

**DEFINITIONS**

1. **Pneumonia** is an acute inflammation of the lung with the production of exudate in the alveoli.

**CLINICAL MANIFESTATIONS**

2. The common presenting features of pneumonia are fever (which is often very high), cough, breathlessness, headache, malaise, anorexia and aching pains in the body and limbs.
3. The order and combination in which these features occur and the severity of each varies from one type of pneumonia to another.

**CLASSIFICATION AND AETIOLOGY**

4. There are many different types of pneumonia and the most simple form of classification is that based on aetiology –
  - 4.1. **Primary pneumonias** in which the disease is caused by a specific pathogenic organism. These include –
    - 4.1.1. **Bacterial pneumonias** caused by *Streptococcus pneumoniae* (the commonest cause of bacterial pneumonia), *Staphylococcus aureus*, *Streptococcus pyogenes*, *Klebsiella pneumoniae*, *Haemophilus influenzae*, *Legionella pneumophila*, *Mycoplasma pneumoniae*, *Coxiella burnetii*, *Chlamydia psittaci* and *Actinomyces israeli* (formerly included among the fungal diseases).
    - 4.1.2. **Viral pneumonias** caused by influenza viruses (the commonest cause of viral pneumonia), parainfluenza viruses, measles virus, chicken pox virus.
  - 4.2. **Secondary pneumonias**, in which some abnormality of the respiratory system facilitates invasion of the lung by organisms of relatively low virulence.
    - 4.2.1. Infection generally reaches the alveoli by aspiration from other parts of the respiratory tract and, for this reason, this form of pneumonia is often referred to as **Aspiration Pneumonia**. The term **Non-specific Pneumonia** is also sometimes used.
    - 4.2.2. Infection may reach the lung by aspiration of pus from an infected nasal sinus, inhalation of septic matter during tonsillectomy or dental extraction under general anaesthesia, vomitus may enter the larynx during general anaesthesia, coma or even sleep and aspiration may occur in patients with gastro-oesophageal reflux. Pus from acute bronchitis, dilated bronchi or a lung abscess may also be carried into the alveoli by the air stream or gravity.

- 4.2.3. Ineffective coughing caused by post-operative or post-traumatic thoracic or abdominal pain, by debility or immobility or by laryngeal paralysis may also lead to secondary pneumonia.
  - 4.2.4. Partial bronchial obstruction – e.g. by tumour - may allow infection derived from the upper air passages to become established in the inadequately drained lung.
5. Pneumonia is sometimes referred to as **lobar pneumonia** when one complete lobe of a lung is affected or **bronchopneumonia** when the infection is scattered throughout the lung tissue. However, this is merely an anatomical observation.

## CONCLUSION

6. The **pneumonias** are inflammatory diseases of the lung, the various causes of which are described at paragraph 4 above.

## REFERENCES

- Johansen W G Jr. Introduction to Pneumonia. In: Wyngaarden J B, Smith L H and Bennett J C (Eds). Cecil Textbook of Medicine. Philadelphia. W B Saunders Company. 19<sup>th</sup> Ed. 1992. p409-413.
- Crompton D F C and Crean G P. Diseases of the Respiratory System - The Pneumonias. In: (Eds) Edwards Christopher R W and Bouchier Ian A D. Davidson's Principles and Practice of Medicine. 16<sup>th</sup> Ed. 1991. Edinburgh. Churchill Livingstone. p356-364.