

Female Reproductive System

Female Genital System

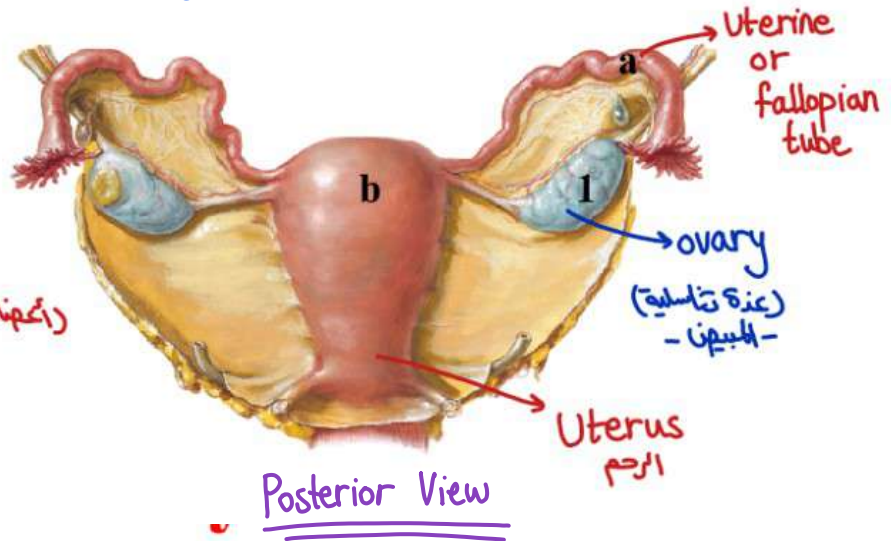
Done by: Rama Alwraikat

1. Ovaries.
2. Genital tract:
 - a. Uterine tubes.
 - b. Uterus.
 - c. Vagina.

3. External genitalia. (أعضاء تناسلية خارجية)

4. Breast.

↳ responsible for feeding the baby



* The ovaries are equivalent to the testes in males.

* They are responsible for:

1. Production of female ova.

بويضات
ovum

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

↳ responsible for secondary sexual characteristics of females

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

الدورة الشهرية

enlargement of Breast

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

↳ just posteriorly

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

* Sex Glands (Gondas)

↳ Ovaries → females
↳ Testes → Males



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* مع التقدم في العمر يتحول لون ovary من pink إلى Grey لأنهم الإبانة تكون fibrous tissue يغير اللون

* كل شهر يتم إنتاج بويضة من ovary ويتم التبادل بينهم يعني لو الشهر هادتم إنتاج بويضة من المبيض اليمين الشهر الجاي من المبيض الشمال.

* It has:
 ↗ 2 Borders
 ↘ 2 Poles
 ↘ 2 Surfaces

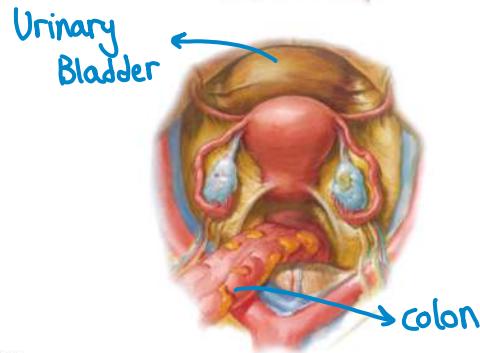
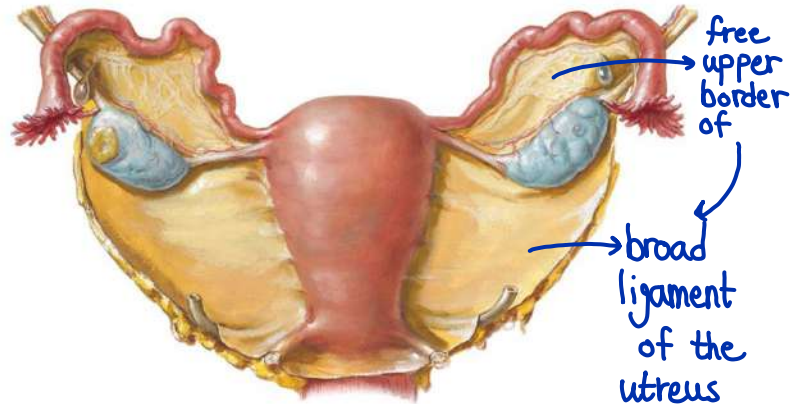
1. Medial and lateral surfaces.
2. Anterior and posterior borders.
3. Upper (tubal) and lower (uterine) poles.

* **The medial surface:** is in contact with coils of intestine and on right side frequently with vermiform appendix.
 ← لجانف
 → الجهات أو أقطاب
 → الأمعاء الدقيقة
 → الديدانية

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

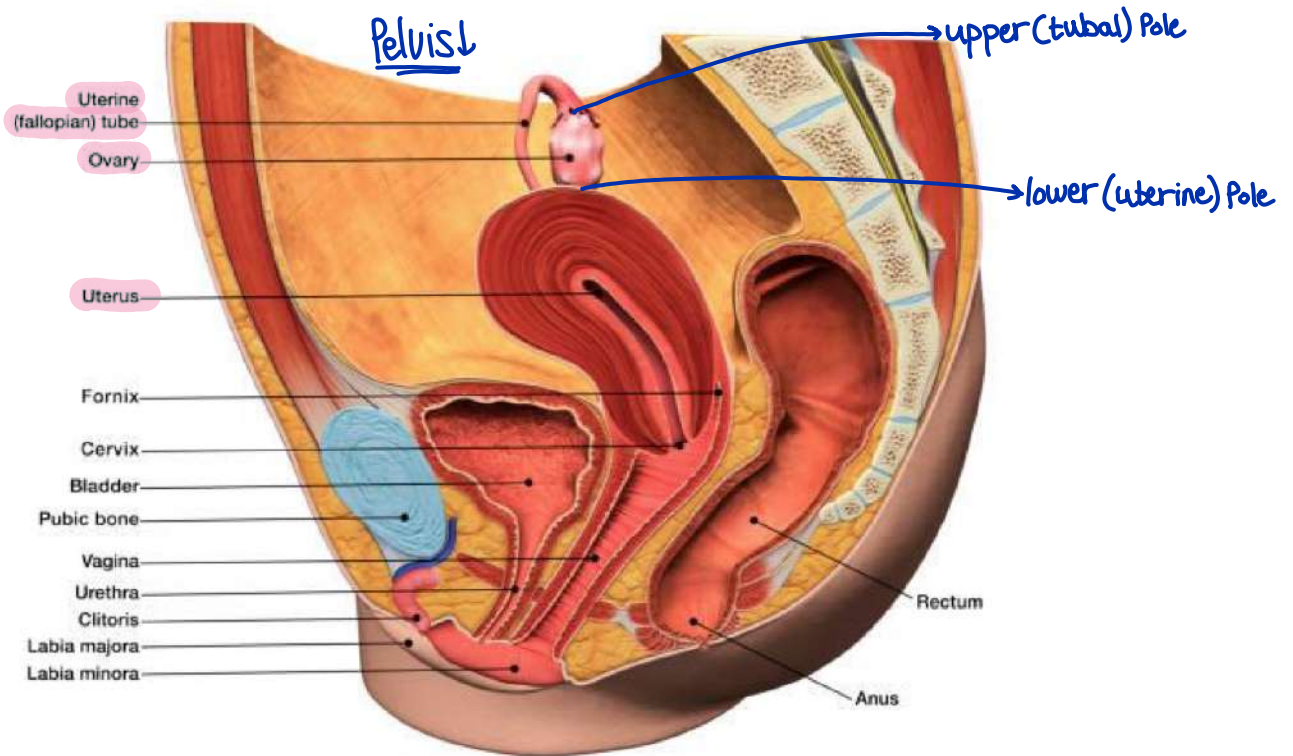
* **Its lower (uterine) pole** → gives attachment to ovarian ligament (which is also attached to uterus).

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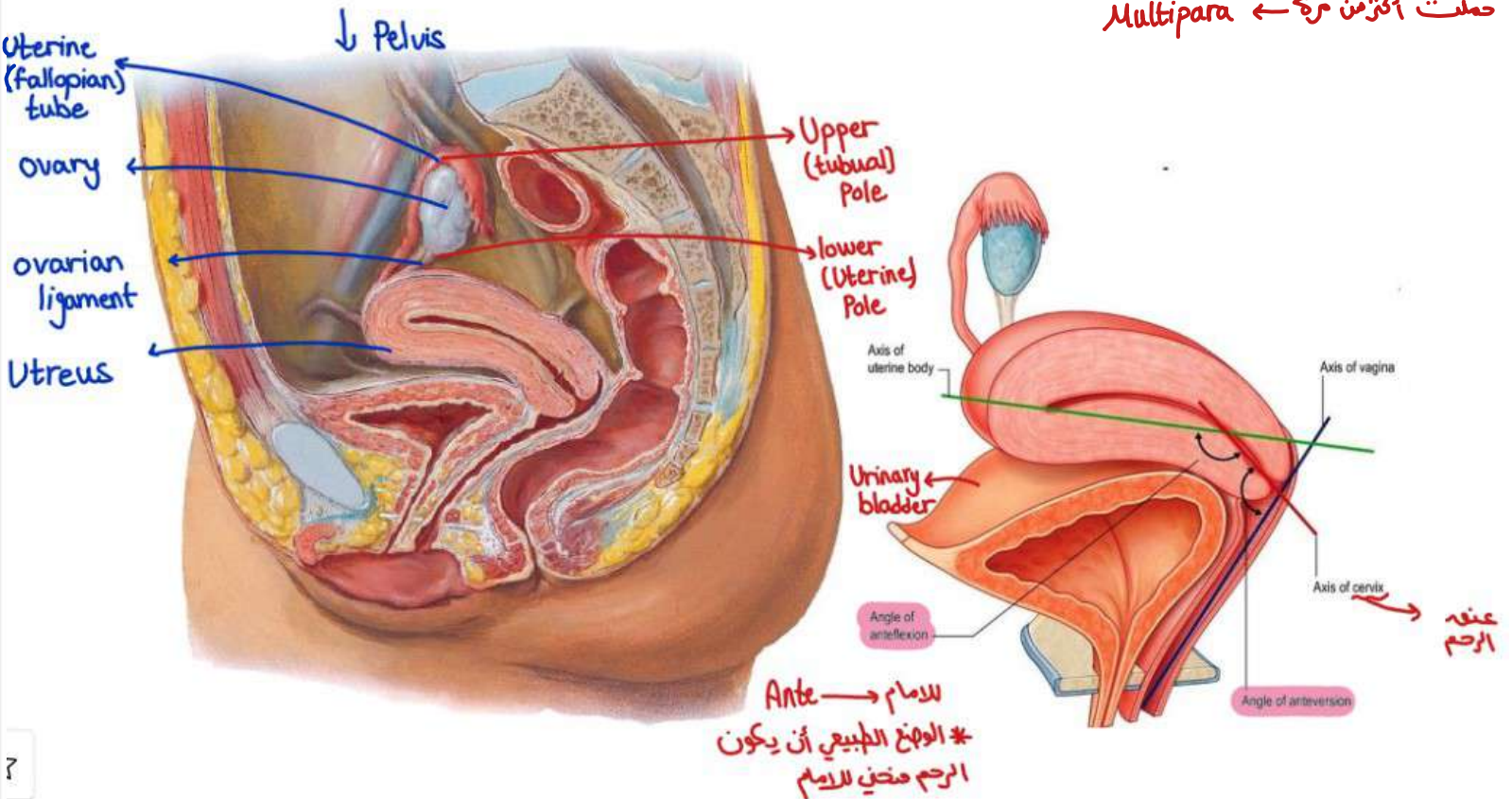
Superior View

بهر من خلاصه
 Blood vessels & Nerves
 التي تتغذى الرحم



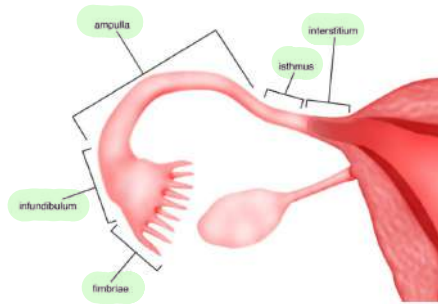
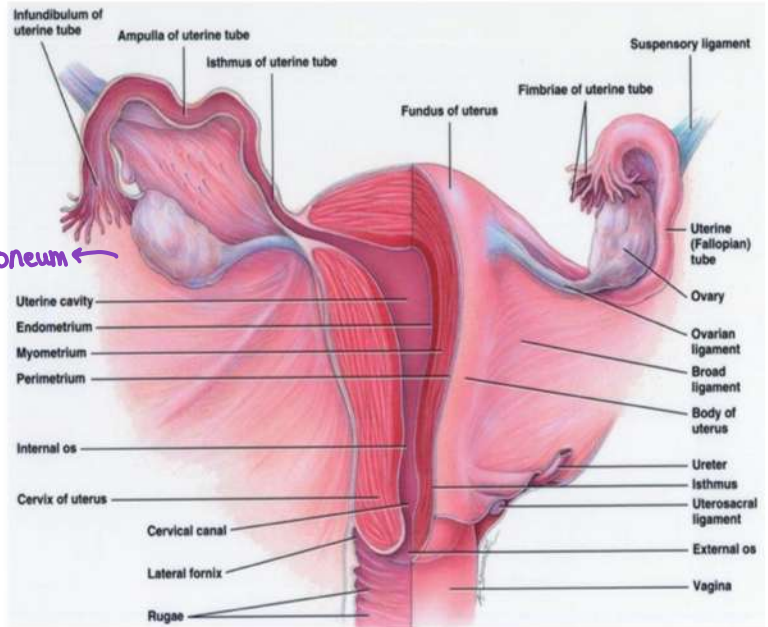
Sagittal Section

* موقع الرحم يكون vertical عند اللقح التي لم تحصل به ← Unipara
 * موقع الرحم يكون horizontal عند ثلاث اللقح حصلت أكثر من مرة ← Multipara



Uterine (Fallopian) Tubes → 2 Tubes

- * 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.



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* المنقبة الخارجية peritoneum تكون عندلاني مفتوحة تماماً عن طريق external environment أن تدخل من pathogens وهذا يسبب uterine tube to peritoneum

وهذا يسبب التهاب peritonitis على عكس الذئب الذي يكون عنده peritoneum completely closed

* It is divided into four parts: فقان

a. Infundibulum: Is funnel-shaped lateral end, the circumference of which has several finger-like processes called fimbriae. (fimbriae فنجد)

b. Ampulla: 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. س.ب.

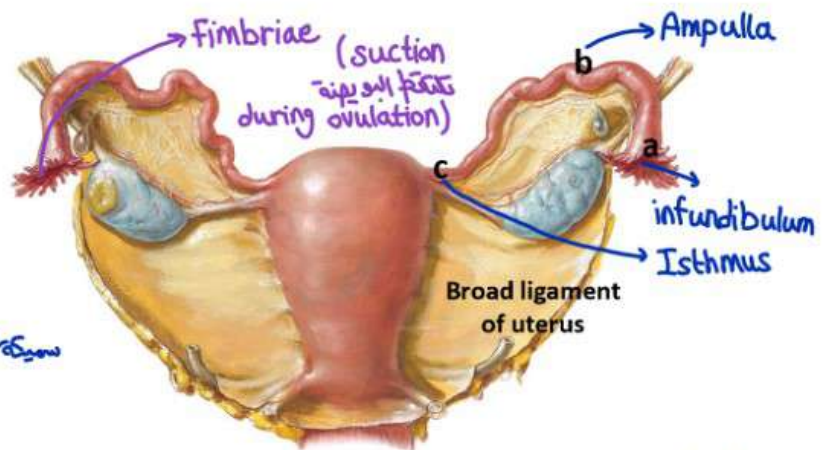
c. Isthmus: Is the narrow, thick-walled medial portion that joins uterus. س.ب.ب.

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

Interstitial Part or Intramural Part

Ectopic Pregnancy

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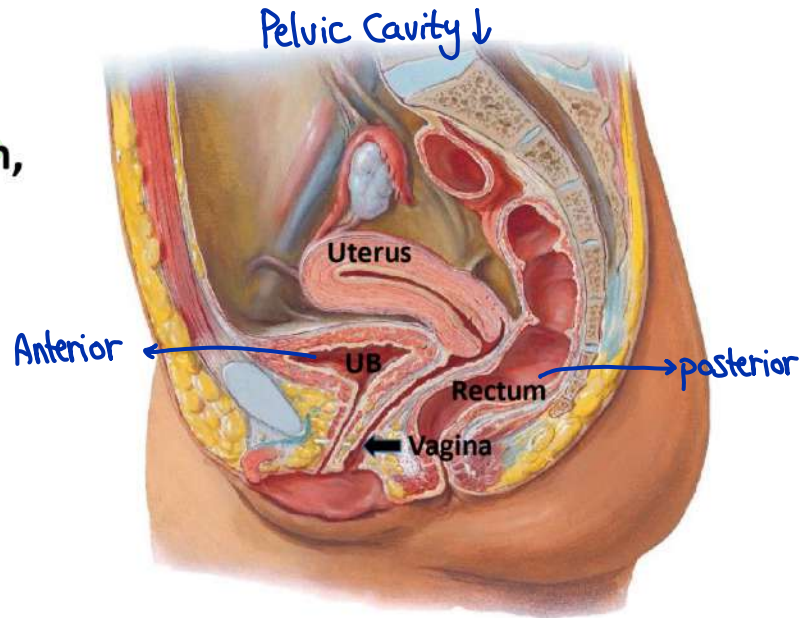


* إذا تمت عملية fertilization خارج Ampulla تقع في peritoneum وهذا يسبب حمل خارج الرحم * وإذا تمت في Uterus تسبب الإجهاض Abortion

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.

حفظ



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* يتكون من 3 طبقات

perimetrium	←	الغشائية الخارجية
myometrium	←	الجزء العضلي
endometrium	←	البطانة الداخلية

* وزن الرحم من المراهقين الحمل = 90 gram
من المراهقين الحمل = 1 kg ← يسمى له Hypertrophy (تضخم)

*** 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.

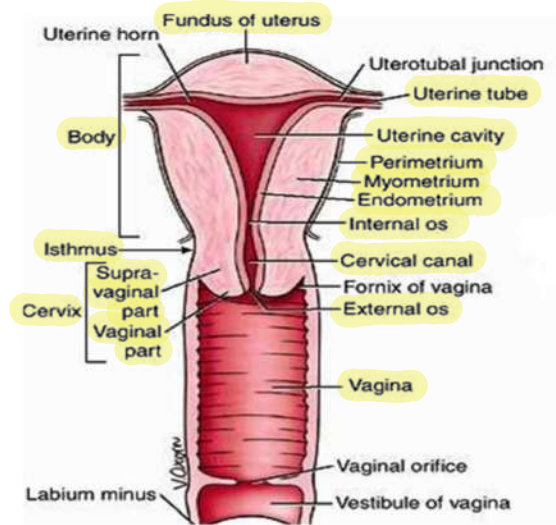
* The fundus is the dome-shaped part of body that lies above the entrance of uterine tubes.

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



Coronal Section

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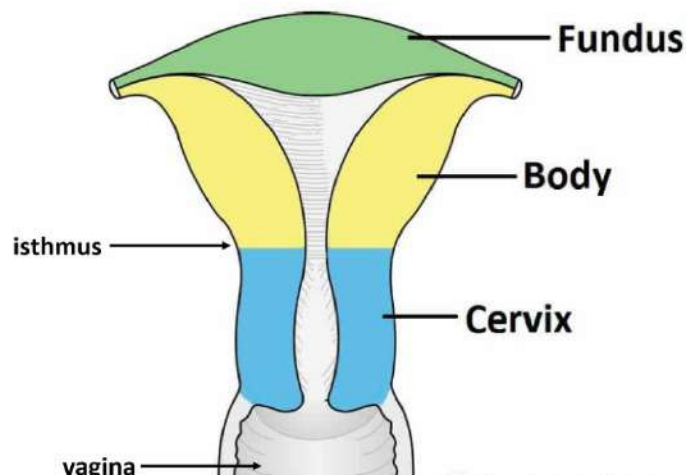
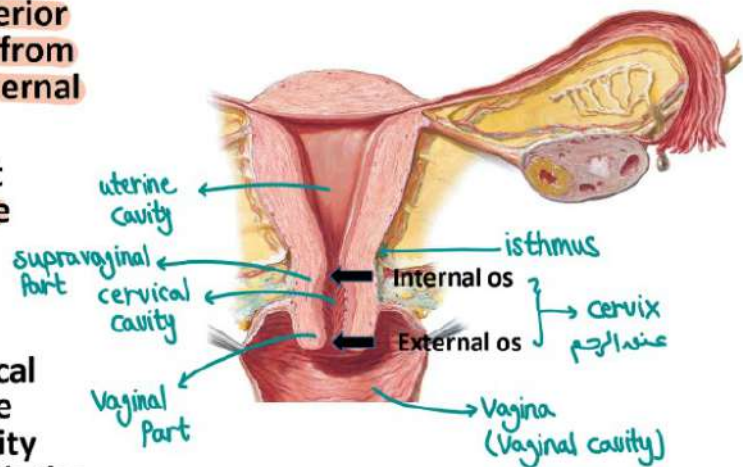
B. Cervix:

→ lower 1/3 of the uterus
اسطواني

* 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.

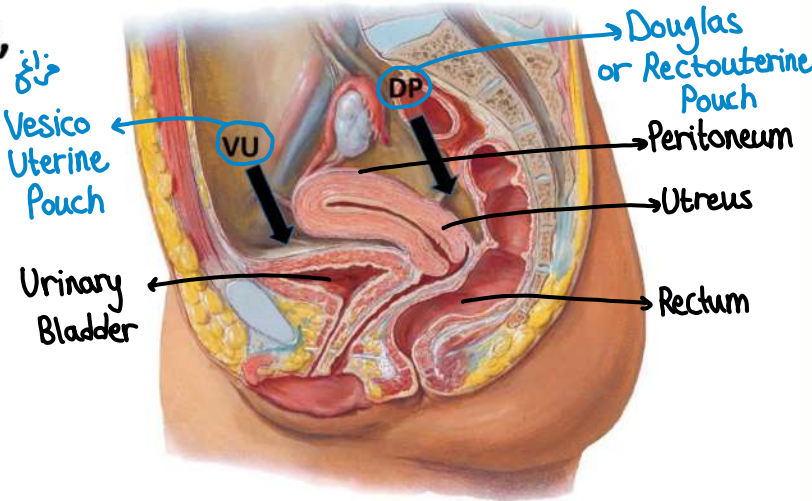


بيز

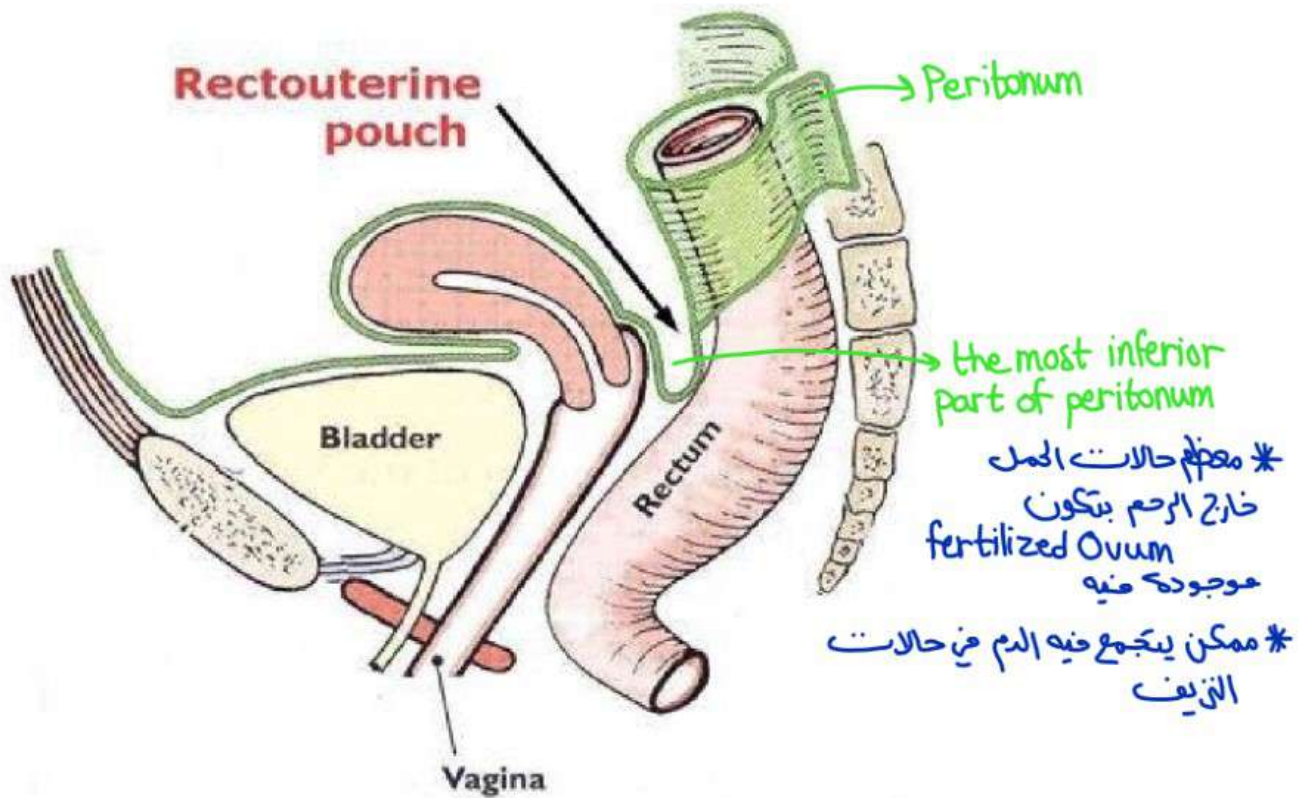
عنق الرحم

* 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**.



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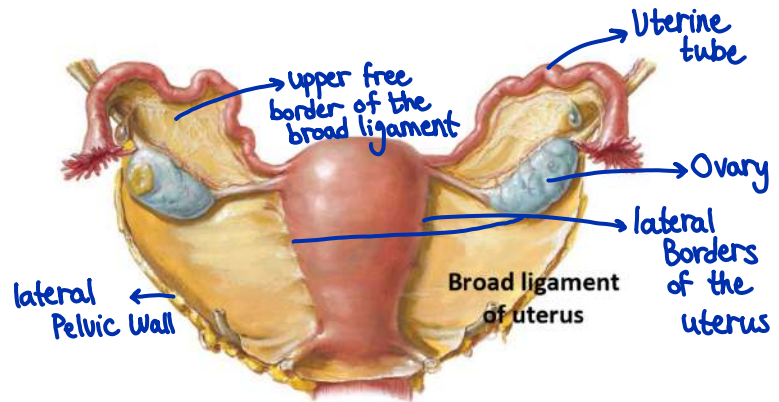


*** Broad ligament of Uterus:**

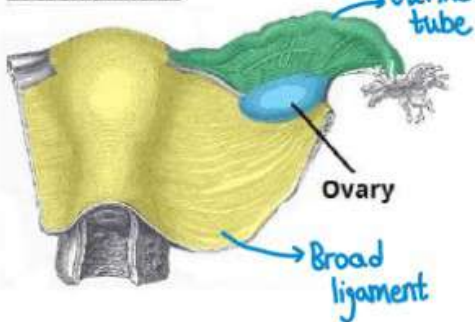
* The peritoneum covers the anterior and the posterior surfaces of the uterus.

* 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.

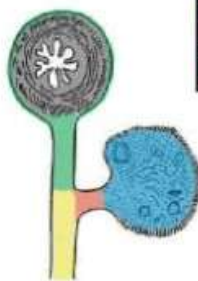
* Superiorly → the two layers are continuous and form the upper free border of the broad ligament. This border contains the uterine tubes.



Coronal Plane:

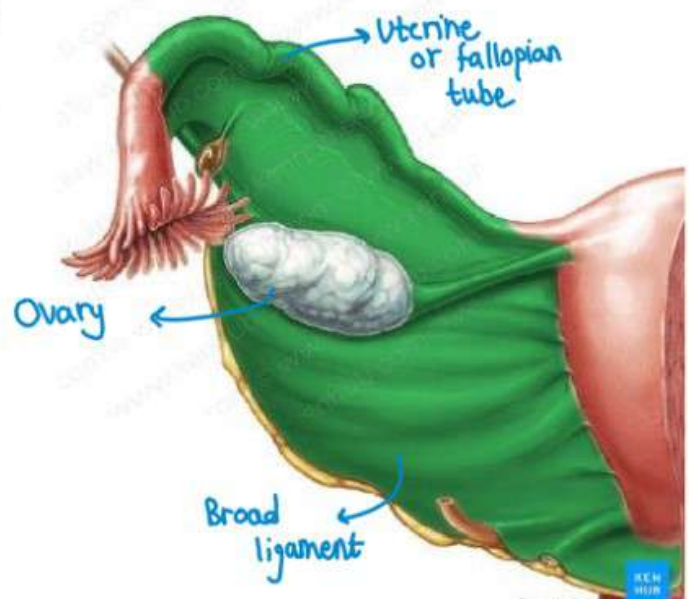


Sagittal Plane:



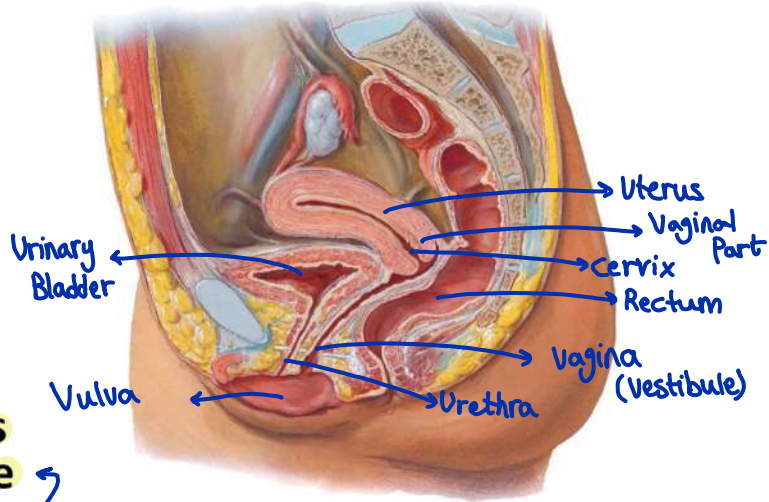
■	Mesometrium
■	Mesosalpinx
■	Mesovarium

الأسواق
غير معلقة



Vagina

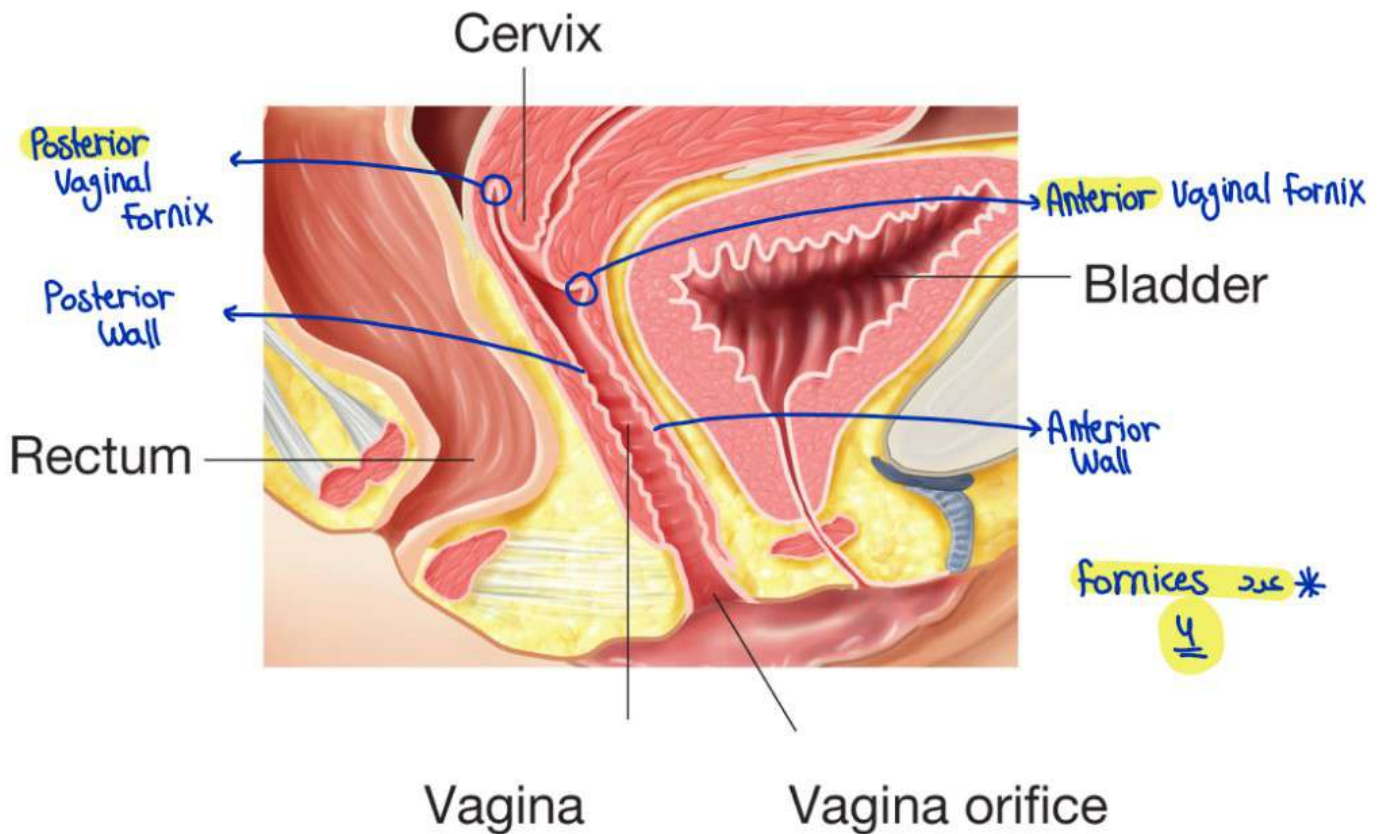
- * Length: about 8 cm long.
- * Situated between the urinary bladder and the urethra anteriorly and the rectum posteriorly.
- * It extends downwards and forwards from the cervix to the vulva, where it opens into the vestibule.
- * Its anterior wall is short, pierced superiorly by cervix, which projects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



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متقوب
why?

* اللون يختلف من إنسان لإنسان
وحس ethnicity
Black females
بنكون Vagina عندهم أطول من
White females

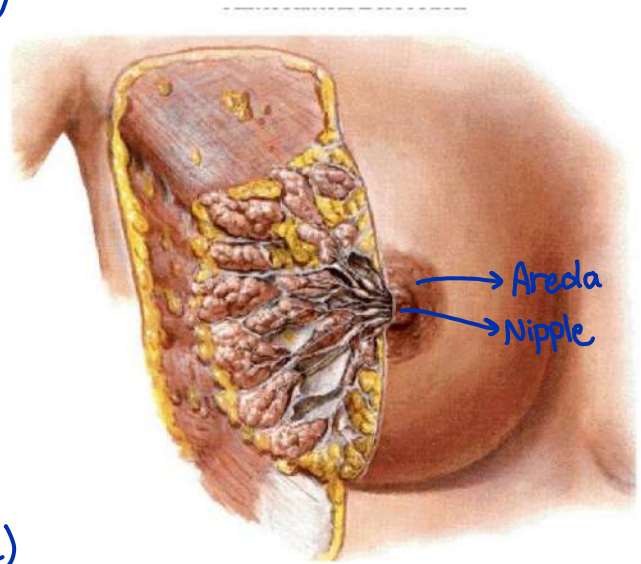


B. Breast or Mammary Gland

* The breasts are two modified ^{why?} sweat glands that produce milk instead of sweat.

^{فوق} * 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. (fat - adipose tissue)



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x Nipple & Areola become darker after the first pregnancy & never come to their original color again

البوغ

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

نصف كروي

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

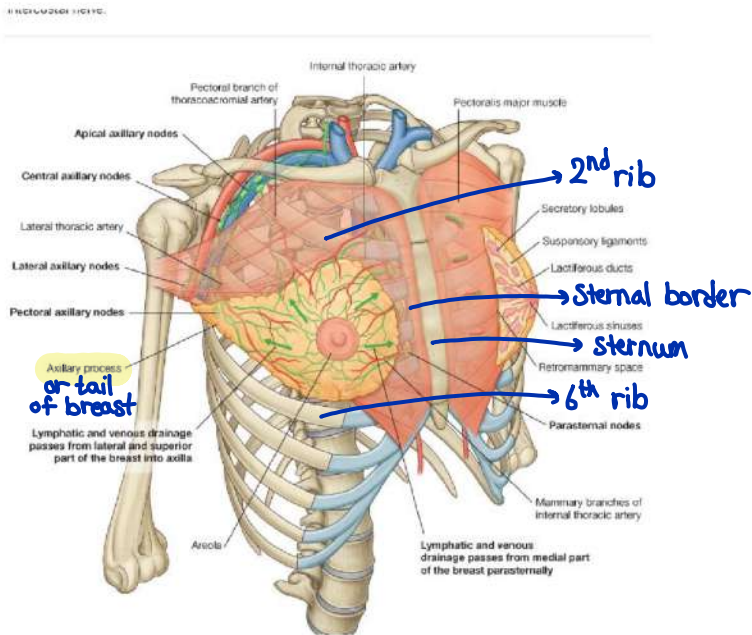
ترسب

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

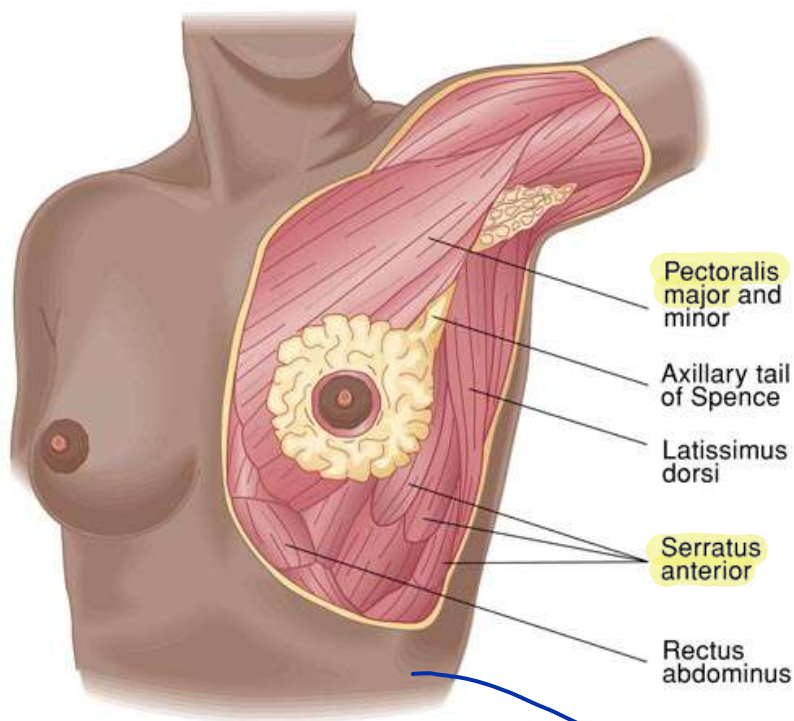
* The base extends vertically from 2nd - 6th rib, and horizontally from sternal border to mid-axillary line.

خط نصف الإبط

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Breast Cancer *
 يعلق من الإبط
 Axillary lymph nodes
 وإذا تقدمت الحالة جعلوا
 إستئصال Mastectomy
 لئلا من إستئصال منطقة
 Axillary tail of Breast



External Oblique

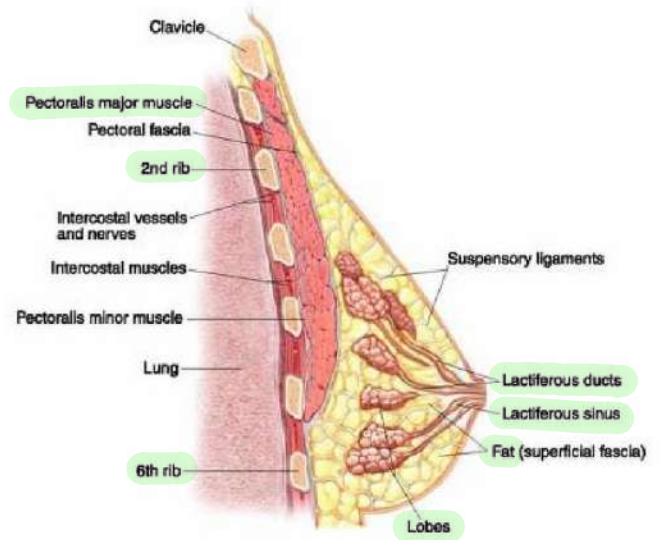


* Each breast consists of 15 – 20 independent units called breast lobes separated by fibrous septa. *Connective tissue*

* 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. *توسع*

**Not a single opening is present in Nipple but Multiple openings.*



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