Chronic Obstructive Pulmonary Disease (COPD) Part 2

Management

Non-Pharmacological
- Stop smoking!!!
- Pulmonary rehabilitation
- Influenza/Pneumococcal vaccination

Pharmacological
- B2 agonists or antimuscarinics (e.g. ipratropium) as required
  - Mild
    - FEV1 of < 50% or >2 exacerbations/year
  - Moderate
    - Regular ipratropium or long acting B2 agonists (salmeterol)
    - inhaled steroid (fluticasone) if FEV1 of < 50% or >2 exacerbations/year
  - Severe
    - Refer to specialist
    - Combination of short acting B2 agonist and anticholinergic
      - consider oral steroid trial

Consider Long Term Oxygen Therapy (LTOT) if PaO2 < 7.3 kPA

Acute exacerbation
- antibiotics shorten symptom duration
- oral steroids improve recovery
- Treat oedema with diuretics

Investigations
- Pulmonary function tests
  - FEV1/FVC < 70%
  - FEV1 < 80%
- Chest X-Ray
  - hyperinflation
  - flat hemidiaphragms
  - large central pulmonary arteries
  - decreased peripheral vascular markings
- CT
  - emphysematous bullae
  - arterial blood gases
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Indications for LTOT
- PaO2 < 8 kPA
- FEV1 < 30%
- >2 exacerbations/year

Clinical Features

“Pink Puffers”
- thin, anxious
- Type 1 respiratory failure (normal CO2 but decreased pO2)
- Breathless but not cyanosed
- associated with emphysema

“Blue Bloaters”
- obese
- type 2 respiratory failure
- CO2 increased and decreased pO2
- cyanosed but not breathless
- associated with chronic bronchitis

Mild
- minimal dyspnoea
- cough
- normal examination
- decreased peripheral vascular markings

Moderate
- breathless on moderate exertion
- hyperinflation
- reduced air-entry
- cough

Severe
- breathless on minimal exertion
- possible signs of respiratory failure
- cyanosis
- Blood Pressure
- increased systolic
- decreased diastolic (due to CO2 retention)
- possible signs of cor pulmonale (right heart failure)
- increased JVP
- oedema