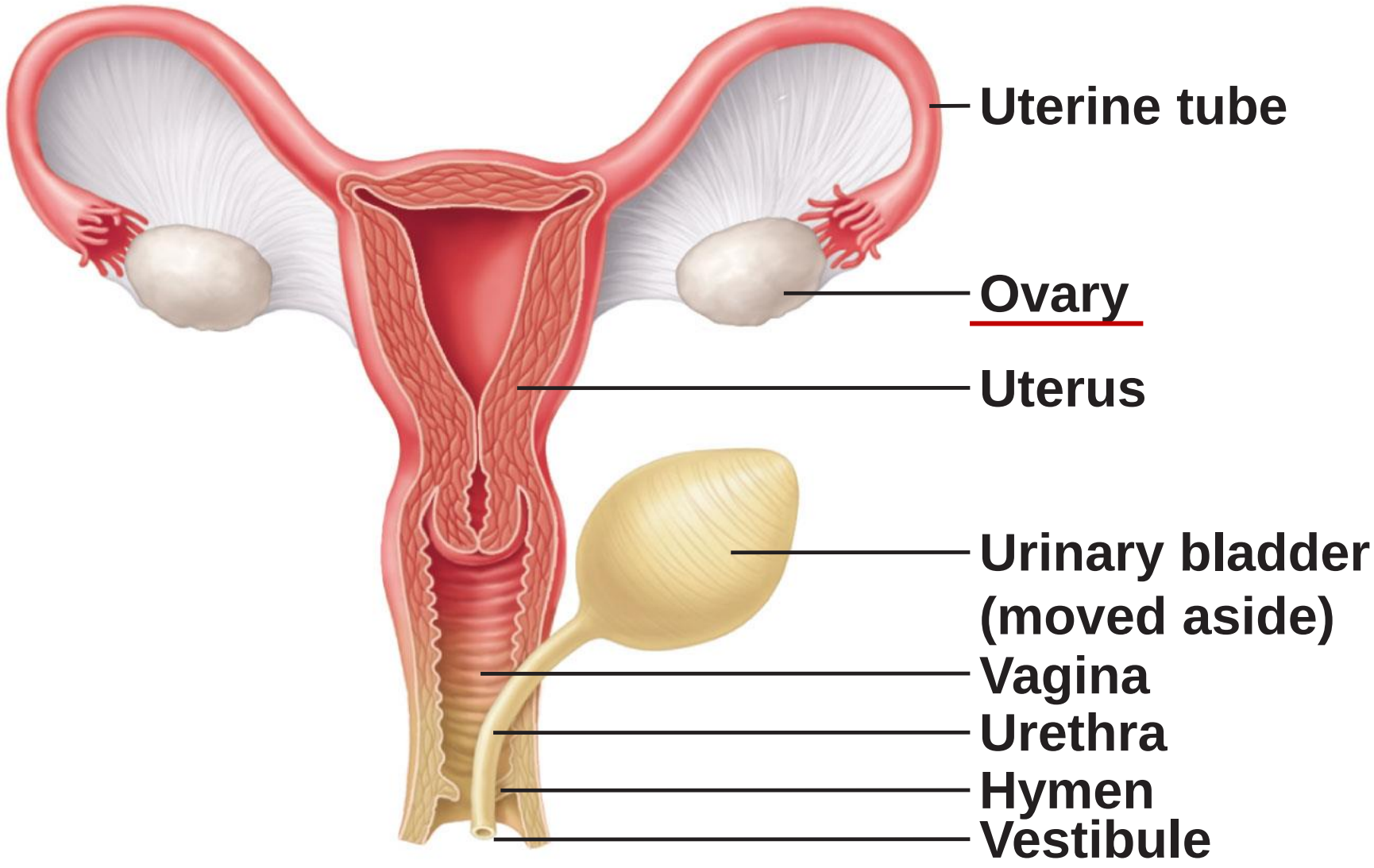
Female Reproductive Anatomy



Female Reproductive Anatomy

- **Ovaries**: **female gonads**
  - Produce female gametes (ova)
  - Secrete female sex hormones, **estrogen** (estradiol, estrone, estriol), and **progesterone**
- **Internal genitalia**: located in pelvic cavity; include **ovaries** and **duct system** (uterine tubes, uterine horns/uterus, and vagina)
- **External genitalia**: external sex organs

The structure of the uterine tubes and uterus are especially variable.

Reproductive Functions

- Production of female gametes
- Gametes transporting
- Fecundation site
- Conceptus side to nourish the fetus until parturition
- Control the reproductive cycle
- Coordinate the ovarian and uterine cycles

The Ovary: female gonad

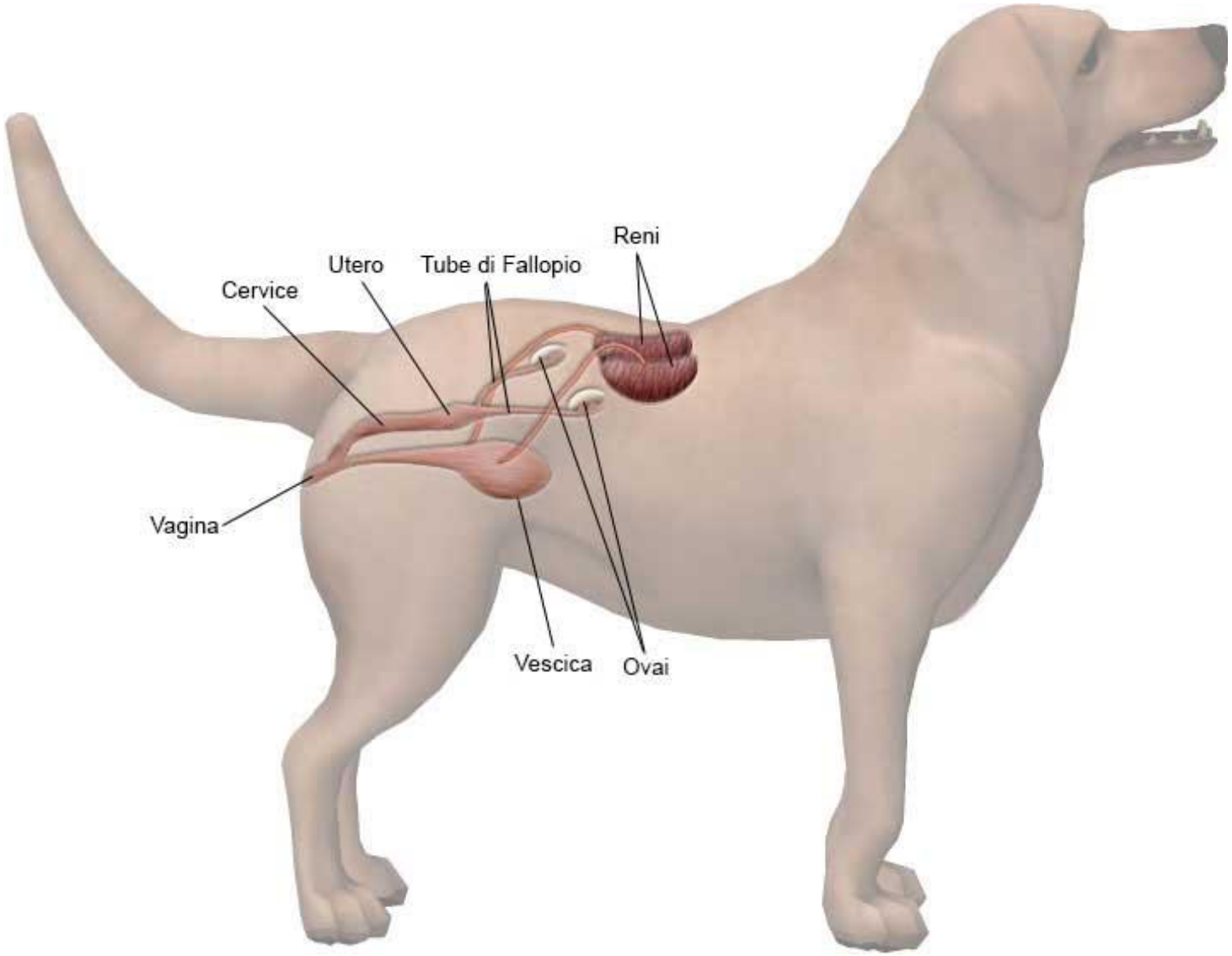
Functions

- an exocrine gland, producing oocytes (gametogena function)

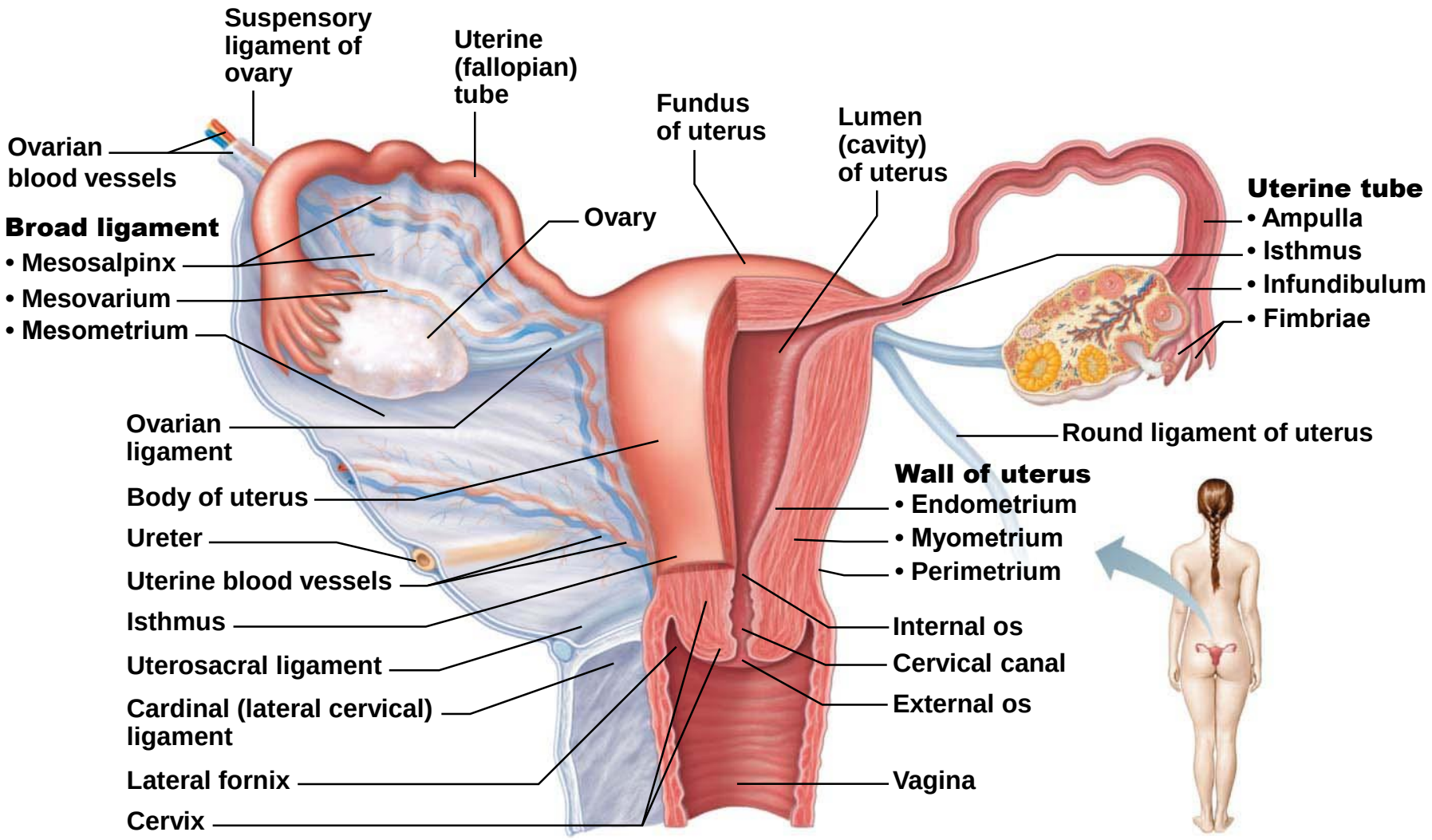
- an endocrine gland, secreting the female hormones: estrogen and progesterone (endocrine function)

In domestic animals:
paired organ
sub-lumbar area
caudal to the kidneys

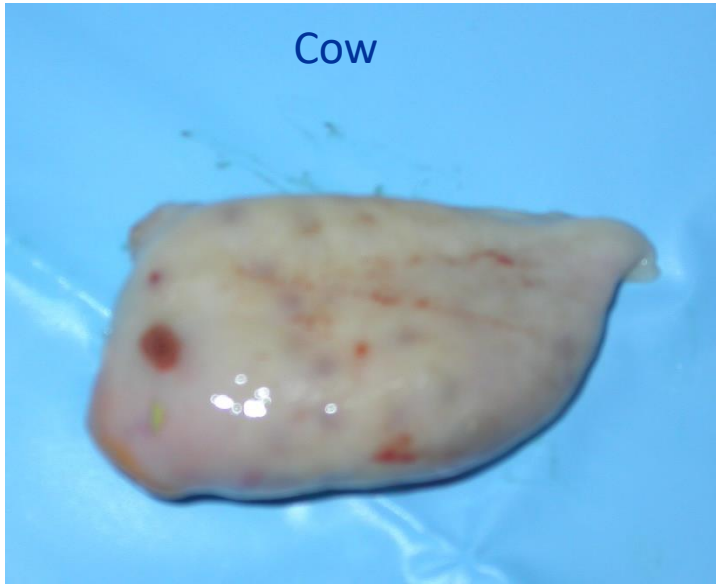
Ovaries



Ovaries

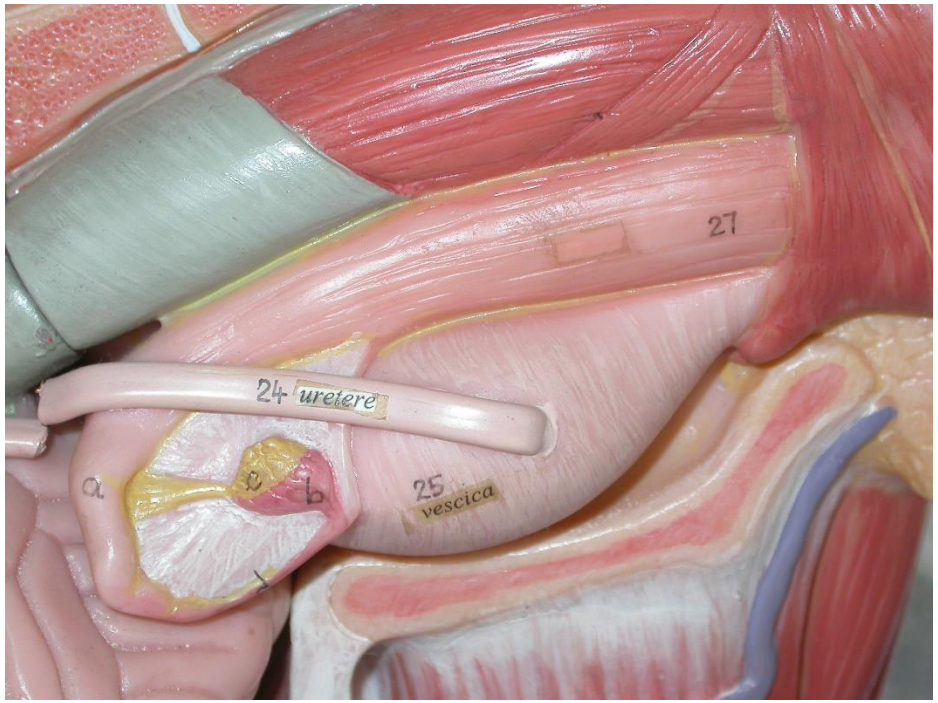


Ovaries



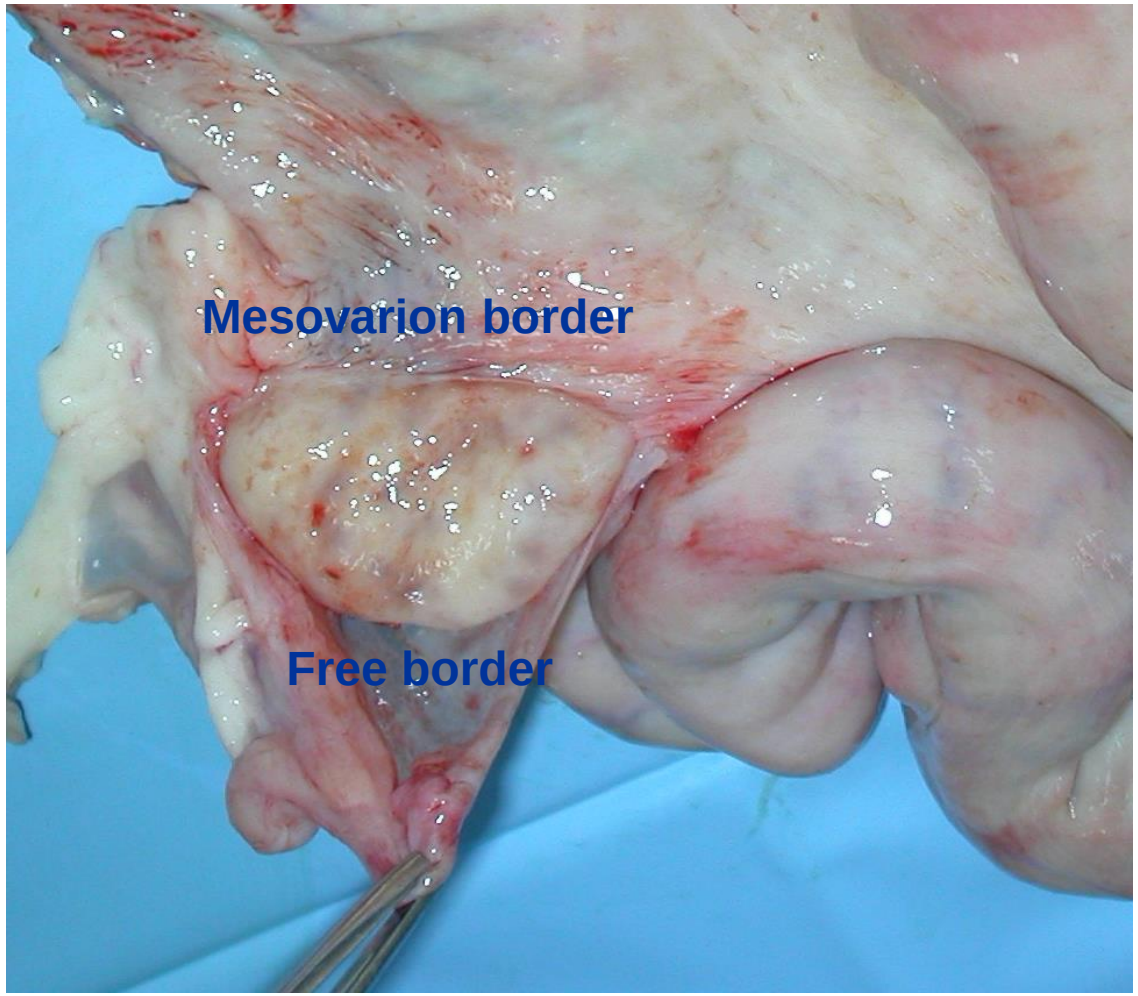
Lateral surface

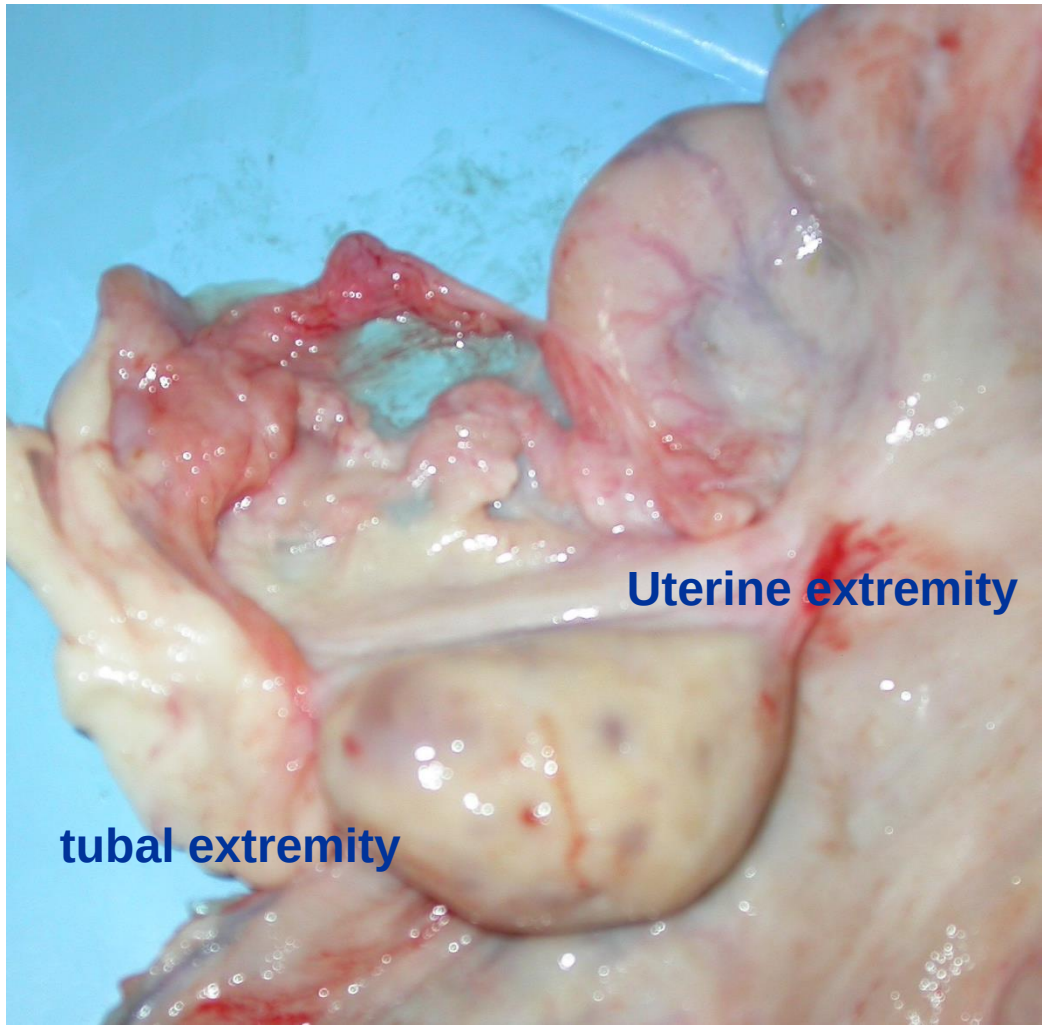
in contact with the parietal peritoneum



Medial surface

to a large extent covered by the fimbriated extremity of the uterine tube

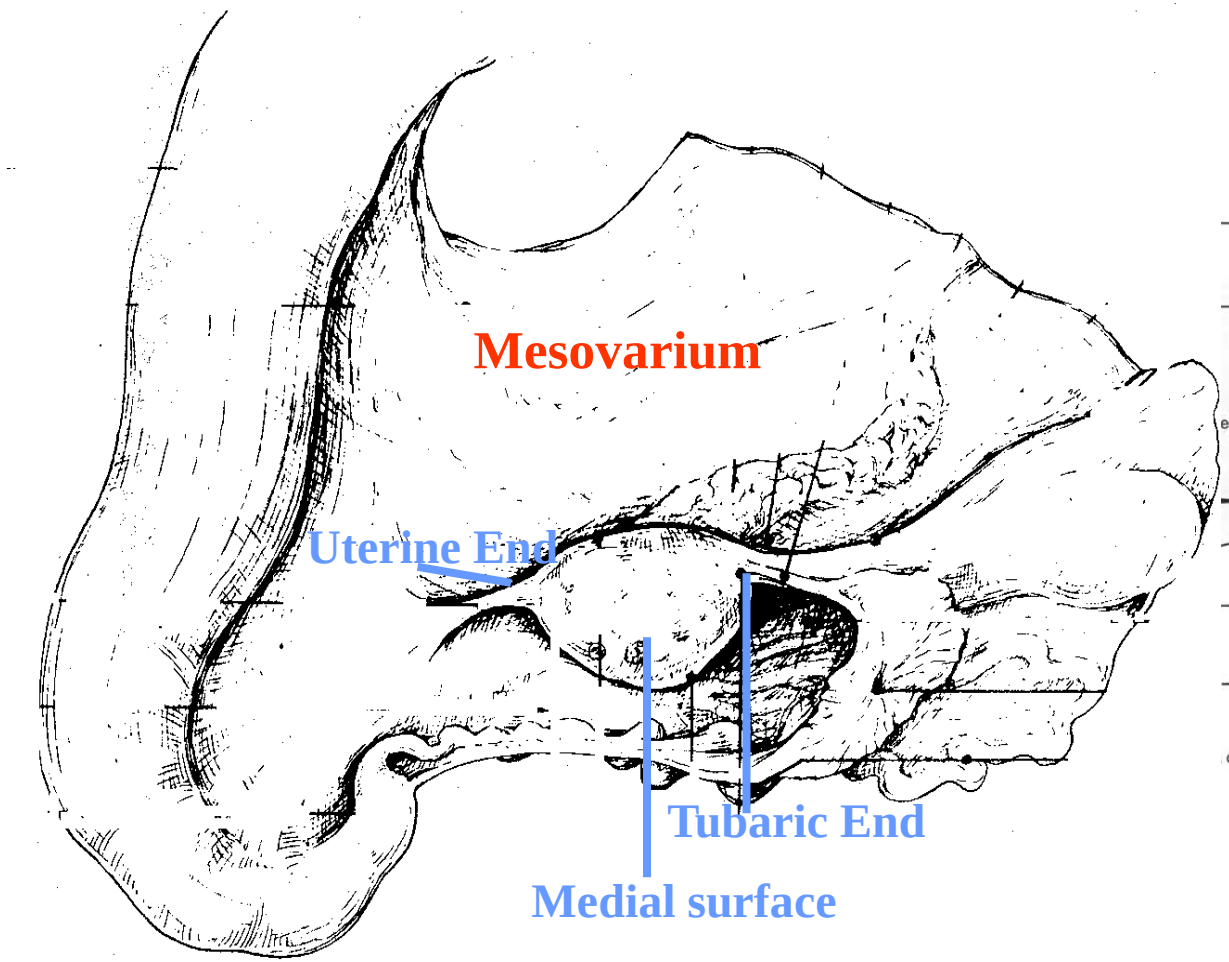

Mesovarion border
Free border

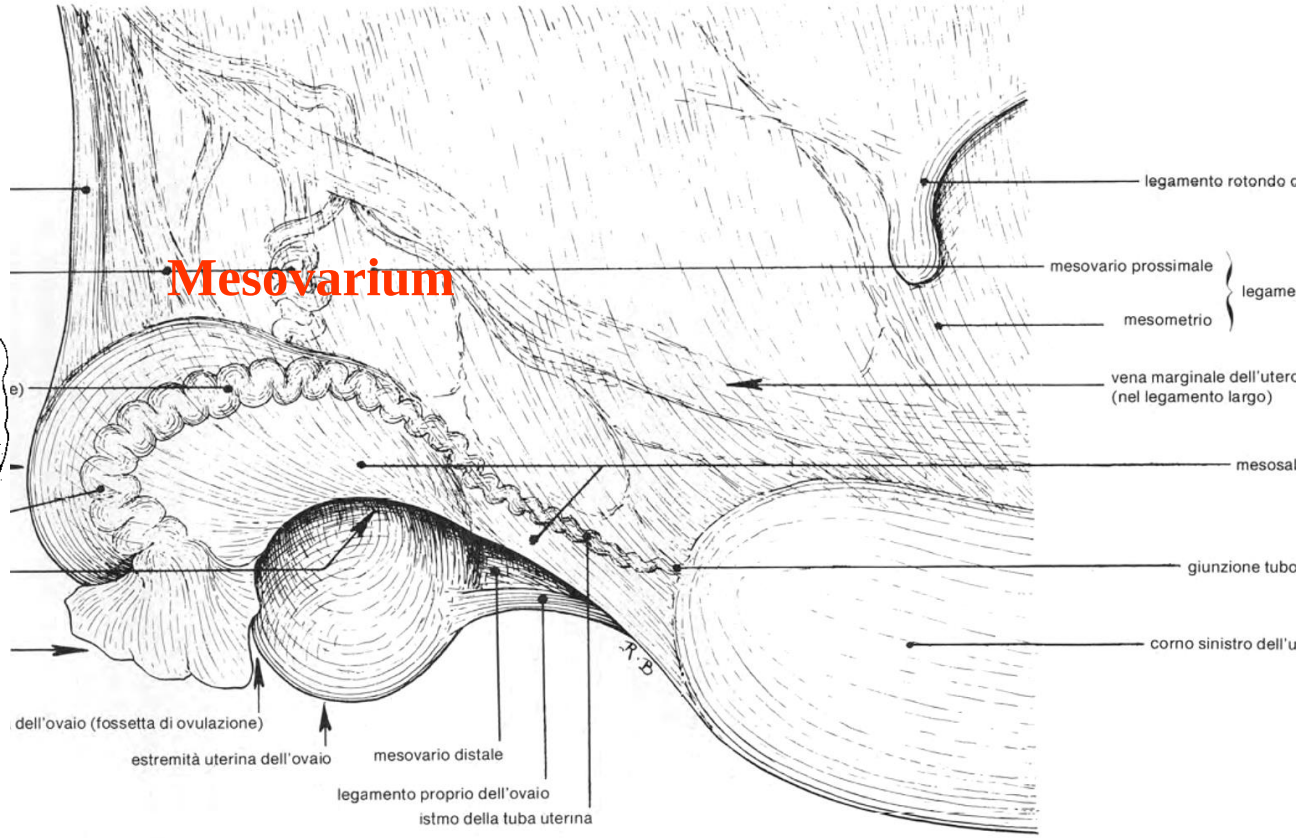

Uterine extremity
tubal extremity

Ovaries: ligaments

Ovaries: Mesovarium

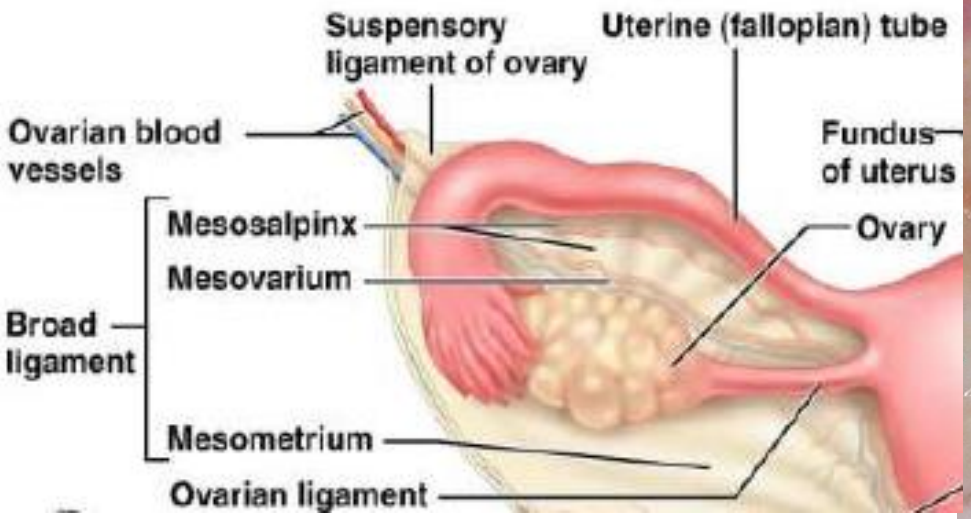
Ovaries: Mesovarium

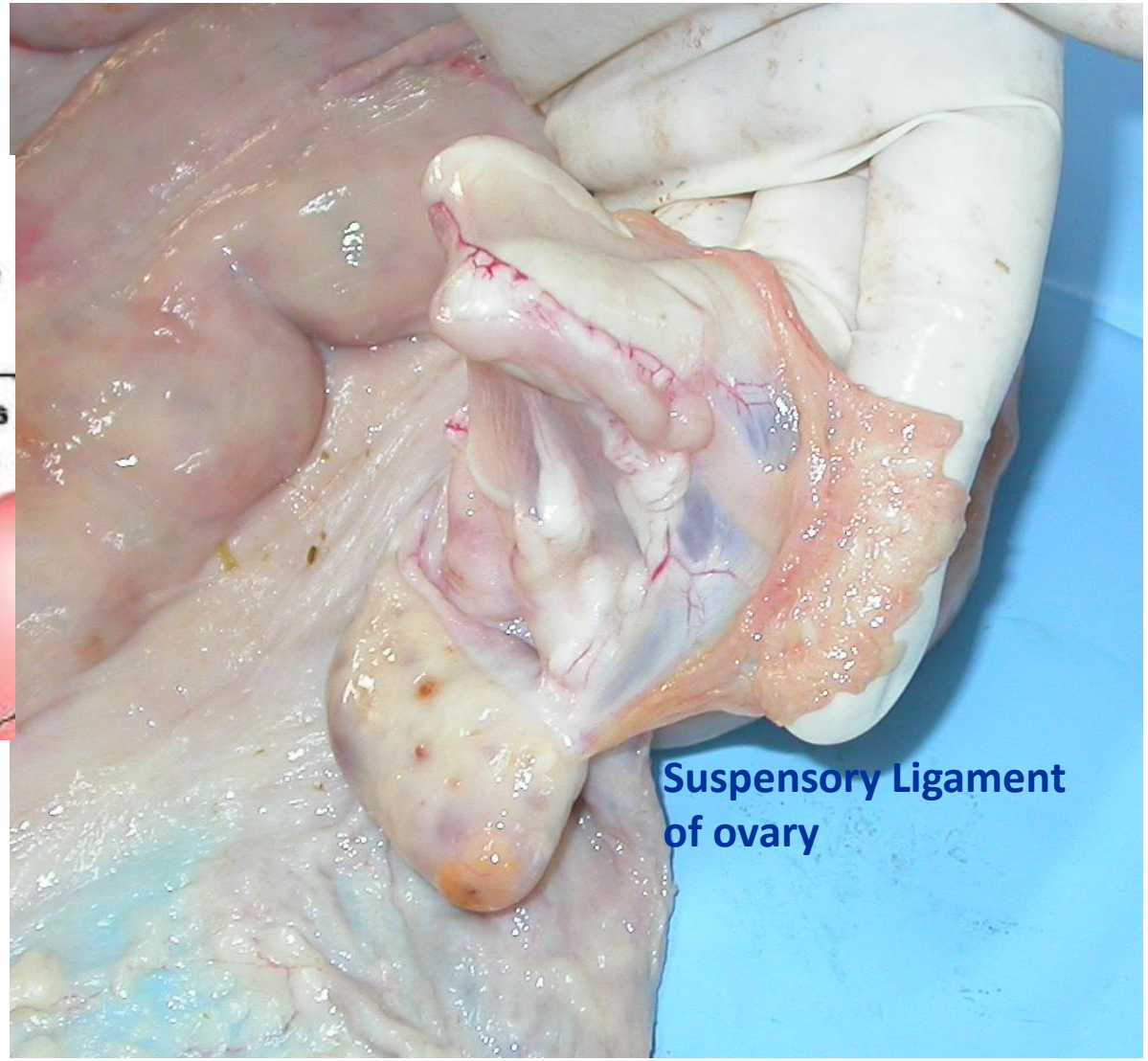




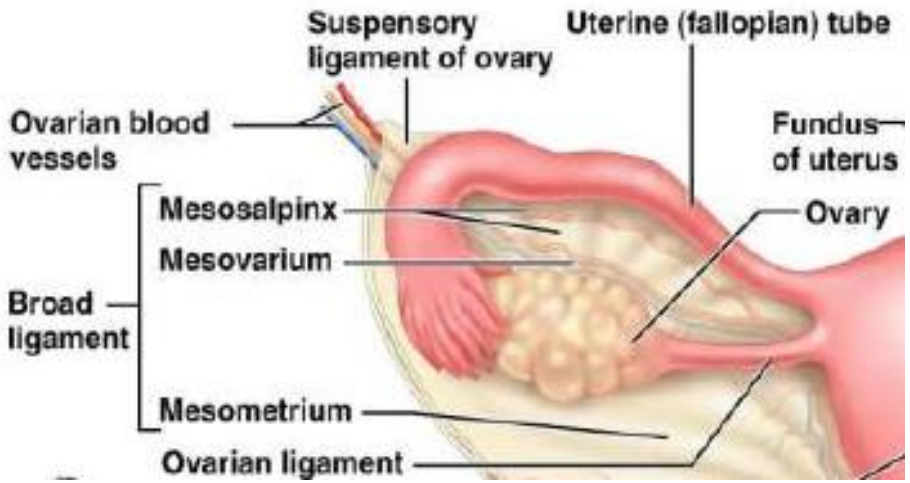
Ovaries: Suspensory Ligament

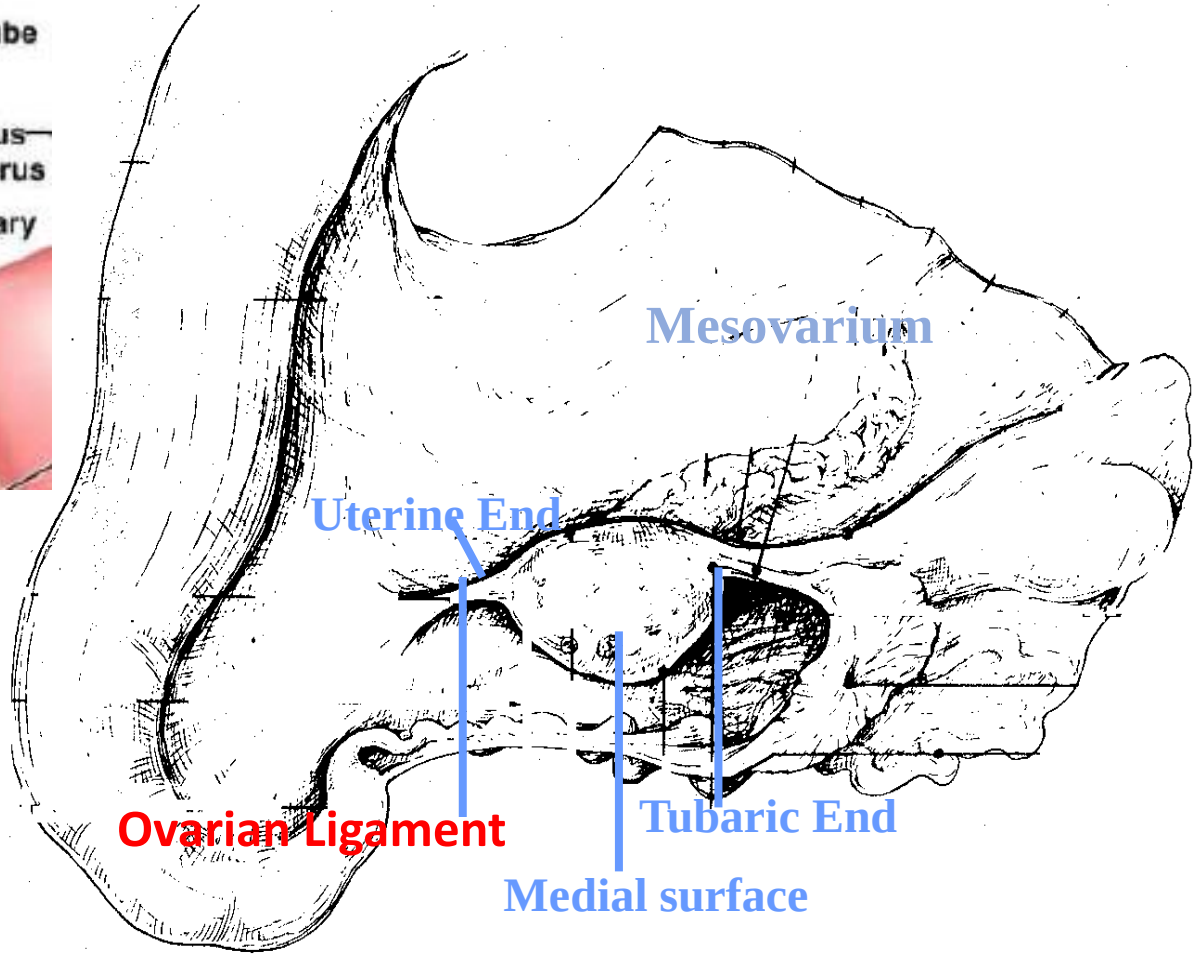
from the ovary to the wall of the pelvis





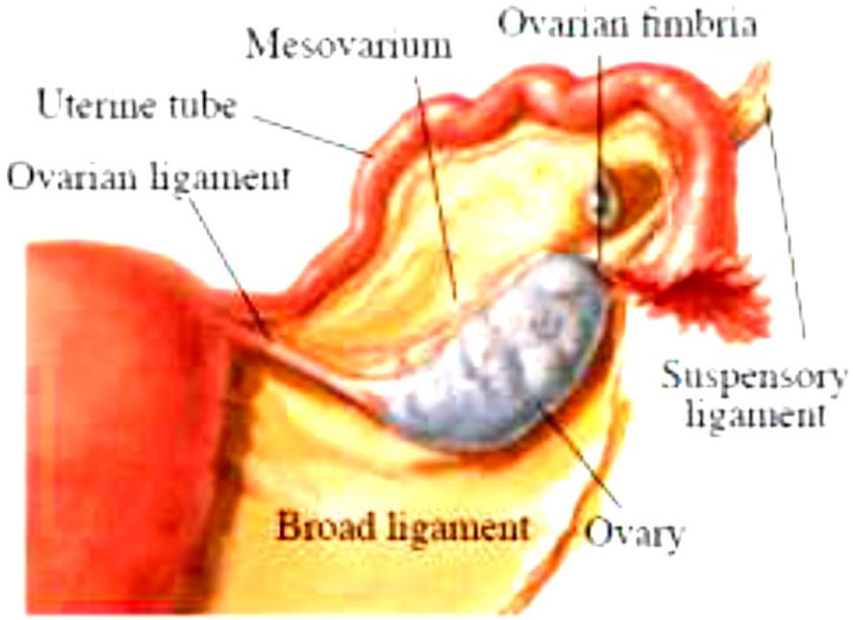
Ovaries: Ovarian Ligament





connects the ovary to the lateral surface of the uterus

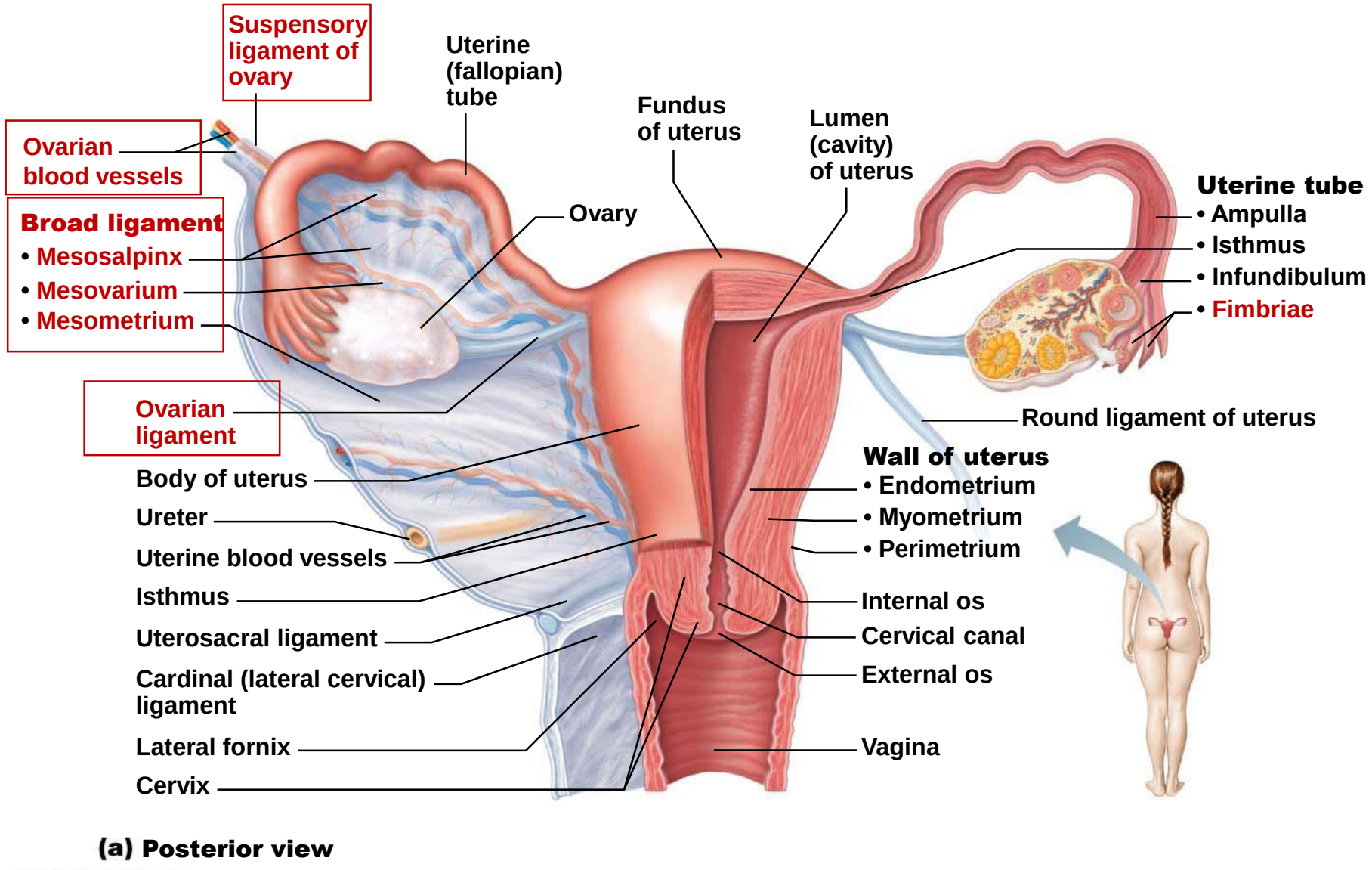
Ovaries: Ovarian Fimbria



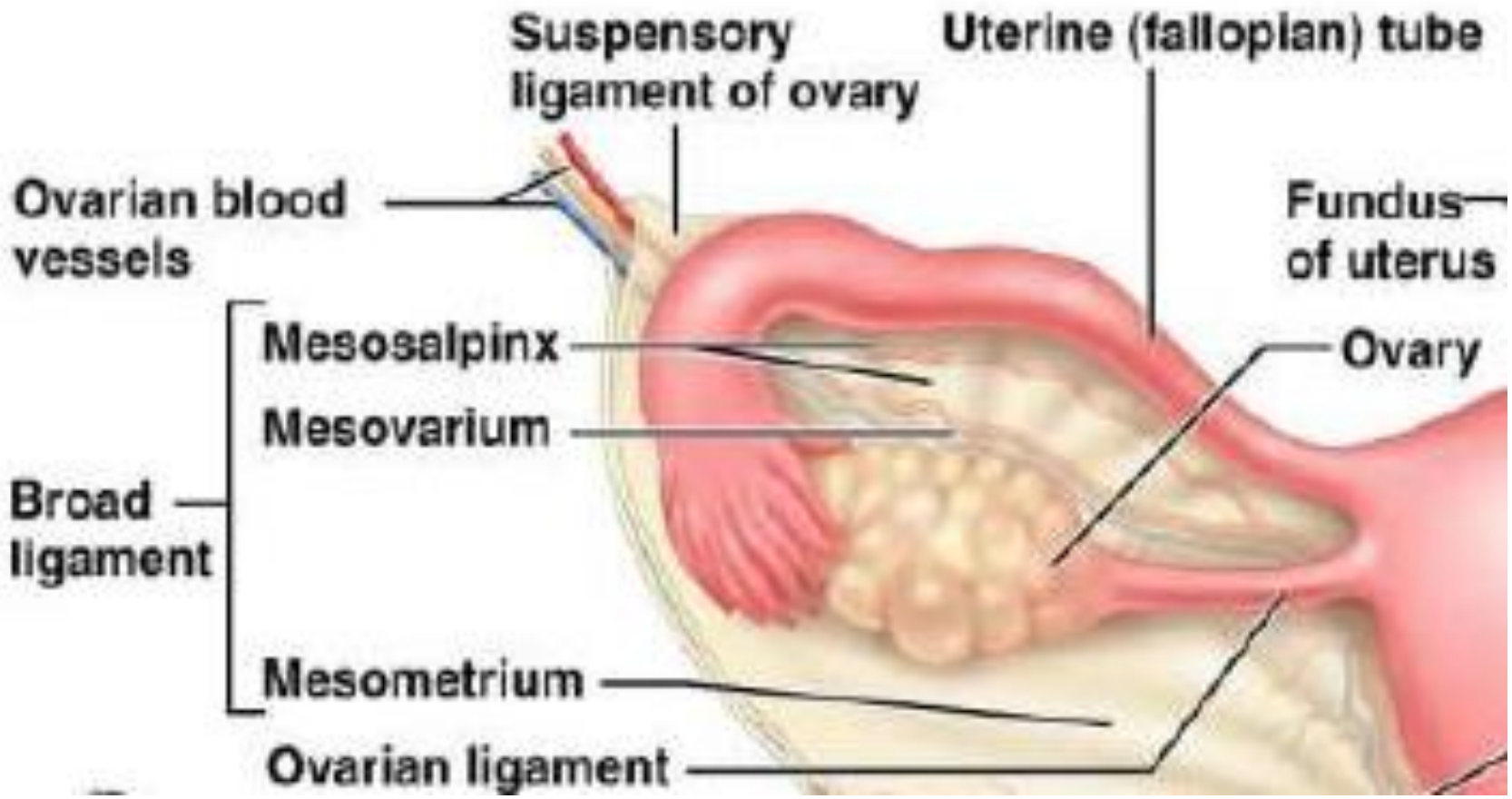
Ovary – posterior view

Ovarian Fimbria

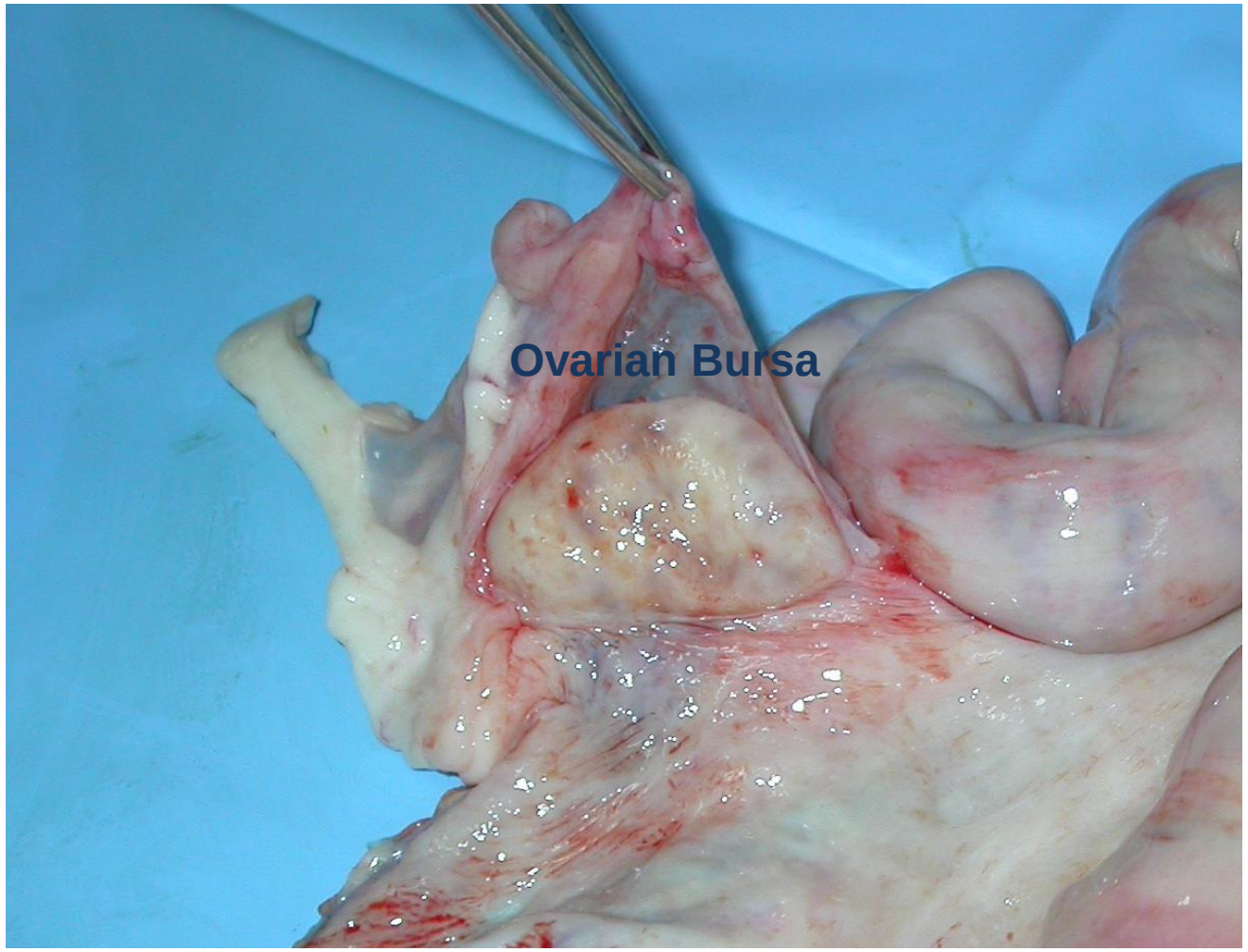
Summary: ligaments



Ovaries: Mesosalpinx



Ovaries: Ovarian Bursa



Blood supply for ovaries

Arterial Supply

•The **ovarian artery** (a branch of the Aorta) and ovarian branches of the uterine artery form anastomoses in the mesovarium and the broad ligament.

•From this arterial plexus ~10 coiled arteries enter the hilus of the ovary.

•Smaller branches radiate into the cortex.

•Here they branch and anastomose to give rise to a rich capillary network around follicles.

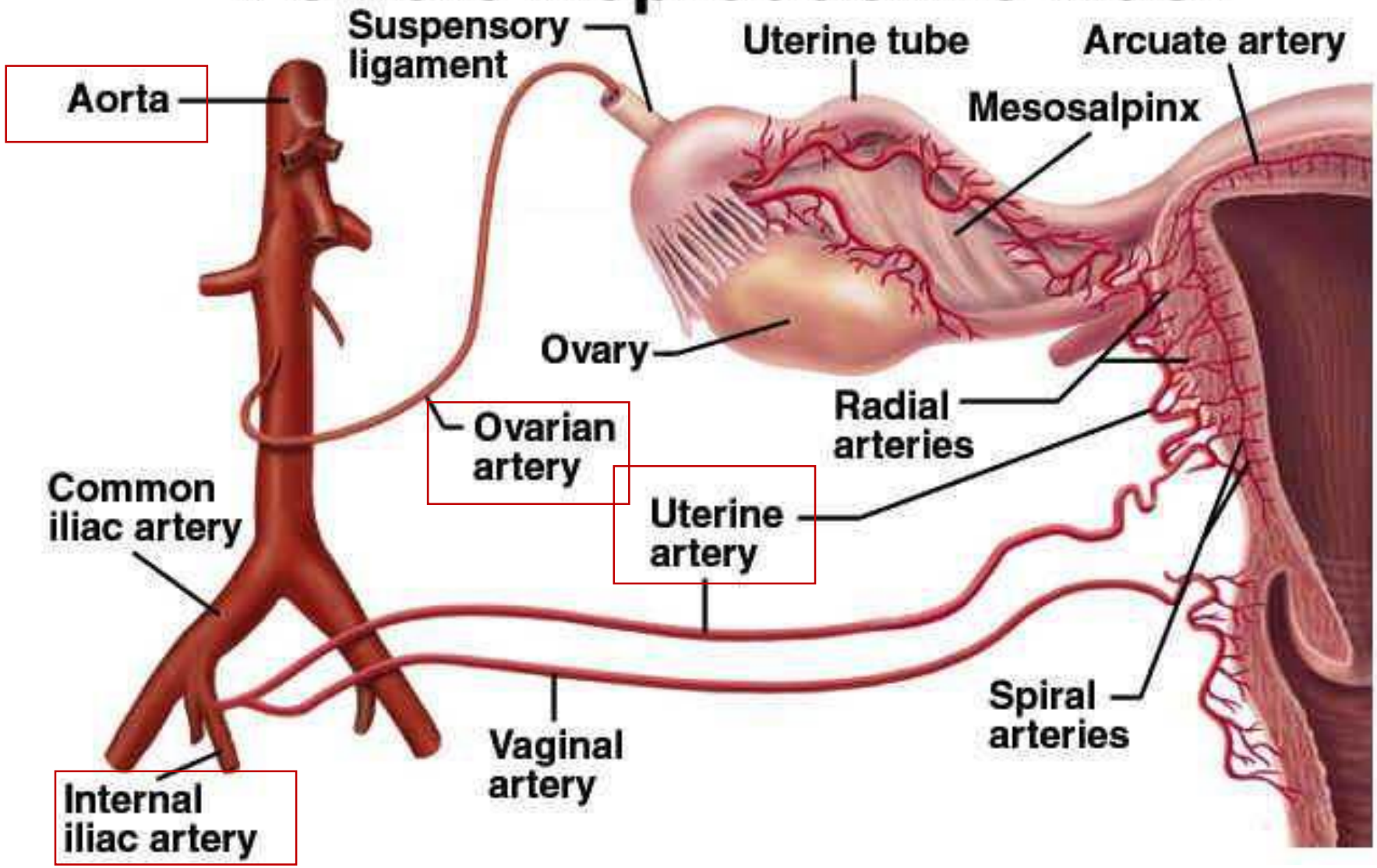
Venous Drainage

•Venous drainage follows the course of the arterial system.

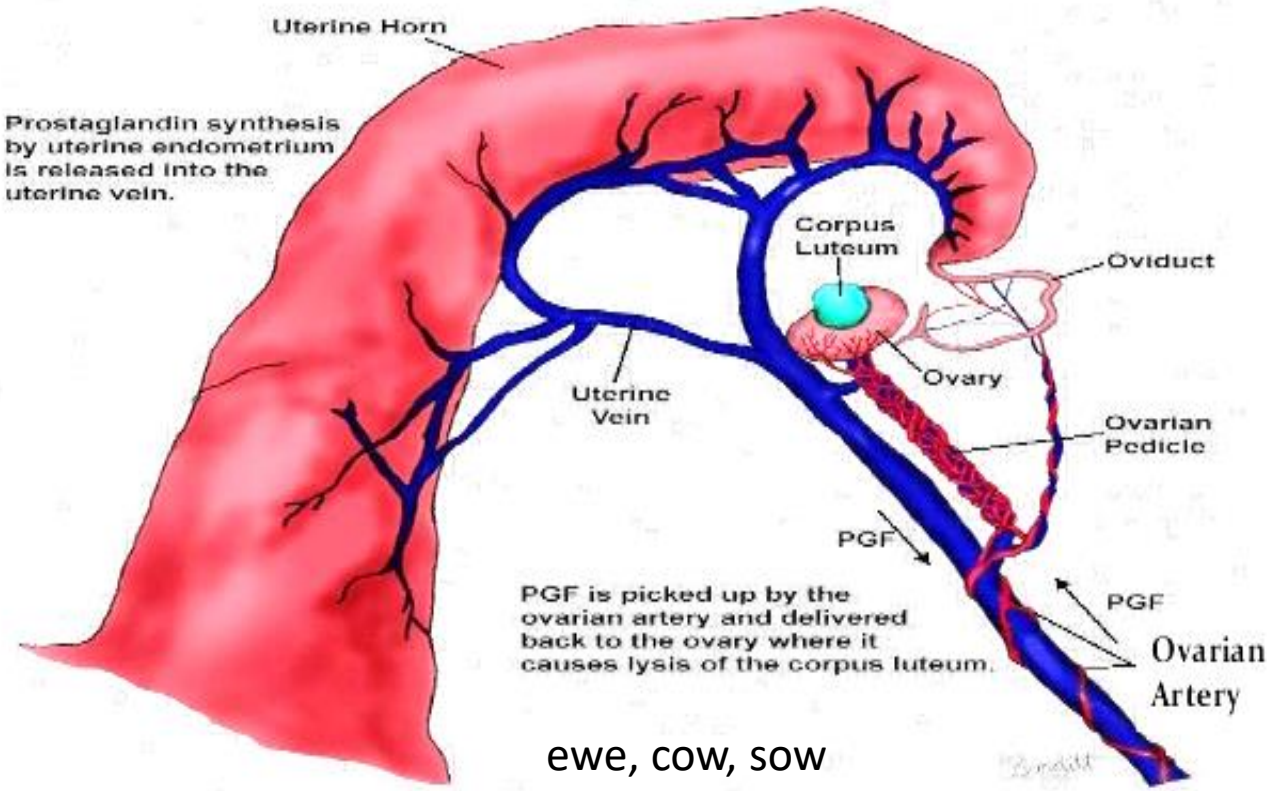
•Medullary veins are large and tortuous.

•The Ovarian Artery is closely associated with the Uterine Vein. This is important for the transfer of luteolytic PGF2α from the Uterus to the Ovary.

Blood Supply to Female Reproductive Tract



Counter-current transfer system



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