**Chronic obstructive pulmonary disease** (COPD)

COPD is characterized by poorly reversible airflow limitation that is usually progressive and associated with a persistent inflammatory response of the lungs. COPD is now the preferred term for patients previously diagnosed as having **chronic bronchitis:** (cough and sputum on most days for at least 3 months, in 2 consecutive years) or **emphysema:** (abnormal permanent enlargement of the distal air spaces, with destruction of alveolar walls).

**Etiology**

1. Cigarette smoking is the major cause of COPD. The risk of death from COPD in patients smoking 30 cigarettes daily is 20 times that of a non-smoker.
2. Chronic exposure to pollutants at work (mining, building and chemical industries)
3. Alpha-1 antitrypsin deficiency causes early onset COPD

**Clinical features**

COPD should be suspected in any patient over the age of 40 years with persistent cough and sputum and/or breathlessness. In advanced disease there may be edema or morning headaches.

**Investigations**

1. Lung function tests
2. Chest X-ray
3. α1­antitrypsin level

**Management**

1. Reduce smoke exposure
2. Bronchodilators: Short acting and longer acting bronchodilators (β2­agonist or anticholinergic)
3. Inhaled corticosteroids: they are recommended in patients with severe disease (FEV1 < 50%)
4. Oxygen therapy: Long-term oxygen therapy improves survival in patients with COPD and hypoxia
5. Other measures: Give influenza vaccination and pneumococcal vaccination