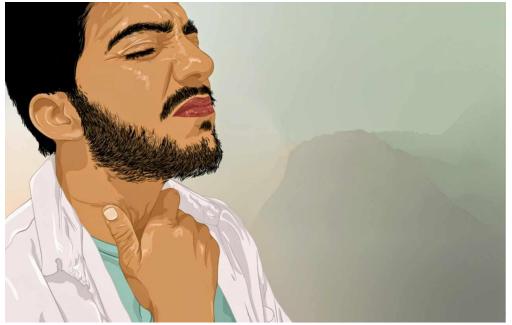
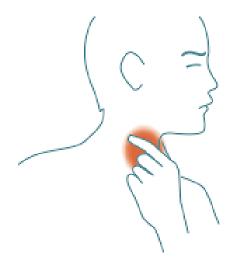
# Lump In The Throat

"Same complaint - Different Disorders"

Dr. Mahmudul Hasan Khan MBBS (DMC) , FCPS (ENT) Associate Professor and Head Dept. of Otorhinolaryngology & Head –Neck





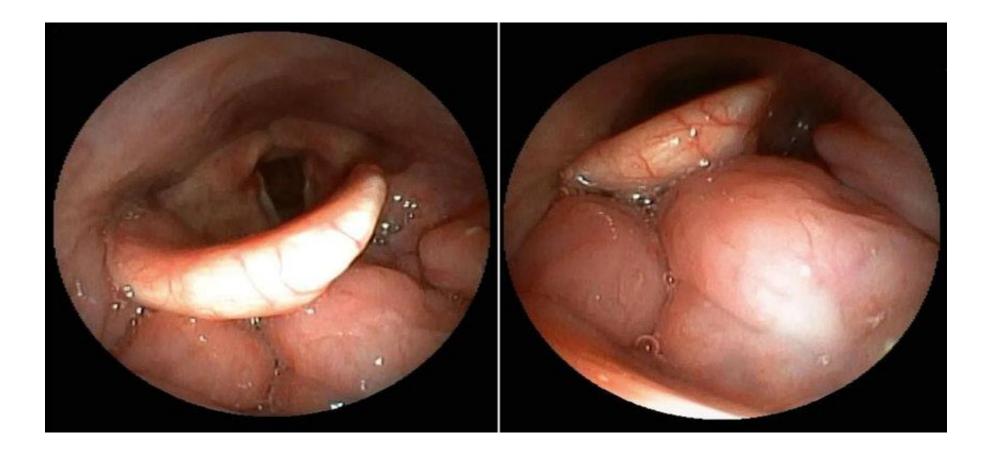
#### Lump in throat

- Lump in the throat may be described as a foreign body sensation, a tightening or choking feeling known as Globus Pharyngeus
- Also called Globus Syndrome, Globus Sensation, Globus Hystericus. The term "globus" has been used a general term to describe the symptom of "throat fullness" or "lump in the throat"

#### **Globus Sensation In Several Disorder**

Lingual Tonsillar hypertrophy	Condition causing irritation or inflammation of the pharynx	A retrovert epiglottis	Cervical osteophytes
Thyroid nodules/ disorders / post thyroidectomy	Phonasthenia	Iron deficiency anemia, Plummer Vinson	UATD malignancy
	Laryngopharyngeal reflux	Hypertensive upper esophageal sphincter	

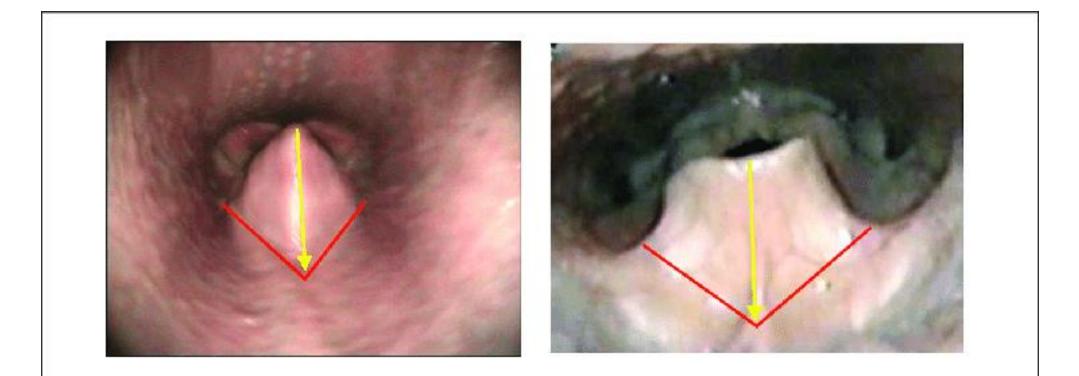
#### Lingual Tonsillar Hypertrophy



# Inflammation of pharynx



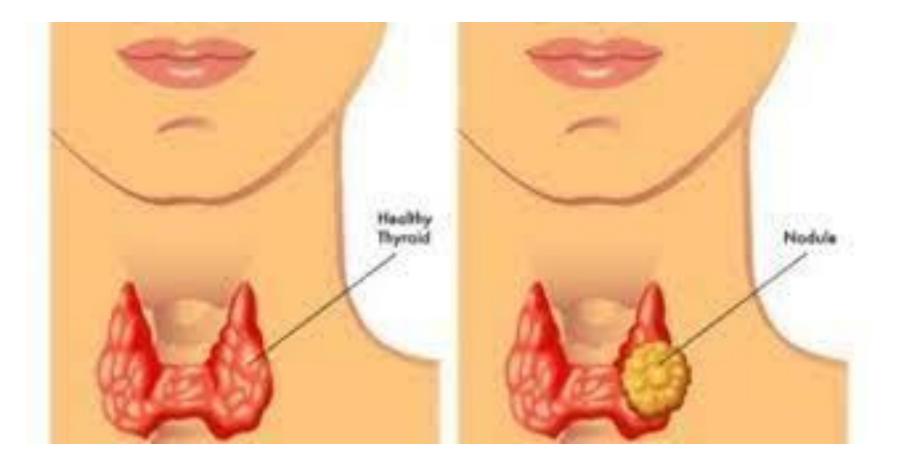
### Retroverted Epiglottis



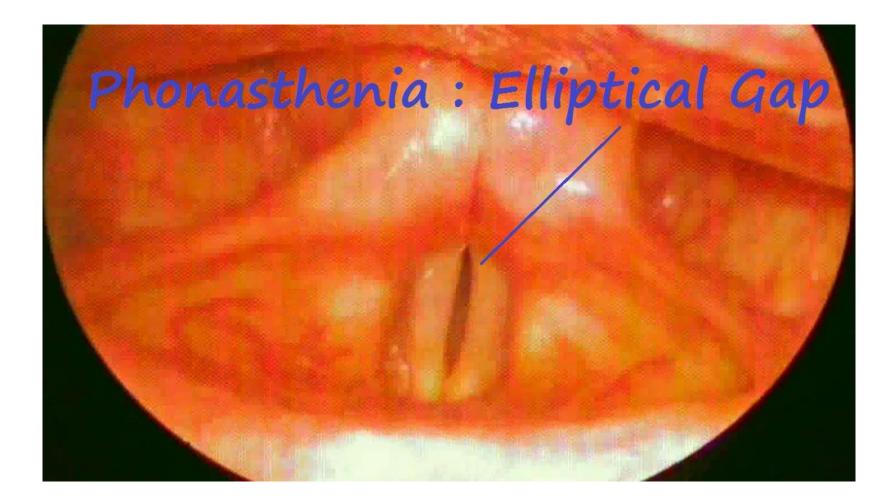
## Cervical osteophytes



# Thyroid Nodules



#### Phonasthenia



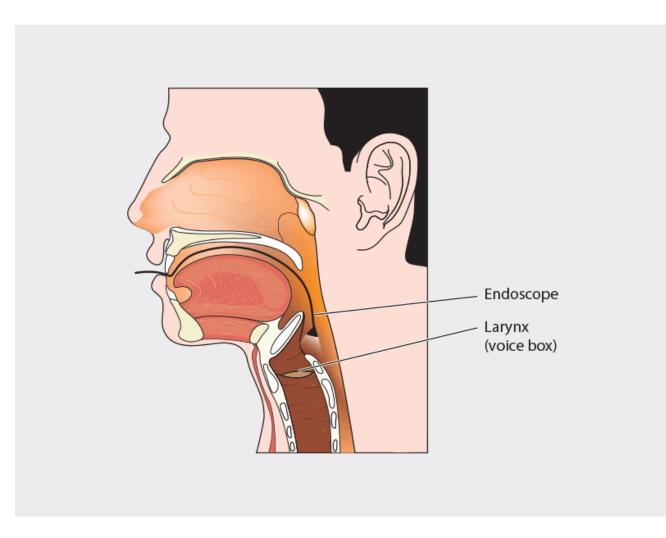
#### Iron Deficiency Anemia, Plummer Vinson

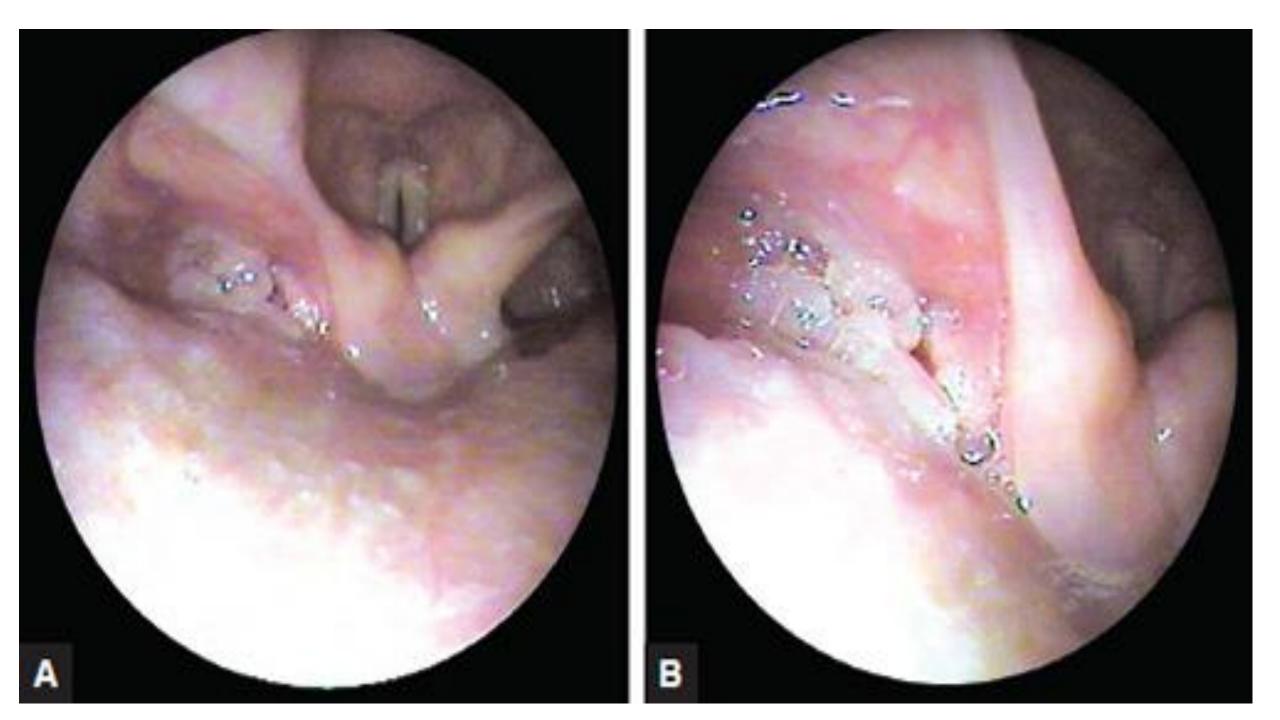


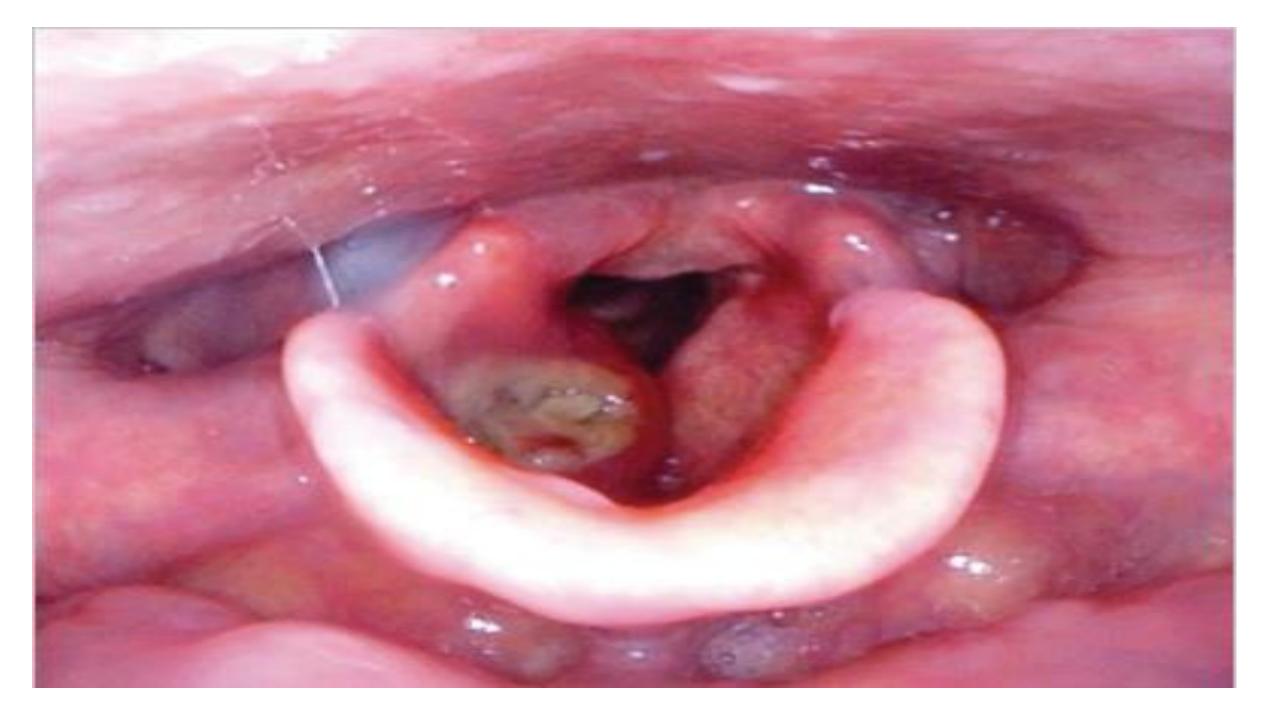
#### **Plummer Vinson Syndrome**

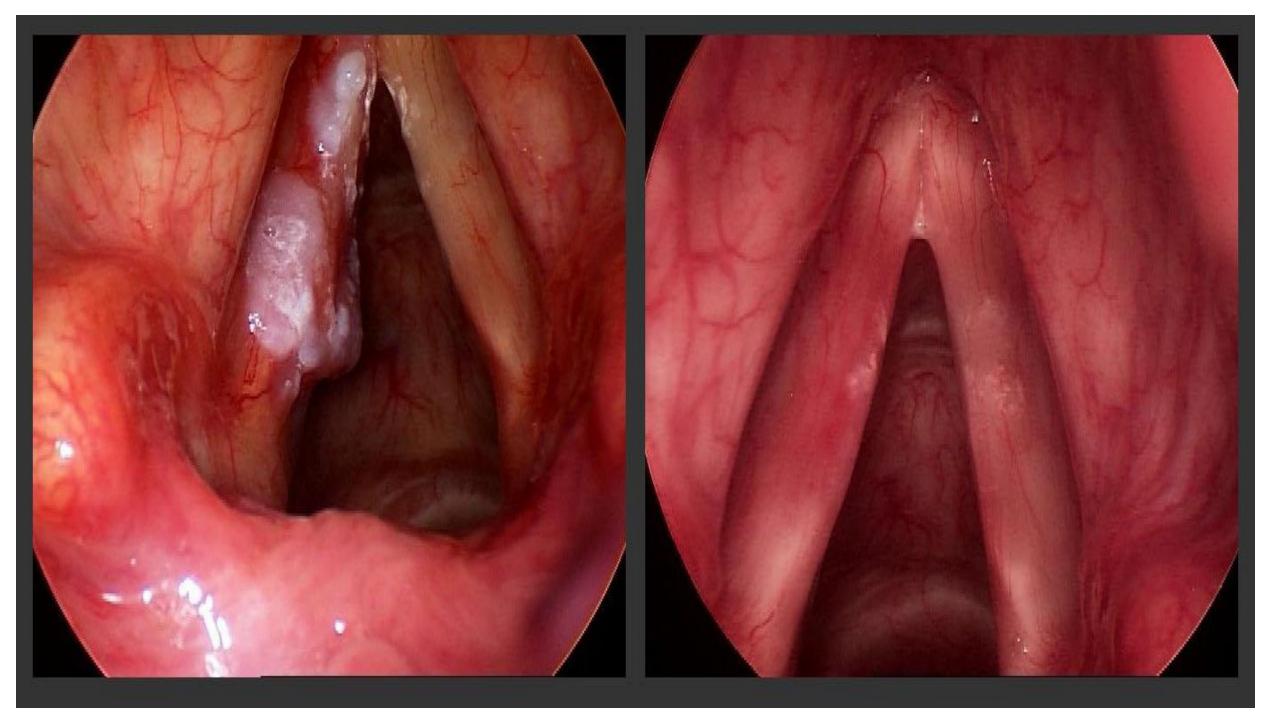


### UADT malignancy

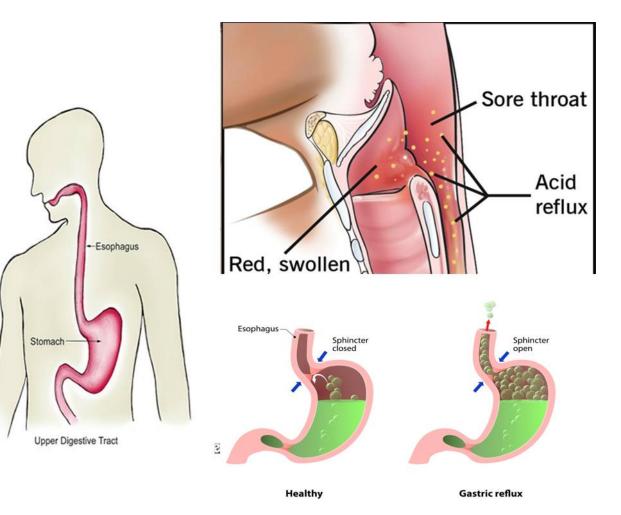








#### Laryngopharyngeal Reflux



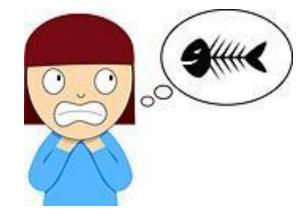
### Hypertensive Upper Esophageal Sphincter



# Globus Pharyngeus: Epidemiology

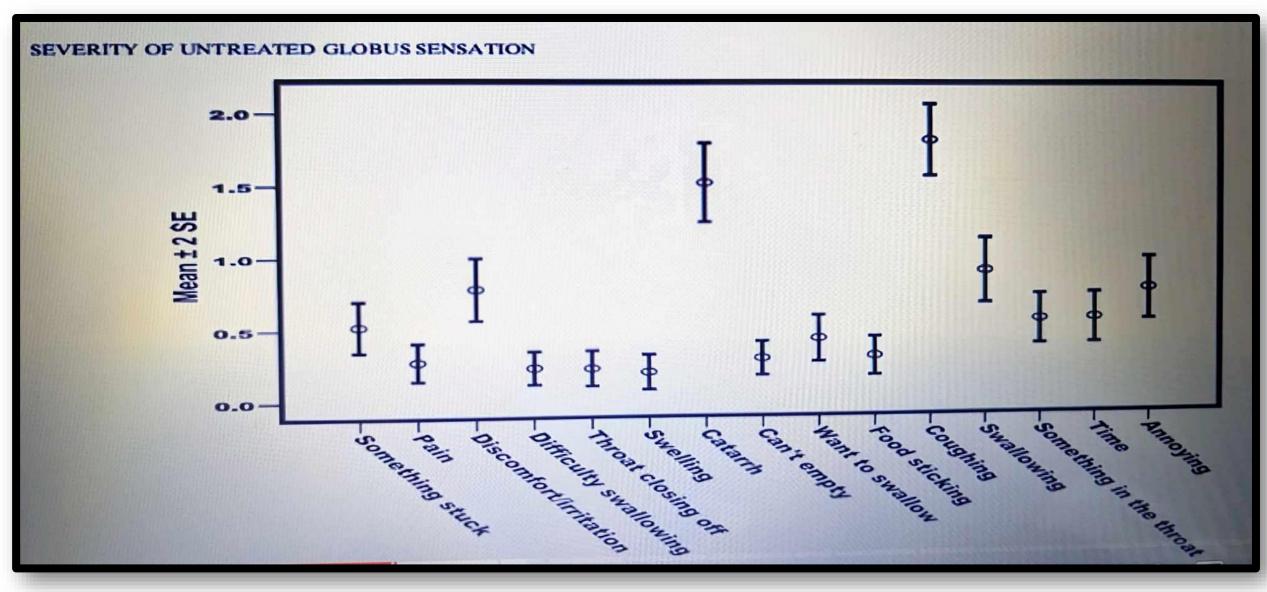
- About 5% of all new ENT referrals.
- Up to 46% of apparently healthy people complain of the symptom.
- Indeterminate origin.
- Incidence peaks in middle age.
- There is no difference in prevalence between the sexes.
- ? Female preponderance.
- It is thought that women more frequently than man visit a doctor because of the symptom.
- Up to age 50 women are three times as likely to be affected as are man

#### How the patients describe the sensation



- Three common symptom were reported more frequently and at a much higher intensity than others that is:
- 1. Feeling of something stuck in throat.
- 2. Discomfort / irritation in the throat.
- 3. Wants to swallow all the time .
- The commonest throat symptoms reported were : "Coughing to clear the throat followed by catarrh down the throat and discomfort/ irritation in the throat."

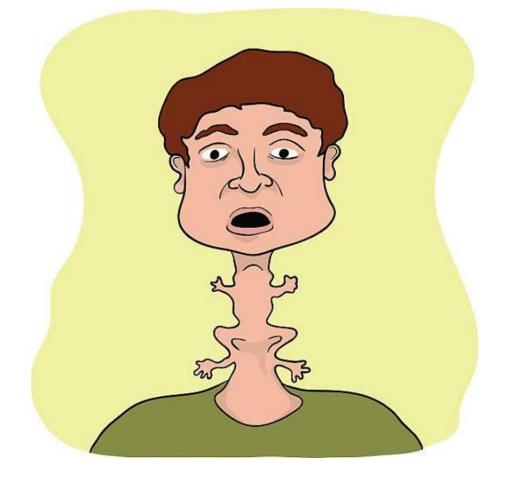
# Glasgow Edinburgh Throat Scale (GETS)





# **Globus Pharyngeus Defined As**

- Persistent or intermittent sensation of a lump or foreign body in the throat for at least 12 weeks .
- Occurrence of the sensation between meals.
- Absence of dysphagia and odynophagia.
- Absence of motility disorder with a recognized pathological basis e.g. Scleroderma.



• If you have ever felt like you had a "lump" or a "frog" in your throat, it may have been Globus Pharyngeus. Almost half of all people will experience this sensation at some point in their lifetime, but luckily over half the time the sensation goes away on its own. Two basic mechanism have been proposed to explain the association between GERD and the Globus

- 1. Direct irritation and inflammation of the laryngopharynx by retrograde flow of gastric content also known as laryngopharyngeal reflux (LPR).
- 2. Reflex hypertonicity of the UES triggered by acidification or distension of the distal esophagus.

### Gastroesophageal Reflux Disease (GERD)

- Malcomson first to connect globus and GERD barium swallow: Reflux in over 60% of globus patients.
- Cherry et al: 10 patients out of 12 reported globus after acid was applied to the distal esophagus.
- GERD major cause of the symptoms in up to 58% of globus patients with abnormal PH results.

# Laryngo-Pharyngeal Reflux (LPR) Vs GERD

- The anatomic abnormality in LPR is believed to be at the upper esophageal sphincter.
- Esophageal motility and acid clearance are usually normal.
- The refluxate in LPR spends very little time in esophagus and does most of the damage above the upper esophageal sphincter.
- Heartburn or esophagitis are not common in LPR (12%).
- Significant upright daytime reflux in common in patients with LPR.
- LPR and GER appear to be somewhat different clinical variation.

Table 1. Differences Between GERD and LPR			
GERD	LPR		
Accompanied by esophagitis and/ or heartburn	Esophagitis or heartburn is rarely present		
Reflux is nocturnal or in supine position	Reflux during daytime or in upright position		
Abnormal esophageal motility and prolonged esophageal acid exposure	Intermittent episodes of reflux		
Dysfunction of the lower esophageal sphincter	Dysfunction of the upper esophageal sphincter		
Throat related symptoms are sometimes present	Leads to throat related symptoms and damage to the laryngopharyngeal epithelium		

### Non-Acid (Proximal) Reflux

- Anandasabapathy and Jaffin multichannel intraluminal impedence and PH monitoring (MII – PH): Globus may also be due to non acid (NAR) reflux.
- As MII PH can detect reflux episodes independent of acid changes.
- This latter study found NAR and proximal reflux to be significant predictors of globus .

# **Abnormal Upper Esophageal Sphincter Function ?**

- Tokashiki : Perfusion of HCl into the distal esophagus was related to a sensation of globus associated with a rise in UOS pressure.
- This rise in pressure was independent of the detection of changes in PH in the hypopharynx .
- Kwiatek et. Al. respiratory variation of the UES: Globus patients respiration related change in the resting USE pressure was significantly amplified compared to controls and GERD patients.
- Others studies have not found the association between globus and elevated UES pressure.

# Function of Pharynx & Upper Esophageal Sphincter in Gobus

- There were no statistical differences of pressures of pharynx ,UES and the pharyngeal transit time between the two groups.
- But there was an association between laryngeal penetration and globus pharynges.



# Globus Hystericus ???

- Dearly et al ; Globus patients were significantly more depresses than controls.
- Significantly higher on neuroticism.
- Low on extroversion scales.
- Significantly elevated levels of physiological distress, including anxiety, low mood and somatic concern .
- Finnish study, globus patients and the general population had a similar prevalence of psychiatric disorder.
- RCT showed response to low dose amitriptyline.

UATD Occult Malignancy in 1-2% The primary reason for investigating patients with globus pharyngeus is to rule out a neoplastic lesion.

The secondary objective is to investigate the 35% upper and lower oesophageal benigh lesion

High Risk" symptoms ,such as weight loss, dysphagia, throat pain, progressive symptoms, smokers and lateralization of pathology

# **Red Flags**

- Weight loss
- Dysphagia
- Pain
- Hoarseness or other voice changes which are persistent or worsening
- Otalgia
- Unilateral symptoms
- Risk factors for malignant cause- smoking ,alcohol excess, previous radiotherapy or head and neck surgery
- Regurgitation
- Systemic symptoms- fever, night sweats
- Abnormalities on examination –lumps ,lymphadenopathy.



# **Globus Natural History**

- Wilson : 73% were still symptomatic at 31 months.
- The longest mean period follow up study by Rowley et al .45% of patients had persistent symptoms at 7 years.



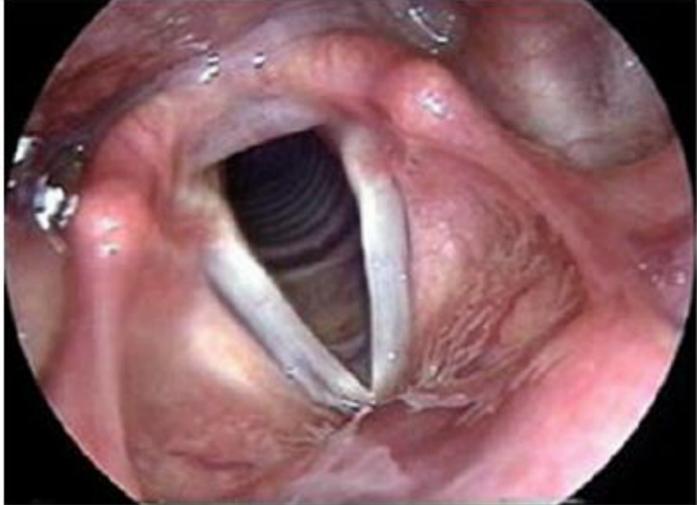
# Globus Pharyngeus Management : A Pragmatic Approach

# United kingdom based ENT specialists Investigating Globus

- 86% investigated globus symptoms
- Rigid endoscopy (61%)
- Barium swallow (56%) or
- A combination of these methods (17.5%)

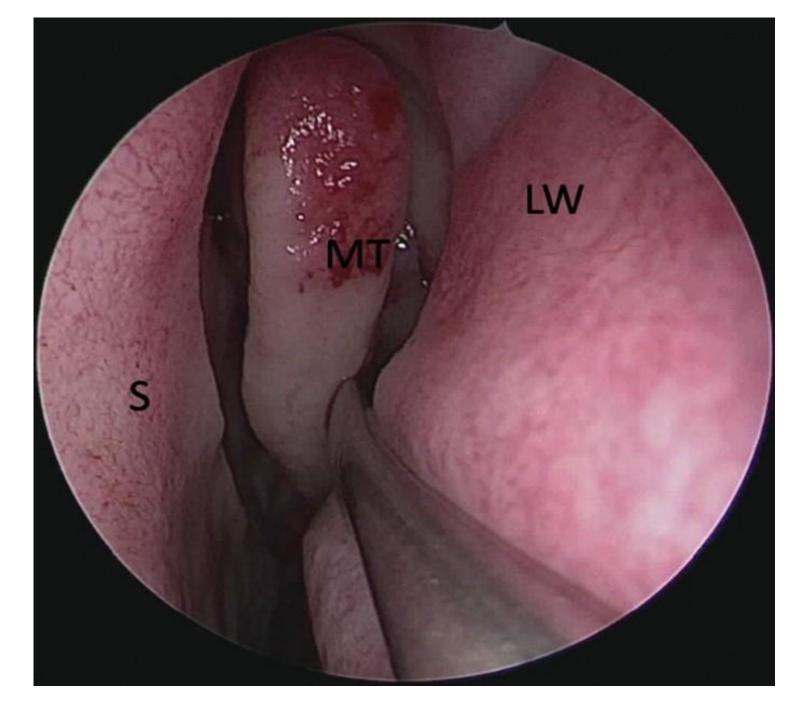
Flexible Laryngo – Pharyngoscopy

- OPD procedure
- Safe ,effective and rapid.

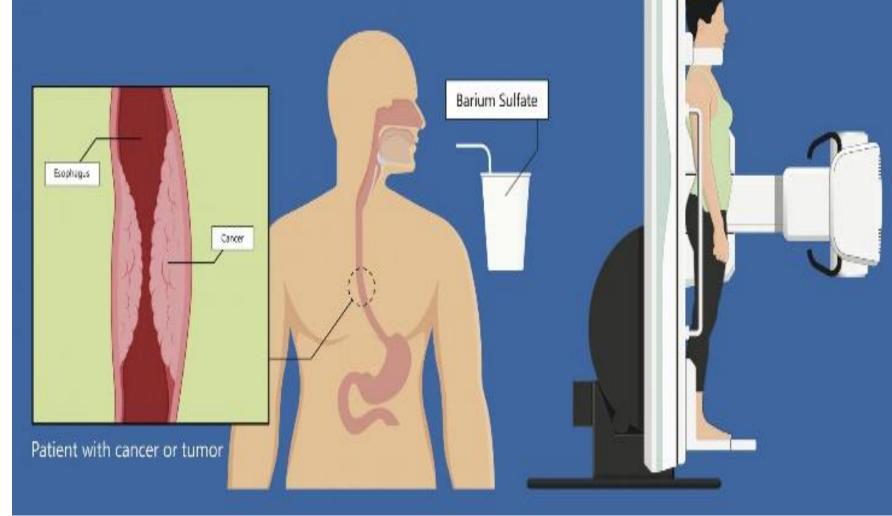


#### Nasoendoscopy :

• Identification of structural lesion.



#### Barium Swallow - Esophagram

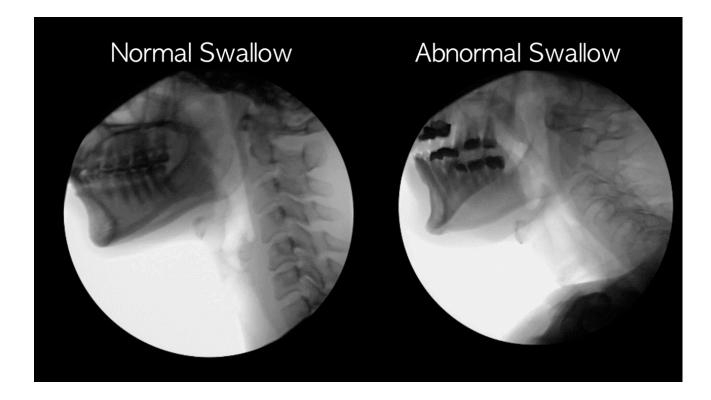


#### Fluoroscopy Upper Gastrointestinal



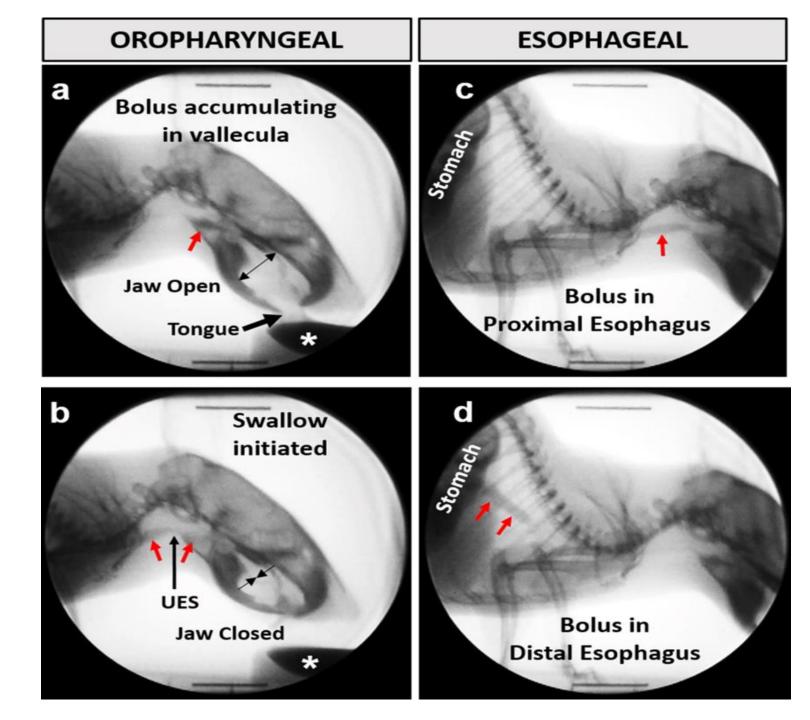
#### Contrast (Barium)Swallow

- Specificity and sensitivity of barium swallow were 97.5% and 25.6% respectively.
- The barium swallow had low positive predictive value.
- The significant number of false positive cases might result in unnecessary further investigation.
- All barium swallow finding of "suspected of malignancy" were normal in the follow up endoscopy.
- There was no patient aged below 30 years with abnormal barium swallow result.
- Association of globus pharyngeus with distal esophageal benign lesion = 35%



### Video Fluroscopy

- Globus patients
- 25% patients showed abnormal results
- Laryngeal aspiration
- Barium stasis in the vallecula and pyriform sinuses
- Had poor pharyngeal elevation
- Unlikely that this indicate a causal relationship



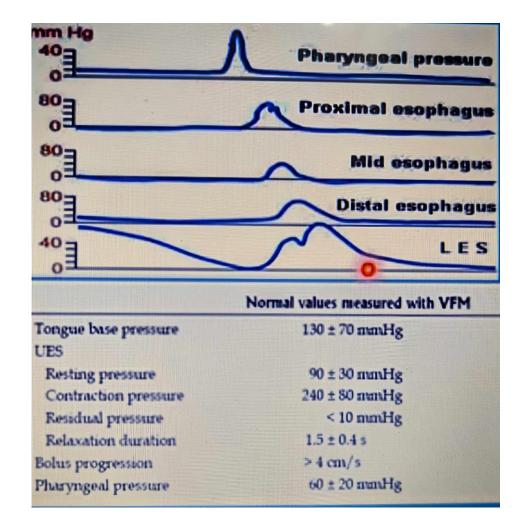
# Rigid Endoscopy

• Effective in assessing post cricoid and upper esophageal " blind spot".

• 1% serious morbidity or even mortality.

### Intraluminal Trans-Nasal Manometry

- Intraluminal manometry performed using a trans nasally positioned manometric assembly.
  Quantity: Timing and pressure generation.
- Strength of pharyngeal contraction.
- Completeness of UES relaxation
- Relative timing of these two events.



### 67% of Globus patients: Nonspecific Esophageal motility disorder

- Recent findings do not confirm the association between globus and elevated UES pressure.
- Not recommended to be routinely used in globus diagnosis.
- Esophageal manometry has revealed abnormalities in as many as 67% of globus patients with nonspecific esophageal motility disorder being the most frequent finding.

### Flexible Trans-Nasal Oesophagoscope:

- 2.8% aborted due to inability to pass the endoscope
- 0.3% aborted due to vasovagal
- Significant finding were noted in 49.7% (294/592) of patients.
- Esophagitis (17.0%), hiatal hernia (8.0%), Barrett's metaplasia (5.0%), candidiasis (5.0%), stricture (4.0%) and carcinoma (4.0%)

### Limited Diagnostic Value :

Not recommended to be routinely used in globus diagnosis:

- Psychological assessment
- Manometry, Dual probe PH monitoring
- Barium swallow
- CT/MRI scanning
- Rigid endoscopy
- Check biopsies

#### **Globus Pharyngeus: Management Plan**

#### Flexible laryngo pharyngoscopy

Flexible trans – nasal oesophagoscope Consider rigid endoscopy for high risk patients (> 40 years, smoker, weight loss)

Consider PPI, Nystatin mouth wash, low dose amitriptyline & voice therapy whenever indicated

Follow up ??

3-6 months for high/ intermediate risk group

# Empirical PPI therapy

**Empirical PPI therapy to diagnose and treat possible reflux in common** 

Reflux symptoms and short symptoms duration were independent predictions of responsiveness to PPI

GERD responds well in PPI medications but LPR's response varies and may require high dose and longer treatment period.

Placebo has been as effective as PPI's in resolving globus symptoms with no associated reflux symptoms

## Amitriptyline Vs PPI



- The main efficacy endpoint was assessed using the Glasgow Edinburgh Throat Scale (GETS)
- RTC : 30 patients, either 25mg AMT before bedtime (AMT group) or 40 mg Pantoprazole once daily for 4 weeks.
- Low dose AMT is well tolerated and can significantly improve patient symptoms, sleep and quality of life.

### Liquid Alginate Suspension



- RTC : Response of the Reflux Symptom Index and Reflux Finding Score.
- To a liquid alginate suspension 10ml four times daily after meal and after bedtime.

### Voice Therapy



- Reducing laryngopharyngeal tension with neck and shoulder exercises and relaxation techniques with voice hygiene and voice exercises.
- SLP treated half of the Globus patients with exercise to relieve laryngopharyngeal tension.
- Controls were only given reassurance.
- After 3 months, patients in the SLP group had significant improvement compared to the control group.

 In our AWMCH from September 2023 to January 2024 We treat around **150** patients with lump or FB sensation in throat. **80 - Chronic pharyngitis.** 40- Reflux disease. **10-Lingual tonsillar hypertrophy. 1-Pyriform fossa growth. 1-Supraglottic ca. 18-Globus pharyngis.** 

### TAKE HOME MASSAGE

- What is important to remember, is that it is a **feeling or sensation** of a lump, rather than an **actual lump**.
- Sometimes people will 'test' the lump, and notice it is present when swallowing saliva, but better when eating. In about 70% of cases the symptoms are intermittent.
- If **stress** is the main cause, then treating this is important, as far as possible.

- Sometimes treatment for acid reflux can be helpful. This could be with lifestyle and dietary changes, and sometimes medicines can be helpful.
- **Stopping smoking** can also be helpful, as this causes generalised inflammation of the throat and airways.
- Trying to reduce the **habit of throat-clearing**. Persistent throatclearing can cause mild inflammation in the throat, which then increases the desire to clear the throat, so breaking this cycle can really help.

• If the symptoms of **globus persist**, you should see your GP, and quite possibly **an ENT surgeon**, such as myself, who will usually complete a full examination of the head and neck region, including an examination of the throat with a flexible telescope, and sometimes arrange further tests.

