

Dysphagia



Deglutition

- It involves rapid coordination of structures in oral cavity, hypopharynx & esophagus
- Before swallowing begins, oral preparation of the bolus must occur

- **STAGES:**

- 1.Oral phase

- 2.Pharyngeal phase

- 3.Esophageal phase

- The first stage is under voluntary control, whereas the second two stages are involuntary, being reflex

ORAL PHASE

- **PURPOSE:**

- Reduce solid food mechanically and mix with saliva to :
 - Produce a soft consistency appropriate for swallowing
 - Produce the pleasurable sensation of eating

- **END & RESULT:**

- Move food from the front of the oral cavity to the anterior palatal arches

PHARYNGEAL PHASE

- **PURPOSE:**

- Transport food from the palatal arches to the esophagus
 - Velopharyngeal closure
 - Pharyngeal peristalsis
 - Protect the airway from aspiration

- **END & RESULT:**

- Opening of the cricopharyngeal region to allow bolus passage into the esophagus

ESOPHAGEAL PHASE

- **PURPOSE:**

- To transport the food bolus from the UES to the stomach.

- **END & RESULT:**

- Relaxation of LES and bolus enters the stomach

What is Dysphagia?

Difficult swallowing or discomfort or
Sensation of the act of swallowing

Odynophagia:

Painful swallowing

Pathogenesis:

- Mechanical disorder:
narrowing of the pharynx
or esophagus →
dysphagia more to solids
- Functional disorder:
inadequate function of
the muscles of the
pharynx or esophagus →
dysphagia more to fluids
WHY?



Swallowing of fluids need highly coordinated act of swallowing
Solids can descend by gravity

CAUSES

- Any pathology in any of the levels responsible for normal deglutition
- Any disturbance in the sequence of different stages of deglutition

Etiology

Oral causes:

In the oral cavity

Outside the oral cavity

Pharyngeal causes :

In the pharynx

Outside the pharynx

Esophageal causes

In the esophagus

Outside the esophagus

Oral Causes of Dysphagia

In the oral cavity:

Traumatic:

- Mucosal laceration
- Corrosive ingestion

Inflammatory:

stomatitis

Neoplastic:

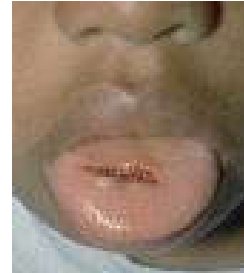
Tumors of the tongue

Paralytic:

Paralysis of tongue & cheek muscles

Outside the oral cavity

Ludwig's angina



Pharyngeal causes

In the Pharynx

-Traumatic:

FB

Corrosive ingestion

Inflammatory:

Pharyngitis

Tonsillitis

Neoplastic:

Tumors of the oropharynx& hypopharynx

Paralytic:

Paralysis of the pharynx

Neuromuscular:

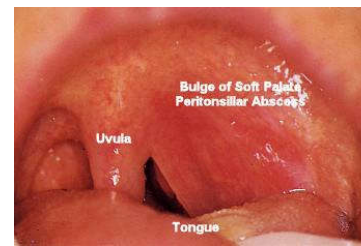
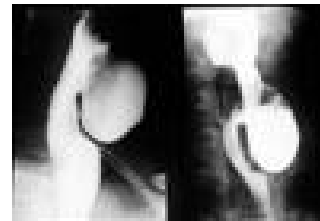
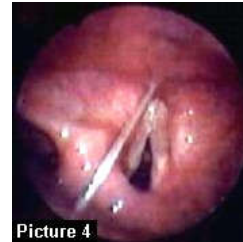
Pharyngeal pouch

Outside the pharynx:

Inflammatory:

Quinsy, parapharyngeal abscess, Retropharyngeal abscess

Neoplastic: tumors of the parapharyngeal space



Esophageal causes

In the esophagus :

Congenital

Traumatic:

FB

Caustic ingestion
perforation

Inflammatory:

Esophagitis e.g. monilliasis,
Plummer Vinson syndrome,
GERD

Neoplastic

Neuromuscular:

➤ MND : multiple sclerosis, myasthenia gravis,
cardiac achalasia

➤ Cranial nerve palsies: IX, X, XII

➤ CNS disease: bulbar paralysis, botulism, multiple
sclerosis, polio, amyotrophic lateral sclerosis etc.

Drugs

Post-radiation

ACE inhibitors (cause angioneurotic edema)

Outside the esophagus:

In the neck:

enlarged thyroid

In the chest:

Enlarged left atrium

Enlarged mediastinal LN

Aortic aneurysm

Systemic causes: scleroderma

Psychosomatic: globus pharyngeus

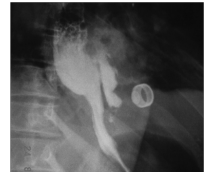
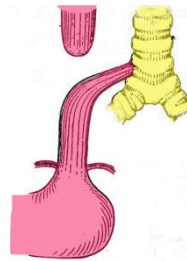
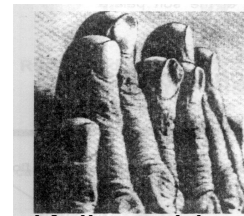
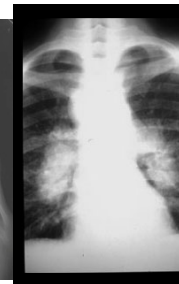
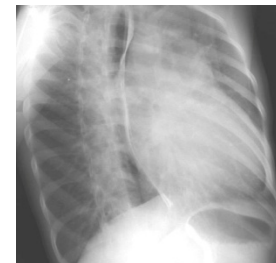


Figure 2. Esophagogram upon admission of a woman operated for morbid obesity, with suspicion of esophageal perforation. Note the extravasation of contrast in the middle esophagus.



Koilonychia,,



F.B Swallow

- The variety of FB in the oesophagus is legion but coins, bones, often safety pins, dentures and lumps of meat are by far the most common to be encountered.
- It is commonly seen in children less than 10 years old, in mentally retarded and in adults over 50 years of age who obstruct with meat or bones due to lack of teeth.

- The site of the F.B depends on the age.
- The narrowest part of the GIT is UES (cricopharyngeus muscle) and two-thirds of the F.Bs. are found at this level.

Clinical picture

- Dysphagia and occasionally pain of sudden onset. Discomfort and excessive salivation.
- Associated coughing or choking if the FB is impacted at or just below the laryngeal inlet.
- The patient is often able to point at the exact site particularly if it is lodged in the upper part of the oesophagus

Investigation

- Plain AP and lateral x-ray of the neck and chest may demonstrate the F.B. particularly if it is radio-opaque.
- Oesophagoscopy.

Treatment

Removal of the F.B. as soon as possible through rigid oesophagoscopy after the radiological examination.

EVALUATION OF DYSPHAGIA

- History
- Physical Exam
- Review of Systems
- Imaging Studies

History-key questions

- Onset, duration, severity
- Perceived level of Dysphagia
- Type of food
- F.B. sensation in throat / Globus pharyngeus
- Regurgitation (oral or nasal, timing)
- Aspiration
- Weight loss
- Pain
- Hoarseness / airway obstruction
- Neck swelling
- Earache

CLINICAL FEATURES

- Onset/ duration /course
- Perceived level of obstruction
- Type of food: more to solids or fluids
 - Progressive dysphagia for solids-suggests structural lesion
 - Dysphagia for liquids-suggests neurologic lesion
 - Odynophagia (painful swallowing)-suggests spasm, mucosal ulcer, or distention

Physical examination

- Thorough:
 - Oropharyngeal,
 - Laryngeal &
 - Neck examination
- Neurological examination
- Associated physical signs

INVESTIGATIONS

- Plain X-ray
- Barium swallow
- Fluoroscopy: with video.
- Esophagoscopy (flexible/rigid):
 - Visualizes interior of esophagus
 - Diagnoses ulcers, tumours
 - Can biopsy lesions
- CT/MRI
 - For tumours, extrinsic compression
- Manometry: Diagnoses motility disorders
- PH Monitoring: Diagnoses reflux
- Laboratory tests: CBC, Immunological assessment

Thank You



