Acute Pulmonary Oedema

Fluid accumulation in the lungs leading to reduced gas exchange

AETIOLOGY

Cardiogenic Causes:

- Decompensated HF
- Hypertensive crisis
- Valve disease
- MI
- Arrhythmias

Non-cardiogenic:

 Acute respiratory distress syndrome (ARDS), secondary to pneumonia, sepsis, or trauma

HISTORY

- **Breathlessness**
- Orthopnoea
- Cough +/- pink frothy sputum



EXAMINATION

- Appear generally unwell: sweaty, pale, anxious
- Respiratory distress: tachypnoea, tachycardia
- Bilateral fine crackles on auscultation
- ↓ O2 sats
- Signs of the underlying cause. e.g:
 - Raised JVP or peripheral oedema in HF
 - Murmur in valve disease

INVESTIGATIONS

- Bedside
 - ABG: may show ↓ O2
 - ECG: Arrhythmias,
 - ischaemic changes, LVH
- **Bloods**
 - FBC, U&E, LFT, glucose
 - Troponin, BNP, TFT
- CXR
 - Alveolar oedema (patchy shadowing)
 - Other signs of HF
- **Echocardiography**
 - HF, valve disease



MANAGEMENT

- Supplemental Oxygen if hypoxic.
- Furosemide IV (↓ fluid overload)
 - Nitrate IV (only if systolic BP > 90mmHg)
 - NIV if acidotic or poor response to treatment

