

# ACUTE EXACERBATION OF COPD

# DEFINITION

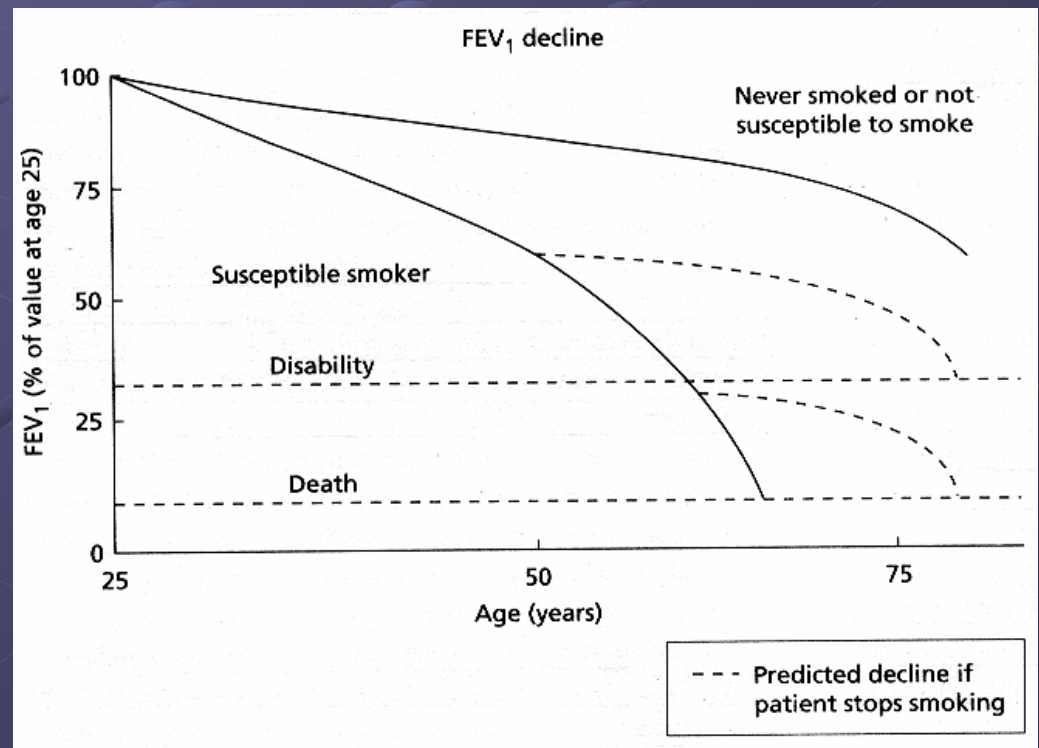
- COPD → Presence of airflow obstruction that is progressive, accompanied by airway reactivity that may be partially reversible.
- Two clinical Variants
  - Chronic Bronchitis → Blue Bloaters
  - Emphysema → Pink Puffers

# ETIOLOGY

Cigarette smoking → most important etiological factor.

## Natural History:

The effect of age on airflow obstruction in normal subjects and susceptible cigarette smokers. Cessation of smoking returns the rate of decline to normal. (Adapted from Fletcher *et al.* [23].)



# DEFINITION-ACUTE EXACERBATION

- ↑ Dyspnea
- ↑ Sputum volume
- Sputum purulence
- Type-I → All three
- Type-II → 2 out of 3
- Type-III → one symptom + associated features (anyone)

# DIAGNOSIS

- HISTORY

- CLINICAL EXAMINATION

- General Physical

- Cyanosis

- Pursed lip breathing

- Respiratory System

- Barrel shaped chest

- Hoover's sign

# INVESTIGATIONS

- PULSE OXIMETRY
- BLOOD GAS ANALYSIS
- OTHER INVESTIGATIONS

# INDICATIONS FOR ADMISSION

- Marked ↑ in symptoms
- Onset of new physical signs
- Failure of initial medical treatment
- Significant co-morbidities
- Newly developed arrhythmias
- Diagnostic uncertainty
- Old age

# TREATMENT

- O<sub>2</sub> inhalation – humidified at 1-2 ltrs./min
- Antibiotics – to cover H.influenzae, Strep

## Pneumoniae

- Bronchodilators – Nebulized  $\beta_2$  agonists

Ipratropium

I/V Methylxanthines

- Corticosteroids
- Diuretics