

وسهلا



أهلا

يُمنع أخذ السلايدات بدون
إذن المحرر واي اجراء
يخالف ذلك يقع تحت طائلة
المسؤولية القانونية
جميع المعلومات للاستخدام
التعليمي فقط

الأستاذ الدكتور يوسف حسين

كلية الطب - جامعة مؤتة - الأردن

دكتورة من جامعة كولونيا المانيا

Prof. Dr. Youssef Hussein Anatomy - YouTube

الواتس (أي استفسار)
00201224904207

Gametogenesis

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- ▶ **Formation of the mature gametes (sperm or ovum) from the primordial germ cells**

<https://www.youtube.com/@ProfDrYoussefHusseinAnatomy/playlists>

Aim of Gametogenesis

Production of mature male gametes (sperm) and female gametes (ovum) with the following changes:

1- Nucleus: reduction of **diploid** number (46 chromosomes) into haploid number (23 chromosomes).

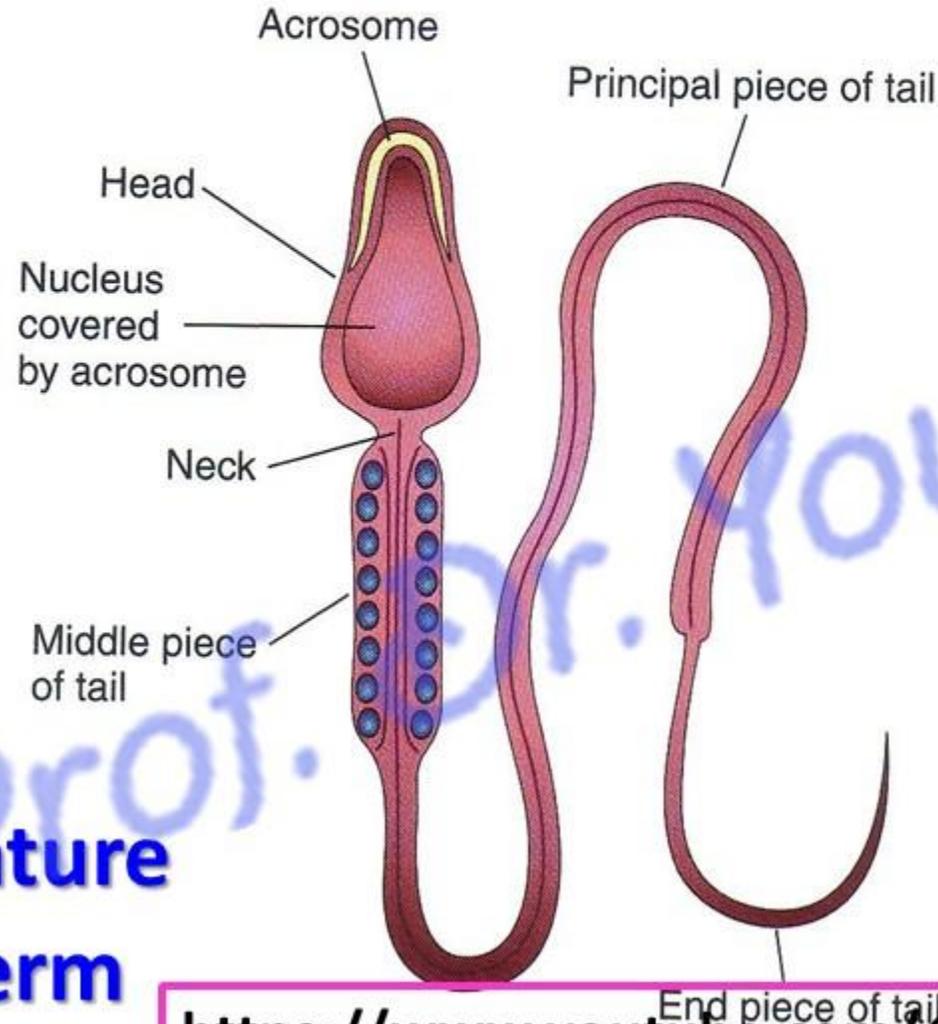
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2- Cytoplasm: is increased in the ovum but decreased in the sperm

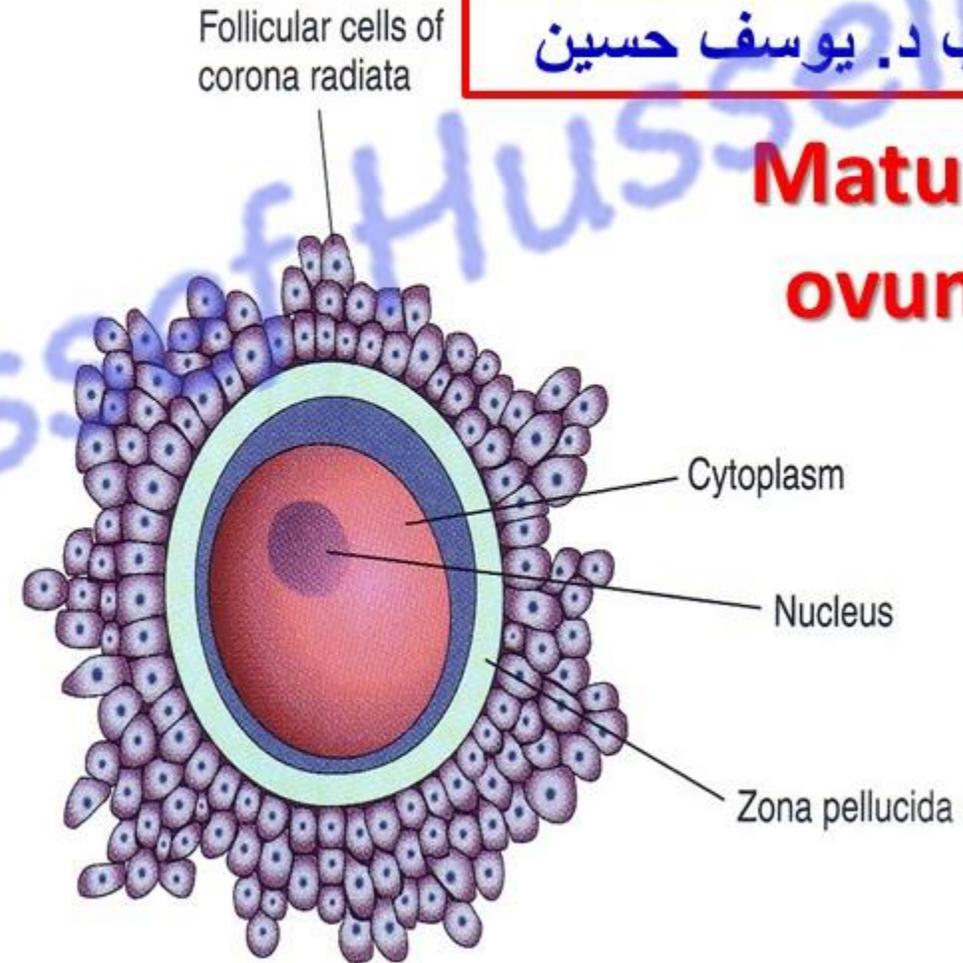
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Where are Sperm or Ovum formed? It is formed inside the gonads (testis or ovary)

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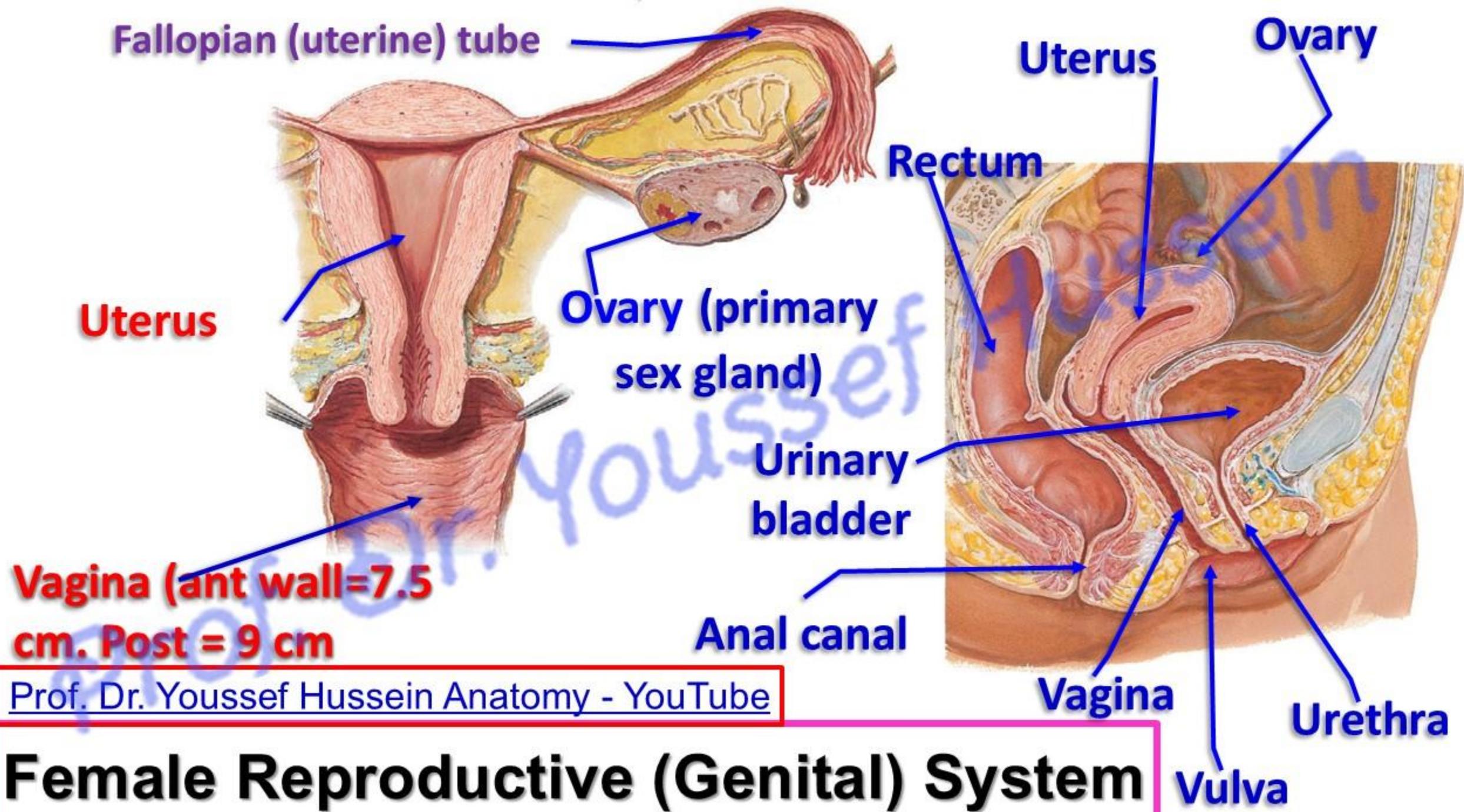


Mature sperm



Mature ovum

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❖ Uterus

- The uterus is a hollow thick-walled muscular organ.

** **Site**, It lies between the urinary bladder **anteriorly** and the rectum **posteriorly**.

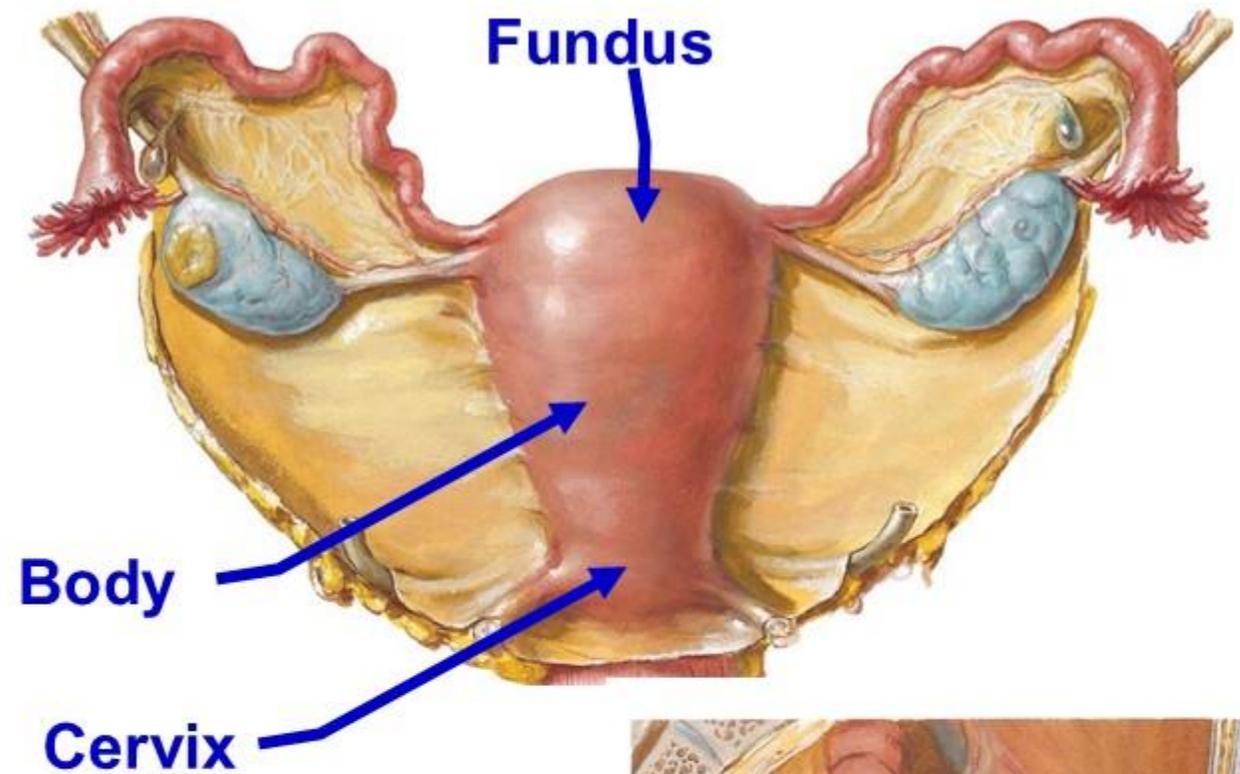
** **Dimensions**

= **Measurements**

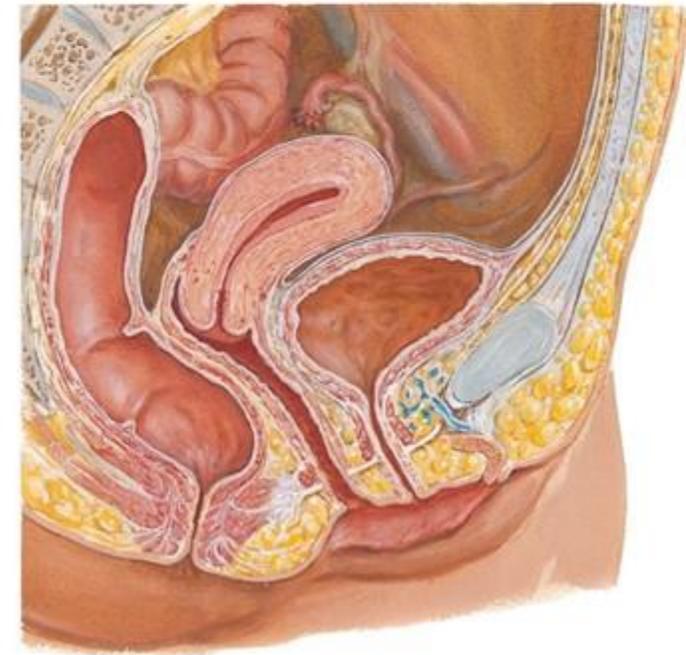
(1 inch **thickness**)

(2 inches **breadth**)

(3 inches **Length**)



Parts



- The two tubes run in the free border of the broad ligament.

- It is about **10 cm long** and has **2 ends**.

a- Medial end opens in the uterine cavity at the junction of the fundus with the body.

b- Lateral end opens in the peritoneal cavity

Ovaries

- One on each side

- **Primary female sex organs.**

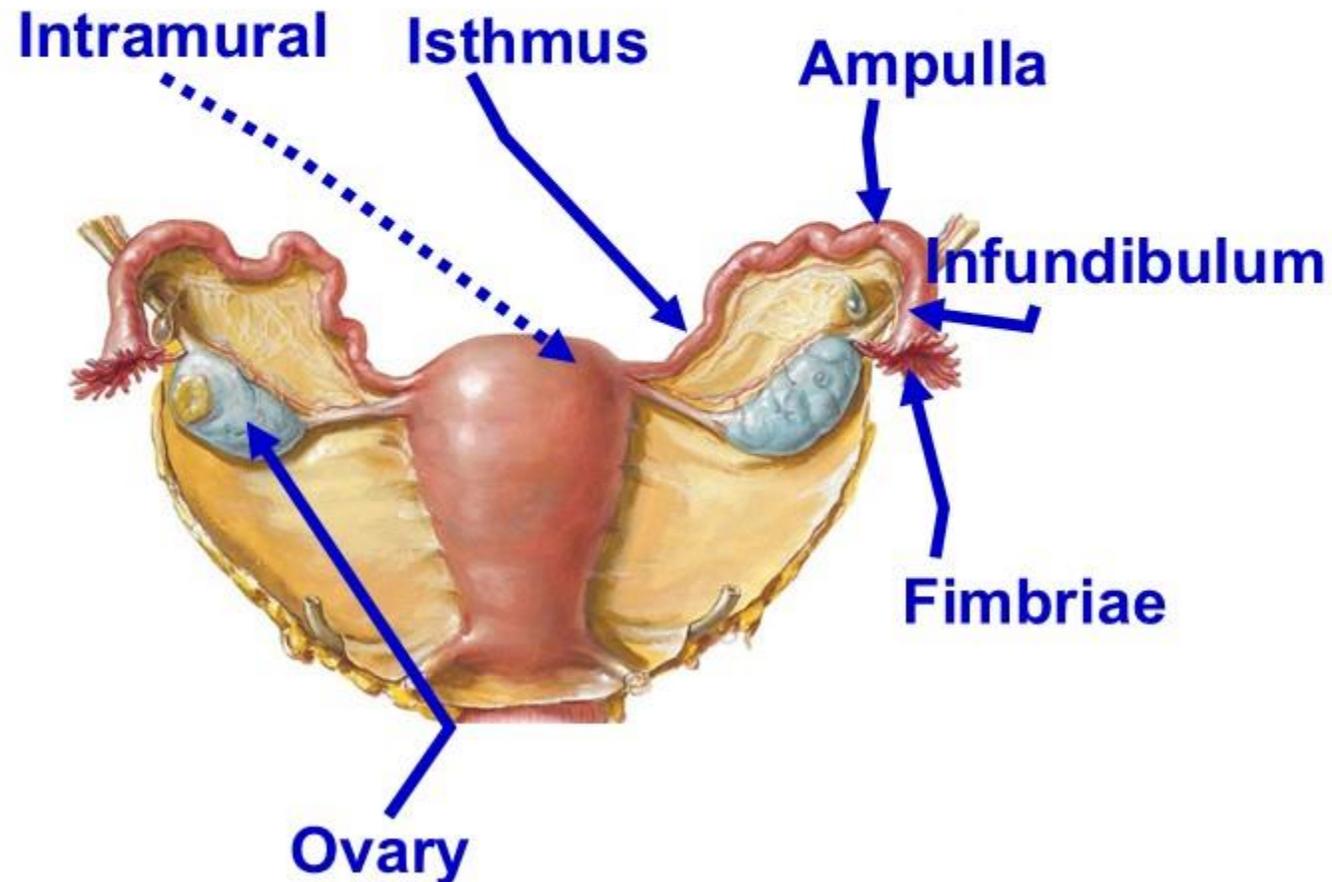
** Dimensions

- 1 cm thickness

- 2 cm breadth

- 3 cm Length

- **It is structured into** an outer cortex containing follicles at various development stages, and inner medulla



Male Reproductive System

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Urinary bladder

Vas deferens in spermatic cord=45 cm

Penis containing urethra=18-20cm

Testis
(primary sex gland)

Scrotum

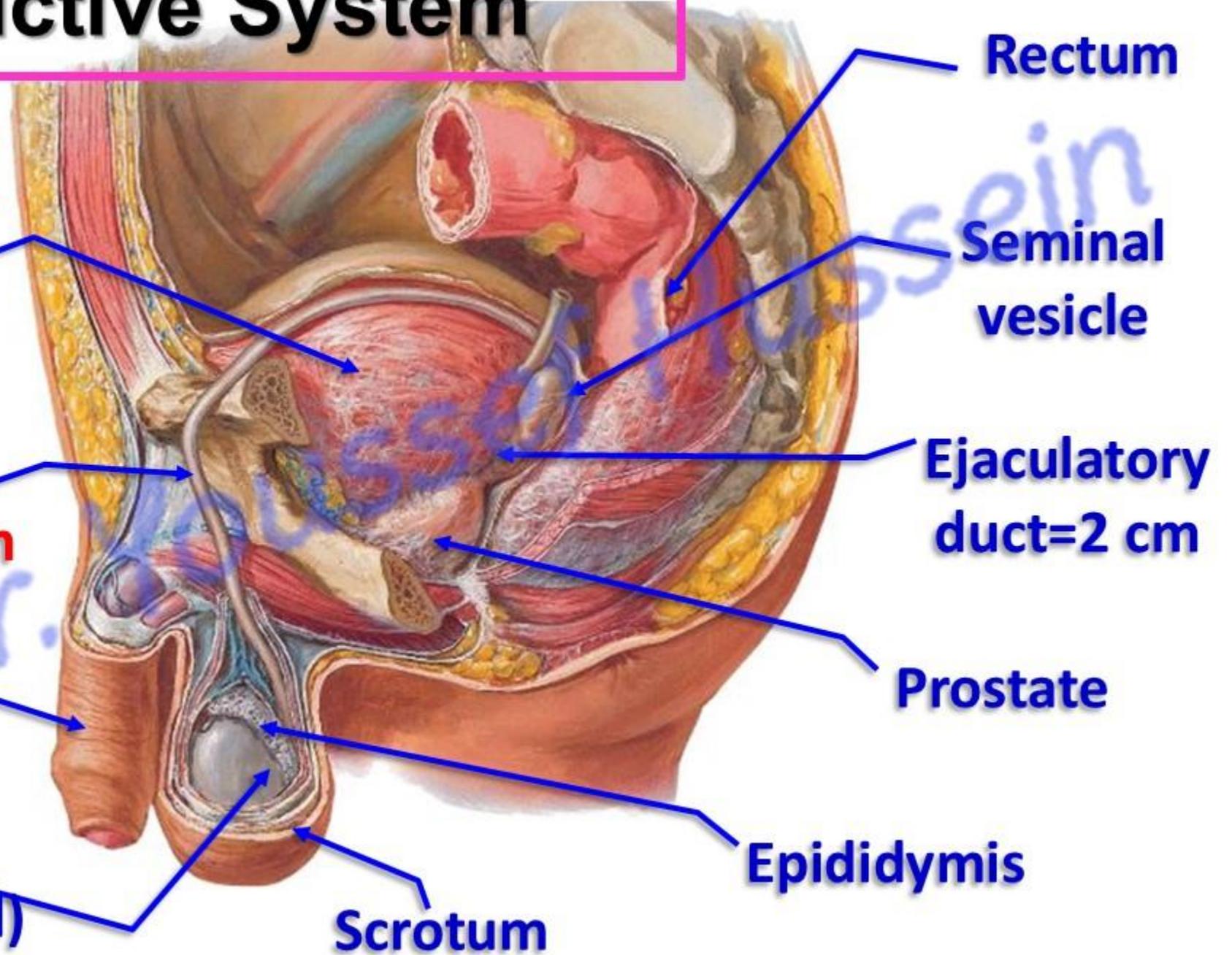
Rectum

Seminal vesicle

Ejaculatory duct=2 cm

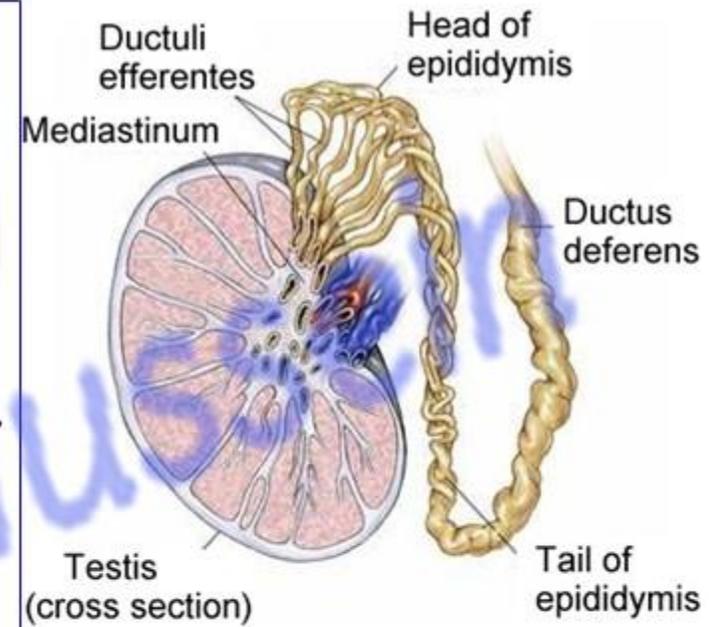
Prostate

Epididymis



** Structure of the testis;

- It is divided into lobules by septa.
- Each lobule contains 2-3 **seminiferous tubules supported by interstitial tissue.**
- **Leydig cells** lie in the interstitial tissue are responsible for **testosterone secretion**
- **Seminiferous tubules** lined by **Sertoli cells**
- **Spermatogenic cells** are responsible for **Spermatogenesis**

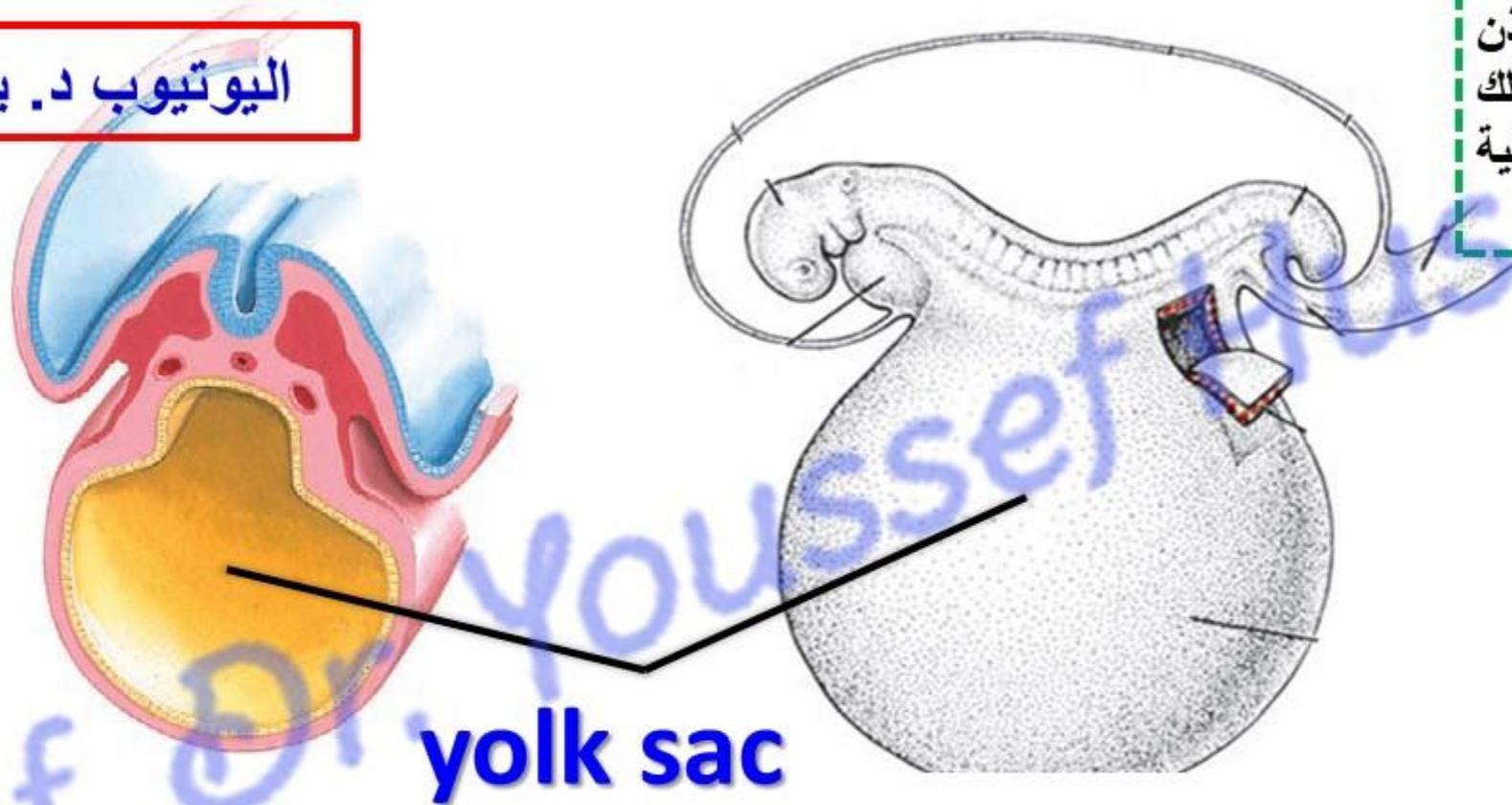


- **Arterial supply:** Gonadal (Testicular or ovarian) artery from the abdominal aorta.
- **Venous drainage** testicular or ovarian veins that end in:
 - a. **Right** vein ends in the inferior vena cava.
 - b. **Left** vein ends in the left renal vein.

Source of primordial germ cells

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- Primitive (Primordial germ cells appear in the wall of the endodermal layer of yolk sac (forming mucosa of gut tube) at the 2nd week after fertilization.

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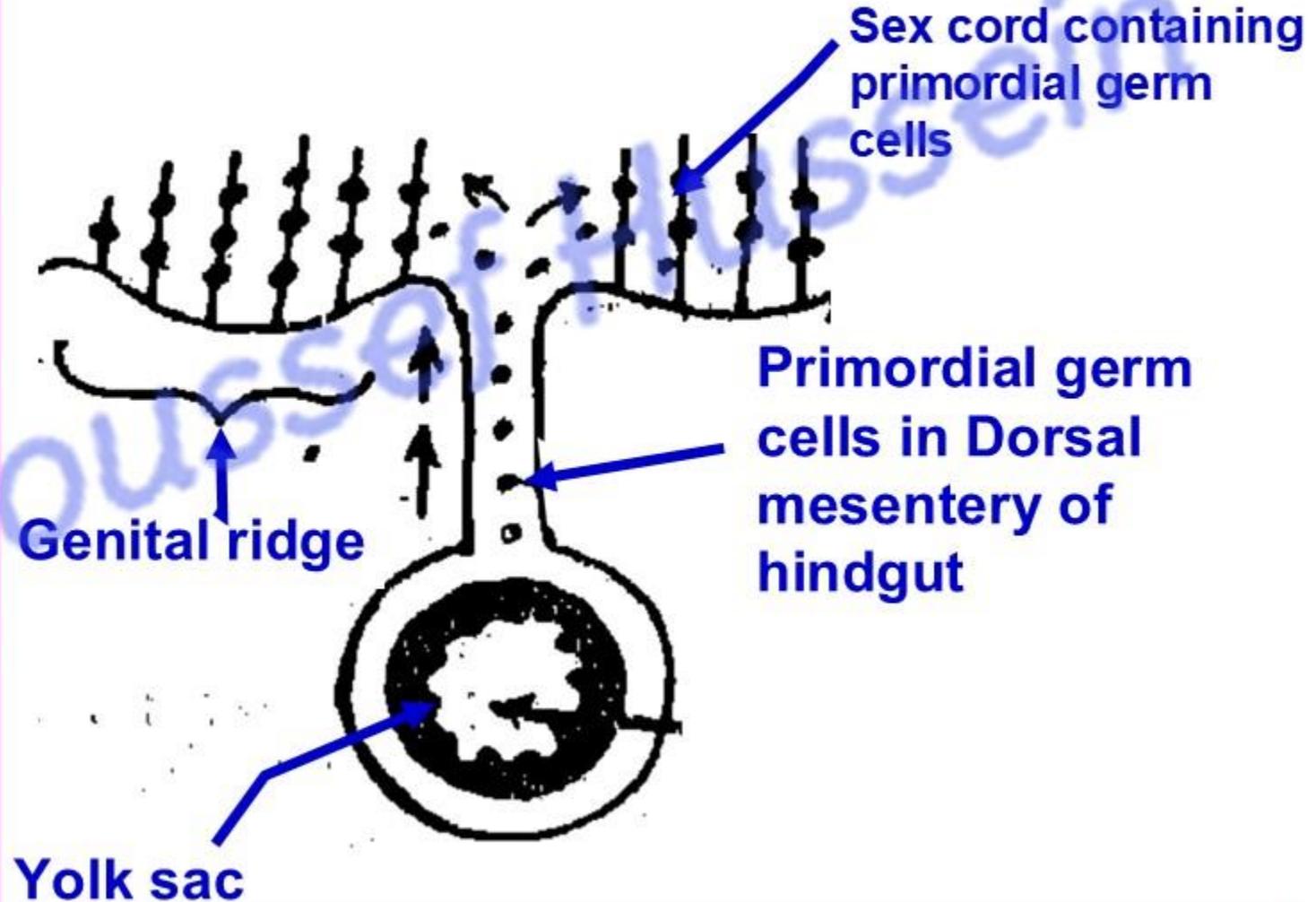
- They migrate by amoeboid movement from **yolk sac** through **dorsal mesentery** of hindgut to the **genital ridges** of the **primitive gonads** in the abdomen

- They reach **primitive gonads** by:

- a- Primitive gonads give a chemostatic attractant for the germ cells

- b- Tissue rearrangement that occur in the early embryos.

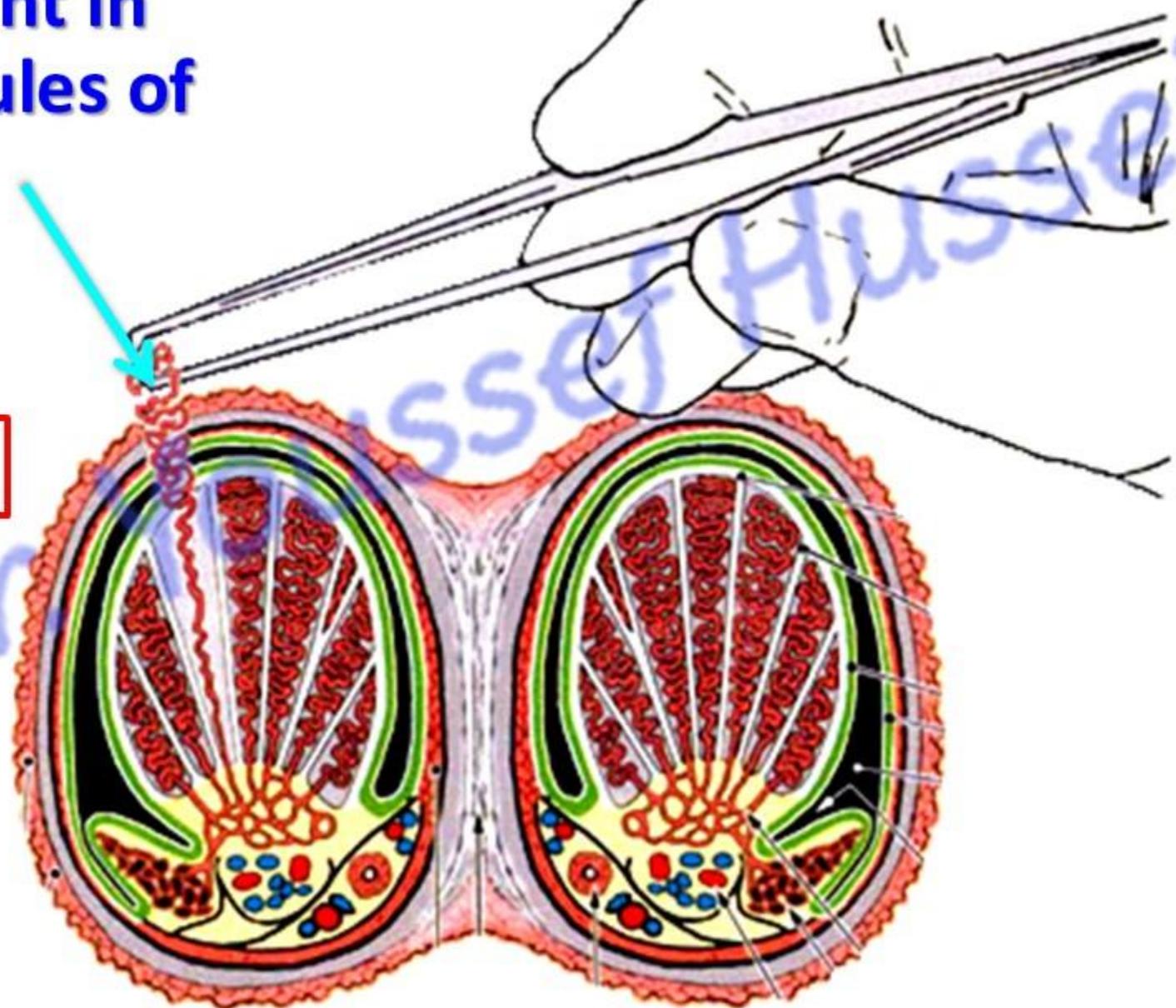
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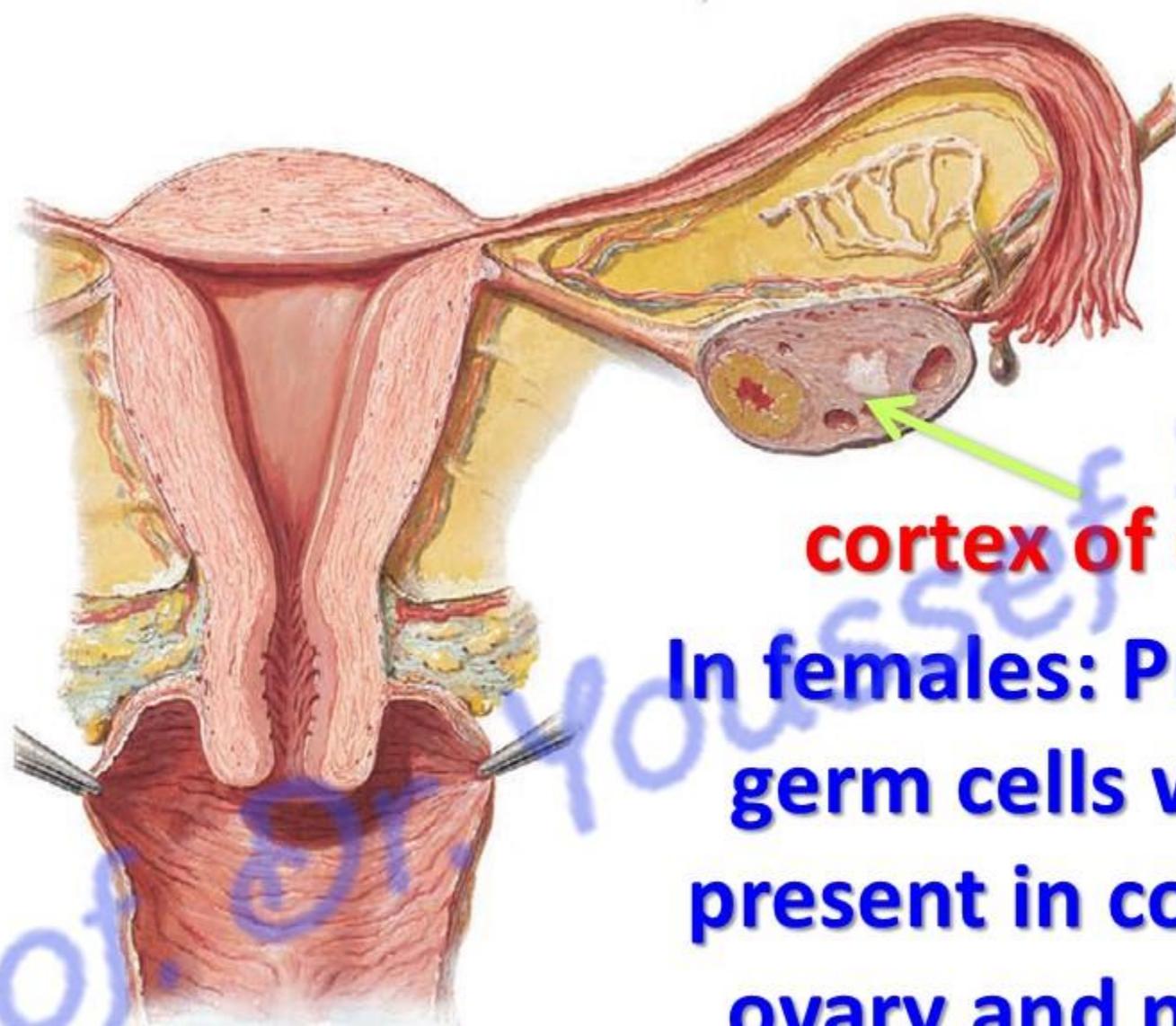


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In males: Primitive germ cells will be present in seminiferous tubules of testis and named spermatogonia.

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cortex of ovary

In females: Primitive germ cells will be present in cortex of ovary and named oogonia.

https://www.youtube.com/channel/UCVSNqbibj9UWYaJdd_cn0PQ

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Thank You

Questions

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