Pneumococcal disease is an infection caused by a bacterium called Streptococcus pneumoniae (S. pneumoniae) or the pneumococcus. Infection can be invasive and result in pneumococcal pneumonia, pneumococcal bacteremia (bacterial infection of the blood), or pneumococcal meningitis. Other common non invasive diseases are otitis media (middle-ear infection) and sinusitis.

Pneumococcal diseases mainly affect infants and children under five years of age with the highest prevalence among children under two years of age. Elderly over 65 years of age, individuals with underlying medical condition, weakened immune systems, cerebrospinal fluid (CSF) leak or tobacco smokers are at increased risk of infection.

The bacterium spreads from person-to-person via respiratory droplets through coughing or sneezing. The disease is spread from person to person by droplets in the air. The pneumococci bacteria are common inhabitants of the human respiratory tract. Pneumococcal diseases are more common during the winter and in early spring when respiratory diseases are more prevalent.

The pneumococcus is the most common cause of serious bacterial pneumonia among children. Pneumococcal pneumonia is also common bacterial complication of influenza and measles. Complications of pneumococcal pneumonia include empyema (infection of the pleural space), pericarditis (inflammation of the sac surrounding the heart), and endobronchial obstruction with atelectasis and lung abscess formation.

Pneumococcal bacteremia is a common clinical presentation among children younger than age two years and younger. It occurs in about 25%–30% of patients with pneumococcal pneumonia. Symptoms include fever and chills, and possibly sleepiness and loss of appetite.

It is also a main cause of bacterial meningitis specially among children younger than age of one year. The disease has high fatality rate. Neurologic sequels are common among survivors of pneumococcal meningitis.

Thursday 9th of May 2024 06:56:09 PM