

Dyspnea or Breathlessness

- ~~Un~~ Feeling of an uncomfortable need to breathe, which may be present in health (during) or as well as disease.

Pathophysiology

- 1) Bronchial, Intertitial, Pleural } → Stimulate vagal nerve.
 - 2) Increased mechanical load to the respiratory muscle → Spinal afferents.
 - 3) Hypoxia, Hypercapnia, Acidosis → Chemoreceptors in Carotid Body.
 - 4) Cortical drive
 - 5) Limbic system (Emotion)
- All these in turn stimulate the Medulla oblongata (Respiratory centre)

Causes:

System 1) CVS

- Acute → Acute Pulmonary edema.
- Chronic → Chronic Heart failure.
- occasional dyspnea Myocardial infarction.

2) Respiratory

Acute =

- Upper → laryngeal edema (Anaphylaxis)
- Inhaled foreign body.

Lower $\Rightarrow$ ① Acute severe Asthma

② Acute decompensation of COPD.

③ Acute respiratory Distress Syndrome

④ Pneumonia.

⑤ Lobar collapse

⑥ Pulmonary embolism

⑦ Pneumothorax

Chronic exclusional:

① COPD

② Bronchial asthma

③ Lung Cancer

④ Interstitial lung Disease (Sarcoidosis, Pneumoconiosis)

⑤ Chronic Pulmonary Thromboembolism

⑥ Large Pulmonary Effusion

⑦ Lymphangitis Carcinomatosa

Others:

Acute: Metabolic acidosis (Diabetic ketoacidosis, Lactic acidosis, Uremia).

- Psychogenic (Panic or Anxiety).

Chronic $\Rightarrow$ Anemia, Obesity,

Questions to be asked

① How does your breathing at rest and overnight?

② Do your breathing normal some days?

③ How long you can walk?

④ How does it starts?

⑤ What triggers your breathlessness?

⑥ History (childhood) - ⑦ Associated complaints.

Breathless Scale.

Grade 1: Not only strenuous exercise.

Grade 2: When hurrying or walking uphill.

Grade 3: Walk slower than others, stops after 15 min.

Grade 4: stops after 100 yards.

Grade 5: Too Breathless to leave house or even undressing.

Investigation?