

# Pharmacology-III

## UNIT-I

### Drugs used in the management of COPD



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# COPD: CHRONIC OBSTRUCTIVE PULMONARY DISEASE

- COPD- Airflow resistance which is not reversible
- COPD includes; chronic bronchitis, chronic bronchiolitis(small airways disease), emphysema: damaged air sac in lungs
- **COPD** associated with impaired weight loss and skeletal muscle dysfunction , obstruction of airway for long time.
- **Risk factors:** tobacco smoking, fulltime smoke, Air pollution, industrial exhaust ,fumes, exposure to cadmium, other kind of respiratory infection
- Time available for expiration reduced caused infection & loss of ventilation.

## Pathophysiology:

- Enlargement of mucus secreting gland
- Increased no of goblet cell in larger airways
- Loss of elastic tissue in surrounding the smaller airways
- Inflammation & fibrosis in airways wall & mucus in airways lumen

# Approaches to treat COPD:

- Inhaled bronchodilators:  $\beta$  sympathomimetic, Anti – cholinergic
- Inhaled glucocorticoids
- Oxygen inhalation
- Prophylactic antibiotic: when triggered by any bacteria or virus  
e.g. corona virus, influenza virus
- Physiotherapy & pulmonary rehabilitation
- Avoidance of respiratory irritant : smoking, dust, pollution etc