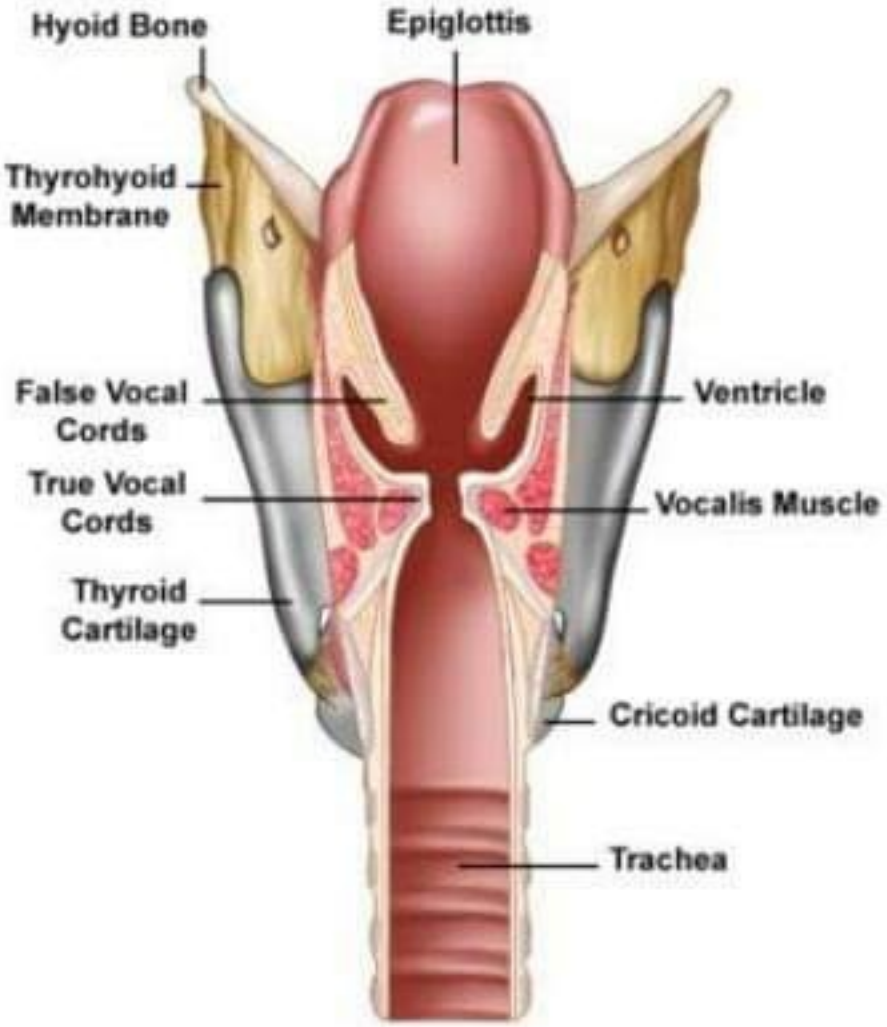
ACUTE LARYNGITIS



DEFINITION

It is the acute inflammation of larynx leading to oedema of laryngeal mucosa and underlying structures.

Acute and Chronic Laryngitis

- Key Points
  - #1 cause of acute laryngitis = viral
  - #1 cause of chronic laryngitis = reflux
  - Candidal laryngitis can occur in non immuno compromised
  - Even in setting of likely neoplasm, still consider infection

Acute laryngitis

It is swelling of the laryngeal mucosa and .underlying tissue

: Caused by

.(Infection (viral or bacterial
.Exogenous agents
.Autoimmune processes

AETIOLOGY

INFECTIOUS:

- Viral
- Bacterial

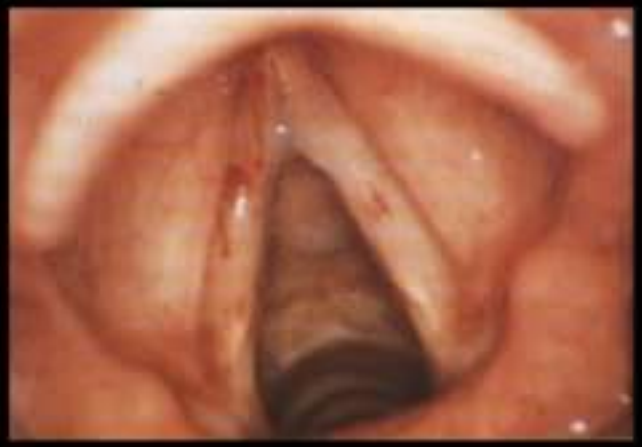
NON INFECTIOUS

- Inhaled fumes
- Allergy
- Polluted atmospheric conditions
- Vocal abuse
- Iatrogenic trauma

Clinical entities

1. Acute simple laryngitis.
2. Acute laryngotracheobronchitis (croup).
3. Subglottic laryngitis (pseudocroup).
4. Acute epiglottitis.
5. Diphtheric laryngitis.
6. Membranous laryngitis.
7. Herps zoster of the larynx.

Acute (simple) laryngitis



Aetiology

1. **Infection**. Airborne.
   - **Viral** ***influenza*** & adeno virus.
   - **Bacterial** Moraxella catarrhalis, Streptococcus pneumoniae & H.influenza.

more in winter and early spring.

Patients suffering from sinusitis, nasal obstruction, overuse of the voice, alcoholic and smokers are more prone.

Predisposing factors

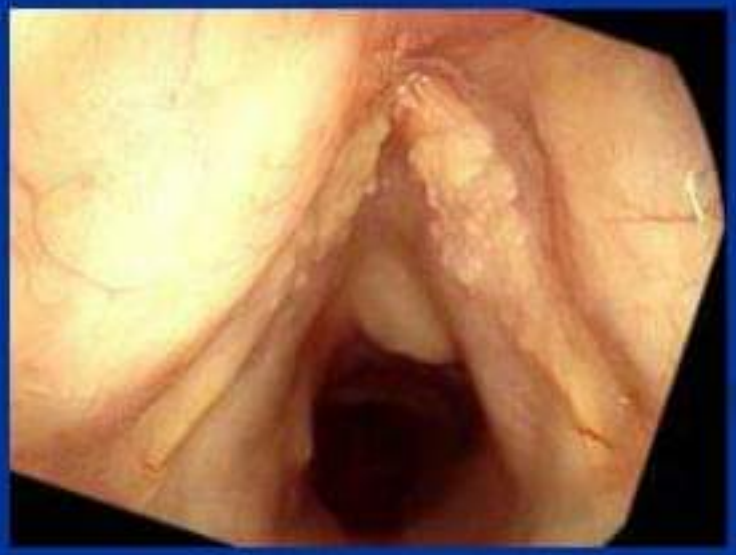
- Smoking
- Psychological strain
- Physical stress

PAEDIATRIC CONCERNS

- Lacks firm cartilaginous skeleton.
- Flabby , easily collapses.
- Glottic aperture , relatively smaller.
- Mucosa swells up rapidly in response to slightest trauma or infection.
- Stridor is the most noticeable presentation.

Acute Fungal Laryngitis

- Candiasis (moniliasis)
  - usually seen with oral/esophageal sx or in a pt taking oral inhaled steroids
  - White sessile plaques on erythematous base
  - Rx: Fluconazole



PATHOLOGY

- The mucosa of the larynx becomes congested and may become oedematous.
- A fibrinous exudate may occur on the surface.
- Sometimes infection involves the perichondrium of laryngeal cartilages producing perichondritiis.

The laryngeal mucosa shows all signs of acute inflammation:

- Extravasation of fluid.
- Infiltration by polymorphnuclear leucocytes.
- Later plasma cells and lymphocytes predominates.
- The underlying muscles, the perichondrium, and the cricoarytenoid joints may be affected.
- The epithelium may be destroyed and exfoliated.
- Full recovery is usuall.
- Sometimes fibrosis will results leading to permanent damage to the laryngeal mucosa which can be the beginning of chronic laryngitis.

CLINICAL PRESENTATION

- Hoarseness or change in voice.
- Husky, high pitched voice.
- Discomfort in throat, pain.
- Body aches.
- Dysphagia, Dyspnoea.
- Dry irritating paroxysmal cough.
- Fever, Malaise.

- **Clinical fearures**

- **Hoarsness** (high-pitched husky voice).
- **Discomfort** in the throat.
- **Pain** is slight or absent.
- **Dysphagia** if epiglottis &/or arytenoid are markedly involved.
- **Dyspnoea** in severe oedema.
- Dry and irritant **cough.**
- **Generalized symptoms** (malaise and fever , toxaemia is rare) more in bacterial infections.
- Symmetrical **redness &/or sticky secretions** on both vocal cords, at indirect laryngoscopy.
- The clinical coarse in children can be rapidly progressive.

CLINICAL DIAGNOSIS

- Signs of acute URTI.
- Dry thick sticky secretions.
- Dusky red and swallon vocal cords.
- Diffuse congestion of laryngeal mucosa.

DIFFERENTIAL DIAGNOSIS

- Acute epiglottitis
- Acute laryngo tracheo bronchitis.
- Laryngeal perichondritis
- Laryngeal oedema
- Laryngeal diphtheria
- Reinke's oedema

- **Progress**

- Usually resolves in a few days.
- The hoarsness may persist for as long as 2 weeks after apparent resolution.
- A functional aphonia may follow specially in women.
- In severe cases the inflammation spreads to the lung in aged patients.

- **Treatment**

- ***Local (supportive)***
- **Voice rest** (a quiet unforced whisper is allowed).
- **Steam inhalations. M**enthol loosen viscid secretions.

- **Aspirin.**
- **Warm application** to the neck.
- **Codeine** to suppress dry cough.

1. ***General***

- **Rest** and sedatives.
- **Avoidance** of alcohol and tobacco.
- **Systemic antibiotics** in cases of bacterial infection

  - Penicillin (Augmentin) 500 mg 4 times daily,

  - Doxycycline 200 mg daily or

  - Erythromycin 500 mg twice daily

TREATMENT Cont

DEFINITIVE

- ANTIBIOTICS

STEROIDS

ANALGESICS

UNRESOLVING LARYNGITIS

- Three weeks duration
- Exclude other laryngeal disorders

Acute epiglottitis

Definition •

special form of acute laryngitis, in which the inflammatory changes affect mainly the loosely .attached mucosa of the epiglottis

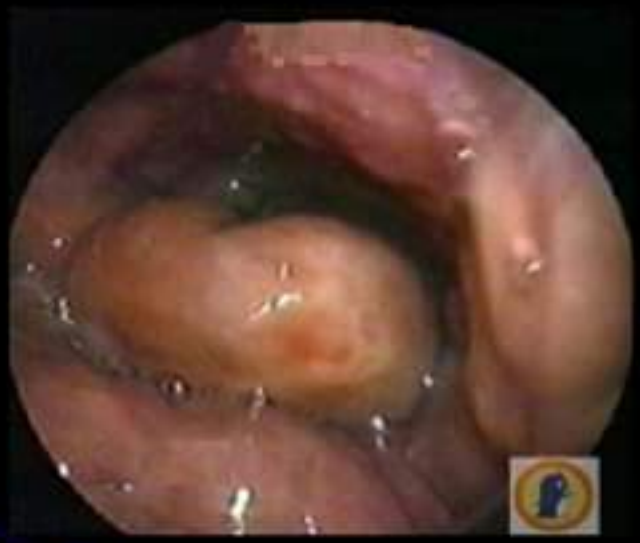
Pathology •

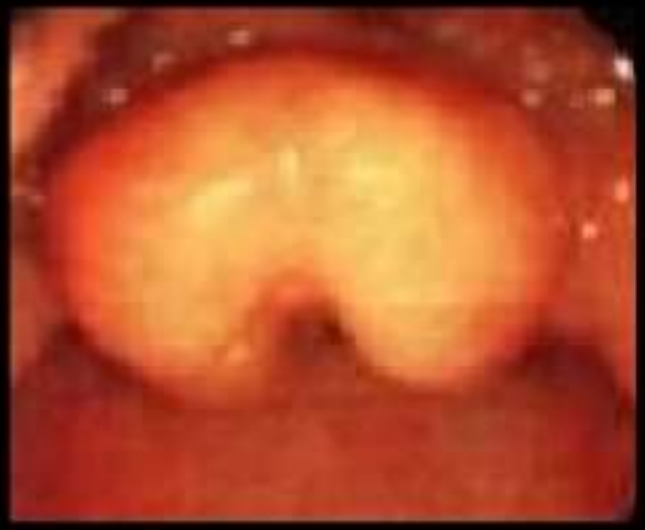
.Localized oedema may obstruct the airway

-**H.influenza** .is the usuall causative organism

-**B-Haemolytic streptococci** .rarely

.Submucous abscesses may form





Acute epiglottitis

Incidence •

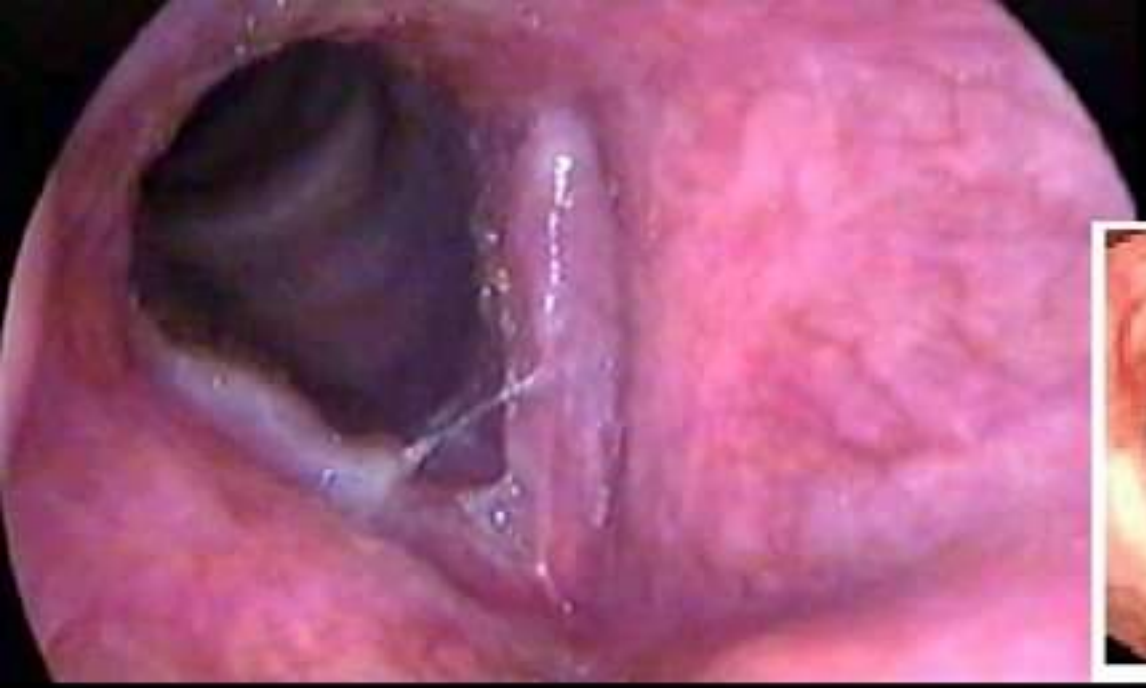
.children 1:17.000

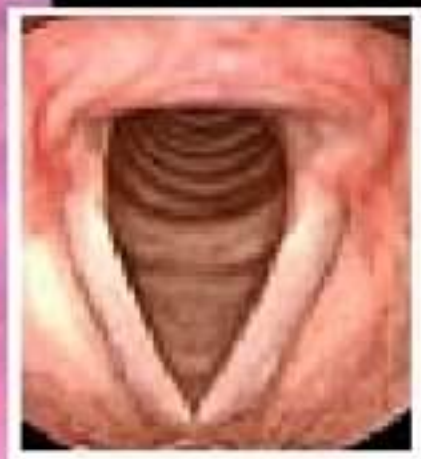
.adults 1:100.000

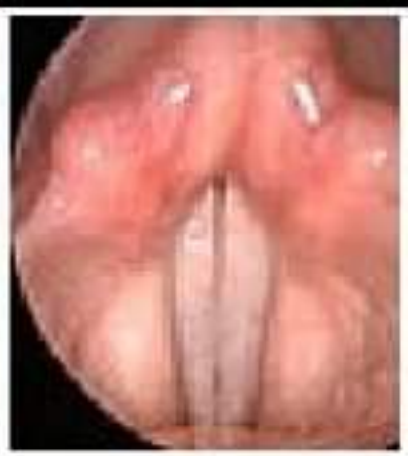
.Vaccination is reducing its incidence .

- **Clinical features**

3. History is short and abrupt.
4. Fever >40 C.
5. Dyspnoea and stridor (progressive and alarming).
6. Pain on swallowing (commoner than respiratory obstruction in adults).
7. Drooling of saliva.
8. The patient is preferring the sitting position







Acute laryngitis

Redness

Oedema

Sticky mucopurulant secretions

Normal larynx

close

Cysts of the larynx

- may be congenital or acquired
- are rare and generally asymptomatic occasionally they may present at or soon after birth with Respiratory Distress and stridor with varying degree of cyanosis
- It may be desirable to carry out a temporary tracheostomy before proceeding to removal of the cyst.

Cyst are managed by

Repeated puncture and aspiration

Puncture and marsupulization

Microsurgical Excision

Chronic Laryngitis

Presents as diffuse lesion or produce localized effects in larynx

Chronic infections in the surrounding areas,vocal abuse smoking, alcohal,irritant fumes are held aetiological factors.

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Chronic Laryngitis

Histopathologically there are mucosal thickining and infilteration of plasma cells and leukocytes. connective tissue elements are increased.

chronic laryngitis differential

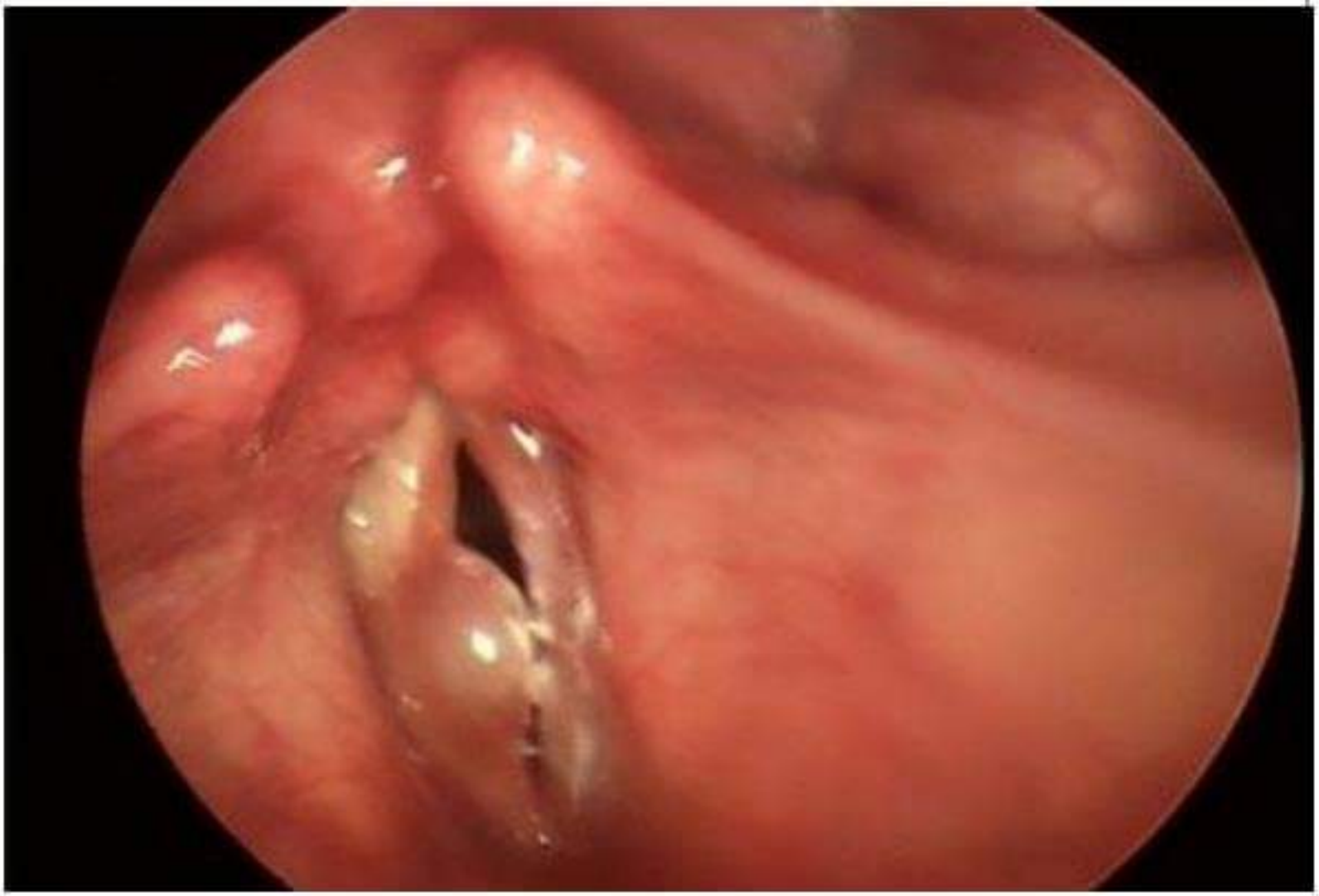
Reinkes oedema
vocal nodules
vocal cord polyp
Contact ulcer
Hyperkeratosis and leukoplakia
Atrophic laryngitis
Laryngeal lupus
tuberculous laryngitis

Vocal nodules

- Nodular thickining of the free edge of vocal cord
- More common in females
- Usually are bilateral,symmetrical occuring at the junction of anterior and middle third
- Develop as hyperplastic thickining of epithelium because of vocal abuse
- Focal haemorrhage in subepithelial tissue

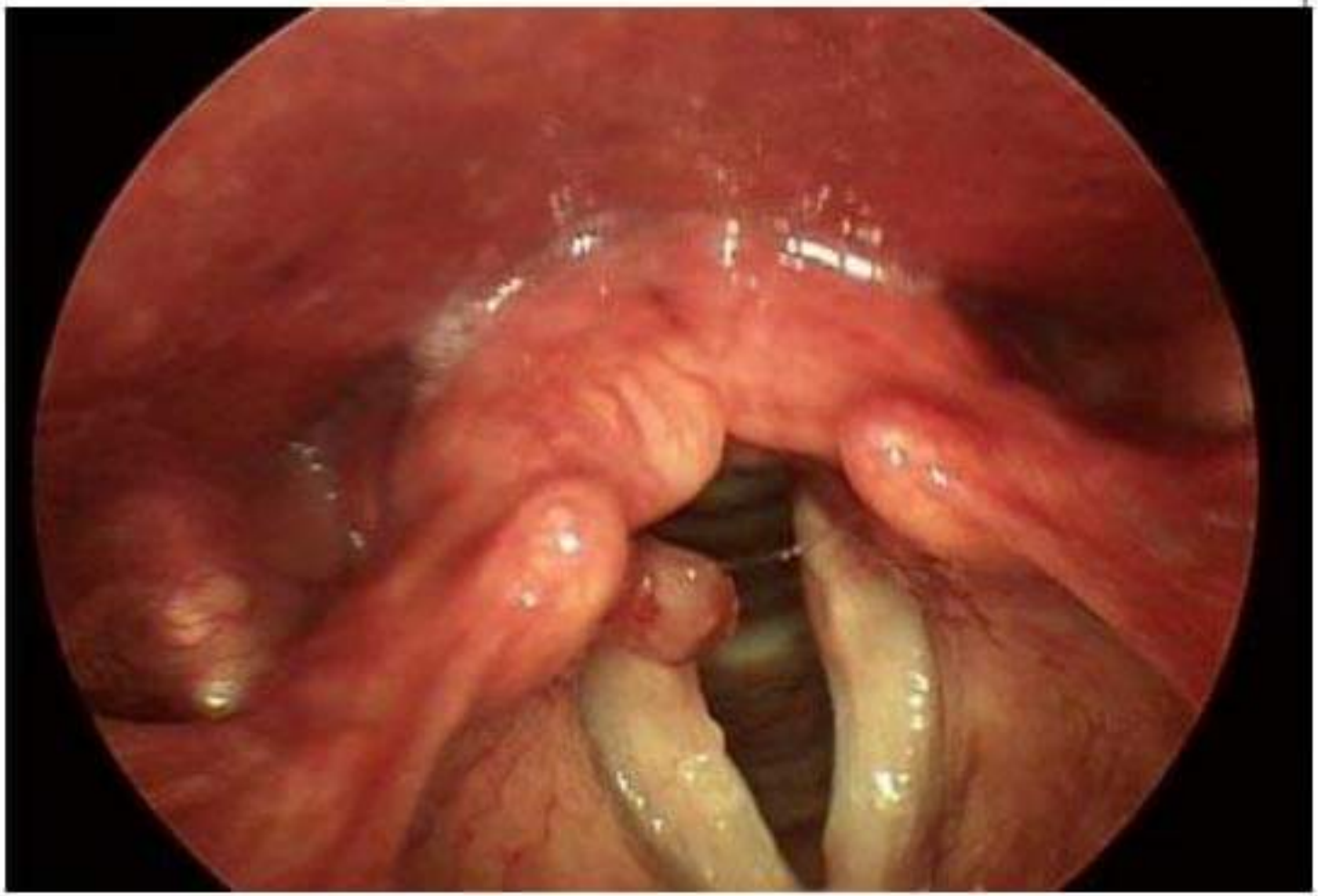
Vocal cord polyp

- Polypoidal lesion of cords
- More in male
- localised vascular engorgement and microhaemorrhage followed by oedema.
- Gelatinous,fibrous,talengiectatic



Tuberculous laryngitis

- Almost always to secondary to pulmonary TB
- Infected sputum
- Younger age group
- Tubercle formation is characteristic
- Infilteration stage followed by proliferative stage
- Posterior part of larynx involved



Voice Therapy

- Voice therapy is an approach to treating voice disorders that involves vocal and physical exercises coupled with behavioral changes.
- The purpose of voice therapy is to help attain the best possible voice and the most relief from the vocal symptoms that are bothering the patient

Voice therapy programs

- generally include education about voice and training in technical skills. Within the educational component, two basic topics are covered. The first is an overview of normal and healthy voice production.

- The second topic of education focuses upon vocal hygiene which consists of habits that help keep the voice production system healthy. These include drinking enough water, reducing or removing exposure to irritants such as cigarette smoke or acid reflux, and avoidance of throat-clearing, habitual yelling, talking in noisy environments, or extensive talking when ill.

Duration of voice therapy

- The length of each individual voice therapy session usually ranges from ½ to 1 hour. Most often, the sessions are weekly. However, for some types of voice disorders, two or more sessions per week are best for the first few weeks, tapering down as the therapy progresses. The duration of the entire voice therapy program is highly individual. The program can be as short as just a few sessions, or as long as 12 weeks or more.

To improve vocal hygiene

- **Drinking lot of fluids** - Drink 7-9 glasses of water per day; also good are herbal tea and chicken soup.
- **maintaining good general health** - Exercise regularly.
- **Avoiding smoking** - They are bad for the heart, lungs and vocal tract.
- **Eating a balanced diet** - Include vegetables, fruits and whole grain foods.
- **Avoid dry, artificial interior climates.**
- **Do not eat late at night** - may have problems when stomach acid backs up on the vocal cords.
- **Use a humidifier to assist with hydration.**

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