

Female Reproductive system

Reproductive Block

Color Index

Main Text

Male's Slides

Female's Slides

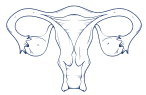
Important

Doctor's Notes

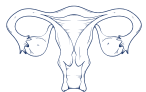
Extra Info

[The Editing File](#) 

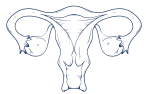
Objectives



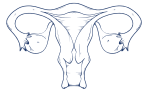
List the organs of female reproductive system.



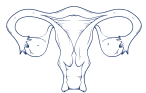
Describe the **pelvic peritoneum** in female.



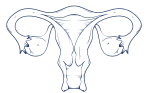
Describe the **position** and **relations** of the **ovaries**.



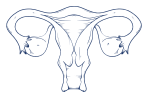
List the **parts** of the **uterine tube**.



Describe the anatomy of **uterus** regarding:
subdivisions, cavity, relations, ligaments & main support.



Describe the anatomy of **vagina** regarding:
structure, extent, length & relations.



Describe the **supply** (arteries, veins, lymph, nerves) of female reproductive system.

This lecture was presented by :

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★ Special Thanks to Saleh Aljanah and Abdulaziz Alqarni!



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Pelvic Peritoneum in Female

Pelvic Peritoneum

Rectouterine (Douglas) Pouch

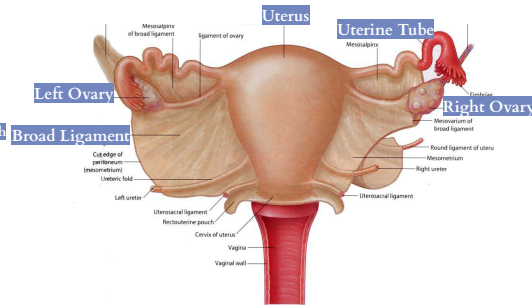
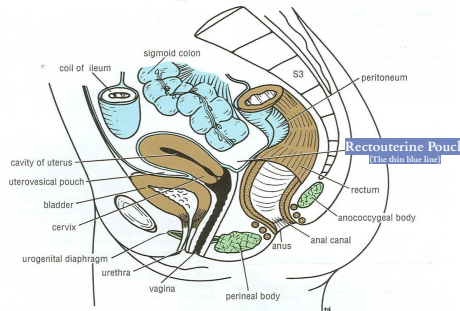
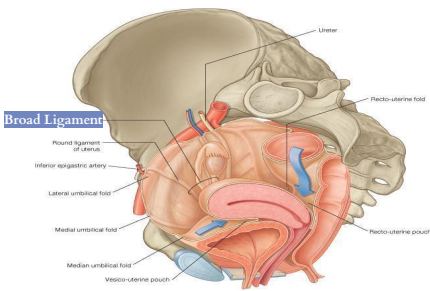
Reflection of peritoneum from rectum to upper part of posterior surface of vagina

Uterovesical (Vesicouterine) Pouch

Reflection of peritoneum from uterus to upper surface of urinary bladder

Broad Ligament of Uterus

Extension of peritoneum from lateral wall of uterus to lateral wall of pelvis, encloses the uterine tubes



The Ovaries

Primary sex organs in female.

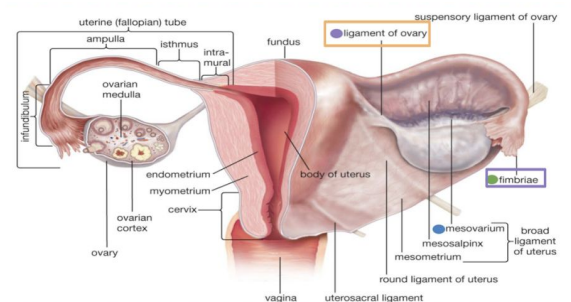
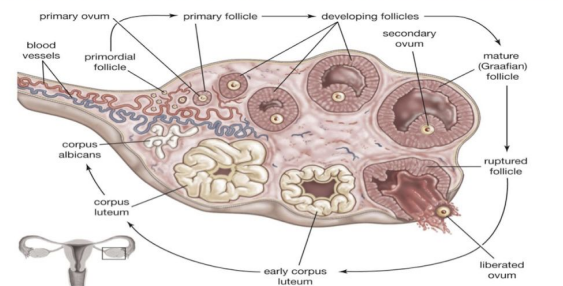
It is an almond-shaped organ.

It is attached to the back of the broad ligament by a peritoneal fold (**mesovarium**).

Function:

- 1- Production of female germ cells.
- 2- Secretion of female sex hormones.

Its **medial** end is attached to the uterus by the **ligament of the ovary**.
Its **lateral** end is related to the **fimbriae of the uterine tube**.



The Uterine (Fallopian) Tubes

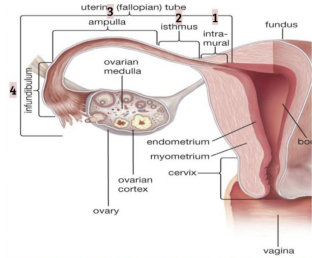
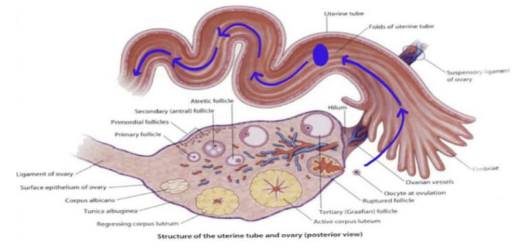
It is 10 cm long.

It is enclosed in the broad ligament of uterus.

Function:

- 1- Site of fertilization.
- 2- Transport fertilized ovum into the uterus.

Divided into:



1 Intramural part

Opening into the uterine wall

2 Isthmus

Narrowest part

3 Ampulla

Widest part (site of fertilization)

4 Infundibulum

Funnel-shaped end, has finger-like processes (fimbriae), related to ovary.

The Uterus

A hollow, Pear-Shaped (🍷) muscular organ
Function: **Site of Implantation**

Fundus

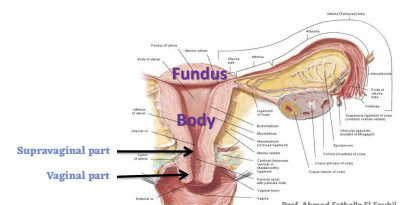
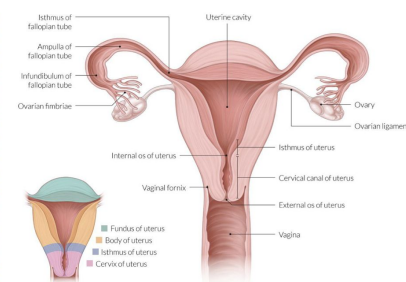
- ➔ No cavity.
- ➔ The part of uterus above the level of the uterine tubes.

Body

- ➔ Cavity is triangular.
- ➔ The part of uterus from the level of uterine tube to the level of the isthmus of uterus.

Cervix

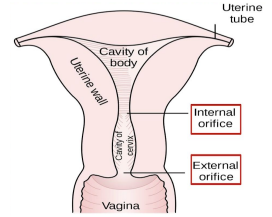
- ➔ Cavity (cervical canal) is: fusiform, divided into **supravaginal part** and **vaginal part**
- ➔ The part of uterus below the level of the isthmus of the uterus.



The Uterus: Cervical Canal

Internal OS: Opening between cavity of body of uterus & cavity of cervix (cervical canal)

External OS: Opening between cervical canal & cavity of vagina.



Nulliparous

- In a **nulliparous** woman: External os appears **circular**
Woman who didn't give birth

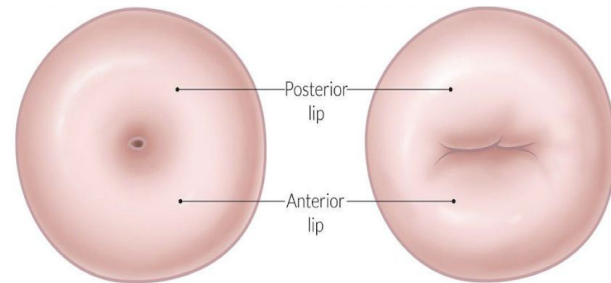
Multiparous

- In a **multiparous** woman: External os appears as a **transverse slit** with an anterior and a posterior lip
Woman who gave birth

#441:

Latin lesson!

- Null- = no/none
 - Multi- = you're smart enough for this one ;)
 - Parous = to bear (a child), give birth
- So nulliparous = no births,
and multiparous = one or more births.



Relations of the Uterus

Fundus, Body, Supravaginal Part of Cervix:

Anterior:

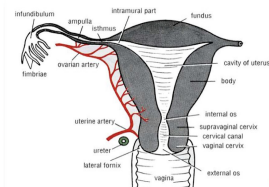
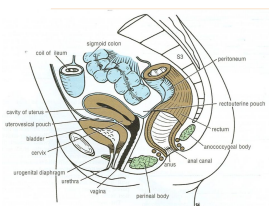
Superior surface of urinary bladder

Posterior:

Sigmoid colon

Lateral:

Uterine artery



Vaginal Part of Cervix (Surrounded by Vaginal Fornices):

Anterior:

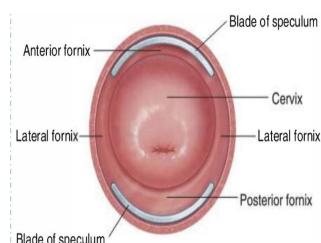
Anterior fornix of vagina

Posterior:

Posterior fornix of vagina

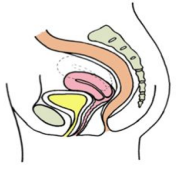

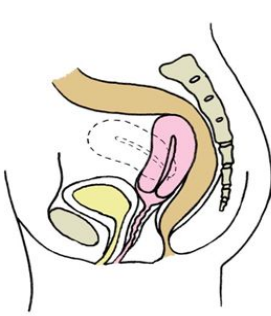
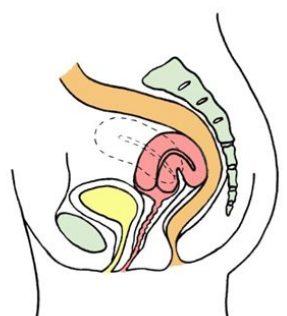


Lateral:

Lateral fornices of vagina



The Uterus

Positions of the Uterus

Anteverted	Anteflexed	Retroverted	Retroflexed
Long axis of whole uterus is bent forward on long axis of vagina	Long axis of body of uterus is bent forward on long axis of cervix	Fundus & body of uterus are bent backward on the vagina and lie in rectouterine pouch	Long axis of body of uterus is bent backward on long axis of cervix.
			
			

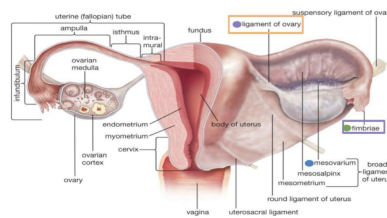
The **USUAL POSITION** of the Uterus is **Anteverted Anteflexed**

Ligaments of the Uterus

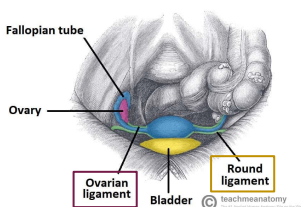
Ligaments at junction between Fundus & Body of Uterus (at the level of uterine tube):

A The Round Ligament

Extends to labium majus through the inguinal canal.

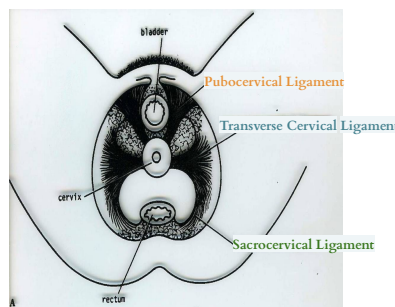


B The Ovarian Ligament



Ligaments of Cervix: Extend from Cervix to Pelvic Wall:

- 1 Anterior portion as a **Pubocervical** ligament.
- 2 Lateral portion as a **Transverse Cervical, Cardinal or Mackenrodt** ligament
- 3 Posterior portion as an **Uterosacral/Sacro-cervical lig.**



The Uterus

Muscles (Levator Ani Muscle)	Forms	<ol style="list-style-type: none"> 1. Forms the pelvic floor: separate pelvis from perineum. 2. Forms the pelvic diaphragm: traversed by urethra, vagina & rectum. 	
	Function	Supports the pelvic organs.	

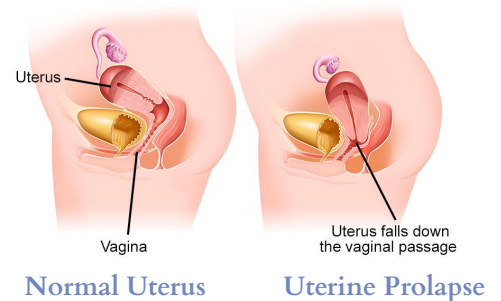
Support of Uterus

- **Round ligament of uterus** (maintains anteverted & anteflexed position).
- **Ligaments of cervix** (especially transverse cervical).
- **Levator Ani muscles.** (the most important)

Clinical Anatomy: Uterine Prolapse

Downward displacement of uterus from the pelvic cavity into the vagina due to damage of:

1. **Ligaments of Uterus** at level of **uterine tube**.
2. **Levator Ani Muscles**.



The Vagina

» **STRUCTURE:** Fibromuscular Tube

» **EXTENT:**

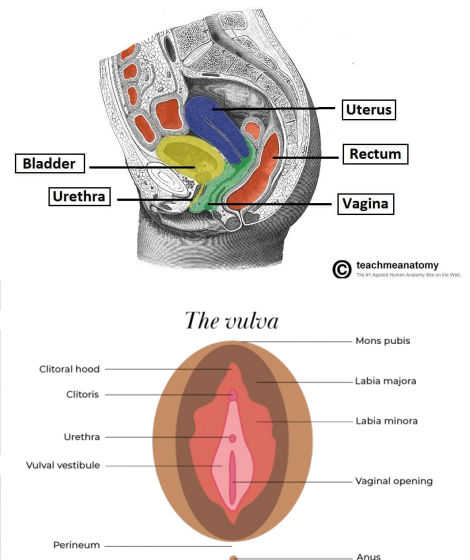
From **External Os**, along pelvis & perineum, to open in the vulva (female external genitalia), behind urethral opening

» **LENGTH:**

Its anterior wall (7.5 cm) is shorter than its posterior wall (9 cm)

» **FUNCTION:**

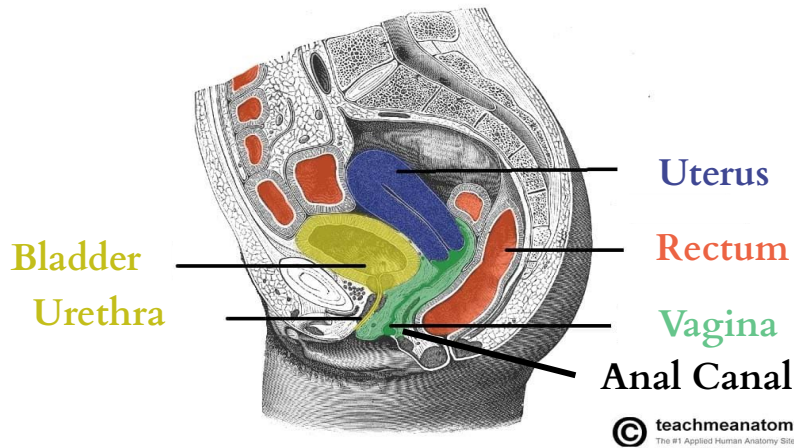
1. Copulatory organ
2. Birth canal



The Vagina

Vaginal Relations

Anteriorly	Posteriorly	Laterally
<ol style="list-style-type: none"> Urinary bladder (in Pelvis). Urethra (in Perineum). 	<ol style="list-style-type: none"> Rectum (in Pelvis). Anal canal (in Perineum). 	<ol style="list-style-type: none"> Ureters (in Pelvis).



Supply

Organ	Arteries	Veins	Lymphatics	Nerves (Autonomic)
Ovaries	Ovarian A. : branch of abdominal aorta	Ovarian V. to: 1. Inferior vena cava 2. Left renal vein	To para aortic lymph nodes (In abdomen)	Ovarian Plexus (in abdomen)
Uterine Tube	1. Ovarian (Lateral) 2. Uterine (Medial)	1. Ovarian 2. Uterine	1. Para aortic 2. internal iliac	1. Ovarian 2. Inferior Hypogastric
Uterus	Uterine: Branch of internal iliac artery in pelvis	Uterine Plexus: To internal iliac vein	To internal iliac lymph node (in pelvis)	Inferior Hypogastric plexus (in pelvis)
Vagina	Vaginal: (internal iliac artery in pelvis)	Vagina Plexus: To internal iliac vein		

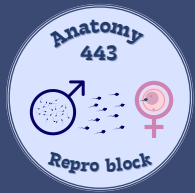
MCQs

Q1-Regarding the female reproductive organs, which one of the following statements is correct?				Female Slides
A- The ampulla is the most medial part of the uterine tube.	B- The rectum is anterior to the vagina.	C- The ovarian artery is a branch of the internal iliac artery of the pelvis.	D- The uterine tube is enclosed in the broad ligament of the uterus.	
Q2-Which one of the following structures is related (or attached) to the lateral end of the ovary?				Both Doctors
A- Ampulla of uterine tube	B- Fimbriae of uterine tube	C- Ligament of ovary	D- Round ligament of uterus	
Q3- Which one of the following structures is anterior to the uterus?				Both Doctors
A- Sigmoid colon	B- Ureter	C- Urinary bladder	D- Ovary	
Q4-Which one of the following groups of lymph nodes are the sentinel nodes (very first nodes affected) in cases of cancer ovary?				Male Slides
A- Paraaortic	B- Superficial inguinal	C- Internal iliac	D- External iliac	
Q5-Which of the following muscles forms the pelvic diaphragm?				
A- Piriformis	B-Obturator internus	C- Levator ani	D- Sphincter ani externus	
Q6-What is the position of the uterus where the long axis of the body of the uterus is bent forward with the long axis of the cervix?				
A- Anteverted	B- Anteflexed	C- Retroflexed	D-Retroverted	

Answers: 1-D 2-B 3-C 4-A 5-C 6-B

[For Anki flashcards click here](#)





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