

4.4 Chronic obstructive pulmonary disease

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Chronic obstructive pulmonary disease is characterised by reduced respiratory function caused by a combination of destruction of alveoli and obstruction of bronchioles by a chronic inflammatory process. There is often a reversible element to the latter caused by bronchospasm.

History and Examination

- Acute deterioration is usually caused either by super-added infection which starts in the upper respiratory tract or by an increase in the asthmatic element of the disease.
- Other causes include a minor chest injury, inappropriate sedation and uncontrolled O₂ therapy.
- Examination findings range from patients with mild respiratory distress to those that are obtunded and moribund with an immediate risk to the airway. This situation can be worsened by high flow O₂ therapy given early.
- The treatment depends on the blood gas picture, sensitivity to added oxygen, and reversibility of the bronchial narrowing by pharmacological means.

Investigations

- ABG on air
- FBC
- U&E
- CXR
- PEFV if possible

Treatment:

Sit up right

A: Ensure adequate airway . May be at risk due to high CO₂ or low O₂ ,both causing a decreasing conscious level. Give additional oxygen as guided by initial ABG

B: Breath sounds may be very quiet .There may or may not be a wheeze. **Ensure there is no pneumothorax , particularly before starting Non Invasive Ventilation.** Start nebuliser and steroids and aminophylline as per asthma protocol.

C: This may also be affected due to hypoxic injury to the heart.

D: Refer to ARCU if requiring NIPPV.

