

Female reproductive system

Before going through the contents, make sure you check this [CORRECTION FILE](#) first

Pelvic peritoneum:
a thin translucent membrane that is
continuous with that of GIT

Pelvic peritoneum in females

Rectouterine (douglas) pouch:

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

Tip of catheter
for peritoneal
dialysis is
inserted
deepest point in
Douglas pouch

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

Ovaries and uterine (fallopian) tubes:

Location of ovaries depends on uterus

The ovaries

- It is an almond-shaped organ.
- It is attached to the back of the broad ligament by a peritoneal fold (mesovarium)
- Its medial end is attached to uterus by **ligament of ovary**.
- Its lateral end is related to the **fimbriae of the uterine tube**.

The uterine tubes

- It is 10 cm long
- It is enclosed in the broad ligament of uterus.
- It is 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**

Fimbriae grasp ovum from ovaries

Functions of OVARIES: (PRIMARY SEX ORGANS IN FEMALE)

- Production of female germ cells
- Secretion of female sex hormones

Functions of UTERINE TUBES:

- Site of fertilization
- Transport of fertilized ovum into the uterus

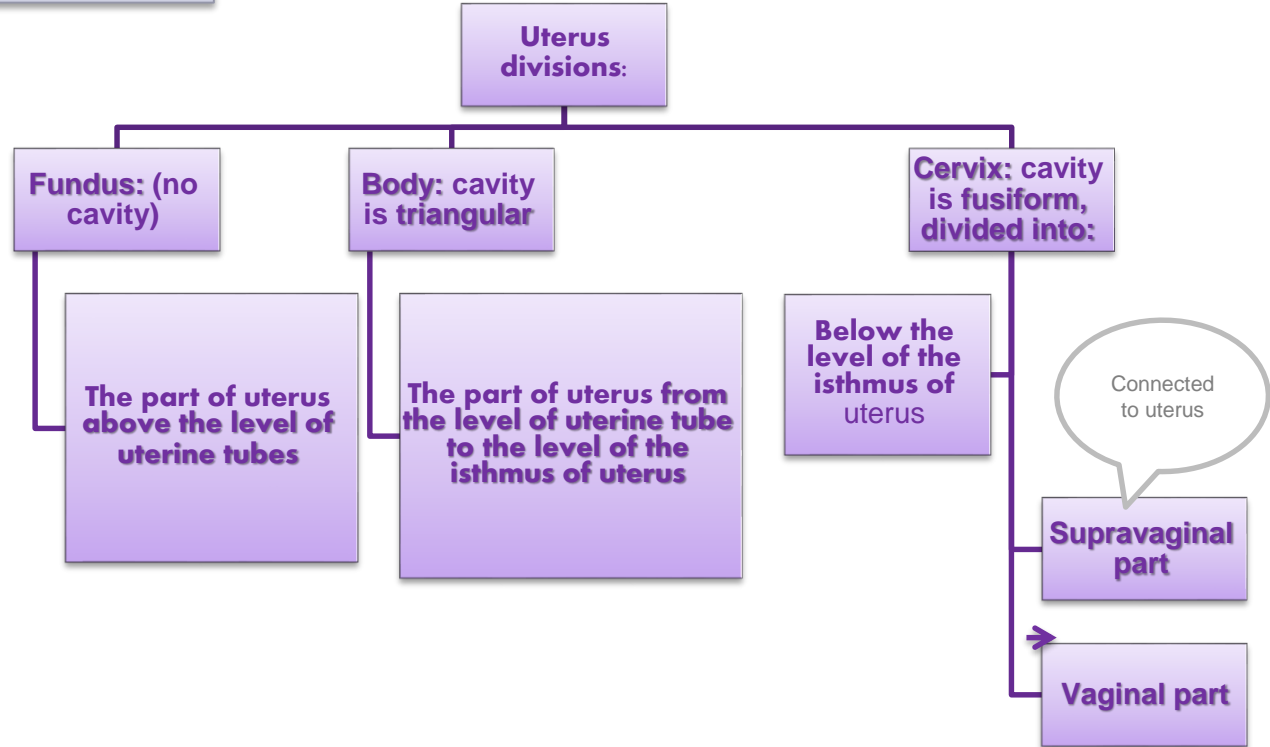
The uterus

A hollow, pear-shaped muscular organ

The cervical canal has:

INTERNAL OS: opening between cavity of body of uterus & cavity of cervix (cervical canal)

EXTERNAL OS: opening between cervical canal & cavity of vagina
-circular in **Nulliparous woman**
-a transverse slit with an anterior & a posterior lip in a **Multiparous woman**.



POSITIONS OF UTERUS

A) ANTEVERTED UTERUS

(Long axis of whole uterus is bent forward on long axis of vagina)

B) ANTEFLEXED UTERUS

Long axis of body of uterus is bent forward on long axis of cervix

C) RETROVERTED UTERUS

Fundus & body of uterus are bent backward on the vagina and lie in rectouterine pouch

D) RETROFLEXED UTERUS

Long axis of body of uterus is bent backward on long axis of cervix

Relations of 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

Usual position of uterus:
ANTEVERTED ANTEFLEXED UTERUS

Function of uterus: pregnancy

Levator Ani muscles:

FORM THE PELVIC FLOOR:
separate pelvis from perineum

FORM PELVIC DIAPHRAGM: traversed by urethra, vagina & rectum

- SUPPORT PELVIC ORGANS

UTERINE PROLAPSE:

Downward displacement of uterus due to damage of:

1. Ligaments of uterus
2. Levator ani muscles

Ligaments of uterus:

1) Ligaments at junction between fundus & body of uterus:

- Extends through inguinal canal
- to labium majus
- (At the level of uterine tube)

2) Ligaments of cervix:

- Extend from cervix to: anterior (pubocervical),
- lateral (transverse cervical or cardinal)
- posterior (**uterosacral or sacrocervical**)
- pelvic walls

SUPPORT OF UTERUS:

- Round ligament of uterus (maintains anteverted anteflexed position)
- Ligaments of cervix (especially transverse cervical)
- Levator ani muscles

Vagina

Relations of vagina:

- **ANTERIOR:** Urinary bladder (in pelvis) & urethra (in perineum)
- **POSTERIOR:** Rectum (in pelvis) & anal canal (in perineum)
- **LATERAL:** ureters (in pelvis)

uterine artery with ureter relation is important in hysterectomy to not to cut the ureter

- **STRUCTURE:** Fibro-muscular 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

Vaginal length is due to uterus position

blood supply, drainage and lymphatics

ORGAN	ARTERIES	VEINS	LYMPHATICS	NERVES (AUTONOMIC)
OVARIES	OVARIAN (ABDOMINAL AORTA)	OVARIAN (TO INFERIOR VENA CAVA & LEFT RENAL VEIN)	TO PARAAORTIC LYMPH NODES (IN ABDOMEN)	OVARIAN PLEXUS (IN ABDOMEN)
UTERINE TUBES	<ul style="list-style-type: none"> ▪OVARIAN ▪UTERINE 	<ul style="list-style-type: none"> ▪OVARIAN ▪UTERINE 	<ul style="list-style-type: none"> ▪PARAAORTIC ▪INTERNAL ILIAC 	<ul style="list-style-type: none"> ▪OVARIAN ▪INFERIOR HYPOGASTRIC
UTERUS	UTERINE (INTERNAL ILIAC ARTERY IN PELVIS)	UTERINE PLEXUS (TO INTERNAL ILIAC VEIN)	TO INTERNAL ILIAC LYMPH NODES (IN PELVIS)	INFERIOR HYPOGASTRIC PLEXUS (IN PELVIS)
VAGINA	VAGINAL (INTERNAL ILIAC ARTERY IN PELVIS)	VAGINAL PLEXUS (TO INTERNAL ILIAC VEIN)	TO INTERNAL ILIAC LYMPH NODES (IN PELVIS)	INFERIOR HYPOGASTRIC PLEXUS (IN PELVIS)

MCQs

1- Which one of the following structures is related (or attached) to the lateral end of the ovary?

- A) Fimbriae of uterine tube
- B) Ampulla of uterine tube
- C) Ligament of ovary
- D) Round ligament of uterus

2- Which one of the following structures is anterior to the uterus?

- A) Urinary bladder
- B) Ureter
- C) Sigmoid colon
- D) Ovary

3- Regarding the female reproductive organs, which one of the following statements is correct?

- 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.

4- Which of the following is supplied by both internal iliac artery and abdominal aorta:

- A) Ovaries
- B) Uterine tubes
- C) Uterus
- D) Vagina

THANK YOU FOR CHECKING OUR WORK
GOOD LUCK DOCTORS

Key answers:

- 1.D
- 2.A
- 3.A
- 4.B

إِنَّ اللَّهَ وَمَلَائِكَتَهُ يُصَلُّونَ عَلَى النَّبِيِّ
يَا أَيُّهَا الَّذِينَ آمَنُوا صَلُّوا عَلَيْهِ وَسَلِّمُوا تَسْلِيمًا

Done By:

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MCQ's By:

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