

# SHORTNESS OF BREATH

<b>Introduce yourself , take permission</b>
<b>Patient profile (name , age , occupation , marital status, address)</b>
<b>Chief complaint + duration</b>
<b>HOPI: Analysis of the Chief Complaint (OPERATS)</b>
<b>Onset (Sudden or gradual)</b> Instantaneous, hours, insidious.
<b>Previous Episodes</b>
<b>Exacerbating, Relieving:</b>
a) Rest over night?? (COPD, HF, Asthma). b) Exercise and the relation if it is present? (Limit exercise or at end of it) c) Cough sputum d) Cold air
<b>Timing ( course, pattern):</b> Episodic with free interval (asthma)/Constant Get worse or better with time?
<b>Severity effect on life: How can you walk? And the things that makes you SOB.</b>
<b>Associated symptoms</b>
<b>I. Constitutional</b> Fever, weight loss, night sweat, loss of appetite.
<b>II. CVS:</b> Chest pain, Orthopnea, PND, Ankle swelling, SOB, Palpitation, intermittent claudication.
<b>III. RS:</b>
a) Cough and sputum → <u>Pneumonia</u> b) Hemoptysis → Pneumonia, <u>PE</u> c) Cyanosis → <u>PE</u> d) Wheeze
<b>IV. GI:</b> Nausea, vomiting, Heart burn, regurgitation, Abdominal pain, Jaundice.
<b>V. MSS:</b> Skin rash, Joint pain, Muscle wasting, lymphadenopathy.
<b>VI. Psychological:</b> anxiety, perioral and digital paresthesia, light headedness, can't get enough air in.
<b>VII. Anemia:</b> Pallor, dizziness , fatigue.
<b>Past medical and surgical:</b> Hx of respiratory and cardiac disease (HTN/ HF/ Hyperlipidemia/ Arrhythmias), DM, Stroke, previous DVT, <b>Hx of blood transfusion . Any surgeries or trauma or any source of immobility.</b>
<b>Drug Hx</b> what he is taking ( <u>Aspirin</u> , <u>B-Blocker</u> , <u>CCB</u> , <u>inhaler</u> ) , any recent change , adherence to medications)
<b>Family Hx</b> asthma , atopy , hay fever , eczema, Lung cancer , IHD
<b>Social Hx:</b> Smoking history (# of pack years), alcohol, travel history (Recently), recreational drugs, contact with sick patient, house ventilation, pets.
<b>Review of systems:</b> (GU, search for malignancies ....etc.).

(DDX: All respiratory and cardiac diseases, Anemia, Psychogenic) + (MSS chest trauma and costochondritis, neurogenic myasthenia gravis GBS, GIT liver ds and pancreatitis).

But most common cases in hospital are (Decompensated HF (Acute pulmonary edema), Acute exacerbation of asthma or COPD, PE, Pneumonia, Anemia).

**\*\*Investigations:**

1. CXR → Pneumonia, Pulmonary edema, Asthma, COPD
2. Spirometry → Asthma, COPD, RLD
3. CT-angiography and D-dimer → PE
4. CBC → Anemia



## 7.6 Breathlessness: modes of onset, duration and progression

Minutes	
• Pulmonary thromboembolism	• Asthma
• Pneumothorax	• Inhaled foreign body
Hours to days	• Acute left ventricular failure
• Pneumonia	• Exacerbation of COPD
• Asthma	
Weeks to months	
• Anaemia	• Respiratory neuromuscular disorders
• Pleural effusion	
Months to years	
• COPD	• Pulmonary tuberculosis
• Pulmonary fibrosis	

Grade	Degree of breathlessness related to activities
1	Not troubled by breathlessness except on strenuous exercise
2	Shortness of breath when hurrying on the level or walking up a slight hill
3	Walks slower than most people on the level, stops after a mile or so, or stops after 15 minutes walking at own pace
4	Stops for breath after walking about 100 yds or after a few minutes on level ground
5	Too breathless to leave the house, or breathless when undressing

## 7.5 Causes of breathlessness

Non-cardiorespiratory	
• Anaemia	• Psychogenic
• Metabolic acidosis	• Neurogenic
• Obesity	
Cardiac	
• Left ventricular failure	• Constrictive pericarditis
• Mitral valve disease	• Pericardial effusion
• Cardiomyopathy	
Respiratory	
<b>Airways</b>	<b>Pulmonary circulation</b>
• Laryngeal tumour	• Pulmonary thromboembolism
• Foreign body	• Pulmonary vasculitis
• Asthma	• Primary pulmonary hypertension
• COPD	
• Bronchiectasis	<b>Pleural</b>
• Lung cancer	• Pneumothorax
• Bronchiolitis	• Effusion
• Cystic fibrosis	• Diffuse pleural fibrosis
<b>Parenchyma</b>	
• Pulmonary fibrosis	<b>Chest wall</b>
• Alveolitis	• Kyphoscoliosis
• Sarcoidosis	• Ankylosing spondylitis
• Tuberculosis	
• Pneumonia	<b>Neuromuscular</b>
• Diffuse infections, e.g. <i>Pneumocystis jiroveci</i>	• Myasthenia gravis
• pneumonia	• Neuropathies
• Tumour (metastatic, lymphangitis)	• Muscular dystrophies
	• Guillain–Barré syndrome