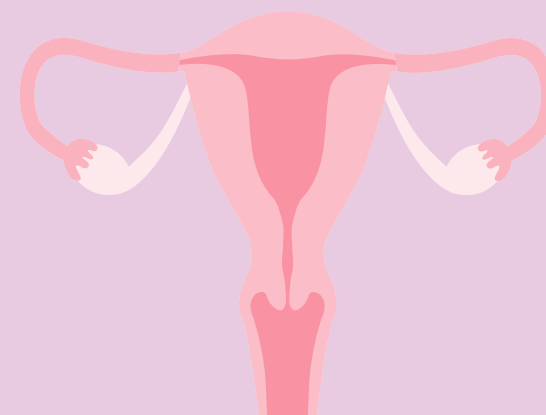




Female Genital system Practical

Done By: Mays Qashou

DR. AHMED SALMAN



1. Ovaries:

- **Surfaces:** lateral and medial
- **Poles (ends):** superior (tubal) end and inferior (uterine) end
- **Ligaments:** Round ligament of the ovary, Mesovarium and Suspensory ligament of the ovary.
- **Relations (back to slides)**
- **Blood supply:** By ovarian artery that arises from the abdominal part of the aorta at the level L2

2. Uterus:

- **Parts:**
 1. Body of the Uterus (upper 2/3 of uterus)
 2. Cervix of the Uterus (lower 1/3 of the uterus).
- **Position:** Anteverted (90°), anteflexed (170°)
- **Relations (back to slides)**
- **Peritoneal covering:**

The posterior surface and fundus of body of uterus are covered by peritoneum.

The peritoneum descends to cover its anterior surface down to the level of internal os, where it is reflected on to the bladder.

The supravaginal cervix is covered by peritoneum only posteriorly.

The front and sides of The supravaginal cervix are bare of peritoneum and related to cellular connective tissue, the parametrium.

3. Ligament of the uterus

Extra images

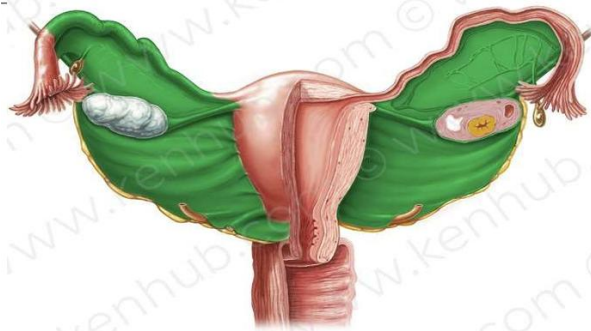
Ligaments of the uterus

Ligaments attached to the body of uterus

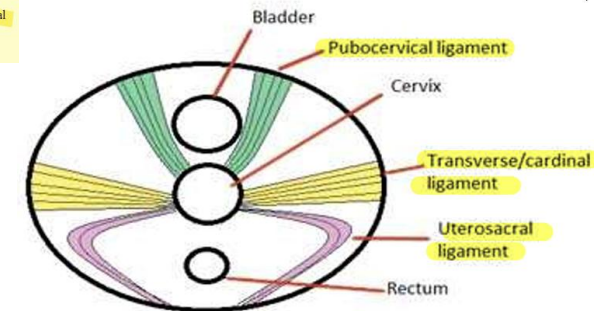
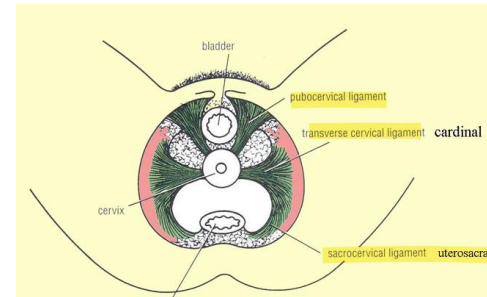
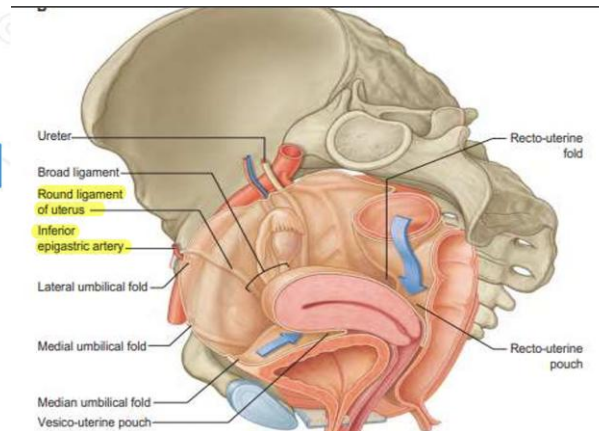
1. Round ligament of uterus
2. Broad ligament.

Ligaments attached to cervix of uterus

1. Pubocervical ligaments
2. Transverse cervical ligaments
3. Uterosacral ligaments

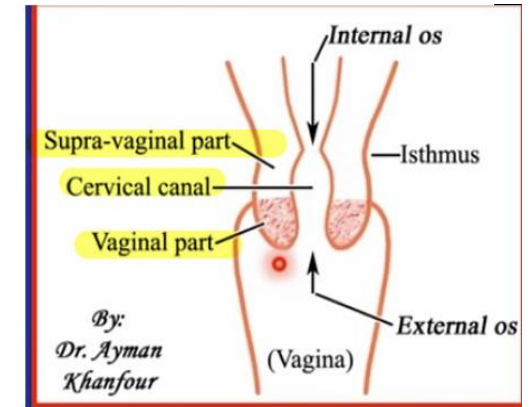
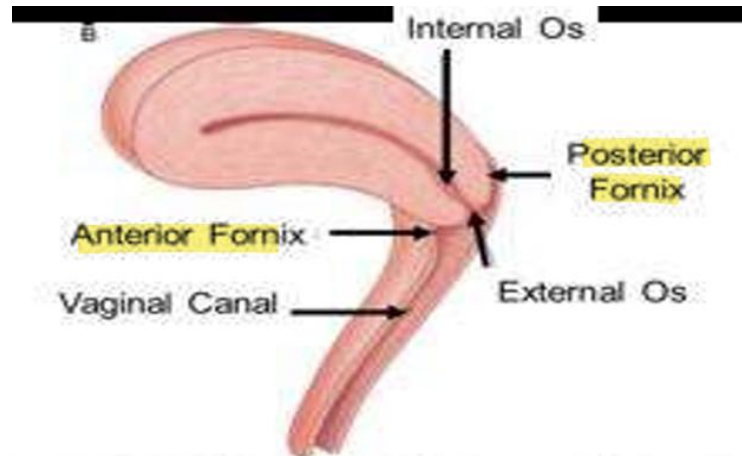
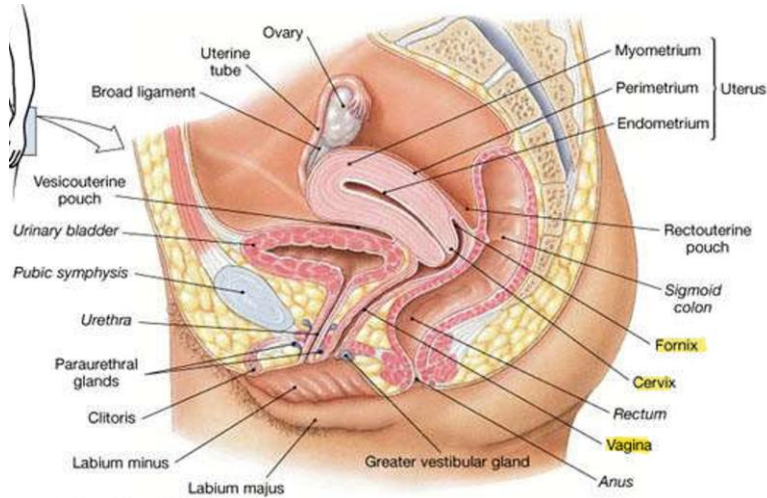


Broad ligament

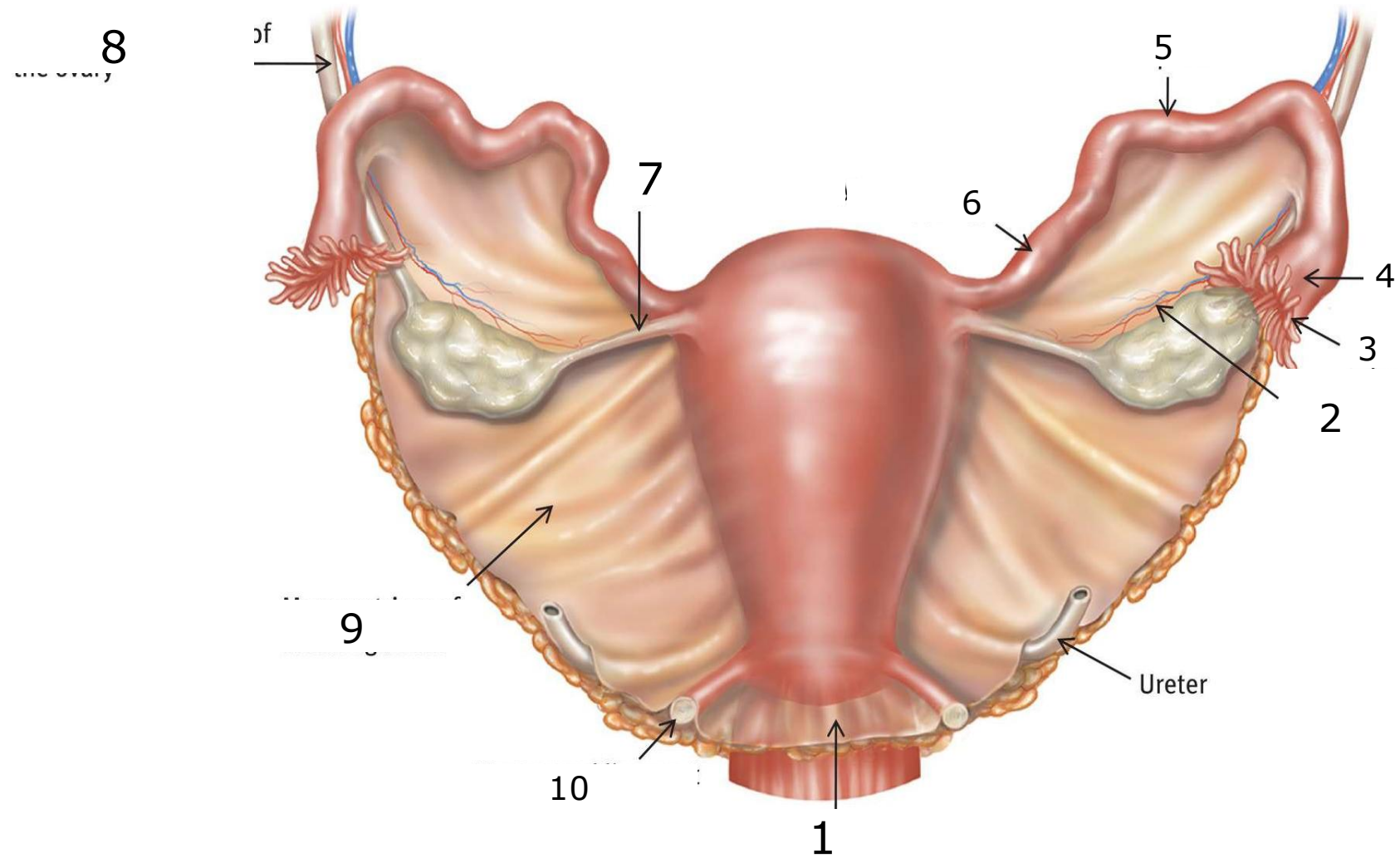


4. Cervix: It forms the lower 1/3 of the uterus. It has supravaginal and vaginal parts.

- **Vagina:** a fibromuscular tube extends from the uterus down to the vestibule.
- **Vaginal fornices:** Vaginal part of the cervix divides the vagina into four vaginal fornices. The posterior vaginal fornix is the deepest and the only one covered by peritoneum.

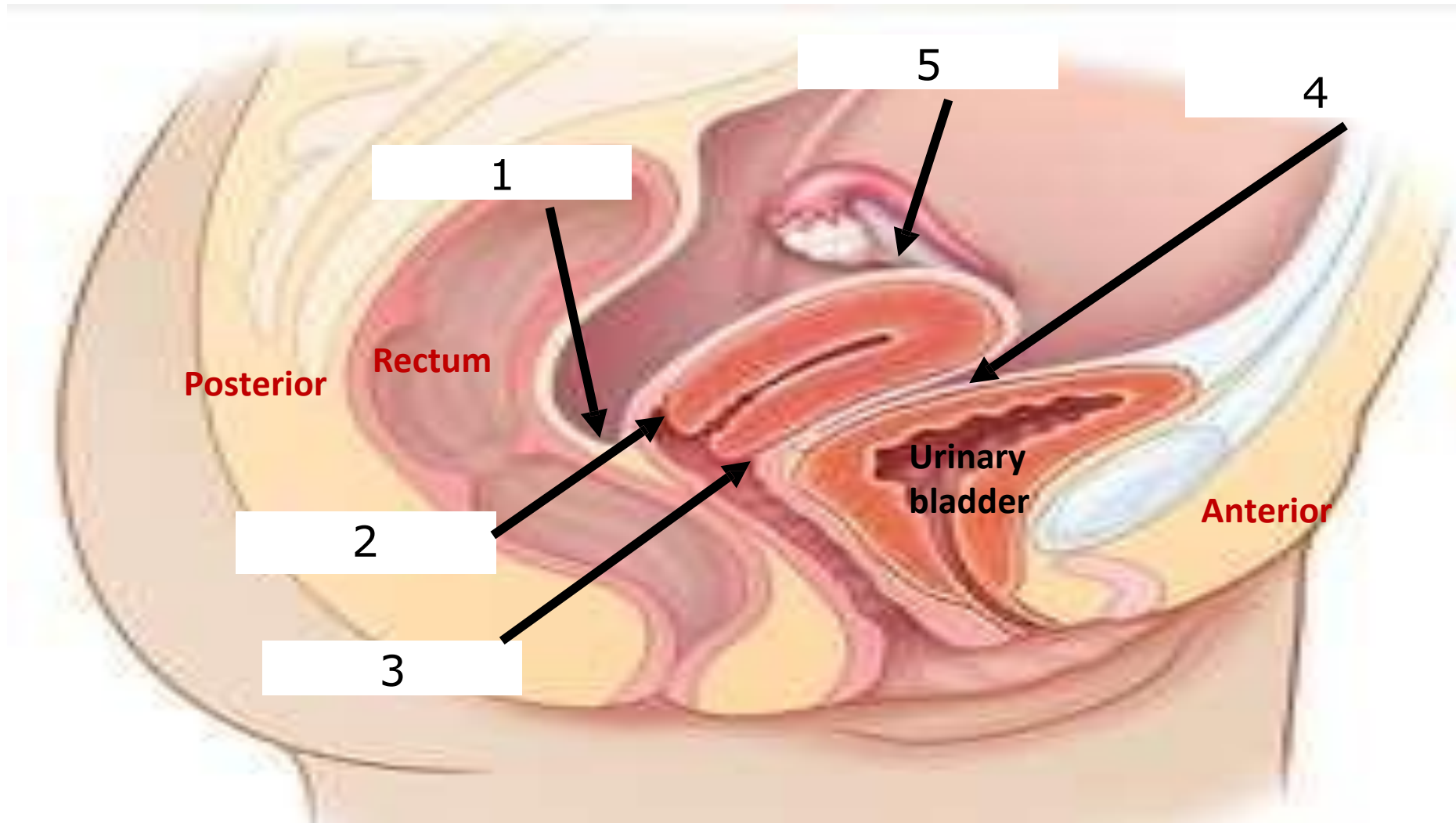


Posterior view

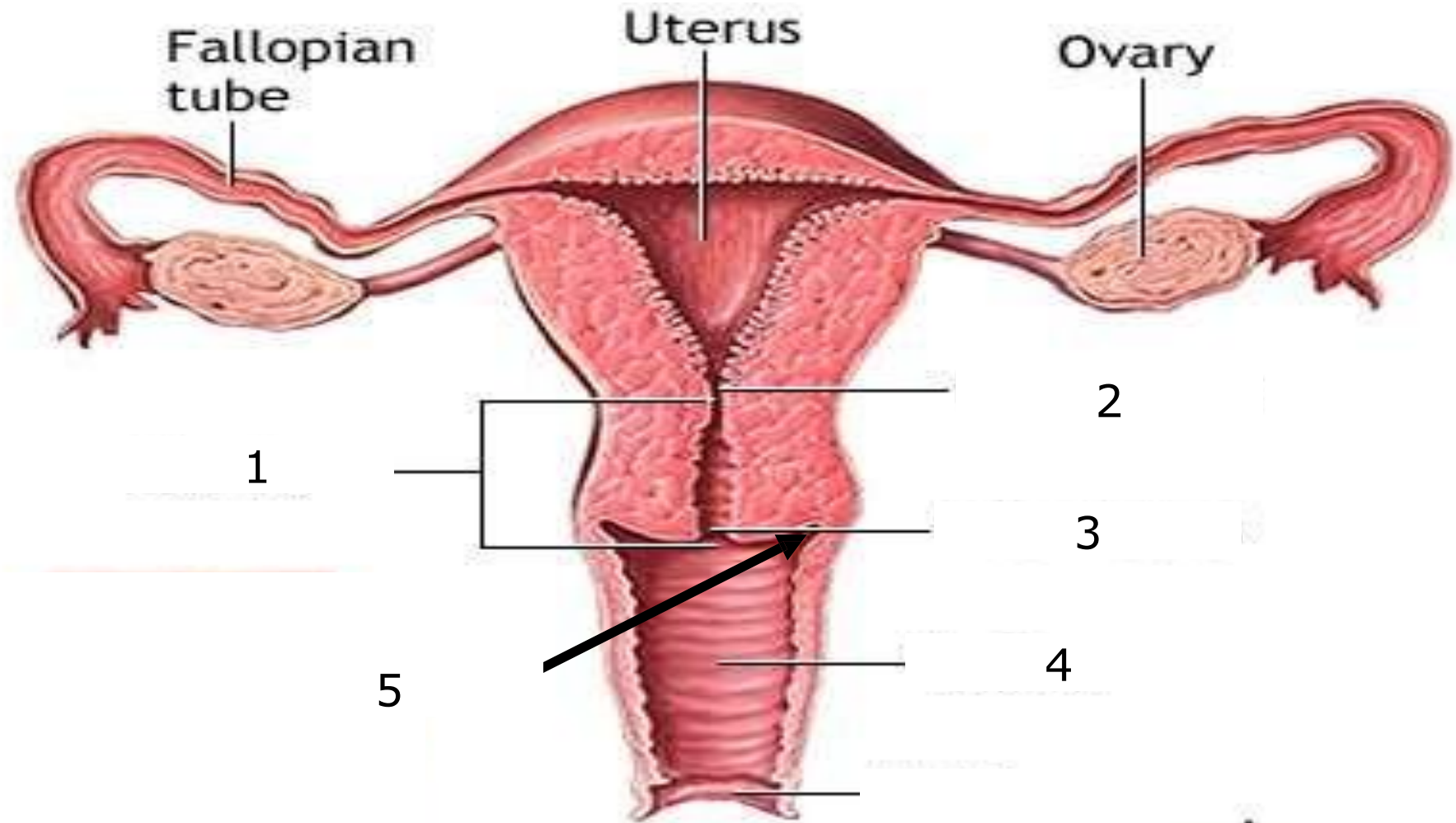


A

This is sagittal section in female pelvis:



B



Pic A:

1. Rectouterine pouch (Douglas pouch)
2. Mesovarium
3. Fimbria of the uterine tube
4. Infundibulum of the uterine tube
5. Ampulla
6. Isthmus
7. Round ligament of ovary
8. Suspensory ligament of the ovary
9. Broad ligament (Mesometrium)
10. Uterosacral ligament

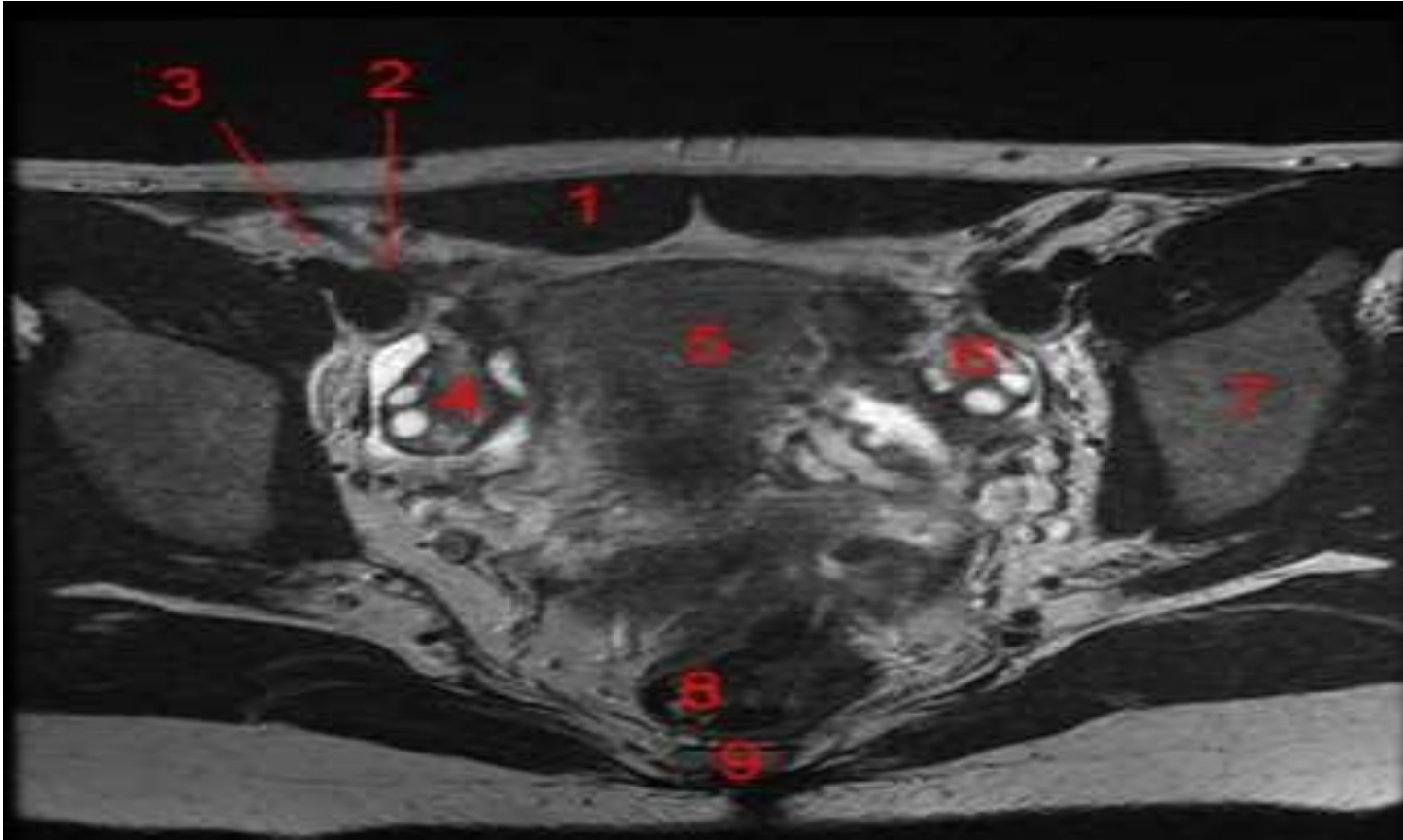
Pic B:

1. Rectouterine pouch (Douglas pouch)
2. Posterior vaginal fornix
3. Anterior vaginal fornix
4. Vesicouterine pouch
5. Round ligament of ovary

Pic C:

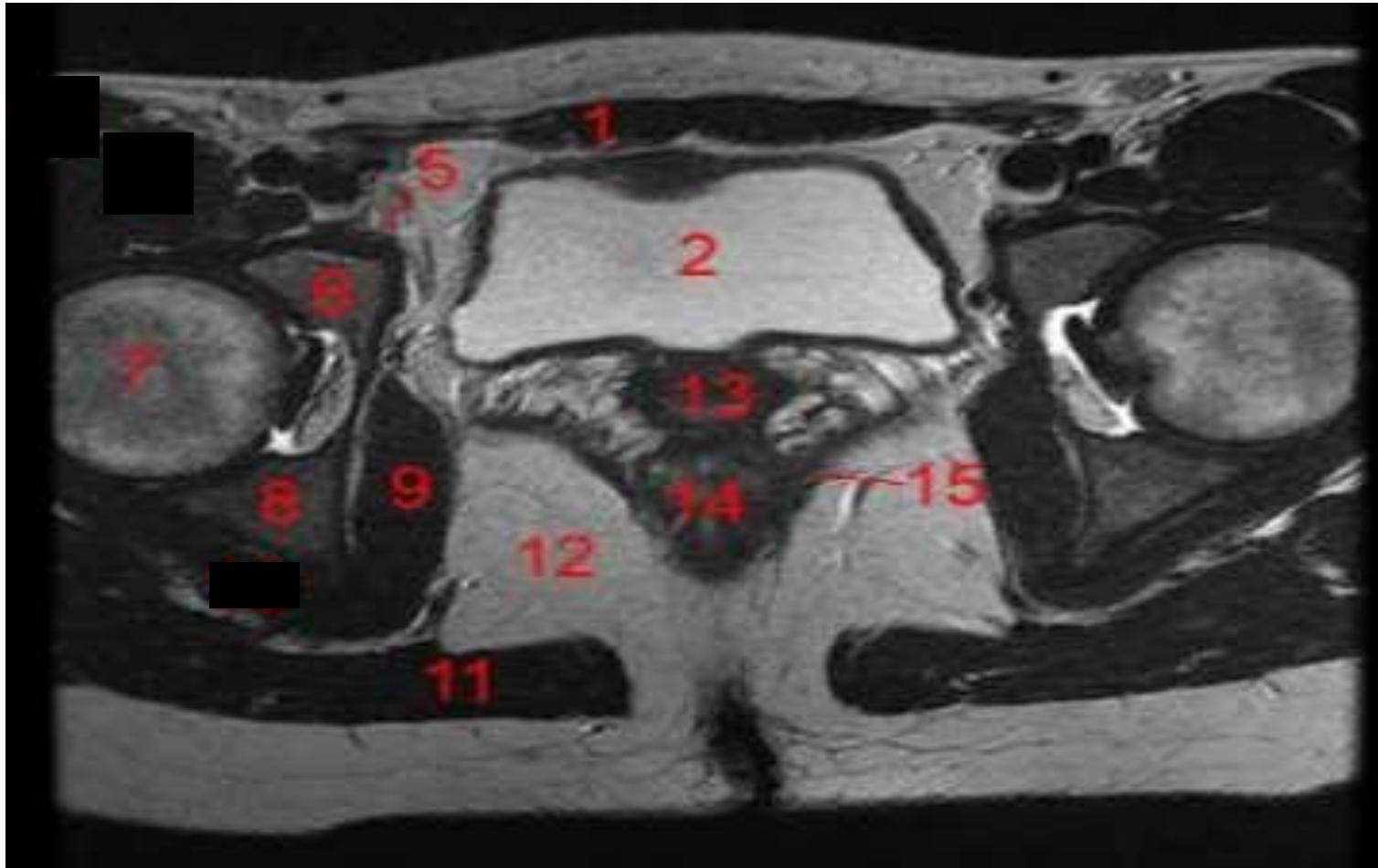
1. Cervix
2. Internal os (opening of the cervical canal with the uterus)
3. External os (opening of the cervical canal with the vagina)
4. Vagina
5. Lateral vaginal fornix

MRI of the female pelvis



1. Rectus abdominis muscle
2. External iliac vein (medial)
3. External iliac artery (lateral)
4. Right ovary
5. Uterus
6. Left ovary
7. loops of the ilium
8. Rectum (posterior)
9. Coccyx

MRI of the female pelvis (lower level)



1. Rectus abdominis muscle
2. Urinary bladder
6. Superior pubic ramus
7. Head of femur
8. Inferior pubic ramus
9. Obturator internus
11. Gluteus Maximus
12. Ischiorectal fossa
13. Vagina
14. Rectum
15. Levator ani

Perineum

1. Superficial ,deep perineal pouches ,boundaries ,contents:

- Superficial Perineal Pouch boundaries:

Boundary	Description
Floor	Membranous layer of the superficial fascia of the perineum (Colles fascia)
Roof	Perineal membrane
On either side	both roof and floor are attached to the side of the pubic arch
Posteriorly	The pouch is closed by union of the roof and floor
Anteriorly	Open; continuous with space between abdominal wall fascia & external oblique aponeurosis

- Deep Perineal Pouch boundaries:

Boundary	Description
Floor	Perineal membrane (inferior fascia of urogenital diaphragm)
Roof	Inferior fascia of pelvic diaphragm (levator ani)
On either side	Obturator fascia
Posteriorly	Closed by union of roof and floor
Anteriorly	Closed by transverse perineal ligament beneath symphysis pubis

- Deep Perineal Pouch contents:

	Male	Female
Urogenital Structures	• Membranous urethra • Bulbourethral glands	• Part of the urethra • Part of vagina
Muscles	• Sphincter urethrae • Deep transverse perineal muscles (These two muscles form the urogenital diaphragm.)	
Vessels	▪ Internal pudendal A. ▪ Artery of bulb. ▪ Urethral A. ▪ Perineal A.	▪ Internal pudendal A. ▪ Artery of bulb of vestibule. ▪ Perineal A.
Nerves	▪ Dorsal N. of penis. ▪ Perineal N.	▪ Dorsal N. of clitoris. ▪ Perineal N.

- Superficial Perineal Pouch contents:

	Male	Female
Urogenital Structures	• Root of penis (2 crura +Bulb) • Penile urethra in corpus spongiosum (bulb of penis)	• Root of clitoris (2 crura) • Two bulbs of vestibule • Greater vestibular glands.
Muscles	• Two ischiocavernosus muscles cover the 2 crura • Bulbospongiosus muscle covers bulb of penis. • Two superficial transverse perineal muscles.	• Two ischiocavernosus • Bulbospongiosus muscle • Two superficial transverse perineal muscles.
Vessels	• Dorsal A. of penis. • Deep A. of penis. • Two scrotal arteries	• Dorsal A. of clitoris. • Deep A. of clitoris. • Two labial arteries.
Nerves	• Dorsal N. of penis. • Two scrotal nerves	• Dorsal N. of clitoris. • Two labial nerves

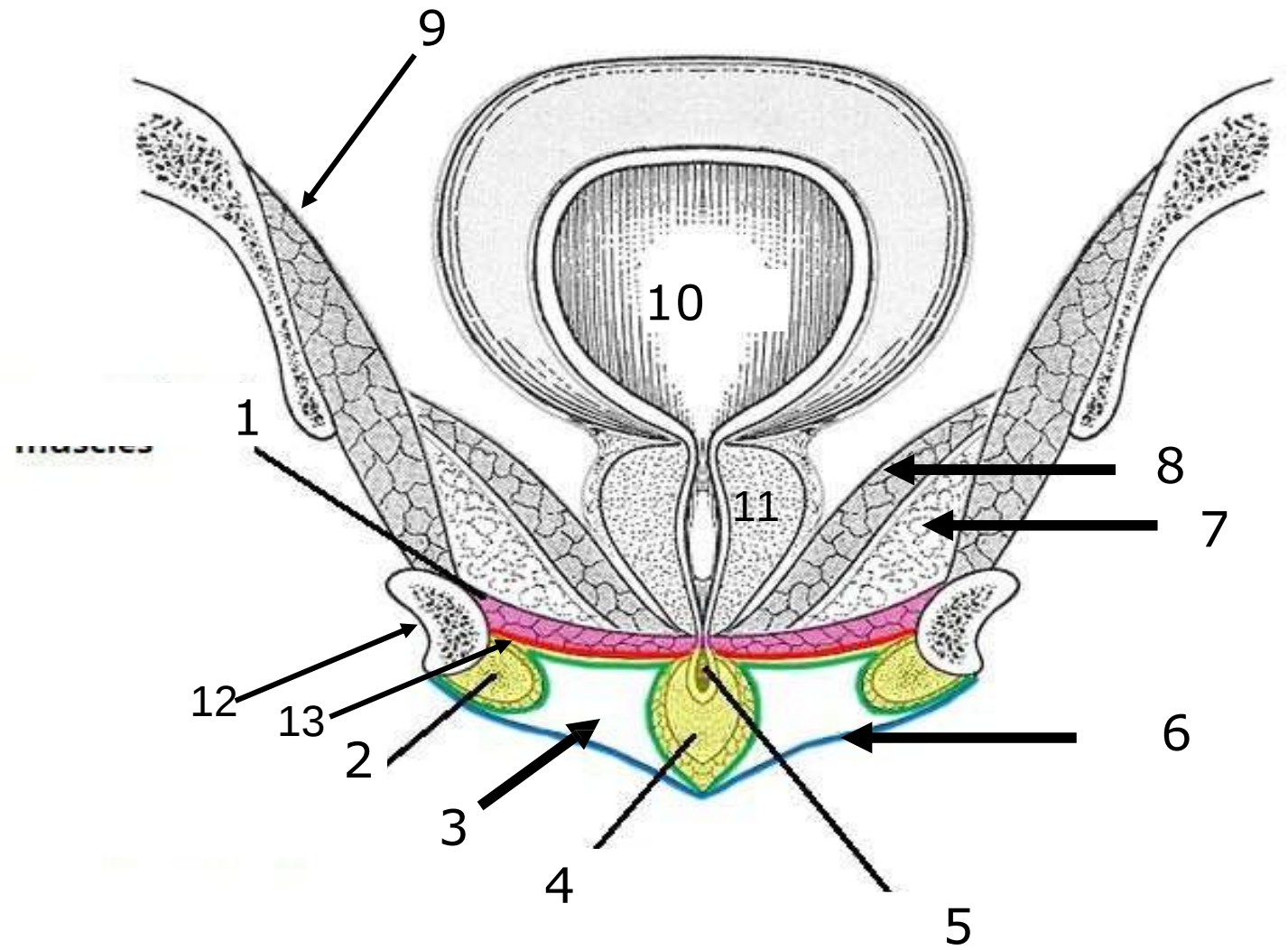
2. Ischiorectal fossa ; boundaries ,contents

Location : It is wedge shaped space on either side of the anal canal.

Boundary	Description
Apex	Origin of levator ani from lateral pelvic wall (<i>White line</i>)
Base	Skin on either side of the anal orifice (innervated by inferior rectal nerve)
Anteriorly	Posterior border of the perineal membrane
Posterior	Sacrotuberous ligament, covered by lower border of gluteus maximus
Lateral Wall	- Lower part of obturator internus muscle - Obturator fascia (forms pudendal canal) - Medial surface of ischial tuberosity
Medial Wall	- Levator ani muscle (lower surface) - External anal sphincter

✔ Contents	
Structure Type	Contents
Nerves	- Pudendal nerve - Inferior rectal nerve - Posterior scrotal/labial nerves - Perforating cutaneous nerve (S2, S3)
Vessels	- Internal pudendal vessels - Inferior rectal vessels - Posterior scrotal/labial vessels
Fat Pad	Rich in fibroelastic tissue; functions: • Cushions and supports rectum & anal canal • Allows distension during defecation • Compresses canal post-defecation

- 1. Urogenital diaphragm** (formed by sphincter urethrae and transverse perineal muscle)
- 2. Crus of the penis** (covered by ischiocavernosus muscle)
- 3. Superficial perineal pouch**
- 4. Bulb of penis** (covered by bulbospongiosus muscle)
- 5. Urethra**
- 6. Colles fascia**
- 7. Deep perineal pouch**
- 8. Lavator ani**
- 9. Obturator internus**
- 10. Urinary bladder**
- 11. Prostate**
- 12. Pubic arch**
- 13. Perineal membrane (red line)**

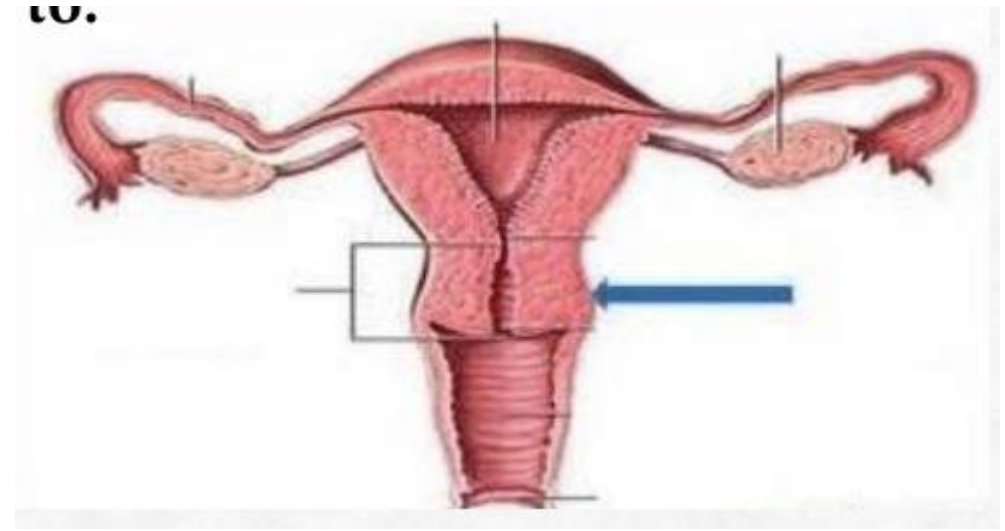




Past Papers

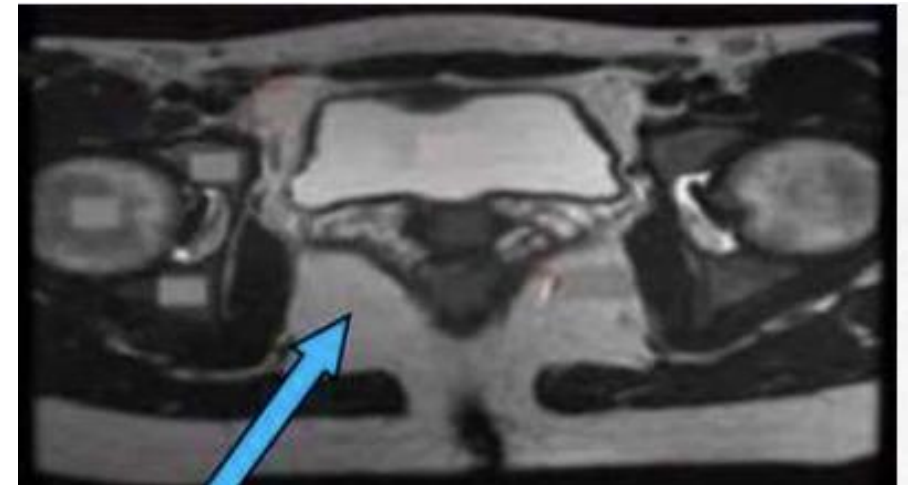
Q1) The pointed structure (blue arrow) is related to:

- A. Sigmoid colon.
- B. Coils of small intestine.
- C. Urogenital diaphragm.
- D. Douglas pouch.
- E. Uterine artery crosses the ureter.



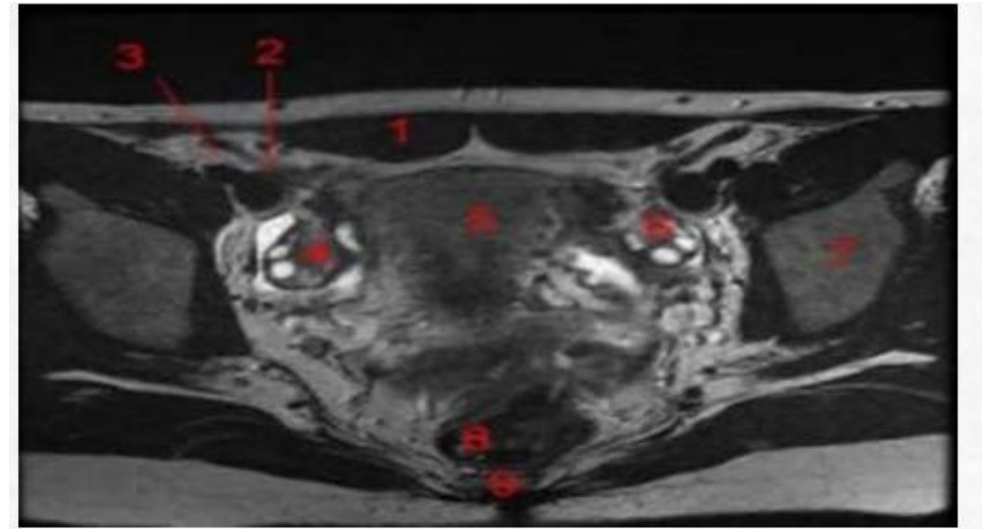
Q2) Which of the following structures passes through the pointed area

- A. Artery of bulb.
- B. Bulbospongiosus muscle.
- C. Membranous urethra.
- D. Inferior rectal nerve.
- E. Deep artery of the penis.



Q3) Structure number 4 lateral border is related to:

- A. Right obturator nerve
- B. Left obturator artery
- C. Ureter
- D. Right uterine tube
- E. Left uterine tube



E,D,A