

(c) **Respiratory paralysis because of depression of higher centres:** This is due to poisonings such as by barbiturates, opium, etc.

(d) Collapse of lung due to penetrating injuries of lungs, pleural effusions, etc.

(e) Obstruction of the blood flow to the lungs by an embolus. Symptoms: There are three stages which constitute the asphyxia:

(i) Stage of Inspiratory Dyspnoea. (ii) Stage of Expiratory Dyspnoea. (iii) Stage of Exhaustion.

Stage of Inspiratory Dyspnoea: This is the first stage which starts immediately and is characterised by

(1) The patient bears a worried and anxious look.

(2) The pulse becomes rapid so as to indicate a compensatory phenomenon of the body. The blood pressure rises.

(3) The carbon dioxide concentration in the blood becomes high which leads to a stimulation of the respiratory centre present in the medula oblongata which results in a deep, and rapid respiratory rate. The extra-ordinary muscles come into action.

Stage of Expiratory Dyspnoea: This stage is preceded by the stage of Dyspnoea. This stage is characterised by :

1. The accumulation of carbon dioxide stimulates the Central Nervous System which leads to a greater activity of the muscles of respiration.

2. The peripheral circulation is slow and there is cyanosis of the hands and feet. There is congestion of the venous circulation.

3. The patient may become unconscious and his thinking cloudy.

4. Sphincters are relaxed.