
CROUP

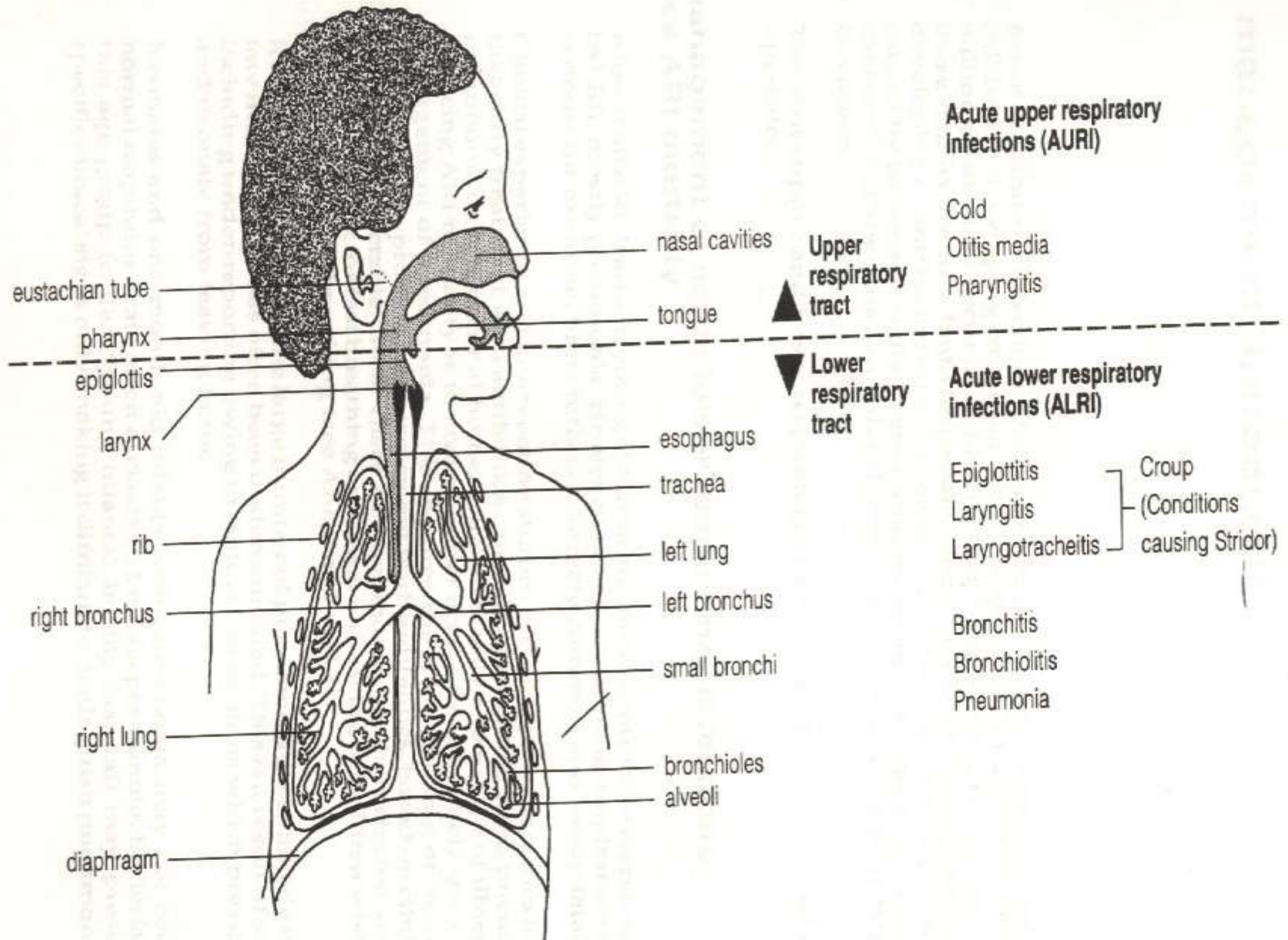
BY

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INTRODUCTION

- Upper respiratory infection
 - Lower respiratory infection
 - Supraglottic
 - Glottic
 - subglottic
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Acute Respiratory Infections (ARI): Clinical syndromes



Definition

- Heterogeneous group of acute infectious process
 - Bark like or brassy cough
 - Inspiratory stridor
 - Respiratory distress
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Croup Syndrome

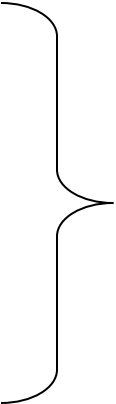
- 1-Laryngotracheobronchitis
 - 2-Acute Epiglottitis
 - 3-Acute infectious laryngitis
 - 4-Spasmodic Croup
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Etiology

- Viral infection
 - Parainfluenza...75%
 - Influenza
 - Adenovirus
 - Respiratory syncytial virus
 - Measles
 - Mycoplasma
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- Age
 - 3 m – 5 yr peak age 2 years
 - Male
 - Winter & fall
 - Recurrent attacks frequent from 3-6 yrs
 - Strong family history
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Clinical features

- Rhinorrhea
 - Pharyngitis
 - Mild cough
 - Low grade fever
 - Brassy cough
 - Inspiratory stridor
 - Respiratory distress
 - Sits up & held upright
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- Worse at night
 - Symptoms may resolve within a week
 - Family members may have mild respiratory illness
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Signs

- Slightly increased respiratory rate
 - Normal to moderately inflamed pharynx
 - Signs of respiratory distress
 - Stridor
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Diagnosis

- Clinical
- X –Rays neck
 - Steeple sign
 - Subglottic narrowing



Treatment

- Mist / steam therapy
 - Moistens airway secretions
 - Soothes inflamed mucosa provide comforts
 - Nebulized epinephrine
 - 0.25 ml in 3 ml of normal saline every 20 min
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- Steroids are beneficial
 - * Dexamethasone 0.6 mg/kg
 - * Nebulized budesonide

No antibiotics

Hospitalized if

- * Progressive stridor
 - * Stridor at rest
 - * Respiratory distress
 - * Cyanosis
 - * Depressed mental status
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Acute Epiglottitis:

- Potentially lethal condition
- Acute fulminating course



Clinical feature

- High fever, sore throat, dyspnoea
 - Rapidly progressing respiratory obstruction
 - Toxic
 - Dysphasia
 - Drooling & Hyperextended neck
 - Tripod position
 - Restlessness
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- Stridor is a late finding
 - Barking cough is rare
 - No family member is ill
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Diagnosis:

- Cherry red” swollen epiglottis
 - X- ray neck lateral – swollen epiglottis
(Thumb sign)

 - Leucocytosis
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Treatment:

- Medical emergency
 - Establish an airway
 - Nasotracheal intubation
 - tracheostomy
 - Oxygen
 - Antibiotics
 - Ceftriaxone or cefotaxime
 - Ampicillin + salbectam
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Complications

- Pneumonia
 - Cervical lymphadenopathy
 - Otitis media
 - Meningitis
 - Arthritis
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Acute infectious laryngitis

- Viral infection
(Diphtheria is an exception)
 - Sore throat, cough
 - * Hoarseness and **loss of voice** out of proportion to systemic features
 - Physical examination is unremarkable
 - Laryngoscopy shows edema of vocal cords and subglottis tissue
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Spasmodic Croup

- Age: 1-3 yr
 - No prodrome
 - No positive family history
 - Cause is viral or allergic
 - Attacks are sudden and at night
 - Child awakens with barking cough
 - Stridor and hoarseness
 - Improves within hours
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Differential Diagnosis

- Bacterial tracheitis
 - Diphtheritic croup
 - Measles croup
 - Foreign body aspiration
 - Retropharyngeal or peritonsillar abscess
 - Angioedema
 - Hypocalcemic tetany
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Prognosis

- Excellent outcome
 - Increase mortality
 - Laryngeal obstruction
 - Complications of tracheotomy
 - Untreated epiglottitis
 - 6% mortality
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Thankyou
