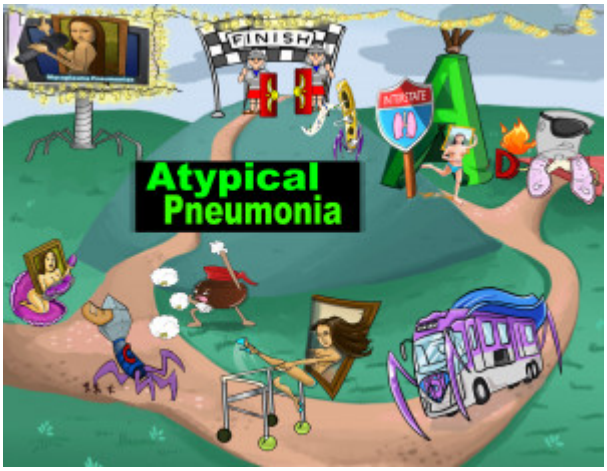
Atypical Pneumonia

Atypical pneumonia is so called because of the lack of the expected pattern of lung infection such as fever, productive cough, dyspnea, and pleurodynia. The radiological pattern shows diffuse patchy inflammatory changes often confined to the interstitium. It is known as "walking pneumonia" since patients can be infected and "walking around with it" without even knowing. Common etiologic organisms include Mycoplasma pneumoniae, Chlamydia pneumoniae, Legionella pneumophila, adenovirus, RSV, CMV, and influenza. Atypical pneumonia characteristically presents with a dry cough and treatment is with macrolides.



PLAY PICMONIC

CHARACTERISTICS

Diffuse Patchy Inflammation

D-fuse Patch In-flames

Due to the inflammation involving the interstitium and the interlobular septa, atypical pneumonia looks like patchy reticular or reticulonodular opacities on chest radiograph.

Interstitial Pattern

Interstate-sign

Diffuse patchy inflammation is often seen in an interstitial pattern on chest radiograph.

"Walking Pneumonia"

Nude-mona with Walker

Atypical pneumonia is informally called "walking pneumonia" due to patients often not experiencing severe enough symptoms to require bed rest or hospitalization. The symptoms are generally so mild that one doesn't feel they need to stay home from work or school.

Etiologies

Mycoplasma pneumoniae

Mic-plasma Nude-Mona

Mycoplasma pneumoniae is the most common cause of pneumonia in school-age children. Mycoplasma affects teens/young adults and presents with a hacking cough that is initially non-productive. As the disease progresses, it becomes productive.

Chlamydia pneumoniae

Clam Nude-Mona

C. pneumoniae is another cause of atypical pneumonia. Radiological presentation is usually single lobed pneumonia.

Legionella pneumophila

Legionnaire Soldier

Legionella commonly causes atypical pneumonia. This is seen in air conditioning exposure especially for those over 50 as well as heavy smokers and drinker. Immunosuppressed patients are also at risk.

Adenovirus

Advertisement-virus

Adenovirus most commonly infects the respiratory system but can also affect the GI tract, causing conjunctivitis as well as cystitis. Pharyngoconjunctival fever is a specific presentation of adenovirus that includes a high fever, pharyngitis, and conjunctivitis. It is often found in summer camps and can be spread via public swimming pools and daycare centers.

Respiratory Syncytial Virus (RSV)

Super-RV

Respiratory syncytial virus infects upper airway epithelial cells leading to copious secretions, coughing, sneezing, and wheezing in patients. It primarily affects infants and young children with a peak incidence between 2 to 7 months of age. It affects more males than female infants, occurs less frequently in breast-fed infants, and has a peak incidence during winter and spring. Most cases of bronchiolitis are caused by RSV, but RSV can also cause atypical pneumonia.

Cytomegalovirus (CMV)

Side-toe-mega-virus

CMV can also cause pneumonia and inflammation of the retina and esophagus in the immunosuppressed.

Influenza

Flute Virus

The influenza virus is one of the most common causative agents of seasonal pneumonia. Patients can present with headache, malaise, fever, chills, myalgias, and anorexia. In younger age groups it may present as bronchiolitis, croup, otitis media, or vomiting.

Presentation

Dry Cough

Cotton-dry Coffee-pot

Patients with atypical pneumonia may complain of dry cough. This varies in the severity from mild to very severe hacking cough.

Treatment

Macrolides

Macaroni-lights

Macrolides are a group of antibiotics whose activity stems from the presence of a macrolide lactone ring. Commonly used macrolides include erythromycin, azithromycin, and clarithromycin.