

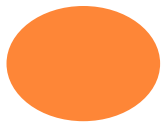
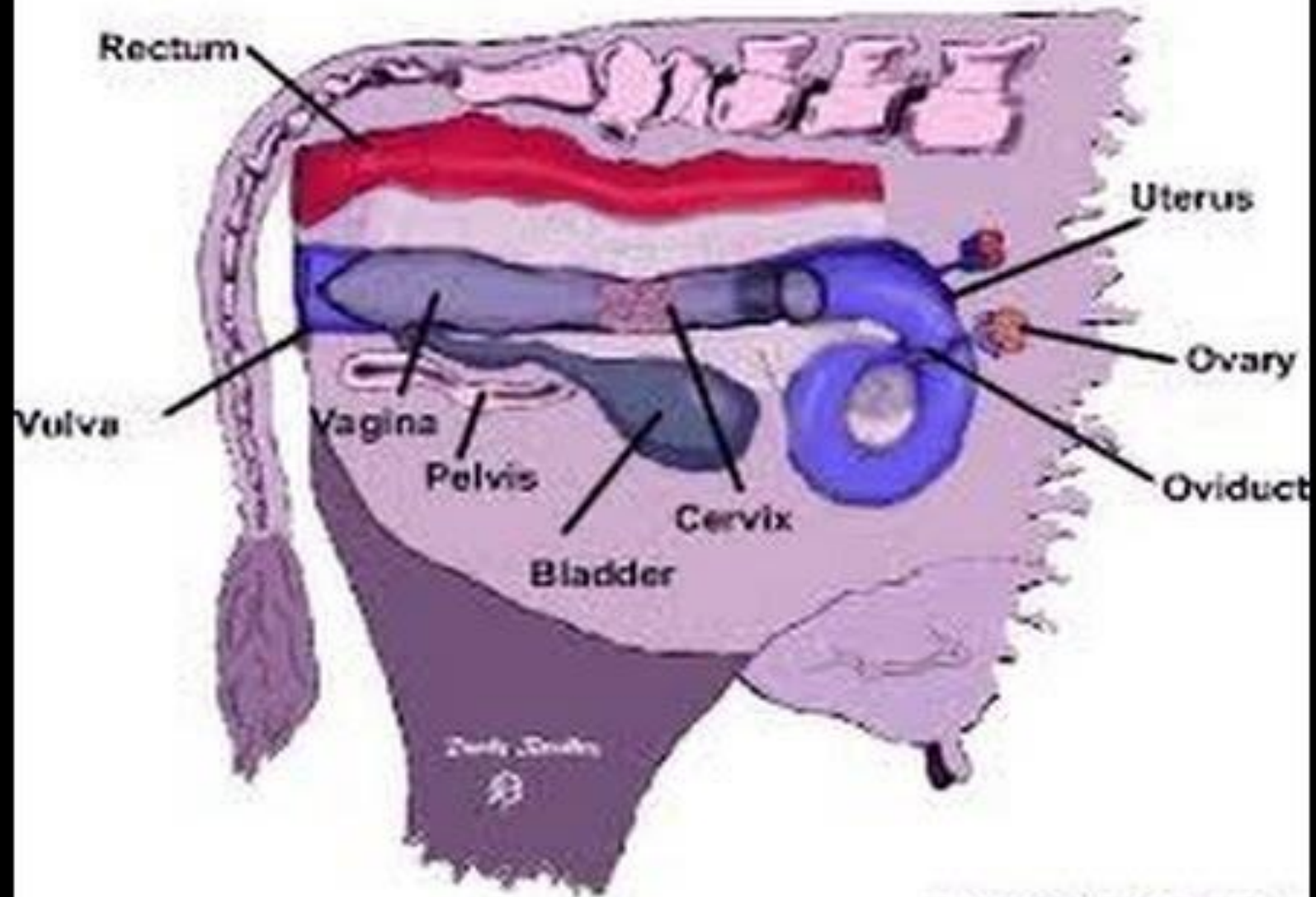


CLINICAL ANATOMY OF FEMALE REPRODUCTIVE SYSTEM

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- The reproductive tract of female consists of
 1. two ovaries
 2. two fallopian tubes / oviducts
 3. Uterus
 4. cervix
 5. vagina
 6. vulva.





Vestibule & vulva

- ◆ The vestibule lies between the vagina & vulva.
- ◆ The vulva is the external genitalia comprises left & right labia which meet on the midline at the dorsal & ventral commissures.
- ◆ The ventral commissure is usually pendulous.
- ◆ This part consists of external urethral orifice and clitoris.
- ◆ The clitoris has specific similarities with the penis of the male having two crura or rods, a body & a glans (visible externally).
- ◆ It is highly sensitive due to nerve innervations.



Vagina

- It lies within the pelvis between the cranially to the cervix & caudally to the vulva.
- It consists of serosa cranially & pelvic fascia (CT) caudally.
- It generally acts as the birth canal for delivery of the fetus & the act of breeding or service (for the penis of male during copulation).



Cervix

- The cervix is a unique structure within the reproductive tract.
- It is 4 to 5 inches long and 1 to 2 inches in diameter and lies between the vagina and uterus.
- This structure is designed to restrict access to the uterus.
- The area around the opening of the cervix actually protrudes back into the vagina.
- The walls of the cervix are thick and dense in comparison to the walls of the vagina. Three or four ridges or rings within the body of the cervix, called annular folds, can be distinguished by rectal palpation



- The anterior cervix may serve as a site for semen deposition during artificial insemination (AI).
- Whether by deposition following AI or by migration from the vagina after natural service, the cervix acts as a reservoir for semen.
- The cervix provides a favorable environment for sperm survival.
- Secretions of the cervix are usually thick, but these fluids thin at the time of estrus to facilitate transfer of sperm to the uterus.



Uterus-

- It consists of a body, a neck (cervix) & two horns.
- The uterine wall consists of lining of mucous membrane & outer serous layer of perimetrium and are suspended & supported by the mesometrium.
- The mesometrium, mesosalpinx & mesovarium collectively constitute the broad ligament.



Fallopian tubes/ Oviducts

- Consists of ampulla, isthmus and infundibulum.
- Each infundibulum is attached to their respective ovaries & the uterus to serve the progression & fertilization of ova acts in this part.
- The wall includes a CT sub-mucosa & smooth muscle layer.
- They are supported by mesosalphynx.



Functions of the uterus

- ⊕ The endometrium & fluids acts as sperm transportation from the ejaculation site to fertilization site of oviduct.
- ⊕ It regulates the function of C.L.
- ⊕ It also initiates the process of implantation, pregnancy & parturition by contraction of endometrium & stimulation and regression of C.L.
- ⊕ The uterine glands are branched, coiled tubular glands throughout the endometrium of the uterus except in ruminants where they are in the form of mushroom like projection called caruncles for the attachment of the fetal membranes.



- ⊕ It is a heavy smooth muscle sphincter having rings in inner surface also called annular folds are tightly closed except during estrus for sperm mobilization & parturition for the expulsion of fetus.
- ⊕ The tunica muscularis (myometrium) of the uterine wall is separated by the outer longitudinal smooth muscle by a vascular layer increases the amount of muscle during pregnancy as in cell size (hypertrophy) & in cell number (hyperplasia)



Ovaries

- These are paired glands found in the lumbar region of abdominal cavity.
- They are primary reproductive organ of females like testes in male.
- The ovaries are suspended from the body wall by serous membrane called mesovarium.
- The medulla of the ovary is highly vascular while cortex consists of irregular connective tissue interspersed with follicles & have an endocrine function.



