

Cheyne - stokes breathing

It is a periodic breathing characterized by rhythmic hyperpnea and apnea.

cycle = 1 min.

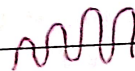
two alternate patterns of respiration:

- ① hyperpneic period.
- ② Apneic period.

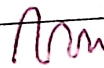
<p><u>Physiological</u></p> <ul style="list-style-type: none"> • New borns • deep sleep. <p><u>pathological</u></p> <ul style="list-style-type: none"> • cerebral (arterio disease). • intracranial pressure ↑.

Hyperpneic period → waxing and waning.

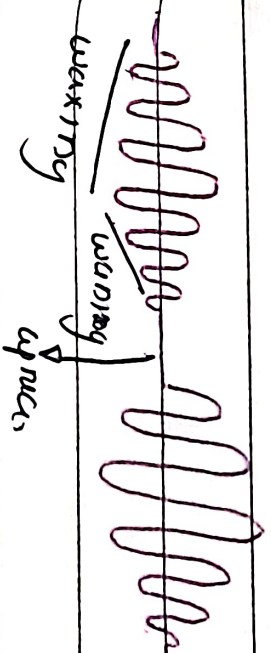
begin → shallow → force rate of respiration → waxing
gradually ↑



• then force rate of resp ↓ → causes → waning



- force -> reaches minimum.
then stops -> apnea.



gradual \uparrow in tidal force
waxing.

activated respiratory
center

$PCO_2 \uparrow$

hypertensive
hypoxia

removal of excess CO_2 .

decrease in partial pressure of
 CO_2 .

Inhibition of respiratory
center.

apnea \leftarrow gradual decrease in
tidal force of
breathing
waning.

238

Periodic breathing

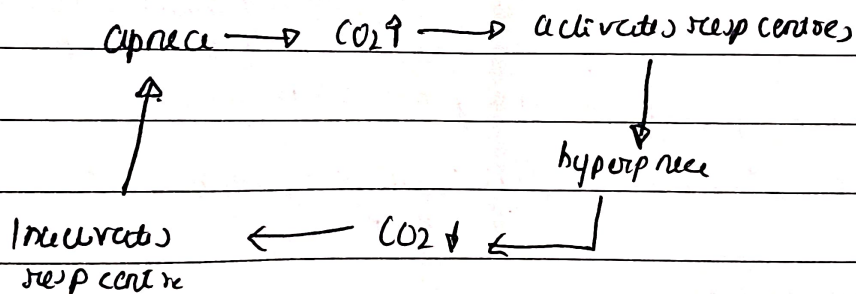
abnormal / uneven respiratory rhythm

- Cheyne Stokes.
- Biot.

Biot breathing

type of periodic breathing where there is apnea & abrupt hypervent.

- no waxing and waning occurs after apnea.



only occurs in pathological.

→ lesion or injuries of brain → nervous disorder.