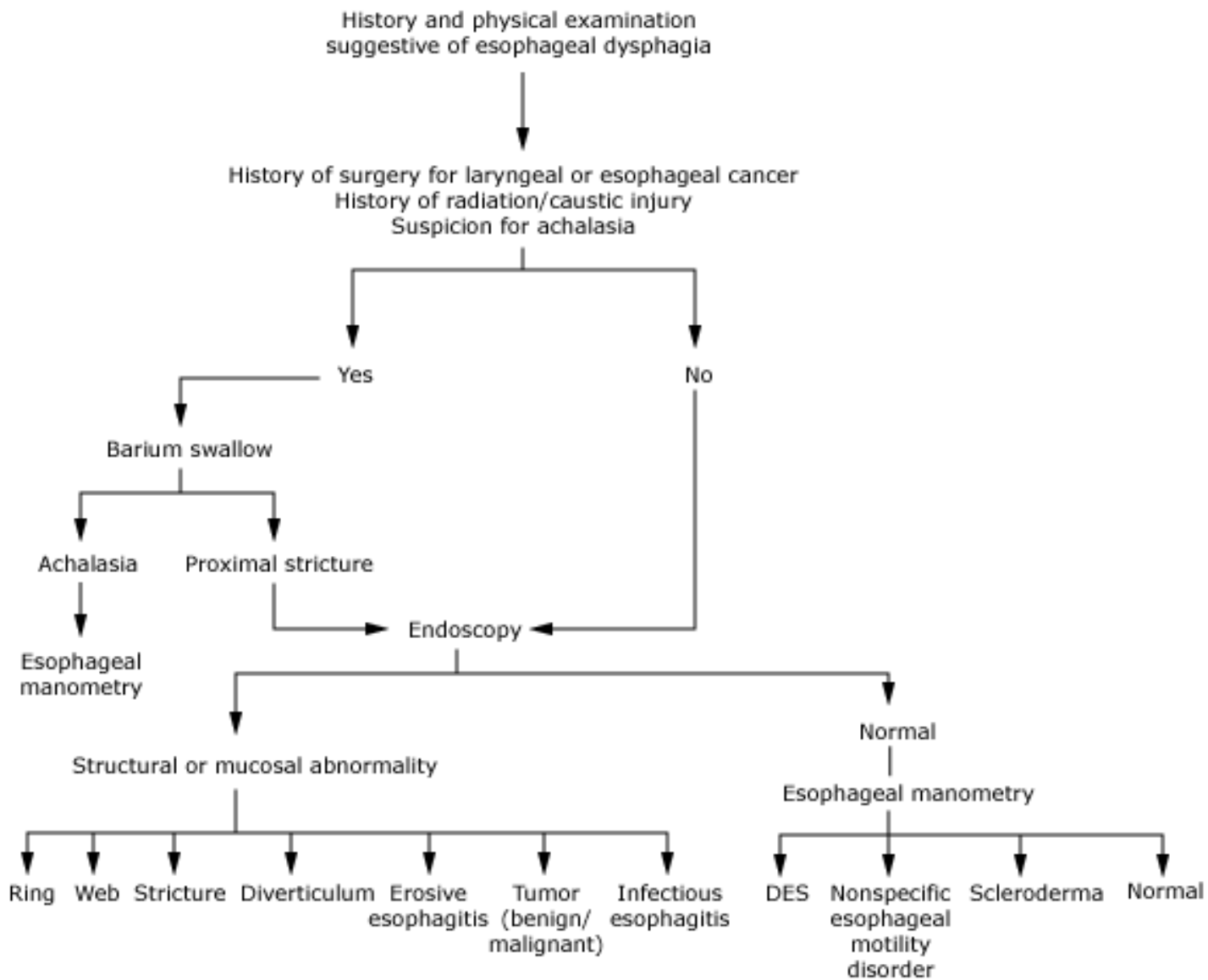
Diagnosis of dysphagia

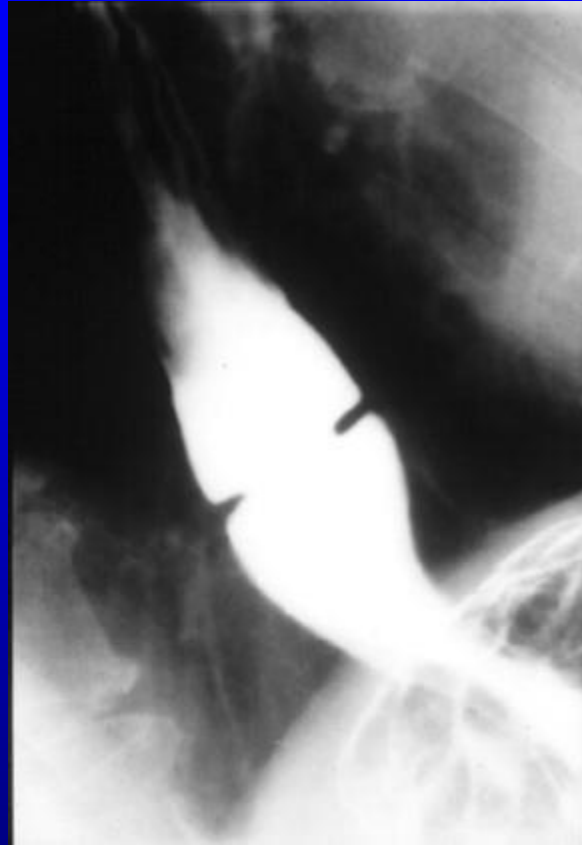
Approach to the patient with dysphagia



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







- Questions ???????