



معكم خطوة بخطوة

Anatomy
Passion



Lecture: 19

Done By: Elaf Sameer



اللَّهُمَّ إِنِّي أَحْسَنُ بِكَ الظَّنِّ فَأُجْرِنِي



General Anatomy

Lecture 19: Female Genital System

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Elrefai**

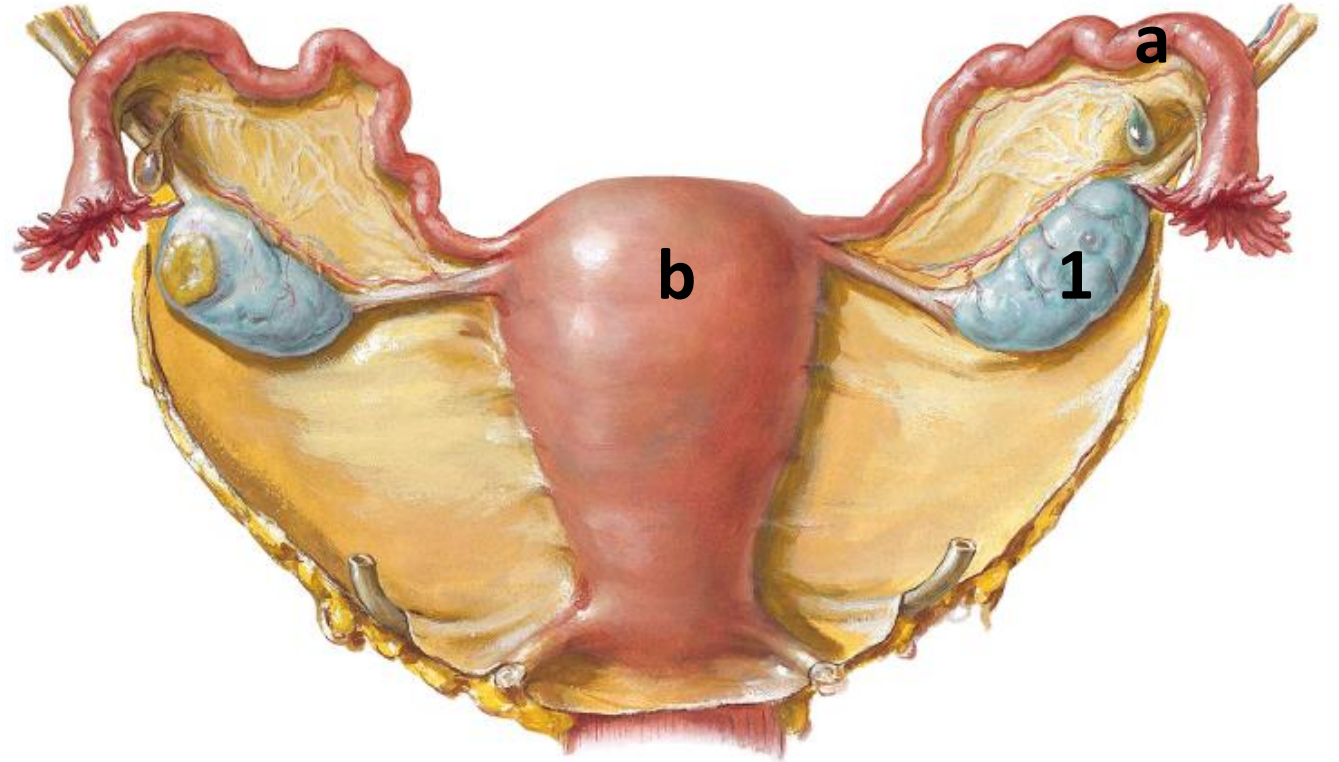
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Female Genital System

اللَّهُمَّ صَلِّ وَسَلِّمْ وَبَارِكْ عَلَى نَبِيِّنَا مُحَمَّدٍ

ريكوردز المحاضرة 19 الدقيقة 35 راجع الدكتور
الأشياء المهمة بالمحاضرة باختصار بحوالي 4 دقائق

- 1. Ovaries.**
- 2. Genital tract:**
 - a. Uterine tubes.**
 - b. Uterus.**
 - c. Vagina.**
- 3. External genitalia.**
- 4. Breast.**



Female → Ovaries
male → Testes

عد ←

Ovary

هورمون ←

* The ovaries are equivalent to the testes in males.

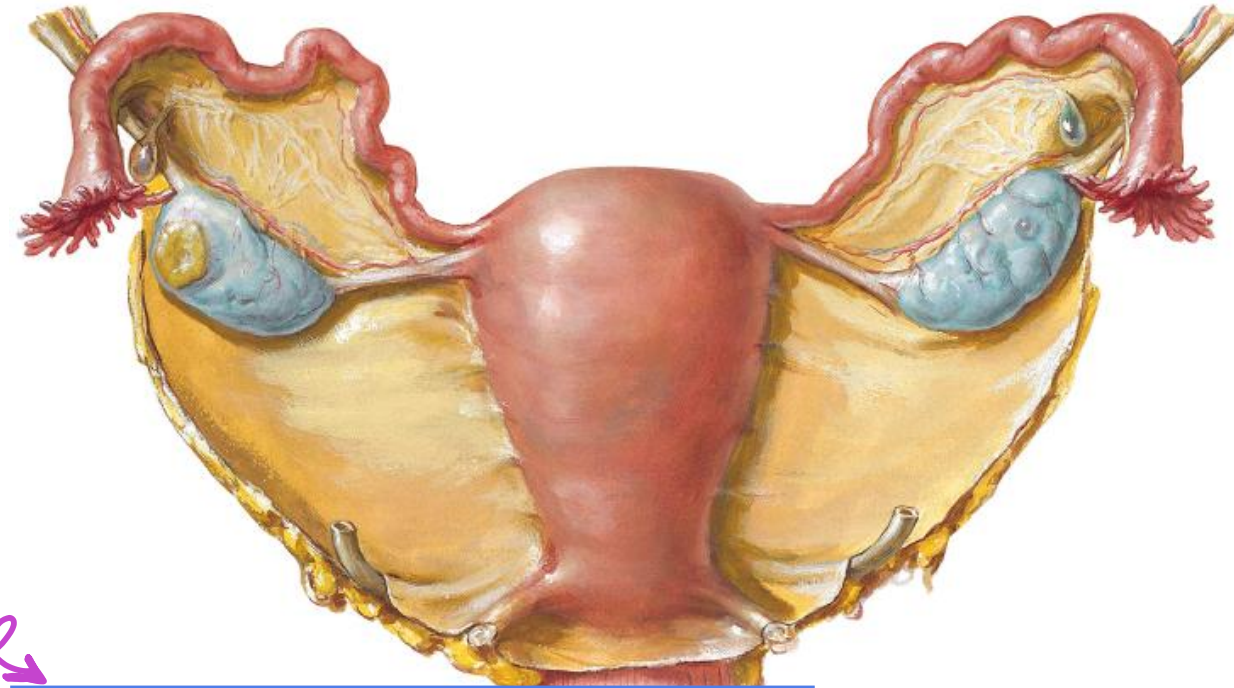
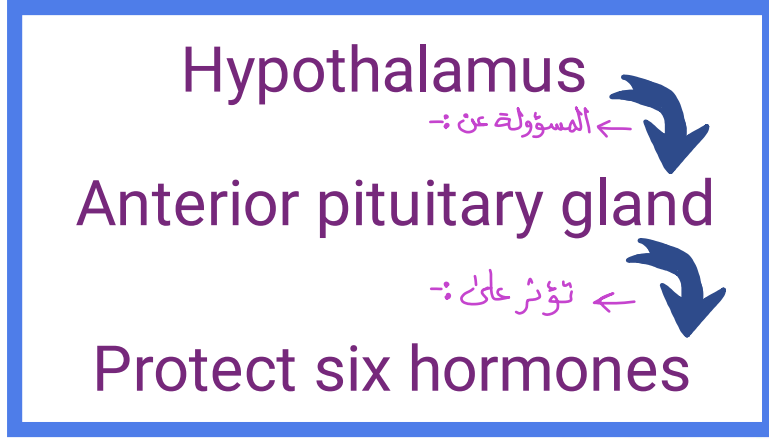
* They are responsible for:

1. Production of female ova.
2. Production of female sex hormones (estrogen and progesterone).

* They vary in size and shape according to age and stage of menstrual cycle.

* In **young adult** → each ovary is a **flattened ovoid, pinkish-grey** in color.

* Ovaries are situated one on each side of uterus in a shallow **depression**, called **ovarian fossa** on the lateral pelvic wall.



←

يقع المبيضان على جانب واحد من الرحم في منخفض ضحل يسمى الحفرة المبيضية على جدار الحوض الجانبي.

* **It has:**

1. **Medial and lateral surfaces.**
2. **Anterior and posterior borders.**
3. **Upper (tubal) and lower (uterine) poles.**

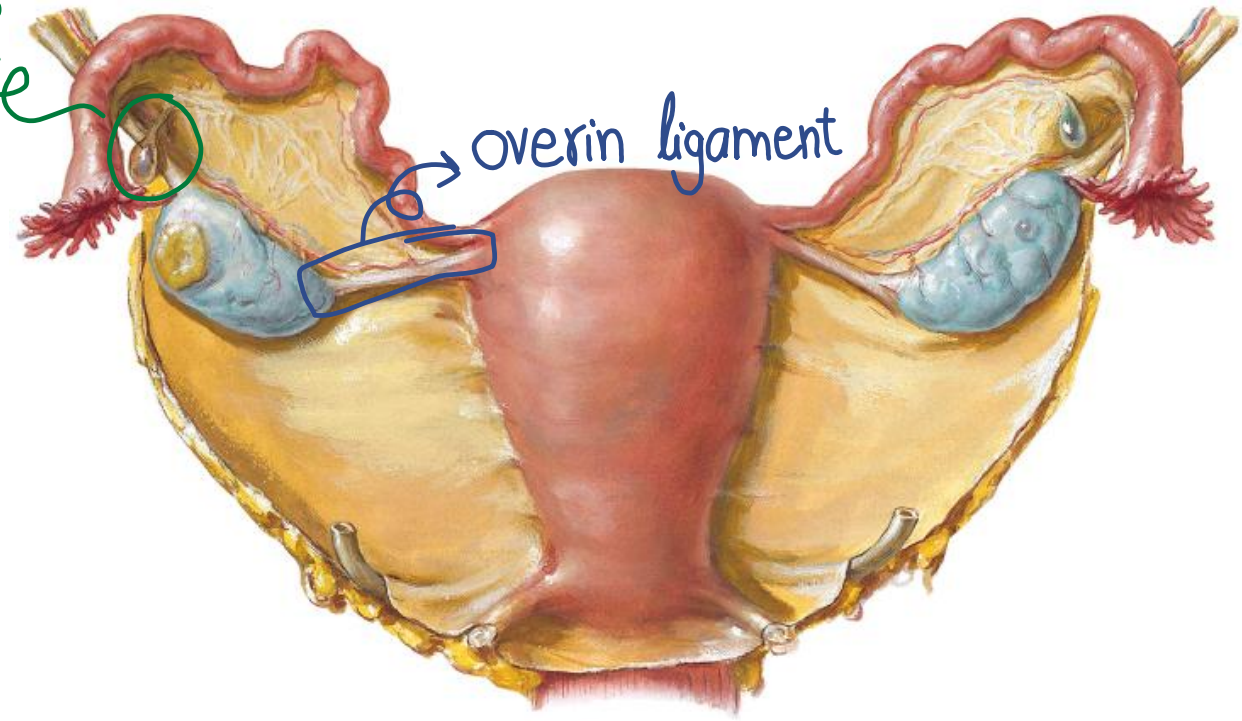
* **The medial surface:** is in contact with coils of intestine and on right side frequently with vermiform appendix.

الرائدة الدودية

* **Its upper (tubal) pole:** is related to the **uterine tube**.

* **Its lower (uterine) pole** → gives attachment to **ovarian ligament** (which is also **attached to uterus**).

قريبة من أول جزء
tube



هم ← حالة الحمل خارج الرحم

Pregnancy out side uterus

Ectopic pregnancy

وده من ضمن الاسباب المتوقعة لما تيجي عندك في

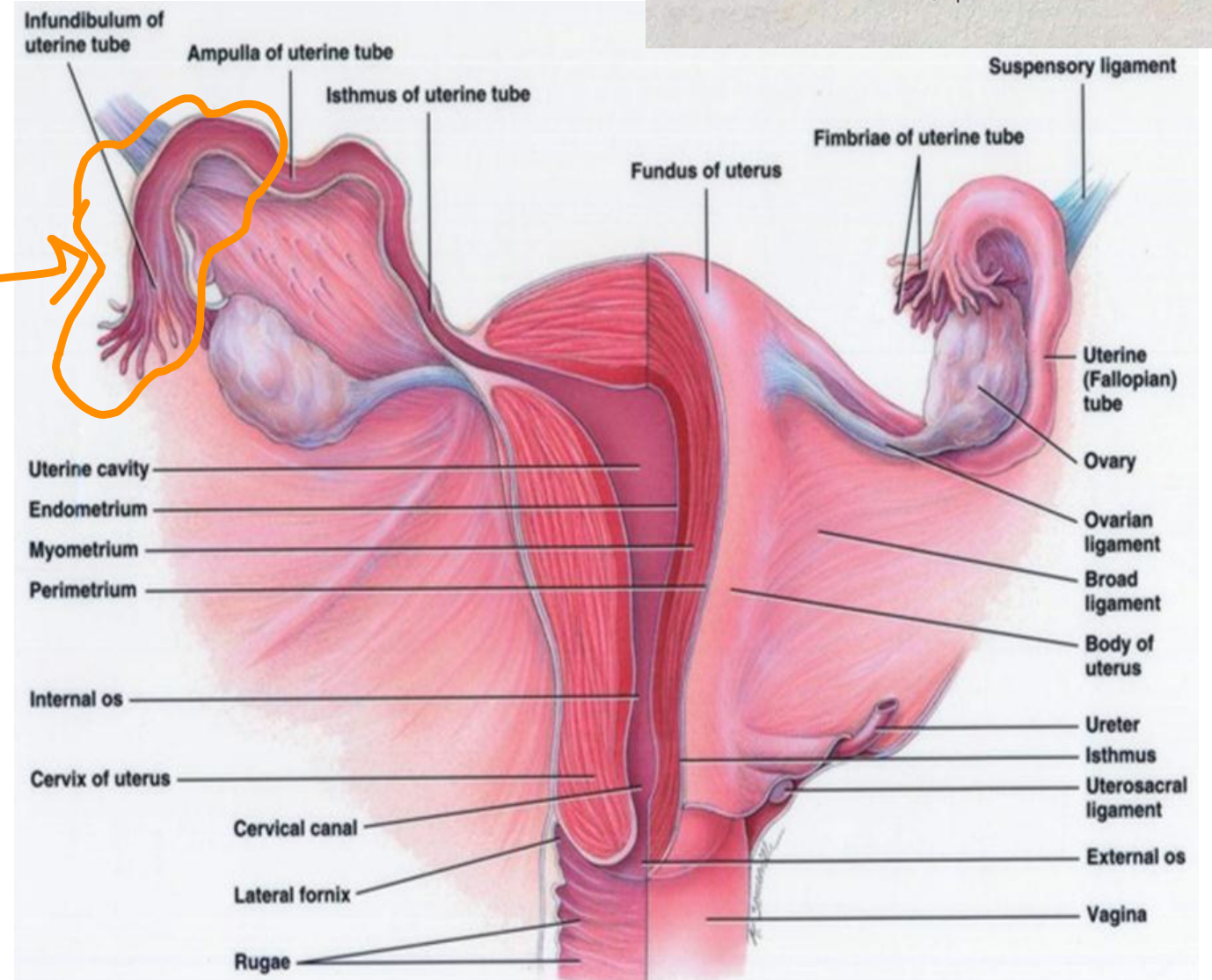
الطوارئ Female, newly married with severe abdominal pain

لازم يتعمل pelviabdominal ultrasound

Uterine (Fallopian) Tubes

اللَّهُمَّ صَلِّ وَسَلِّمْ وَبَارِكْ عَلَى نَبِيِّنَا مُحَمَّدٍ

- * One on each side.
- * Length: 10 cm long.
- * Situated in free upper border of broad ligament of uterus.
- * They transmit ova from ovary to cavity of uterus.
- * The tube is related to tubal pole of ovary.



* مهم جدًا هذا السلايد :-

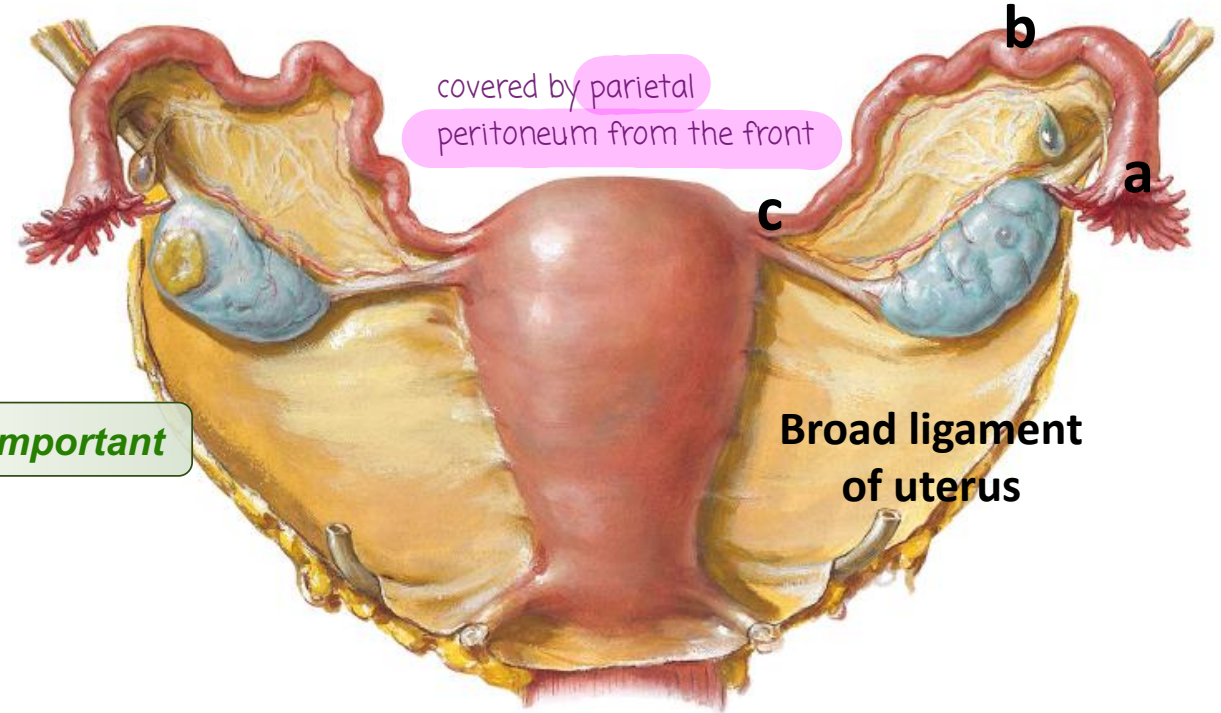
* It is divided into four parts:

a. **Infundibulum:** Is **funnel-shaped lateral end**, the circumference of which has several finger-like processes called **fimbriae**.
كأنها أصابع تحيط بها

b. **Ampula:** Is the **widest and longest portion**, making about 2/3 of the whole length of the uterine tube. In it → **fertilization of ova takes place**.
أوسع مكان
Important

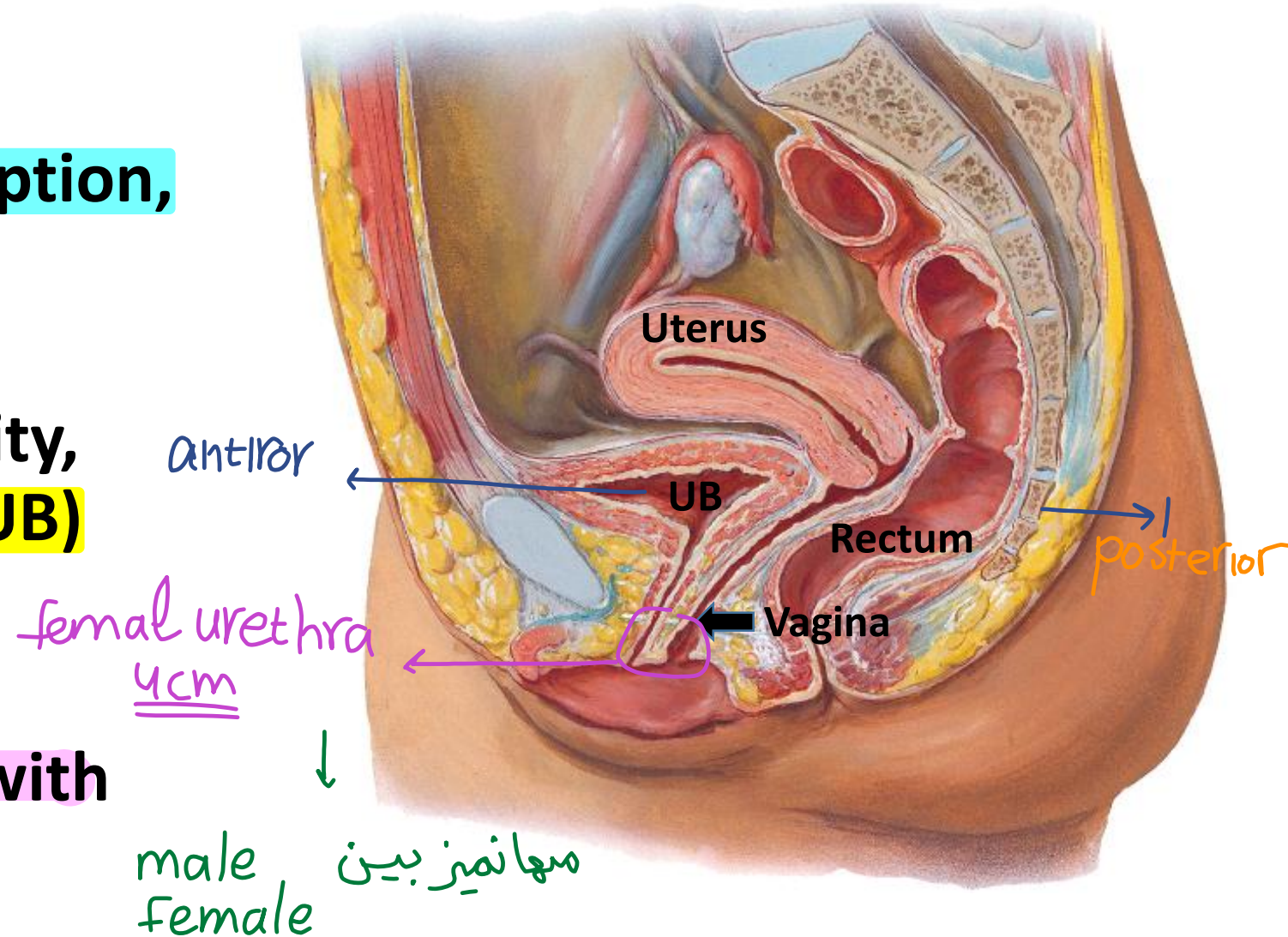
c. **Isthmus:** Is the **narrow, thick-walled medial portion** that joins uterus.
الاصيقة

d. **Uterine Part:** Is the segment of the tube, **which runs through uterine wall**.



Uterus

- * Is a hollow **thick-walled muscular organ**.
- * It serves as a site for **reception, retention and nutrition of fertilized ovum**.
- * It is **situated in pelvic cavity, between urinary bladder (UB) anteriorly, and rectum posteriorly**.
- * Its **cavity communicates with that of vagina**.



* The uterus is formed of two main parts:

A. Body:

* It forms the upper 2/3 of the uterus, including the fundus of uterus and the isthmus.

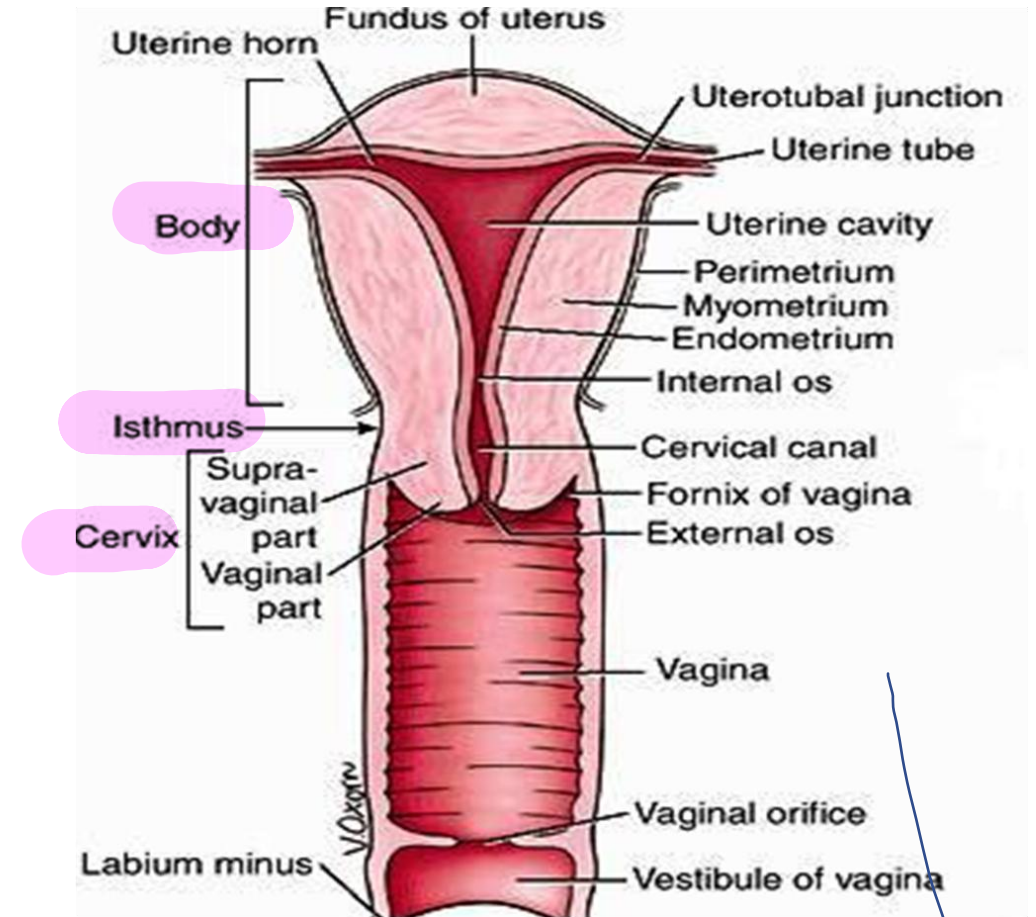
* The fundus is the dome-shaped part of body that lies above the entrance of uterine tubes.

* The isthmus is the lower constricted region of body (about 1 cm) just above the cervix.

* The body of the uterus lies between the two layers of broad ligament and is freely movable.

* The cavity of the body (uterine cavity) is triangular in coronal section.

* It is continuous inferiorly with the cervical canal.

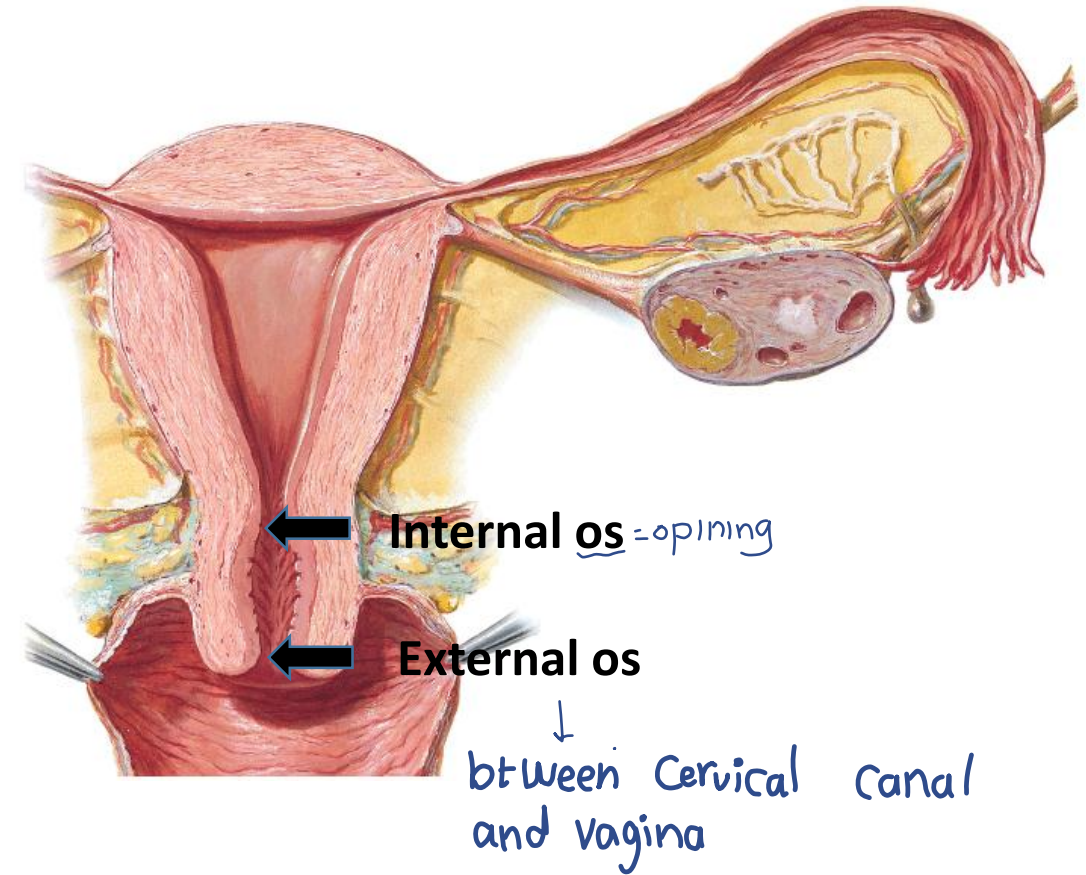


B. Cervix:

* It is the cylindrical narrow inferior part of the uterus that extends from the internal os above to the external os below.

* It has a supravaginal part that extends from the isthmus to the vagina and a vaginal part that protrudes into the vagina and surrounds the external os.

* The cavity of the cervix (cervical canal) is continuous through the internal os with the uterine cavity and through the external os with the vaginal cavity.



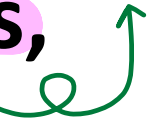
* سؤال الامتحان
The external os
Cervical canal , Vagina

The internal os
Cavity of uterus , cervical canal

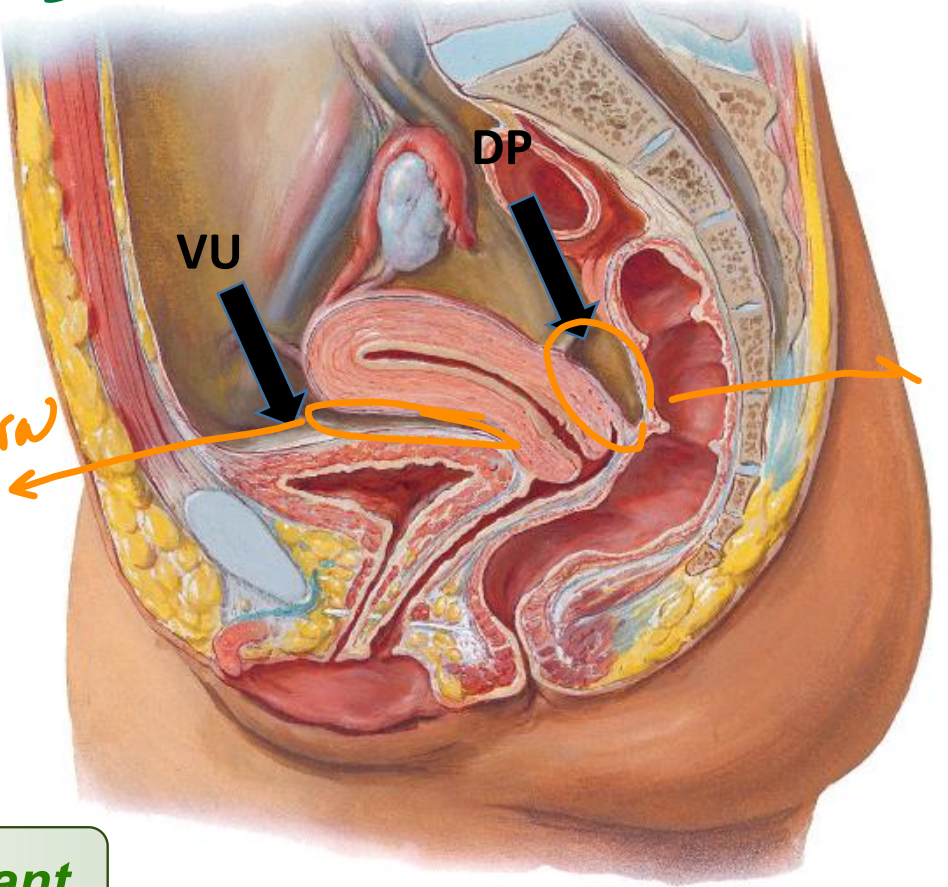
* The peritoneum passes from anterior surface of rectum on to posterior surface of uterus, forming Douglas pouch (DP), and then curves over fundus to reach the anterior surface of the uterus.

* The peritoneum is then reflected forwards on to superior surface of urinary bladder, forming a shallow recess, called vesico-uterine (VU) pouch.

يكون من ←



Supra urinary arch



Important

Douglas abscess
Accumulation of pus in Douglas pouch

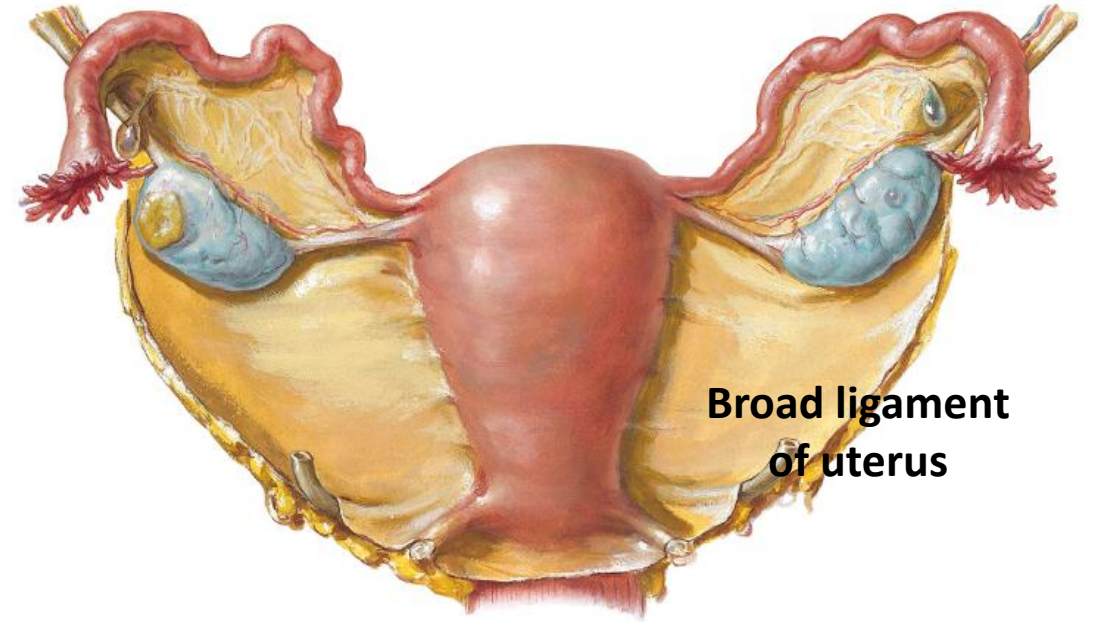
حالة مرضية تصيب المرأة المترجحة ومن أعراضها ، ارتفاع درجة الحرارة والألم الشديد ، ونكتشفه بالسونار.

* Broad ligament of Uterus:

* The peritoneum covers the anterior and the posterior surfaces of the uterus.

* On each side → the two peritoneal layers are expanded laterally from the lateral borders of the uterus to the lateral pelvic walls to form the broad ligament.

* Superiorly → the two layers are continuous and form the **upper free border of the broad ligament**. This border contains the uterine tubes.



Broad ligament of uterus

ده اللي عازيين نعرفه
ماسية فيه

Fallopian tube

Vagina

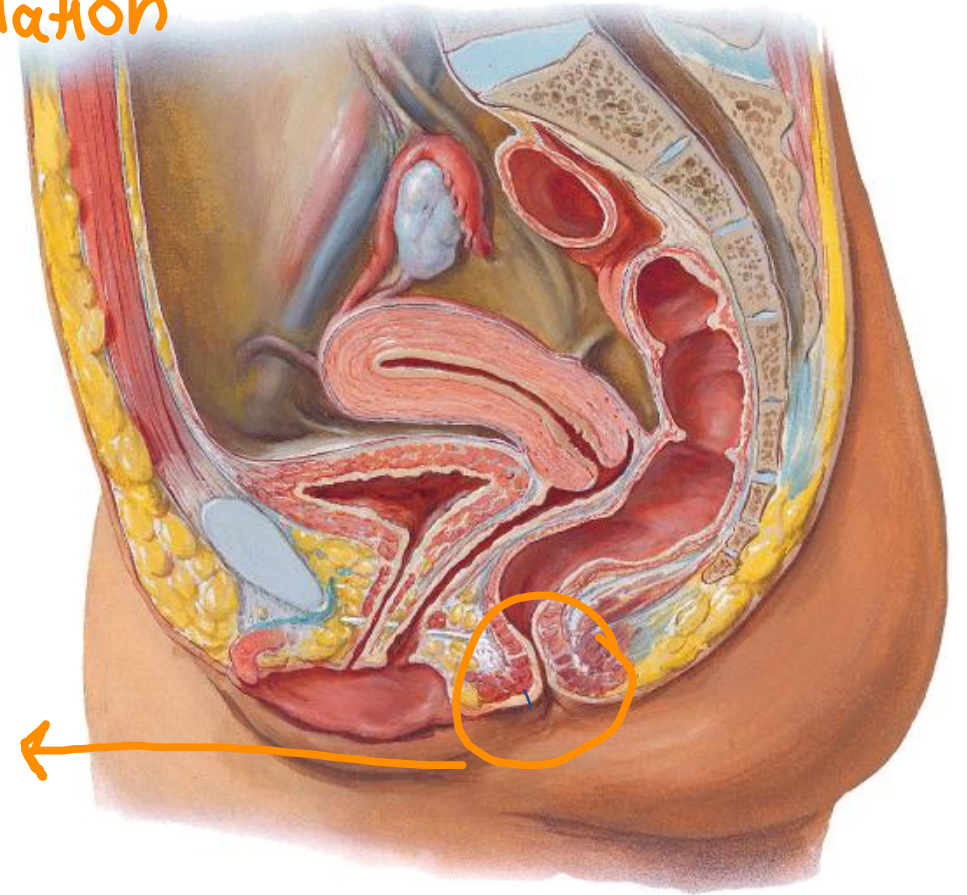
- * Length: about 8 cm long.
- * Situated between the urinary bladder and the urethra anteriorly and the rectum posteriorly.
- * It extends downwards and forwards from the cervix to the vulva, where it opens into the vestibule.
- * Its anterior wall is short, pierced superiorly by cervix, which projects downwards and backwards into the vagina. Its posterior wall is longer.

← The relation

↪ and renal canal

↪ ≈ 7.5 cm

↪ ≈ 9 cm



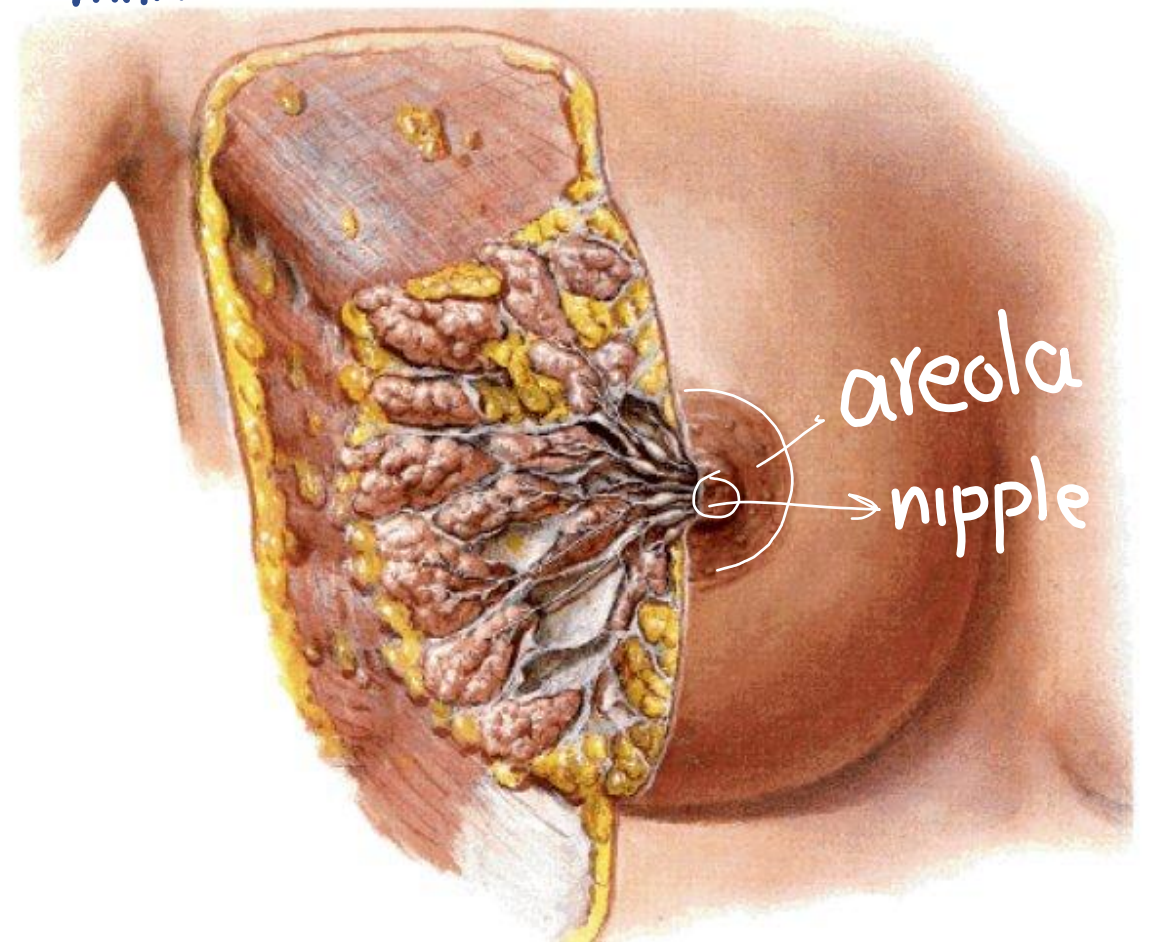
Breast or Mammary Gland

* The breasts are two **modified sweat glands** that **produce milk instead of sweat.**

* Each breast has one **pigmented projection** called **nipple**, which is surrounded by a **colored area of skin** termed **areola.**

* The breast tissue consists of a system of ducts embedded in connective tissue.

درنة المادة التي نقرها ليست
sweat ,
milk وانها



extention : (2-6 ribs)

* At puberty in female, mammary glands gradually enlarge and assume their hemispherical shape under **the** influence of pituitary, ovarian, and other hormones.

* The ducts elongate, but the increase in the size of the gland is mainly due to deposition of fat.

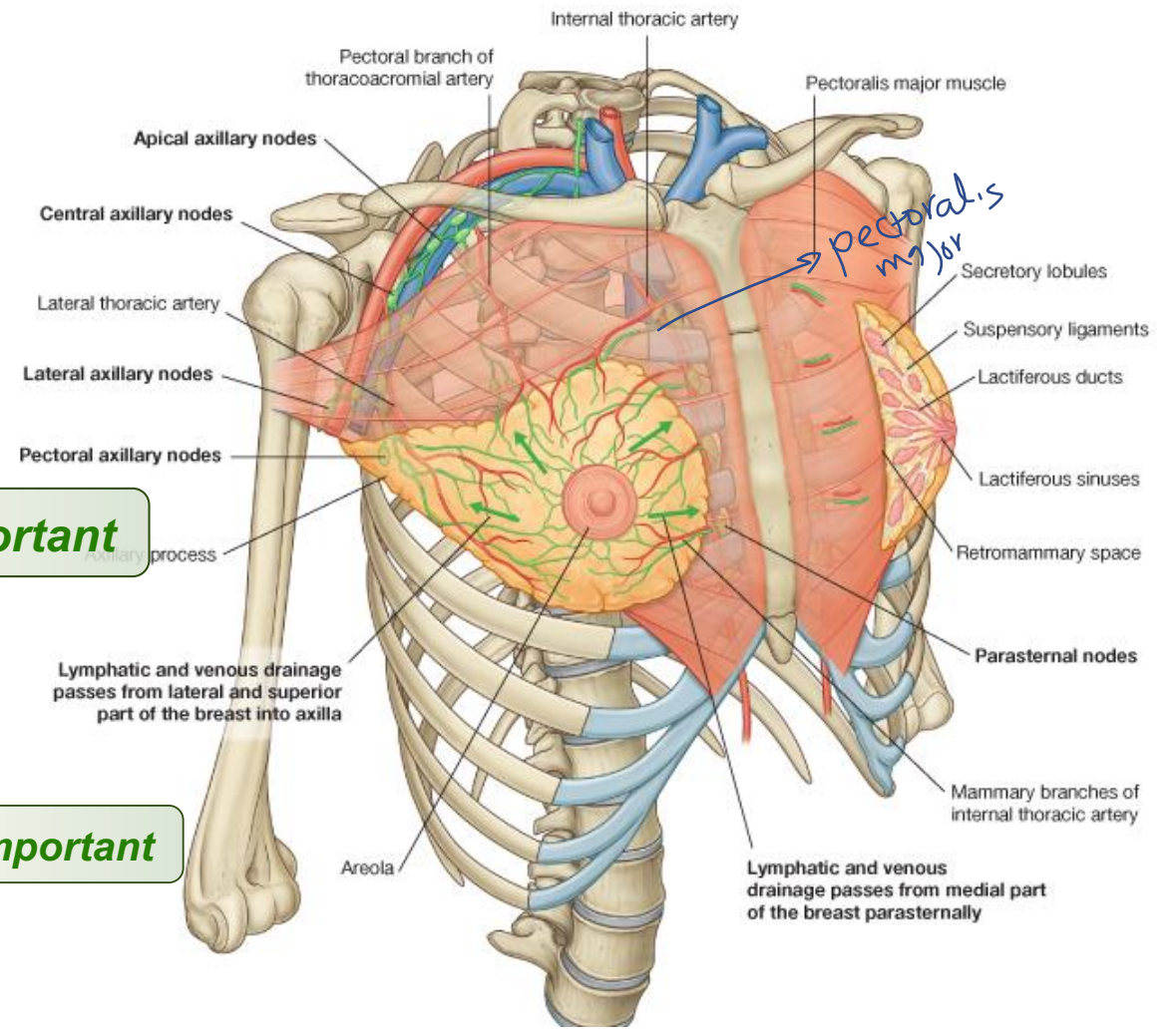
* The deep surface (base) overlies **pectoralis major**, and to a less degree, **serratus anterior** and **external oblique** muscles. *في بعض الأحيان مايلع*

* The base **extends vertically from 2nd - 6th rib**, and **horizontally from sternal border to mid-axillary line**.

Important

Important

intercostal nerve.



* Each breast consists of 15 – 20 independent units called breast lobes separated by fibrous septa.

Each breast divided to many lobes

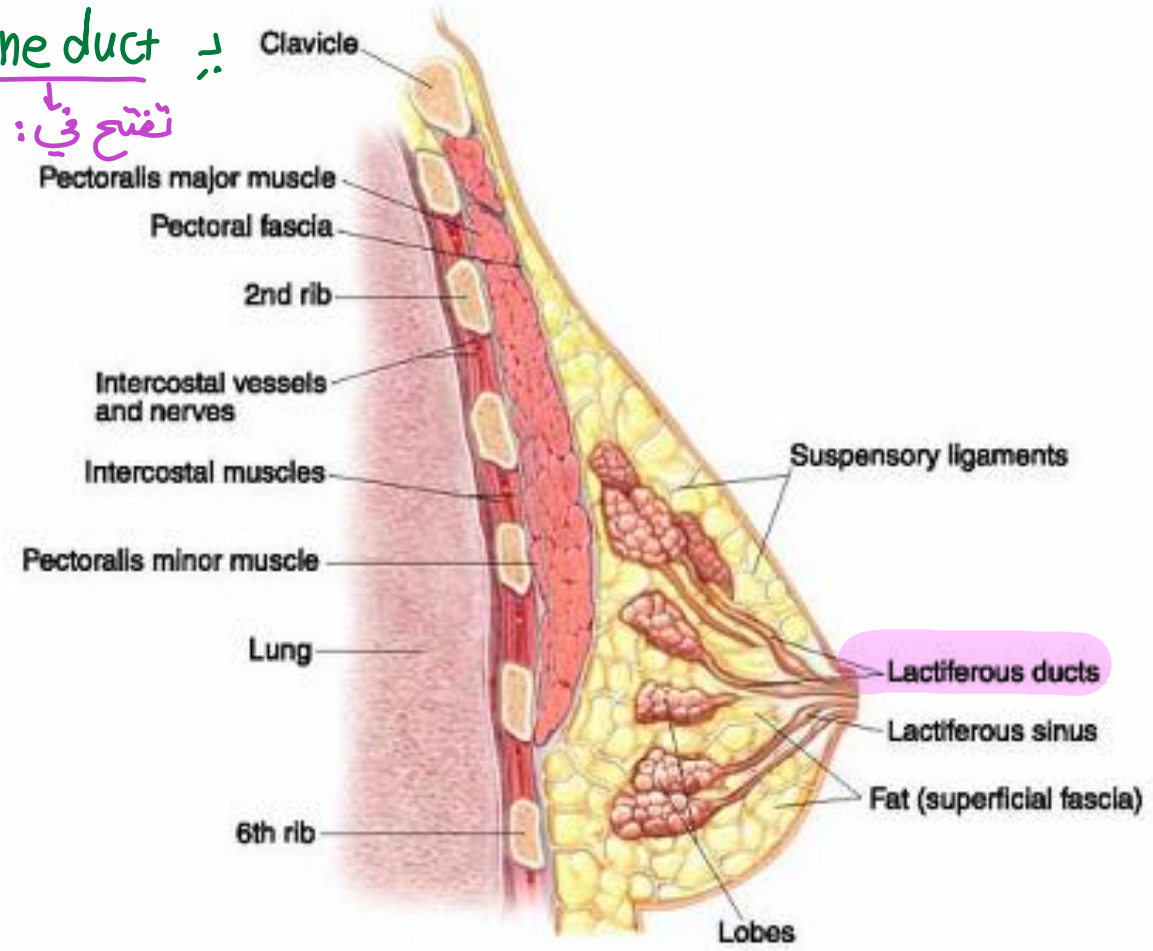
كل لobe فيه مجموعة ducts ← كلهن يفتوا called one duct

lactiferous duct nipple تفتح في:

* A lobe consists of several ducts that empty into one terminal distal duct, the lactiferous duct, which opens onto the nipple.

* Immediately before emerging at the nipple, the lactiferous duct forms a dilatation called lactiferous sinus.

→ المكان الذي يجتمع فيه milk قبل ما تفتح lactiferous duct في (nipple)



تَقْلِبْهُ مِنْ الشُّقْرِ وَيَضْرِبُ
الشُّقْرَ السَّعَادَةَ
الفَاطِمَةُ
=

Dines