

Role of hormones in the regulation of ovulation: —

The central stimulus to ovulation is affected to only a minor degree by environmental stimuli. It is primarily regulated by an internal hormonal cycle. It is mediated by hypothalamic clock of typical frequency such as 28 days in woman, 28 days in cow & so on.

① A complicated reciprocal relationship between ~~three~~^{two} ovarian hormones and three pituitary hormones exists in ovulation. They are: -

1. Oestrogen
2. Progesterone
3. FSH (Follicular Stimulating hormone)
4. LH (Luteinizing hormone)
5. Luteotrophic hormone (LTH)

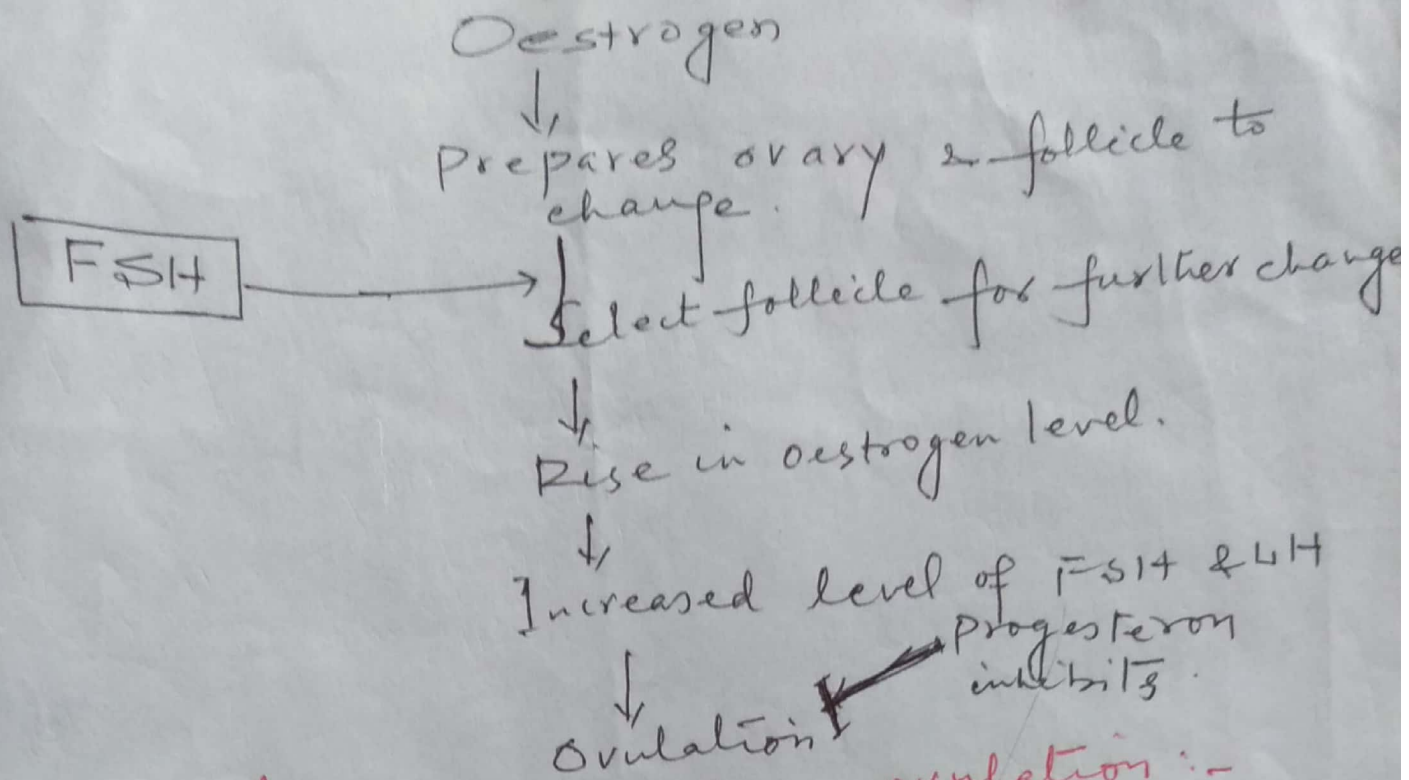
② Oestrogen prepares the ovary for stimulation by gonadotrophins.

③ FSH helps in releasing selecting specific follicle for ovulation.

④ Finally LH sends strong stimulus for ovulation.

⑤ Progesterone inhibits the ovulation.

Thus ovulation is completed and ova are released.



Other factors regulating ovulation :-

1. Age: - ovulation stopped after menopause.
2. Diet: - Balanced diet stimulates.
3. Light: - In goat light influences ovulation.
4. Season: - It is seasonal in rat.
5. Mating: - induces ovulation.
6. Emotion: - may upset ovulation.

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