# Shortness of breath and their associated features on history and examination

Examples of some of the causes of shortness of breath and their associated features on history and examination are outlined below:

| Level | Condition | History | Examination |
|---|---|---|---|
| Upper airway obstruction | Angioedema | • Exposure to allergen<br>• Recent commencement of new medication<br>• ACE inhibitor | • Swelling of lips / tongue /throat<br>• Hoarse voice<br>• Stridor<br>• Wheeze<br>• Altered level of consciousness |
| | Inhalation foreign body | • Sudden onset during eating<br>• Missing dentures | • Stridor<br>• Coughing (may be absent in those without a cough reflex e.g. advanced dementia or after stroke) |
| Lower respiratory tract | COPD / asthma | • History of COPD / asthma<br>• Smoking history<br>• +/- Change to sputum | • Bilateral polyphonic wheeze<br>• Beware the silent chest or residents sitting forwards in "tripod" position |
| | Pulmonary oedema | • Orthopnoea<br>• +/- Dull, central chest pain or heaviness +/- radiation to jaw or arms preceding or concurrent with shortness of breath | • Sweating<br>• Pallor<br>• Bilateral basal crackles<br>• Cardiac wheeze<br>• Signs of right heart failure may or may not be present (peripheral oedema, jugular venous distension) |
| | Pneumonia or infection (e.g. COVID-19) | • Cough<br>• Pleuritic chest pain<br>• Fever | • Elevated temperature<br>• Focal crackles or bronchial breathing |
| | Pulmonary Embolism (PE) | • Hemoptysis<br>• Pleuritic chest pain<br>• Risk factors for PE (e.g. recent surgery, DVT, cancer or immobilisation) | • Tachypnoea (can be isolated)<br>• Unilateral calf tenderness or swelling (may be absent)<br>• Often have a clear chest |
| Pleura | Pneumothorax and / or rib fracture | • Recent trauma / fall with rib pain<br>• Recent medical procedure near chest<br>• History of previous pneumothorax | • Pleuritic chest pain<br>• Reduced breath sounds on same side<br>• Focal tenderness ribs if fractured |
| Metabolic | Anaemia | • History of anemia<br>• Gastrointestinal blood loss (Hematemesis / melaena)<br>• Malnutrition<br>• Lethargy / fatigue | • Pallor conjunctivae<br>• +/- hypotension if acute blood loss<br>• PR - melaena |
| | Diabetic ketoacidosis | • History diabetes<br>• More common in type I or insulin-dependent diabetes | • Tachypnoea (can be isolated) |