



Motivational Corner:

"Patience, persistence and perspiration make an unbeatable combination for success."



Done by:
Fawzan ALOtaibi
Edited by:
Areeb ALOgaiel

Team leaders:
Areeb ALOgaiel - Fawzan ALOtaibi

HISTOLOGY GNT PARTICAL



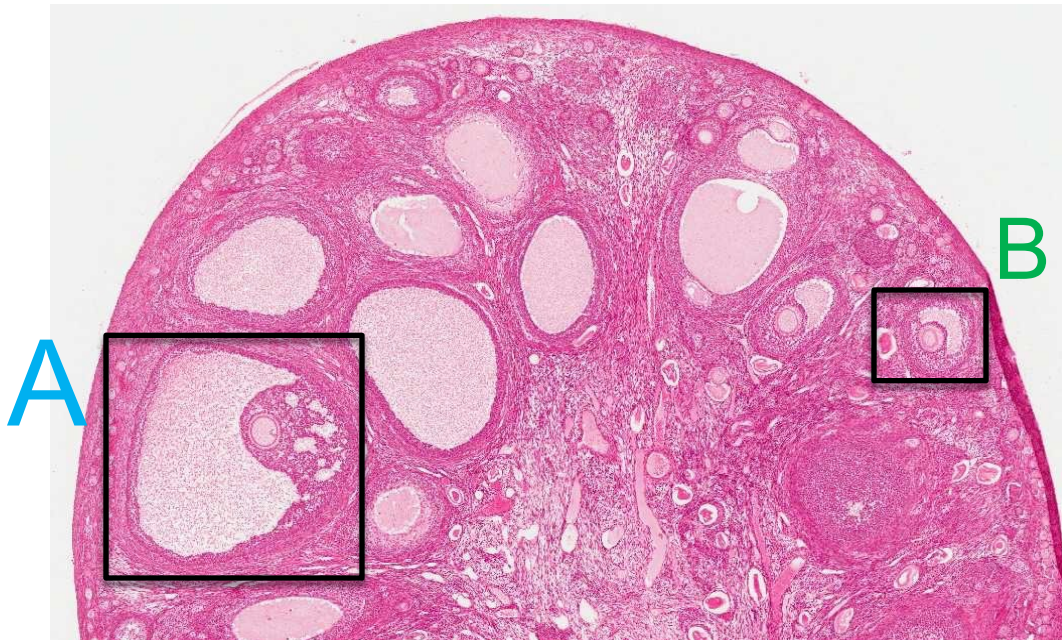
For any question or suggestion:
histology435@gmail.com

Thanks you for checking
our work, Good luck.
-Team histology.

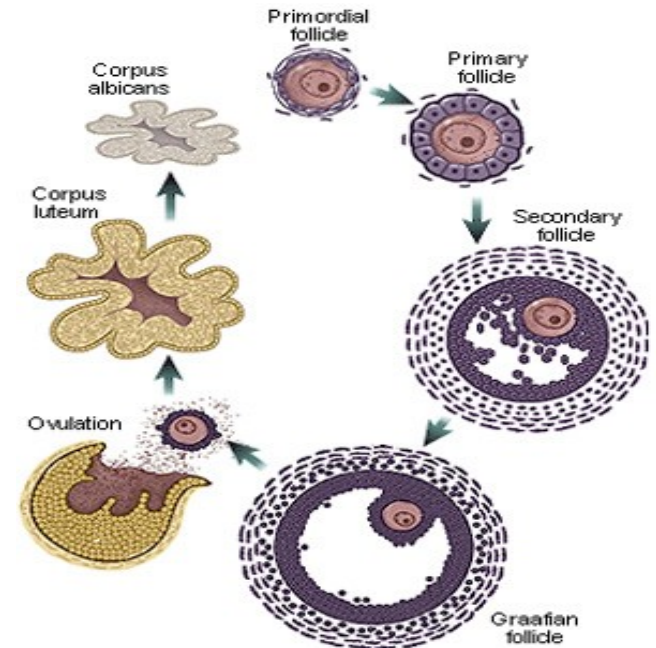


HISTOLOGY
435

Ovary



Ovarian follicle stages:



Q1: Identify the structure

Ovary

Germinal epithelium: outer layer of flat cells.

Q2: Identify the labeled structures A,B

A: Mature (Graafian) follicle.

B: Secondary follicle.

Graafian Follicle

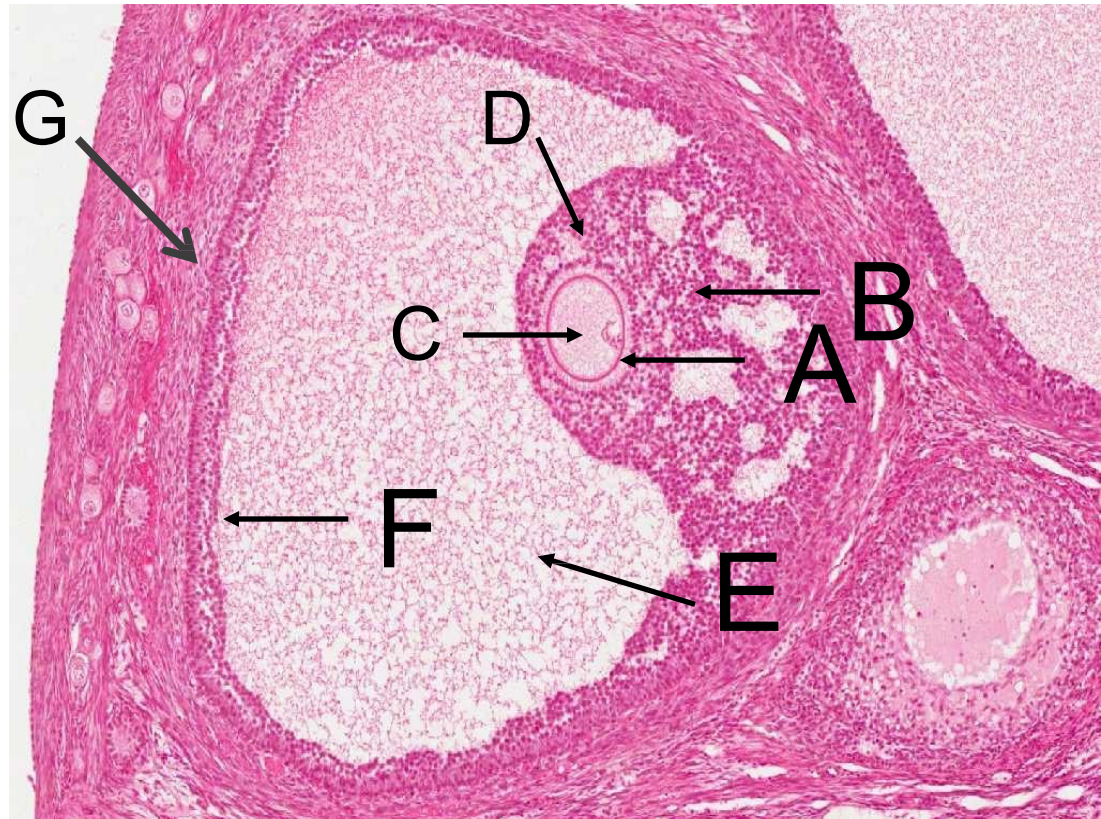


Q1: Identify the structure

Mature (Graafian) follicle.

Q2: Identify the following structures (components)

- **A:** Zona pellucida
- **B:** Cumulus oophorus
- **C:** Primary Oocyte.
- **D:** Corona radiata.
- **E:** Follicular antrum.
- **F:** granulosa cells (Folliculi)
- **G:** Theca folliculi, internal & external



Fallopian Tube (Ampulla)

Q1: Identify the structure

Ampulla of fallopian tube.

Q2: Mention the layers

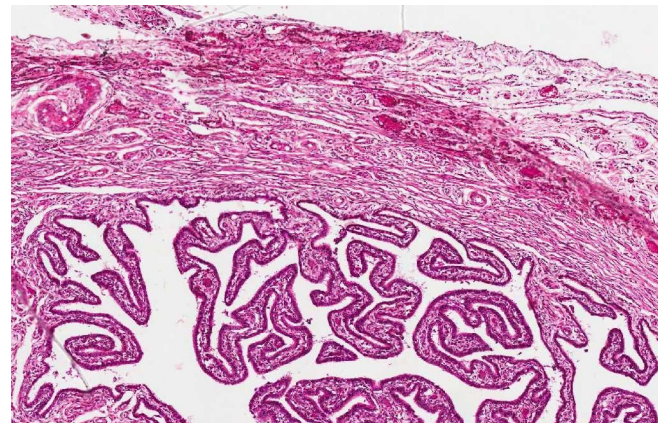
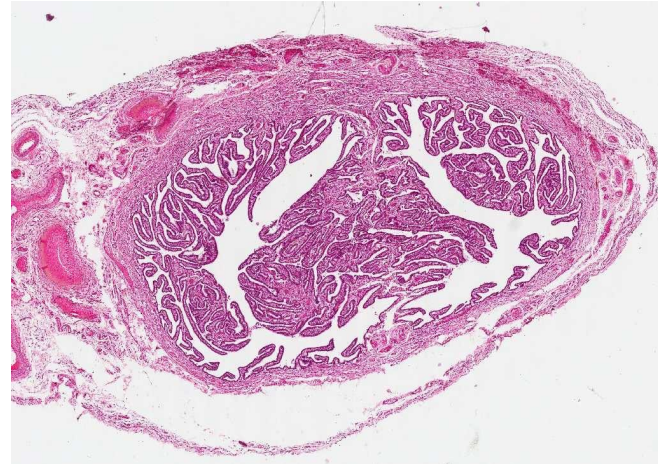
- Muscosa
- Muscularis.
- Serosa

Q3: Mention the type of lining epithelium

Simple columnar partially ciliated epithelium and partially secretory (Peg cells).

Q4: Mention the layers of musculosa in this structure

- Inner circular.
- Outer longitudinal.



Contains:

Ciliated cells: non-secretory cells.

Non-ciliated cells (peg cells): secretory cells.

Uterus

Q1: Identify the structure

Uterus.

Q2: Mention the lining epithelium

Simple columnar partially ciliated epithelium.

Q3: Mention the layers in this structure

- Endometrium (mucosa).
- Myometrium (musculosa).
- Perimetrium (serosa).

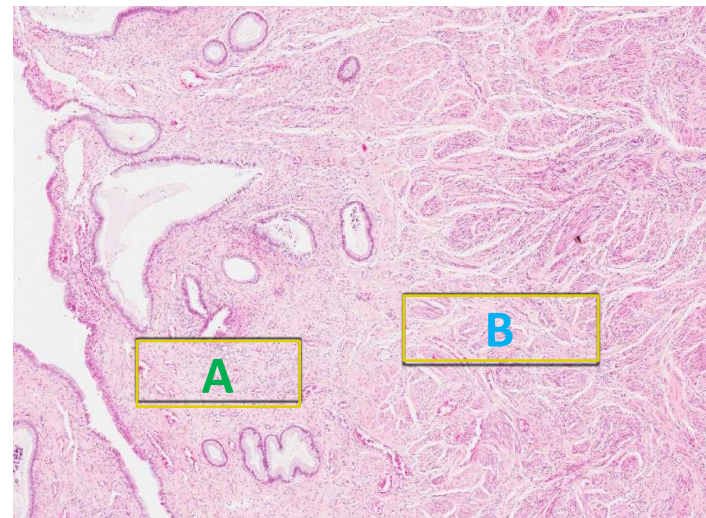
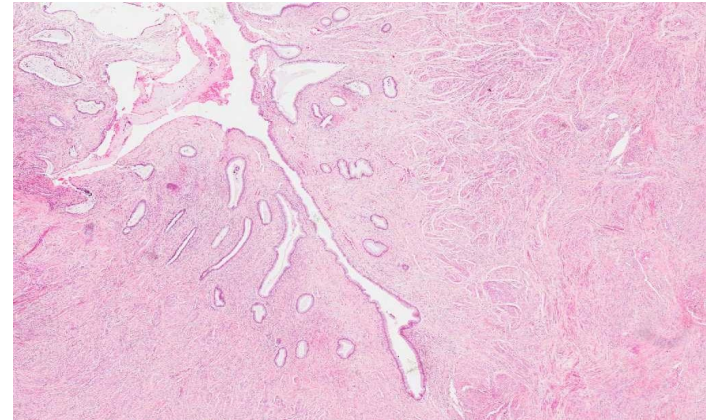
Q4: Mention the layers of Myometrium

- Stratum submucosum (longitudinal).
- Stratum vasculare (Circular).
- Stratum supravasculare (longitudinal).

Q5: Identify labeled structures A,B:

A: Stratum functionalis.

B: stratum Basalis.



Placenta

Q1: Identify the structure

Placenta.

Maternal part (decidua basalis)

Foetal part (chorionic villi)

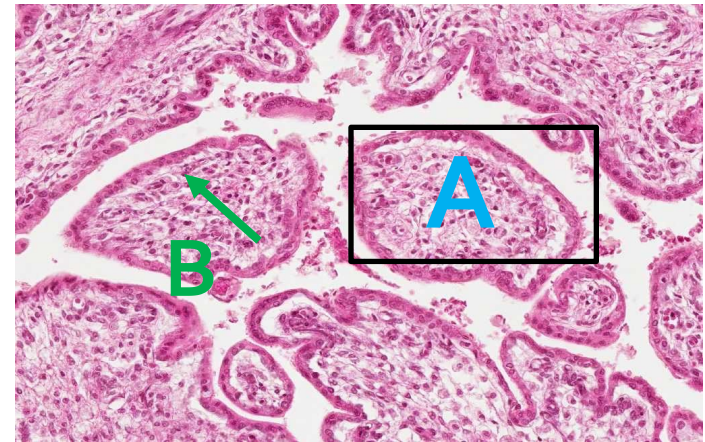
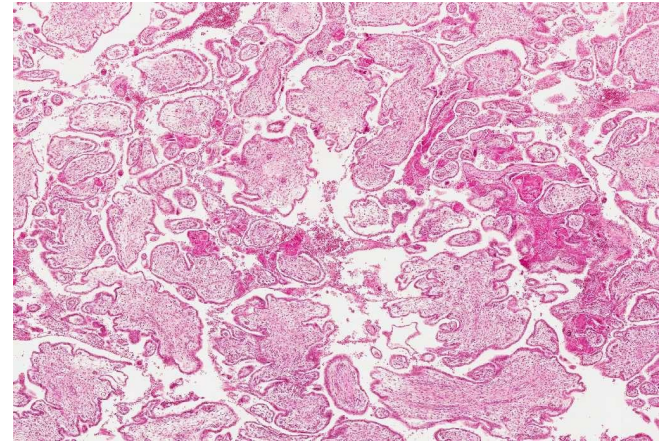
Q2: Mention layers of the placental barrier from outermost to innermost.

- Syncytiotrophoblast.
- Cytotrophoblast
(disappear during late months of pregnancy).
- Basement membrane of trophoblast.
- Connective tissue of the villus.
- Basement membrane of fetal capillaries.
- The endothelium of fetal capillaries.

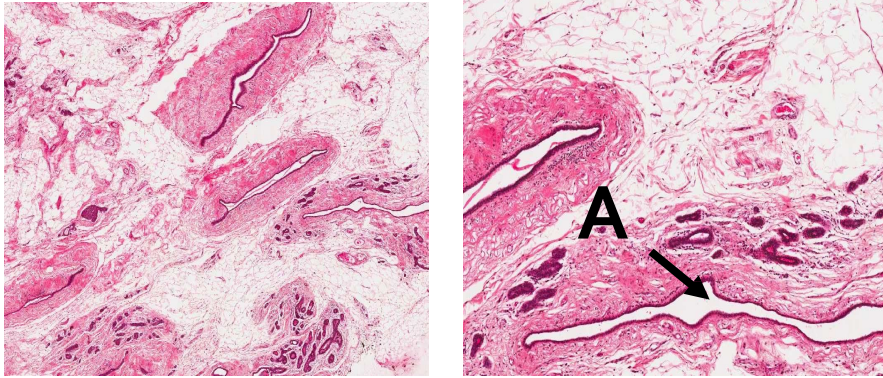
Q3: Identify the labeled structures A,B

A: chorionic villi.

B: Trophoblast.



Mammary Gland



Resting (non-lactating):

Q1: Identify the structure

Resting (non-lactating) mammary gland.

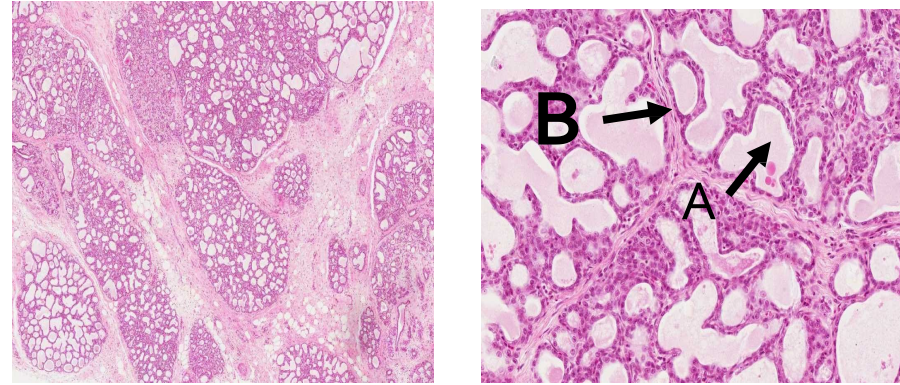
Secretory units appear only during pregnancy and are functioning only during lactation

Q2: Mention 2 structures seen in this picture

- Ducts. (A)
- Dense connective tissue with numerous fat cells (adipose C.T.).

Q3: What is the lining epithelium in this structure ?

- Simple cuboidal,
- Stratified columnar in the areola then
- Stratified squamous in the nipple.



Lactating:

Q1: Identify the structure

- **Lactating mammary gland.**

Q2: Mention 2 structures seen in the picture

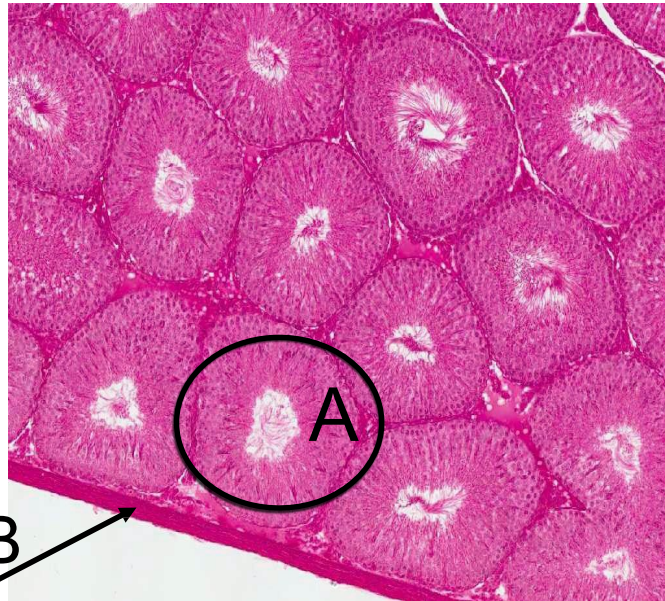
- Alveoli (A) (contains milk).
- Ducts

Myoepithelial cell cannot be seen easily.

Q3: What is the lining epithelium of the alveoli ?

- Simple cuboidal epithelium
- myoepithelial cells. **For Milk release**

Testis



Q1: Identify the structure

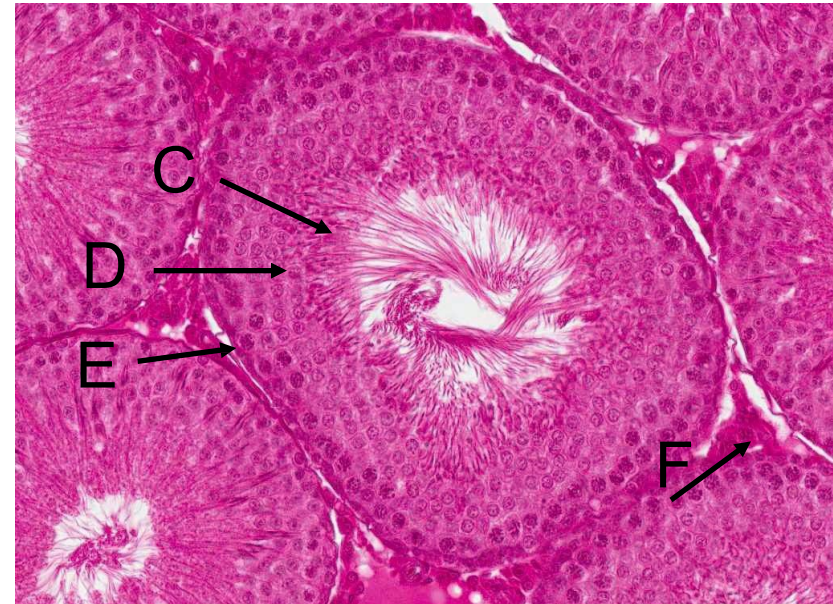
Testis.

Q2: Identify the labeled structure

A: Seminiferous tubule.

B: Tunica Albuginea.

Seminiferous Tubules



Q1: Identify the structure

Seminiferous tubule

each tubule is lined with a stratified epithelium called seminiferous epithelium which is formed of 2 type of cells:

- 1- Sertoli cells
- 2- Spermatogenic cells

Q2: Identify the labeled structures:

- C: Spermatid and sperms.
- D: Primary Spermatocyte.
- E: Spermatogonia (larger and denser).
- F: Interstitial (Leydig) cell (secrete testosterone).

Epididymis



Q1- Identify the structure

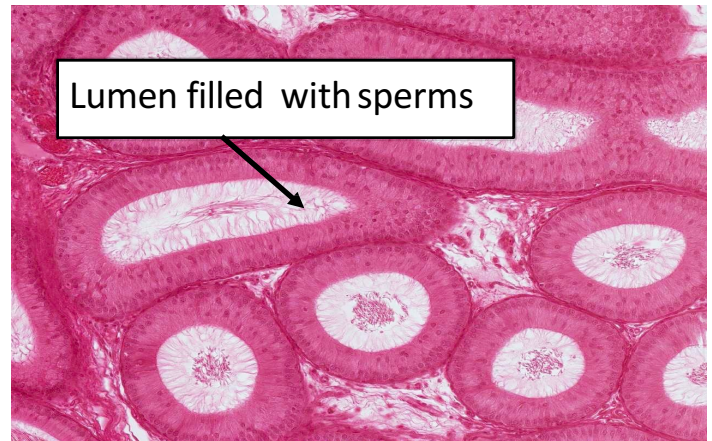
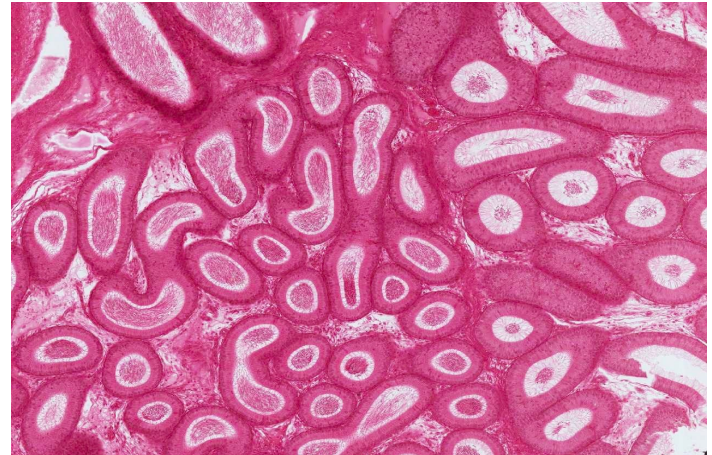
Epididymis.

Q2- What is the lining epithelium?

Pseudo-stratified columnar epithelium with stereocilia, It is surrounded by bundles of smooth muscle fibers

Q3- What is the function of this structure?

It stores and helps in maturation of spermatozoa.



Vas Deferens

Q1: Identify the structure

Vas deferens.

Q2: Identify the layers of the wall of it.

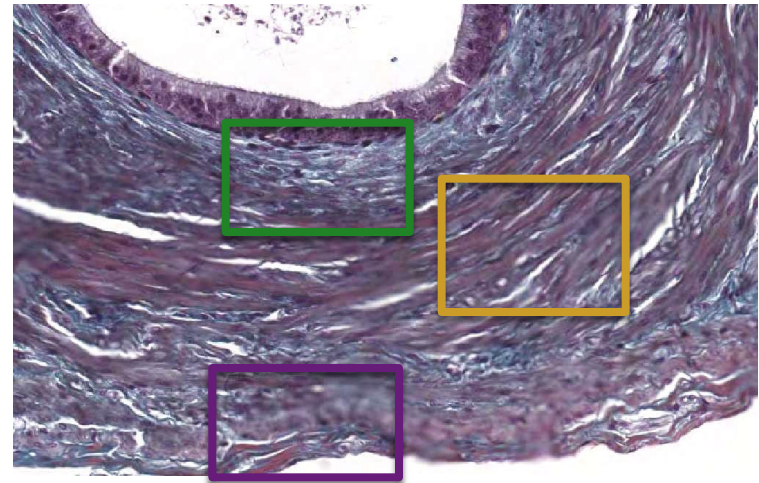
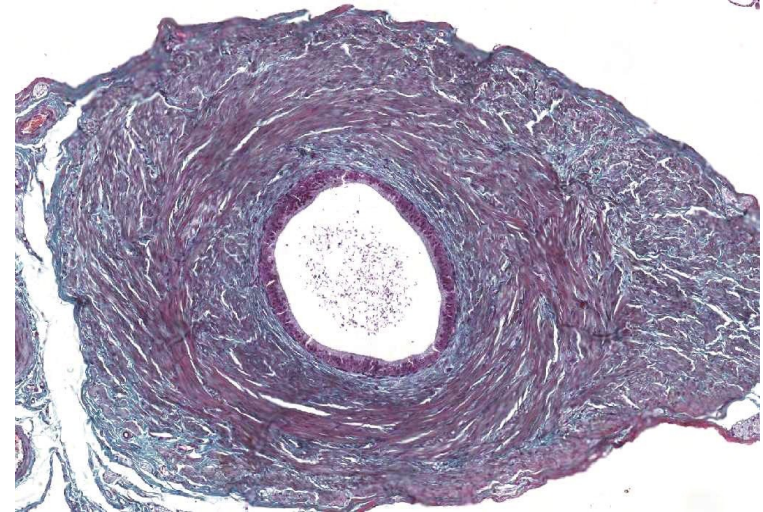
- Mucosa
- Muscularis.
- Adventitia.

Q3: What is the lining epithelium?

Pseudo-stratified columnar epithelium with stereocilia.

Q4: Mention the layers that can be seen in this structure.

- **Mucosa.**
- **Musculosa** (has 3 layers: Inner longitudinal, middle circular & outer longitudinal).
- **Adventitia.**



Prostate Gland

Q1: Identify the structure

Prostate gland.

Q2: What is the lining epithelium?

Simple columnar or pseudostratified columnar epithelium.

Q3: Identify the labeled structures

- A: Copora amylacea.
- B: Fibromasculular band.

