

All clinical in anatomy

❖ L1+L2 (female genital system):

1. Uterine Tubes:

1. **Blockage of the tubes** (due to infection) is the **main cause of sterility in women**.
 2. **The tube is the most common site for ectopic pregnancy**. It usually ruptures with hemorrhage into the abdominal cavity.
 3. **The abdominal ostium of the uterine tube communicates the female genital tract directly with the peritoneal cavity**. Infections in the uterus and tubes may result in peritonitis.
 4. **Ligation of the uterine tubes is one method of birth control**.
2. The ureters pass at lateral fornices of the vagina, 2 cm from the supravaginal cervix **the uterine arteries cross the ureter**. (like water underneath the bridge).
- **So, the ureters are at great risk during surgical procedures on the uterus and ovaries.**

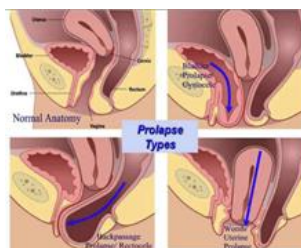
3. Varicose Vein and hemorrhoids are common during pregnancy due to compression of gravid uterus on **inferior vena cava and inferior mesenteric vein**.

- Varicose Vein (inferior vena cava) and hemorrhoids (inferior mesenteric vein).

4. Round Ligament Pain

- **Symptoms:** a sharp, sudden spasm in the belly. Increase by coughing, laughing, rolling over in bed, standing up too quickly.
- **Cause:** Stretch of round ligament during pregnancy.

5. Prolapse of the uterus into the vagina (due to increased intra-abdominal pressure)



6. Culdocentesis:

- Drain a pelvic abscess or blood collection through the vagina by the passage of a needle through the **posterior fornix**.

- Misguided nonsterile instruments, which pierce the wall of the posterior fornix in a failed attempt at an illegal abortion. This leads to Pelvic peritonitis, often with fatal consequences.

7. Painless Labor:

- Epidural anesthesia **provides analgesia during labor and control post-partum pain**. The anesthesia agent is administrated using indwelling catheter into epidural **space at L3-L4**.

❖ L3 (breast):

▪ **Carcinoma of the breast:** may give rise to the following features :

1) Retraction or puckering of the skin due to invasion of the ligament of Cooper.

2) **Peau d'orange or oedema with pitting oedema** is due to **obstruction of cutaneous lymphatics by cancer cells** and pitting due to fixation of the hair follicles to subcutaneous tissue.

3) Retraction of the nipple is due to extension of the growth along the lactiferous ducts with accompanying fibrosis.

4) **Breast may become fixed with the deep fascia**, pectoral muscle and chest wall due to direct spread to the subjacent structures.

5) **Axillary lymph nodes may be involved**, these are stony, hard and fixed.

- **Mammography:** is a radiographic examination of the breast. This technique is extensively used for screening the breasts for benign and malignant tumors and cysts.

❖ L4+L5 (perineum):

1. Rupture of the Urethra

1- Spongy Urethra

- Causes: (Straddle injury)

a) Sever blow to perineum

b) Falling on metal beam

- The urine extravasates into the **superficial perineal pouch** and then passes forward into **loose connective tissue of the scrotum, around the penis beneath the membranous layer of the subcutaneous connective tissue** of lower part of anterior abdominal wall.

2- Membranous part

- Causes:

a) Fracture Pelvis

b) Fault catheterization

- The urine escapes into the **deep perineal pouch** and **may pass upward around the prostate and bladder (extra peritoneal)** through urogenital hiatus.

! IN BOOTH CASES:

- The urine **cannot pass** into **thigh** because attachment of **colles fascia with fasciae lata below inguinal ligament**.

- Also, **cannot pass posteriorly to anal triangle due to fusion of superficial and deep layer of perineal fascia** around posterior edge of perineal membrane.

2. Anal fistula

- **Infections in the ischiorectal pad of fat** are common and lead to **abscess formation**. The **abscess may rupture** medially into the anal canal or downwards into the skin at the fossa. This may **lead to anal fistula**.