The Female Genital organs

Are :-

١- **Two ovaries :** the essential reproductive glands in which the ova are produced .

٢- **The uterine or fallopian tubes** which convey the ova to the uterus.

٣- **The uterus :** in which the ovum develops .

٤- **The vagina :** a dilatable passage through which the fetus is expelled from the uterus.

٥- **The vulva** is the terminal segment of the genital tract which serve for the assistance of the expulsion of urine.

٦- **The mammary glands**.

Genital organs of the mare

١- The Ovaries

Are bean- shaped and are much smaller than testicles . They are normally larger in young than in old animals.

One ovary is often larger than other. ٧-٨ cm long , ٣-٤ cm thick

The weight is about ٧٠ -٨٠ gm . Each consist of two surfaces, two borders and two extremities .

The surfaces are medial and lateral , they are smooth and rounded .

The attached or mesovarial border is convex . It is enclosed in a part of the broad ligament called mesovarium.

The vessels and nerves reach the gland at the border . The free border has a notch which leads into a narrow depression called ovulation fossa . The anterior extremity (end) is rounded and in relation to the fimbriated end of the uterine tube.

The uterine or posterior end is rounded also and connected with the horn of uterus by the ovarian ligament .

The ovaries are situated in the sub lumber region , ventral to the **٤th -٥th lumber vertebra** , they are in contact with the lumber wall of the abdomen . The **right ovary about ١٥ cm behind the right kidney**. The **left ovary ١٢- ١٣ cm behind the left kidney.**

The attachment of ovary to the sub lumbar region is by the anterior part of broad ligament of uterus (٨ – ١٠ cm wide) .

The uterine end of ovary is attached to the corny of uterus by the proper ligament of ovary .

Structure

Its surface is covered by peritoneum, except at the attached border when the vessels and nerves enter, this area is termed the hilus of ovary. The ovulation fossa is covered by a layer of short polygonal cells ((a ruminant of the primitive germinal epithelium)).

The stroma of the ovary is a network of C.T. In the parenchyma there is follicles arrive to the surface of the ovary. At intervals follicle rupture and their content escape , this process is termed ovulation , it takes place the mane at the ovulation fossa.

In old animals, is commonly consist largely of fibrous tissue in which there cysts of various sizes.

The ova are present in numerous at birth are often destroyed by phagocytic process of degeneration .

Vessels and Nerves

The arteries are derived from ovarian arteries . The artery is flexuous and large.

Veins are numerous in form plexus . Lymph vessels is pass to the lumbar glands .

Nerves are derived from sympathetic system through renal and aortic plexus.

The Uterine Tube

Or fallopian tube acts as excretory ducts of the ovaries , they are convey ova from reproductive glands to the uterus.

They are flexuous tubes **(٢٠ -٣٠ cm**) . Long which extend from the end of the uterine horn to the ovaries .

The tube is small and its uterine end **(٢ – ٣ mm),** but toward the ovary is wider **(٤ – ٨ mm**) in diameter forming ampullary tube . Each is enclosed by peritoneal fold derived from broad ligament, termed mesosalpinx.

The uterine end of the tube communicate with the cavity of the corny by a minute orifice **(ostium uteri**). The ovarian end is expanded, funnel shape , termed the infundibulum of the uterine tube, its border or margin is irregular process (**fimbria**) some of them attached to the ovulation fossa , in the middle of infundibulum there is small opening (**ostium abdominal tube**) by which the tube is communicate with the peritoneal cavity, the ovarian end trap the extruded ova to be come to uterus .

Structure

The tube is covered externally by serous coat, formed by the mesosalpinx . The fibrous adventitia is continued with the broad ligament. The muscular coat consist chiefly of circular fibrous layer inside and outside there is longitudinal fibers derived from broad ligament. The inner coat is mucous which had folds are chiefly longitudinal which continue with the fimbriae.

The epithelium is simple columnar ((ciliated)) cilia for moving the ovum toward the uterus.

Vessels and Nerves

Arteries _____ from utero- ovarian

Veins _____ are satellites of aa.

Lymph vessels ____ ovarian lymph vessels ____ lumbar glands

Nerves _____ like ovary (Nerves are derived from sympathetic system through renal and aortic plexus).

Ovaries of Cow

Are smaller than those of mare

(٣,٥ – ٤ cm) long

(٢,٥ cm) width

(١,٥ cm) thick

(١٥ – ٢٠ gm) weight

* Oval in shape

* Have no ovulation fossa

* Located near the pelvic inlet in front of external iliac artery.

*The greater surface of ovary is covered with germinal epithelium .

* Follicle of various size are projecting from the surface as well as corpus luteum of pregnancy of yellow color of (١ – ١,٥ cm).

Uterine Tube of Cow

Are long ((٢٠ -٢٥ cm)), less flexuous than in mare . The fimbrae are attached to the margin of the tube which formed by a pouch of broad ligament and the fimbrae are not extensive like mare.

Ovary of Ewe

The ovary is almond shape ((١,٥ cm)) long .

The uterin tube :- Is very flexuous near the infundibulum and there is no demarcation between the tube and the horn of uterus .

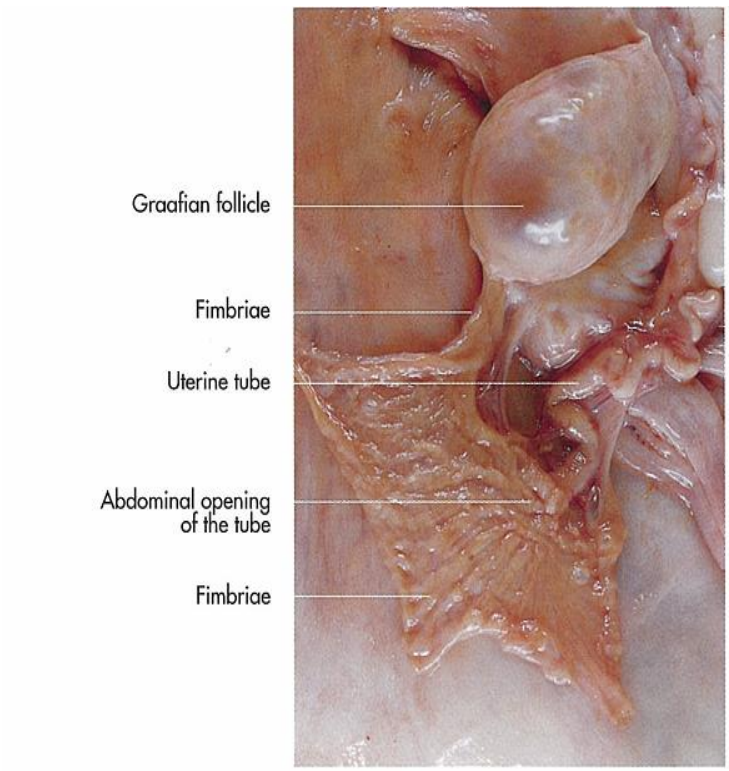

Fig. 11-18. Ovary and uterine tube of a cow.

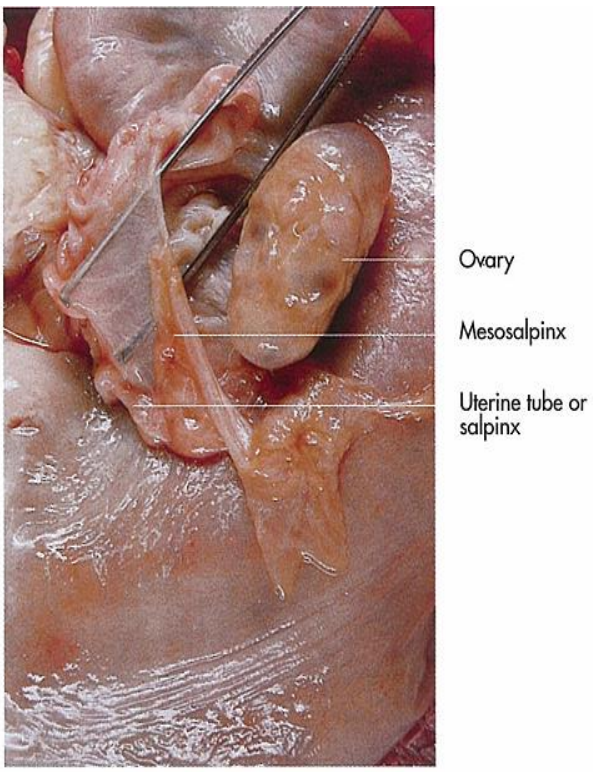

Fig. 11-19. Ovary, uterine tube and ovarian bursa of a cow.

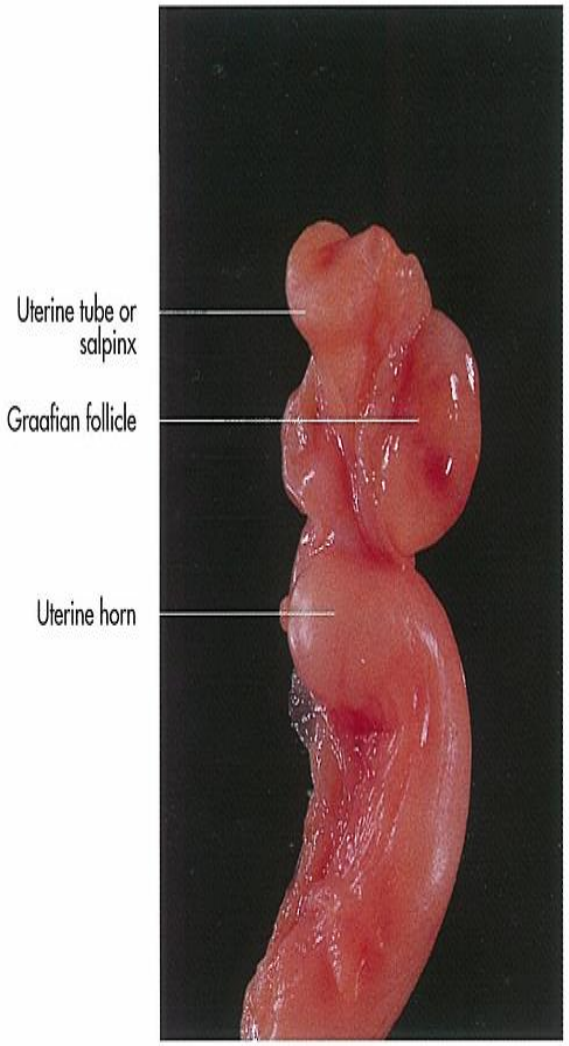

Fig. 11-20. Ovary, uterine tube and uterine horn of a cat.

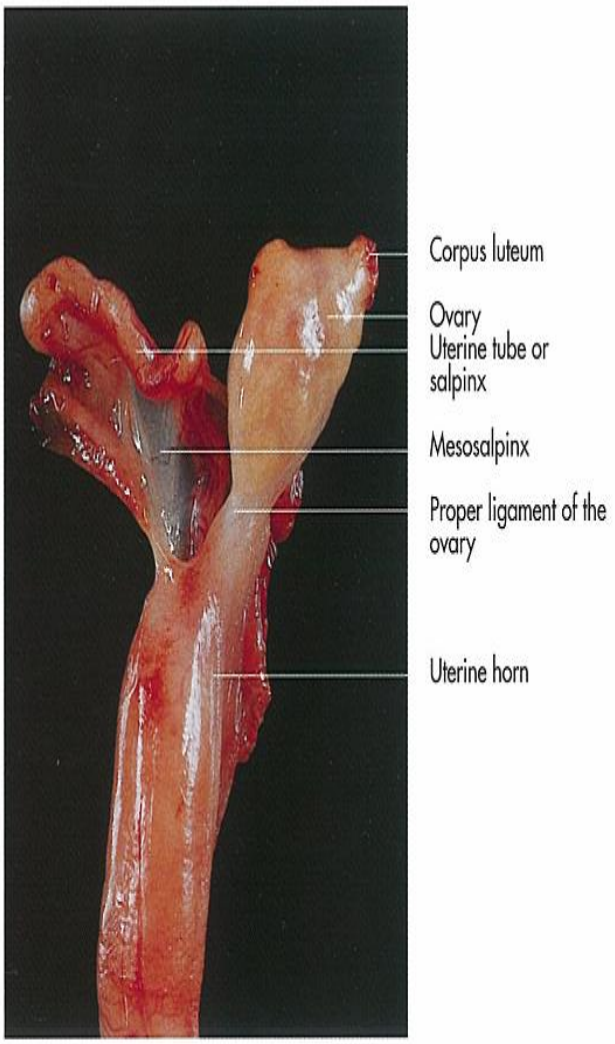

Fig. 11-21. Ovary, uterine tube and uterine horn of a cat.

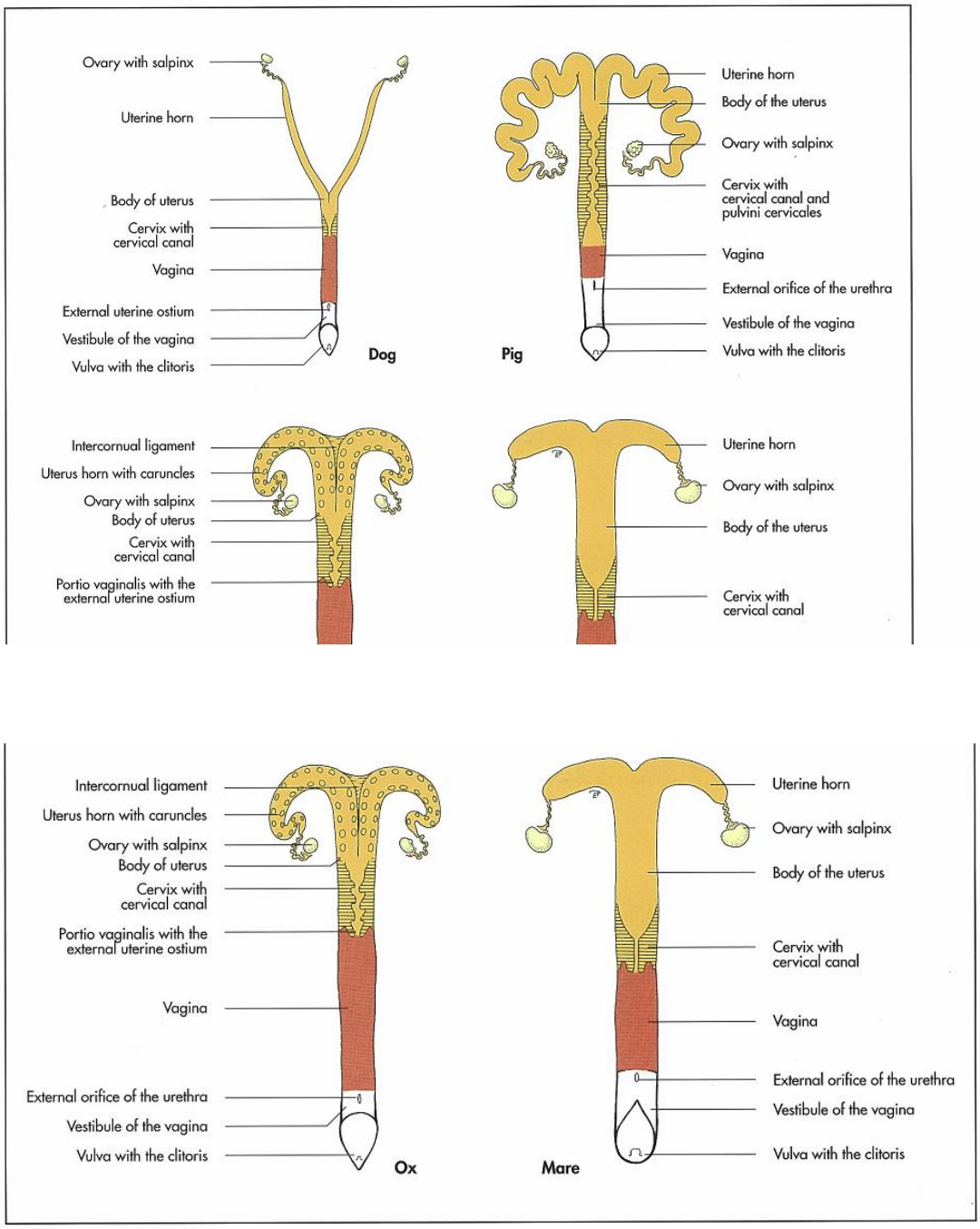

Fig. 11-22. Female genital organs of the domestic mammals, schematic (Najbrt and Kaman, 1982).