Haemophilus Influenzae Disease

Haemophilus influenzae is a gram-negative coccobacilli that can cause several diseases, including meningitis, pneumonia, otitis media, and epiglottitis. Most strains of H. influenzae live in their host without causing disease, and only cause problems when the host has reduced immune function or inflammation in the area. Naturally acquired disease can occur in infants and young children. Type b Haemophilus influenzae can cause pneumonia and bacterial meningitis. It can also cause otitis media and epiglottitis. In fact, this organism is the most common etiologic agent associated with epiglottitis, which has a thumbprint sign seen on X ray. Ceftriaxone antibiotic is commonly used for treatment in severe cases.



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Disease

Pneumonia
Nude-Mona
Pneumonia refers to inflammation of the alveoli of the lungs and is associated with fever, chest symptoms, and consolidation on chest X-ray. Haemophilus influenzae is a common bacterial pathogen of pneumonia.

Cherry Red Epiglottitis
Choking on a Cherry
Epiglottitis is inflammation of the epiglottis, which is a structure at the base of the tongue that prevents food from entering the trachea. Inflammation can give the epiglottis a cherry red color. Due to its location, swelling of this structure can obstruct breathing and constitutes a medical emergency. Symptoms include fever, difficulty swallowing, drooling, and hoarseness.

Meningitis
Men-in-tights
Haemophilus influenzae type b is a common cause of meningitis in people under 18. Meningitis refers to inflammation of the meninges that cover the brain. Symptoms include fever, headache, and neck stiffness.

Otitis Media
Oats-out-of-ear
Otitis media refers to inflammation of the middle ear between the tympanic membrane and the inner ear, which can cause pressure build up and intense pain. While the most common bacterial pathogen is Streptococcus pneumoniae, nontypeable Haemophilus influenzae is also associated with otitis media.

COPD Exacerbation
C.O.P.D-Cop
Haemophilus influenzae is the bacterial species most commonly isolated from airway samples during COPD exacerbations.

Thumbprint Sign (on X-ray)
Thumbs-up
In radiology, thumbprint sign refers to a thickened free edge of the epiglottis on lateral C spine, which gives the appearance of the distal thumb. This suggests a diagnosis of epiglottitis.

Treatment

Rifampin Prophylaxis
Ref-amp with Purple-Axes
Rifampin is recommended as prophylactic treatment for close contacts of children who develop invasive infections with type b Haemophilus influenzae.

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Ceftriaxone

Chef-tri-axes

Ceftriaxone is a third generation cephalosporin antibiotic that can be used for treatment of severe cases caused by Haemophilus influenzae.

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