ACUTE LARYNGOTRACHEOBRONCHITIS

LTB (Croup)

- Slow Onset
- Barking Cough
- “Crowing Sounds”

- Inspiratory Stridor
- Occurs at Night in Fall and Winter
- May Progress to Hypoxic State
- May Have Slight Temperature (<102°)

- Commonly Occurs Age 3 Months to 3 Years
- U.R.I.’s Frequently Precede LTB
- Restlessness
- Supra-ternal Retractions
- ↑ Respiratory Rate

ASTHMA

(Reactive Airway Disease)

- Triggers
  - Hypersensitivity
  - URI
  - Exercise
  - Air Pollutants
  - Respiratory Infections
  - GERD

- Familial Tendency

- Hypoxemia:
  - Tachycardia
  - ↑ Restlessness
  - Tachypnea

- Cough
- ↑ Mucus
- Shortness of Breath
- Wheezing & Prolonged Expiration
- ↑ CO₂ Retention
- Chest Tightness
- Retractions

Emergency:
If symptoms do not respond to usual treatment in 30 minutes, client should seek medical attention.

Status Asthmaticus
Can be life threatening!
CHRONIC BRONCHITIS
“BLUE BLOATER”

* Color Dusky to Cyanotic
* Recurrent Cough & ↑ Sputum Production
* Hypoxia
* Hypercapnia (↑ pCO₂)
* Respiratory Acidosis
* ↑Hbg
* ↑Resp Rate
* Exertional Dyspnea
* ↑Incidence in Heavy Cigarette Smokers
* Digital Clubbing

* Cardiac Enlargement
* Use of Accessory Muscles to Breathe
* Leads to Right-Sided Failure

COPD
CHRONIC AIRFLOW LIMITATION
“EMPHYSEMA AND CHRONIC BRONCHITIS”

• Easily Fatigued
• Frequent Respiratory Infections
• Use of Accessory Muscles to Breathe
• Orthopneic

• Wheezing
• Pursed-Lip Breathing
• Chronic Cough
• Barrel Chest
• Dyspnea
• Prolonged Expiratory Time

• Bronchitis - Increased Sputum

• Digital Clubbing

• Cor Pulmonale (Late in Disease)

• Thin in Appearance
**EMPHYSEMA**

"PINK PUFFER"

- ↑CO₂ Retention (Pink)
- Minimal Cyanosis
- Purse Lip Breathing
- Dyspnea
- Hyperresonance on Chest Percussion
- Orthopneic
- Barrel Chest
- Exertional Dyspnea
- Prolonged Expiratory Time
- Speaks in Short Jerky Sentences
- Anxious
- Use of Accessory Muscles to Breathe
- Thin Appearance

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PULMONARY EDEMA

Meds ➔ Nipride, Morphine
Airway
Digitalis

Diuretics (Lasix)
Oxygen
Blood Gases (ABG’s)

Sleep Apnea

Symptoms
• Loud Snoring
• Excessive day time sleepiness
• Frequent episodes of obstructed breathing during sleep
• Morning headache
• Unrefreshing sleep
• Dry mouth upon awakening

Treatments
Non-Surgical
• Change sleep position
• Decrease weight
• CPAP (Constant Positive Airway Pressure)
• Drug Therapy

Surgical
• Adenoidectomy
• Uvulectomy
• Remodeling posterior oropharnx
• Tracheostomy

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ACUTE RESPIRATORY DISTRESS SYNDROME (ARDS)

Signs & Symptoms
- Tachypnea
- Dyspnea
- Retractions
- Hypoxia
- Tachycardia
- Pulmonary Compliance

ABGs
- \( \downarrow \text{Fi}O_2 \), \( \uparrow \text{Dyspnea} \)
  (Pt’s NOT Getting Better, even with \( \uparrow \text{Fi}O_2 \))

Causes
- Trauma
- Pulmonary Infection/Aspiration
- Prolonged Cardiopulmonary Bypass
- Shock
- Fat Emboli
- Sepsis

CYSTIC FIBROSIS (CF)

* Treatment *
- Diet: \( \uparrow \)CAL, \( \uparrow \)Protein
- Pulmonary Therapy
  - Chest Physiotherapy
  - Postural Drainage
  - Breathing Exercises
  - Aerosol Therapy
- Meds
  - Antibiotics
  - Supplemental Vitamins
  - Aerosol Bronchodilators
  - Mucolytics
  - Pancreatic Enzymes
- Salty Snacks
  - Salty Taste On Skin

* Symptoms *
- Fatigue
- Chronic Cough
- Recurrent URI’s
- Thick, Sticky Mucus
- Chronic Hypoxia:
  - Clubbing, Barrel Chest
- \( \downarrow \) Absorption of Vitamins and Enzymes
- Abdominal Distention
- \( \downarrow \) Digestive Enzymes
  - Rectal Prolapse
  - Fatty, Stinky Stools (Steatorrhea)
  - Meconium Ileus in Newborn

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**EPIGLOTTITIS**

- A: Airway Inflammation → Obstruction
- I: Increased Pulse
- R: Restlessness
- R: Retractions
- A: Anxiety Increased
- I: Inspiratory Stridor
- D: Drooling

**TREATMENT:**
- 
  - 1: Anxiety
  - Don’t Examine Throat
  - Position For Comfort
  - Trach Tray or Endotracheal Tube Available

- Cool Mist Humidification
- Oxygen
- No Oral Fluids
- IV Fluids

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**GUIDELINES FOR PPDs**

PPDs Must Be **D**

After 48 to 72 Hours

**Positive Findings**

(Area of induration - Swelling Size Measured, not Redness or Inflammation)

- > 15mm: General Public Without Risk Factors
- > 10mm: Residents of Long-Term Care Facilities, IV Drug Abusers and Medically Underserved Populations, Health Care Workers
- > 5mm: HIV Group or Recent Close Contact With Active TB

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MANAGEMENT OF ASThma

- Adrenergics (Beta 2 Agonists) (Albuterol)
- Steroids
- Theophylline
- Hydration (IV)
- Mask O₂
- Anticholinergics

PNEUMONIA

* Obstruction of Bronchioles
* ↓ Gas Exchange
* ↑ Exudate

Symptoms...
- Cough
- Fever
- Chills
- Tachycardia
- Tachypnea
- Dyspnea
- Pleural Pain
- Malaise
- Respiratory Distress
- ↓ Breath Sounds

* Productive Cough
  Yellow, Bloodstreaked
  Rusty Sputum = Infection

* Opportunistic
  (PCP) Pneumocystis
  Carinii Pneumonia
  Mycobacterium Avium Complex (MAC)

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**THORAX** - Air in the pleural cavity, resulting in lung collapse...

- Dyspnea
- Anxiety
- Tachycardia
- Pleural Pain
- Asymmetrical Chest Wall Expansion
- ↓ Breath Sounds

*Causes*
- Ruptured BLEB (COPD)
- Thoracentesis
- Trauma
- Secondary Infection

*Diagnosed By:*
- Chest X-Ray
- ABG's

*Treatment:*
- Chest Tube
- Oxygen

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**PULMONARY EMBOLUS**

- Sudden Sharp Chest Pain
- Emboli On The Way To The Lungs
- Thrombolytic Therapy
  - Tachypnea ↓ PCO₂
  - Hypoxia ↓ PO₂
  - Dyspnea

- Risk Factors
  - Immobility
  - Obesity
  - DVT
  - Postoperative
  - Oral Contraceptives

- Venous Highways
- Venous Rolling (Stasis) With Embolus Formation

*ABG's:
- ↓ PCO₂
- ↓ PO₂
- ↑ pH

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RESPIRATORY PATTERNS

Kussmaul - Fruity Acetone Breath

Cheyne-Stokes - Near Death Breathing Pattern

Tachypnea - Fast

Bradypnea - Slow

Biots - Irregular

SYMPTOMS OF HYPOXIA

Early

- Restlessness
- Anxiety
- Tachycardia/Tachypnea

Late to Early

- Bradycardia
- Extreme Restlessness
- Dyspnea (Severe)

(In Pediatrics)

- Feeding Difficulty
- Inspiratory Stridor
- Nares Flare
- Expiratory Grunting
- Sternal Retractions

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