

### Acute Bronchitis

#### Definition

Inflammation of the airways (trachea, bronchi, bronchioles) characterized by cough

#### Etiology

>90% viral (rhinovirus, coronavirus, RSV)

#### CXR will be \_\_\_\_ in acute bronchitis

Negative

#### Treatment for acute bacterial bronchitis

Second-generation cephalosporin (ie Cefitin)

#### When are antibiotics indicated in acute bronchitis

Elderly, underlying cardiopulmonary disease, cough >7-10 days, immunocompromised state

### Acute epiglottitis

#### Definition

A severe, life-threatening infection of the epiglottis\*

#### Most common ages

2-7 yo

#### What has decreased the incidence in children

Wide-spread administration of H. flu vaccine

#### Clinical findings

Patients sit upright with necks extended, higher fever, reasp. distress, drooling

#### Lateral neck radiograph finding

Thumbprint sign

#### Treatment

Secure airway + broadspectrum 2nd or 3rd generation cephalosporin (cefotaxime or ceftriaxone) x 7-10 days

Buzzwords: Drooling, sniffing position, tripod, toxic, thumbprint sign

### Croup

#### Definition

Viral laryngotracheo-bronchitis, affects kids 6mo-5yo

#### Most common cause

Parainfluenza virus types 1 & 2

#### Clinical findings

Harsh, barking, seal-like cough

#### PA neck film radiograph

Steeple sign

#### Treatment

Mild croup doesn't need treatment

Buzzwords: pediatric with barking cough, steeple sign, inspiratory stridor

### Tuberculosis

#### Organism

Mycoplasma tuberculosis-acquired by inhaling organisms within aerosol droplets expelled from coughing

#### Inactive TB most commonly found in

Apices of lungs

#### Most common symptom

Cough

#### Histologic hallmark

Bx showing caveating granulomas

#### Tx for LTBI

INH x 9 months

#### Tx for active TB

INH/RIF/PZA/EMB x 2 months then INH/RIF x 4 months

Indurations greater than \_\_\_\_ should be treated aggressively

5mm

Buzzwords: Apical infiltrates, fever, chills, dry cough

### Acute bronchiolitis

#### Definition

Inflammation of the bronchioles (<2mm diameter), primarily in kids/infants

#### Most common organism

RSV

#### Treatment

Hospitalization + ribavirin + supportive measures

### Pneumonia

#### Definition

Inflammation in the alveoli of the lung caused by microorganisms

#### Most common cause of CAP

Strep pneumo.

#### Clinical Features

cough, sputum, SOB, pleuritic chest pain, sweats, rigors

#### Treatment-uncomplicated/outpatient

Doxycycline, erythromycin, macrolides (azithromycin), fluoroquinolones

#### Treatment-inpatient (want to cover Legionella)

Ceftriaxone/cefotaxime + azithromycin/or fluoroquinolone

#### Most common cause of atypical CAP

Mycoplasma pneumo.

#### Treatment-atypical CAP

erythromycin (Mycoplasma pneumo.) or tetracycline (Chlamydia)

#### Who is at highest risk for HAP?

ICU patients on mechanical ventilation

#### Organism in ICU with worst prognosis

Pseudomonas auroginosa

Most common opportunistic infection in patients with HIV

Pneumocystis jiroveci



### Pneumonia (cont)

Treatment-HIV-related pneumonia

Bactrim (trimethoprim/sulfa.)

When is prophylaxis recommended for HIV-pneumonia

CD4<200

Clinical Scenario: >35yo with PNA. Rusty colored or yellow-green sputum. Acute onset F/C

Strep. pneumonia

Clinical Scenario: <35 yo, college students. Fever, cough, +/- sputum, chills, muscle aches, Bullous myringitis

Mycoplasma pneumonia

Clinical Scenario: PNA w/ Smokers, COPD

H. influenza

Clinical Scenario: PNA w/ DM, immunocompromised, EtOH. Currant color sputum.

Klebsiella

Clinical Scenario: PNA w/ Water, late summer, construction site. Diarrhea. Toxic looking

Legionella

Clinical Scenario: PNA from Nursing homes, chronic care facility. Purulent sputum

Staphylococcus aureus

Clinical Scenario: PNA & HIV+, AIDS, Immunocompromised. Sx out of proportion to exam. Diffuse interstitial & alveolar infiltrates

Pneumocystis jirovecii; TMP-SMX =  
Drug of choice

Clinical Scenario: PNA & decreased mental status, poor dental hygiene, dentures, foul smelling sputum, bronchiectasis. Patchy infiltrates in dependant lung zones

Aspiration pneumonia

Buzzwords: Fever, cough, sputum.

Crackles, decreased breath sounds, dullness to percussion, +egophony, pectoriloquy. CXR – infiltrates or consolidation

