## PHARYNGITIS, AND LARYNGITIS



#### **ACUTE PHARYNGITIS**

# ACUTE PHARYNGITIS

- PATHOLOGY: •
- Frequently viral -
- may be secondary to sinonasal disease, caustic injury, chronic allergy. Pharyngitis is a common condition, particularly in children and young adults

#### **Types of pharyngitis** •

- There are two types of pharyngitis chronic and acute.
- Acute pharyngitis is common and is usually caused by a viral infection. It's often caused by the same viral infection that causes the common cold
  - Chronic pharyngitis is a persistent sore throat •

## Acute Pharyngitis

- Etiology •
- Viral >90% -
- Rhinovirus common cold •
- Coronavirus common cold •
- Adenovirus pharyngoconjunctival fever;acute respiratory illness
  - Parainfluenza virus common cold; croup
    - **Coxsackievirus herpangina** •
    - EBV infectious mononucleosis
      - HIV •

## Acute Pharyngitis

- Etiology •
- Bacterial –
- Group A beta-hemolytic streptococci (S. pyogenes)\*
  - most common bacterial cause of pharyngitis -
  - accounts for 15-30% of cases in children and 5-10% in adults.
    - Mycoplasma pneumoniae •
    - Arcanobacterium haemolyticum
      - Neisseria gonorrhea •
      - Chlamydia pneumoniae •

## PHARYNGITIS

- SIGNS AND •
- SYMPTOMS:
- sore throat –
- odynophagia –
- otalgia (referred)
  - malaise –

- fever –
- erythema –
- cervical adenopathy -

## PHARYNGITIS

- DIAGNOSIS: •
- clinical exam –
- consider throat cultures -
- viral smears rarely indicated -

Suppurative Complications of Group A Streptococcal Pharyngitis

- Otitis media
  - Sinusitis •
- Peritonsillar and retropharyngeal abscesses
  - Suppurative cervical adenitis •

## **Streptococcal Cervical Adenitis**



#### Nonsuppurative Complications of Group A Streptococcus

- Acute rheumatic fever •
- follows only streptococcal pharyngitis (not group A strep skin infections)
  - Acute glomerulonephritis •
  - May follow pharyngitis or skin infection (pyoderma)

# PHARYNGITIS

- supportive care
  - bed rest –
  - hydration
    - humidity
      - lozenges –

- anesthetic sprays (cetacaine or xylocaine) iodine glyceride solutions
  - antipyretics -
  - decongestants) -
- antibiotics for suspected bacterial infections

## PHARYNGITIS

#### **Other causes:**

- Candidiasis •
- Infectious Mononucleosis
  - Herpangina
    - Diphtheria •
  - Scarlet Fever •

#### ETIOLOGIES

- granulomatous diseases
- connective tissue disorders
  - malignancies –
  - postnasal drip (chronic
  - rhinosinusitis)

- Irritants
  - dust, •
- dry heat, •
- chemicals,
  - smoking,
    - alcohol •

Signs and Symptoms

- clearing
  - dry throat •
  - odynophagia •

- thickened and granular
  pharyngeal wall
  - pharvngeal crusting •







The typical appearance of a granulating inflammation involving the posterior wall of the pharynx (hypertrophic form).

- clinical history and examination •
- culture and biopsy if failed empiric therapies •



Treatment

- address underlying etiology •
- avoidance of contributing factors
  - smoking
    - dust –
  - dry environments -
- symptomatic treatment similar to acute pharyngitis



#### LARYNGITIS

### Anatomy





## DEFINITION

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

# 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. •

## AETIOLOGY

**INFECTIOUS:** Viral **Bacterial** NON INFECTIOUS Inhaled fumes Allergy Polluted atmospheric conditions Vocal abuse

latrogenic trauma

# **CLINICAL PRESENTATION**

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

# CLINICAL DIAGNOSIS

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

# DIFFERENTIAL DIAGNOSIS

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

#### TREATMENT

#### **SUPPORTIVE**

Voice rest.

Steam inhalation.

Cough suppressants.

Avoid smoking and cold. Fluid intake.

#### **TREATMENT** Cont

#### DEFINITIVE

ANTIBIOTICS •

**STEROIDS** 

ANALGESICS

# **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.



#### **CAUSES OF CHRONIC LARYNGITIS**

Chronic laryngitis has a multifactorial etiology and is ofen exacerbated by intercurrent viral

#### chronic laryngitis differential

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

# **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 •

# **Reflux-Induced Laryngitis**

inflammatory response of laryngeal mucosa
 from Laryngopharyngeal Acid Reflux (LPR)



# **Reflux induced Laryngitis**

the epiglottis

Laryngeal Findings:

- Erythema and edema of
  - Posterior commissure -
    - Arytenoids –
    - Superior surface of the vocal fold
    - Laryngeal surface of -

#### Treatment:

- Address etiology
  - stop smoking –
- voice rehabilitation -
  - Treatrhinosinusitis
    - reflux regimen –

- Humidification
  - Mucolytics –
- Consider short course of corticosteroids

### Croup (laryngotracheobronchitis)

Term applied to group of inflammatory conditions involving larynx , trachea and characterized by Triad :

- Inspiratory stridor
- Brassy cough
- Our Hoarseness of voice +/\_ resp.distress

- Usually viral in origin
  - Influenza virus
  - RSV , adenovirus , measles virus
- It is the most common cause of Acute Airway Obstruction in children
- Age group 3m-3 years (peak 2years)
- Affects boys more often than girls
- Peak occurrence is in fall and winter



- It is clinically diagnosed
- Neck x-ray and CBC all should be done in clinically stable pt.
  - AP neck film : show a pencil tip or steeple sign of the subglottic trachea
  - CBC, it may helps.

Pencil shaped or steeple sign



مرب ابن لي عندك بيناً في الجنة



- It is a rapidly progreesive bacterial infection causing acute inflammation and edema of the epiglottis and adjacent structures : aryepiglottic folds and arytenoids
- Also known as supraglottitis
- It is life threatening condition may lead to sudden and complete airway obstruction

- Age : 2-6 years (peak at 3 year)
- Infant , older children and adult are rarely affected
- Causative agents:
  - 50
  - pneumococci, staphylococci,

streptococci



#### History

- OPresentation
- Output the second se
  - Pharynx examination at this stage in ER is absolutely contraindicated
- Next step = admission in ICU
- Neck x-ray : Not the priority
  - Do not leave the patient unattended



#### Thumb sign

### THANK YOU!!!