

Abdomen

Abdomen :

It is a chamber extending from inferior margin of thorax to superior margin of pelvis.

The chamber enclosed by abdominal wall contains a single large **peritoneal cavity**, which freely communicates with pelvic cavity.

The superior opening of the abdomen is closed by diaphragm but inferiorly is continuous with pelvic cavity.

Esophagus

Liver

Gall bladder

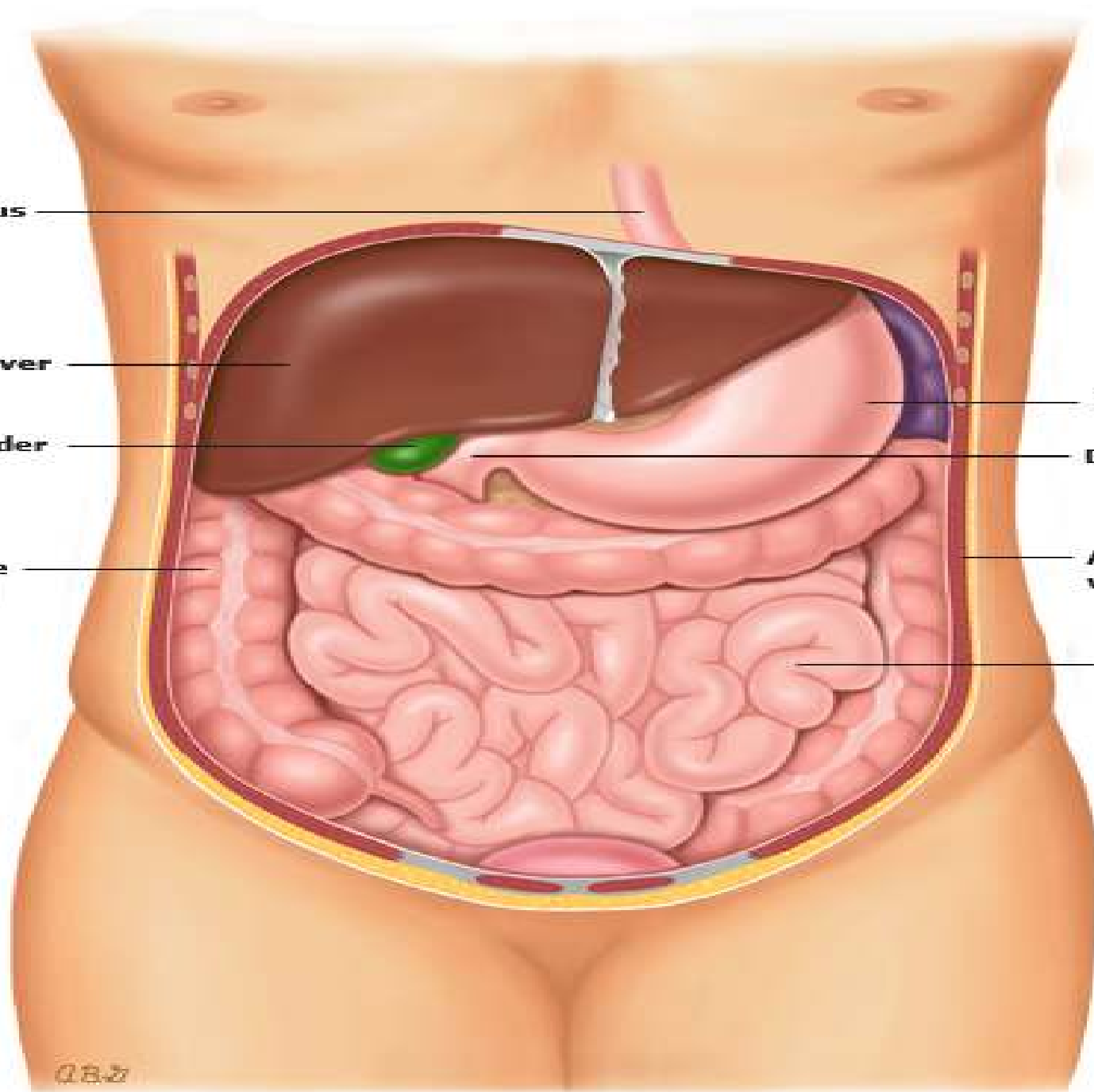
Large intestine (Colon)

Stomach

Duodenum

Abdominal wall

Small intestine



Abdominal viscera are suspended in the peritoneal cavity , these abdominal viscera include :

- ❖ The gastrointestinal system: caudal end of esophagus, stomach, small & large intestines , liver, pancreas and gallbladder .
- ❖ spleen.
- ❖ urinary system : kidneys & ureters.
- ❖ suprarenal glands.
- ❖ Major neurovascular structures.

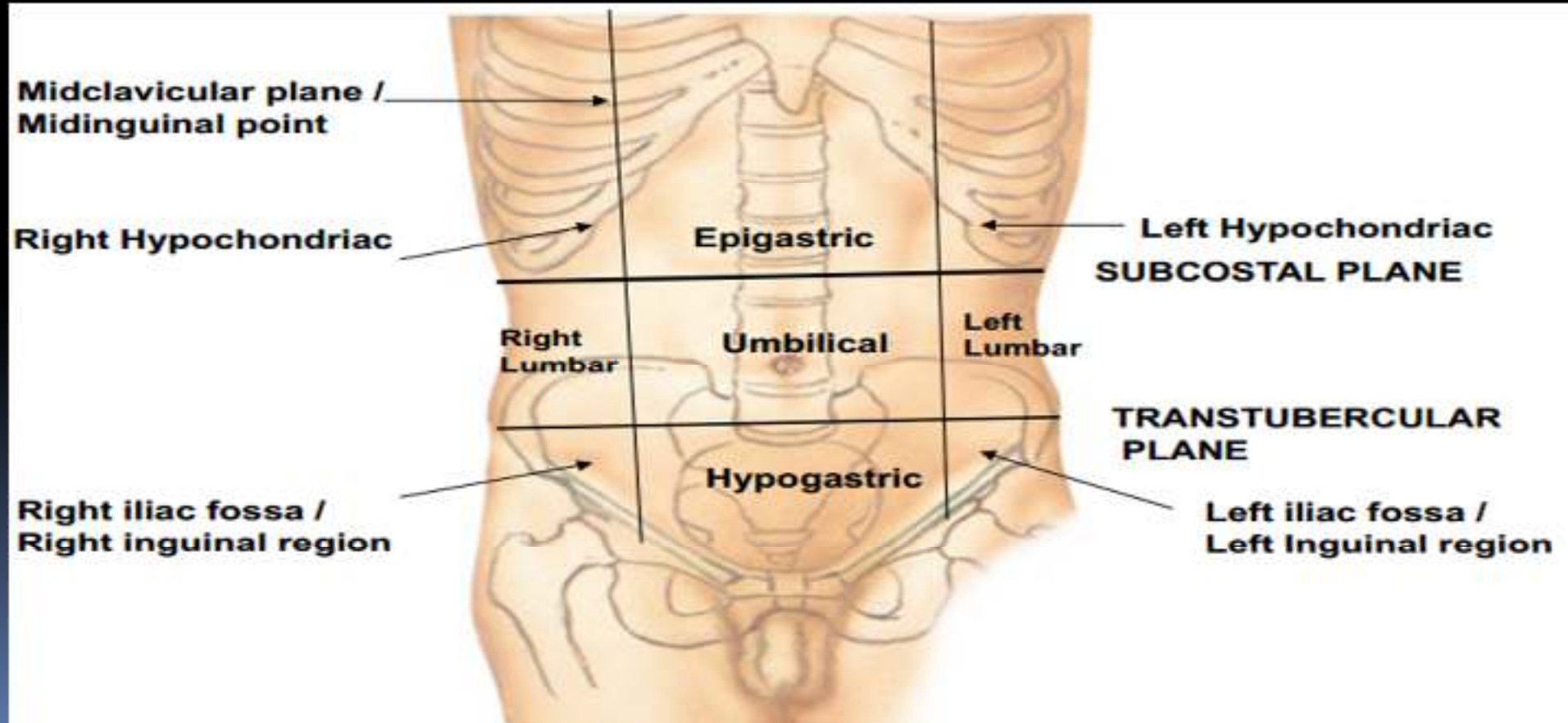
Surface land marks of anterior abdominal wall :

- Xiphoid process.
- Costal margin
- Pubic tubercle
- Symphysis pubis
- Inguinal ligament
- Umbilicus
- Anterior superior iliac spine
- Iliac crest



Abdominal Lines And Planes:

□ **Vertical lines** RT & LT lines passes between mid clavicular point & mid inguinal point (midway between anterior superior iliac spine & symphysis pubis).



□ Horizontal planes:

1) Subcostal plane:

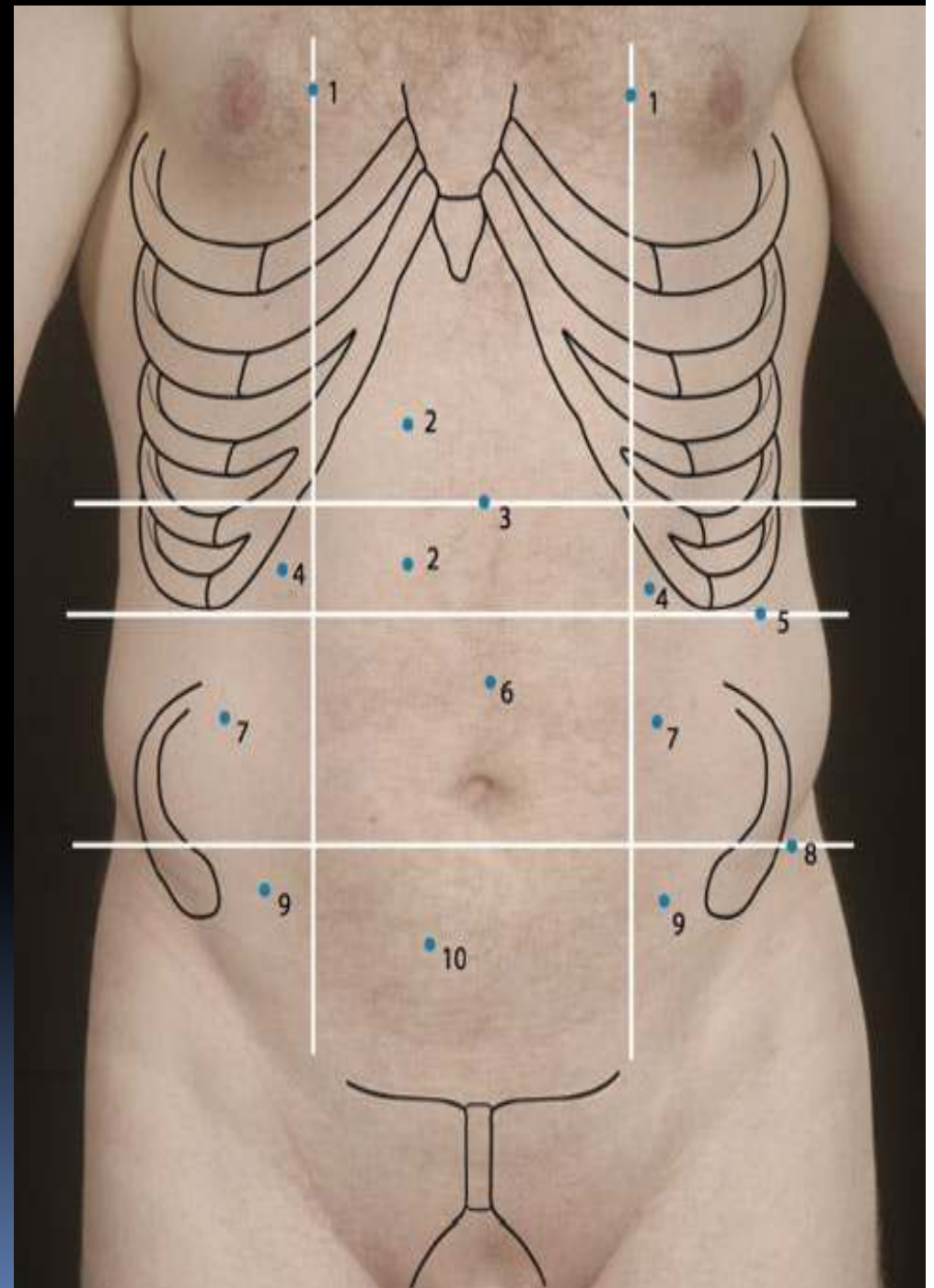
Join lowest point of 10th costal margin on each side.

2) Trans pyloric plane: Passes

through tips of **9th** costal cartilage on both sides

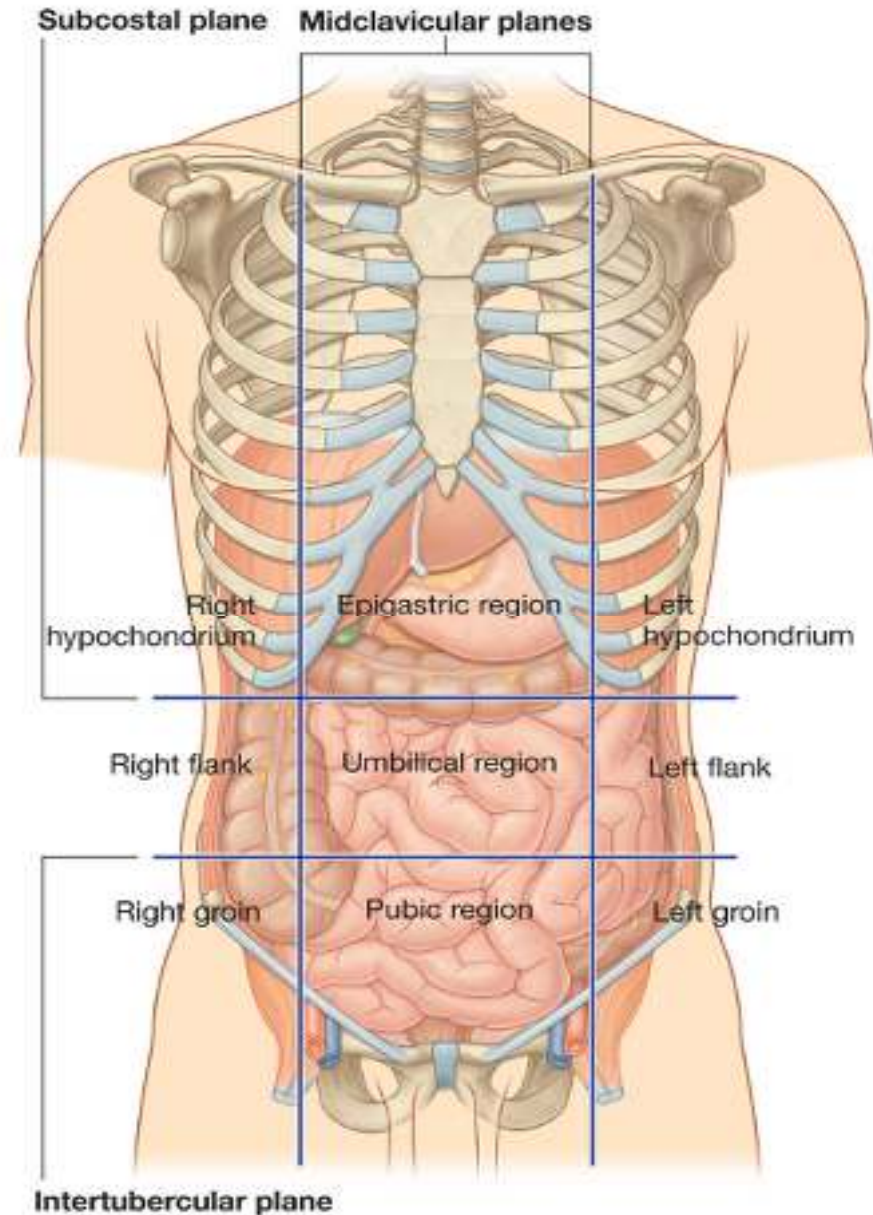
3) Intertubercular plane:

Joins tubercles on iliac crest.



Structures lie in transpyloric plane:

1. Pylorus of stomach .
2. Head ,neck &body of pancrease.
3. Fundus of gall bladder
4. Transverse mesocolon.



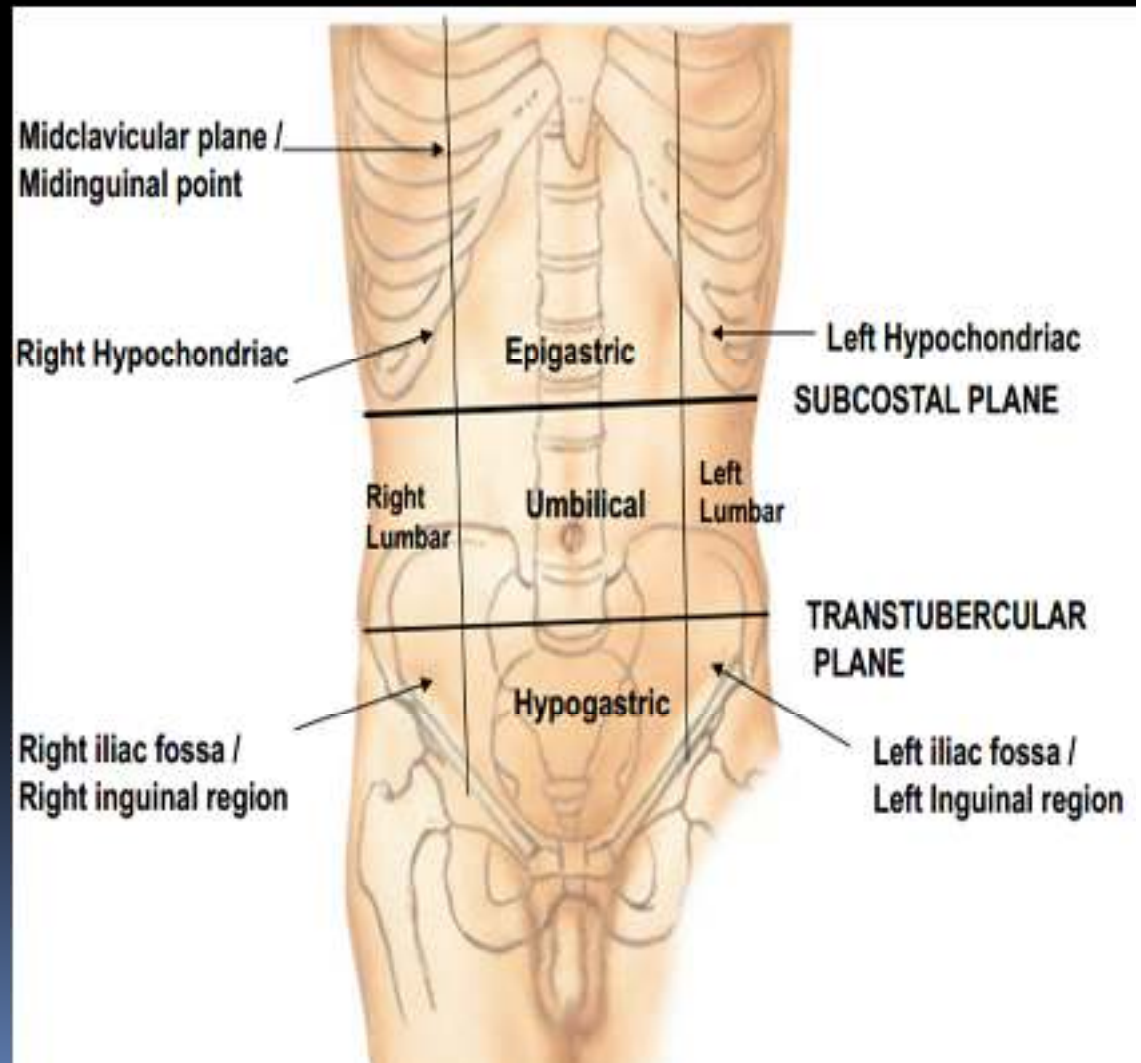
Regions Of Anterior Abdominal Wall:

The two vertical lines & horizontal planes (i.e. **subcostal & intertubercular planes**) divides abdomen into 9 regions.

- 1) Rt. Hypochondrium
- 2) Epigastrium
- 3) Lt. Hypochondrium

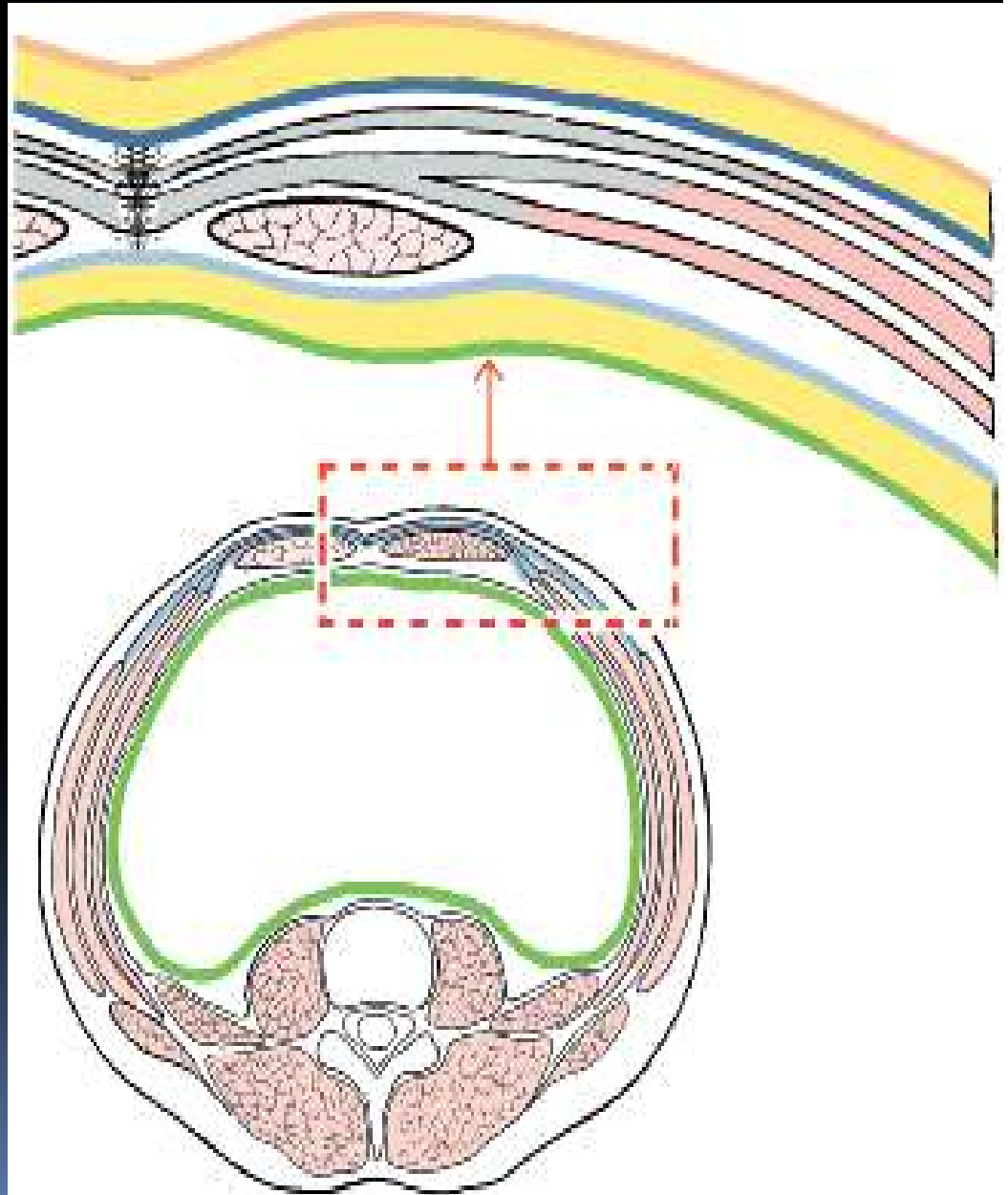
- 4) Rt. Lumbar (flank)
- 5) Umbilical
- 6) Lt. Lumbar (flank)

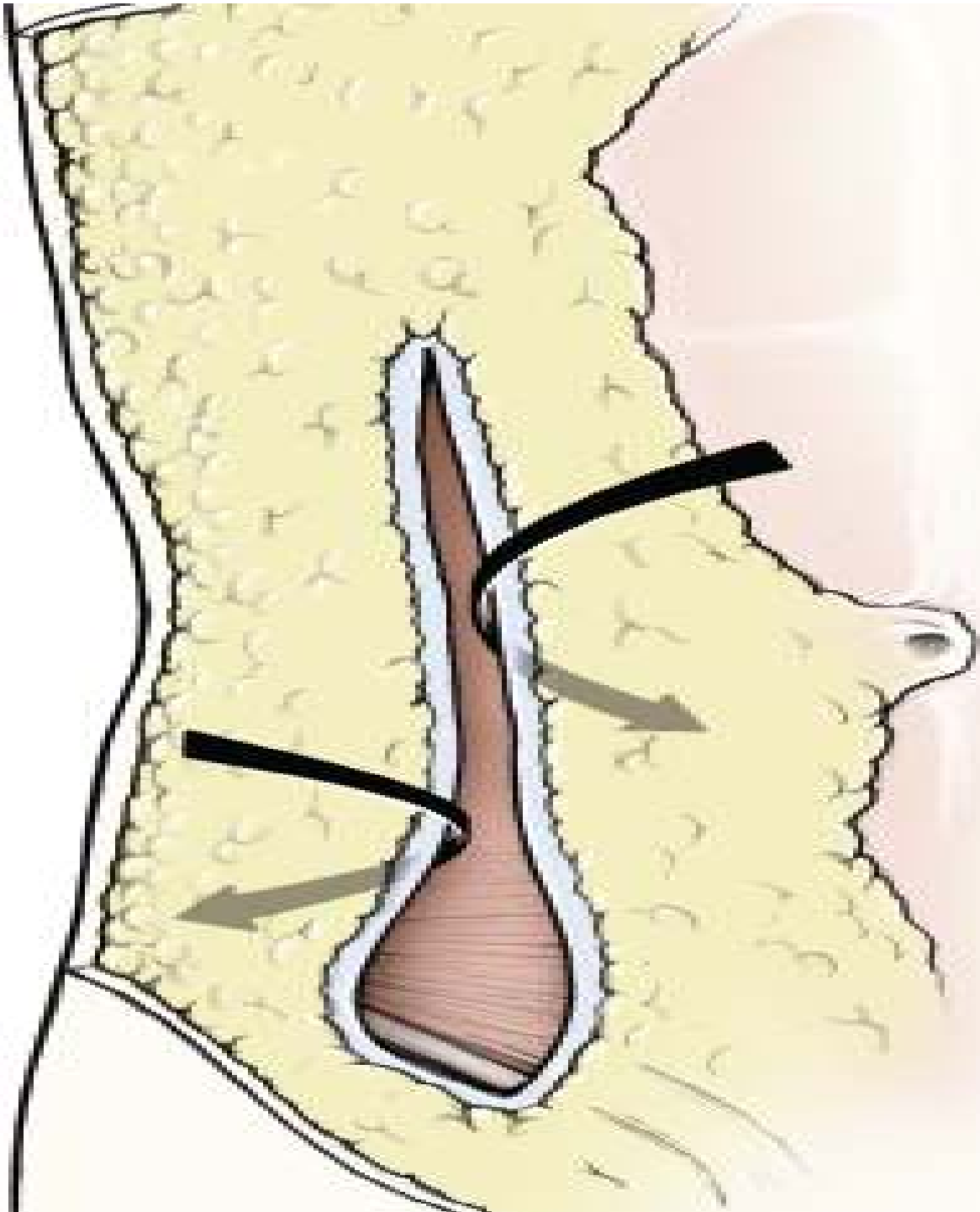
- 7) Rt. Iliac (inguinal)
- 8) Hypogastrium
- 9) Lt. Iliac (inguinal)



Anterior Abdominal Wall :

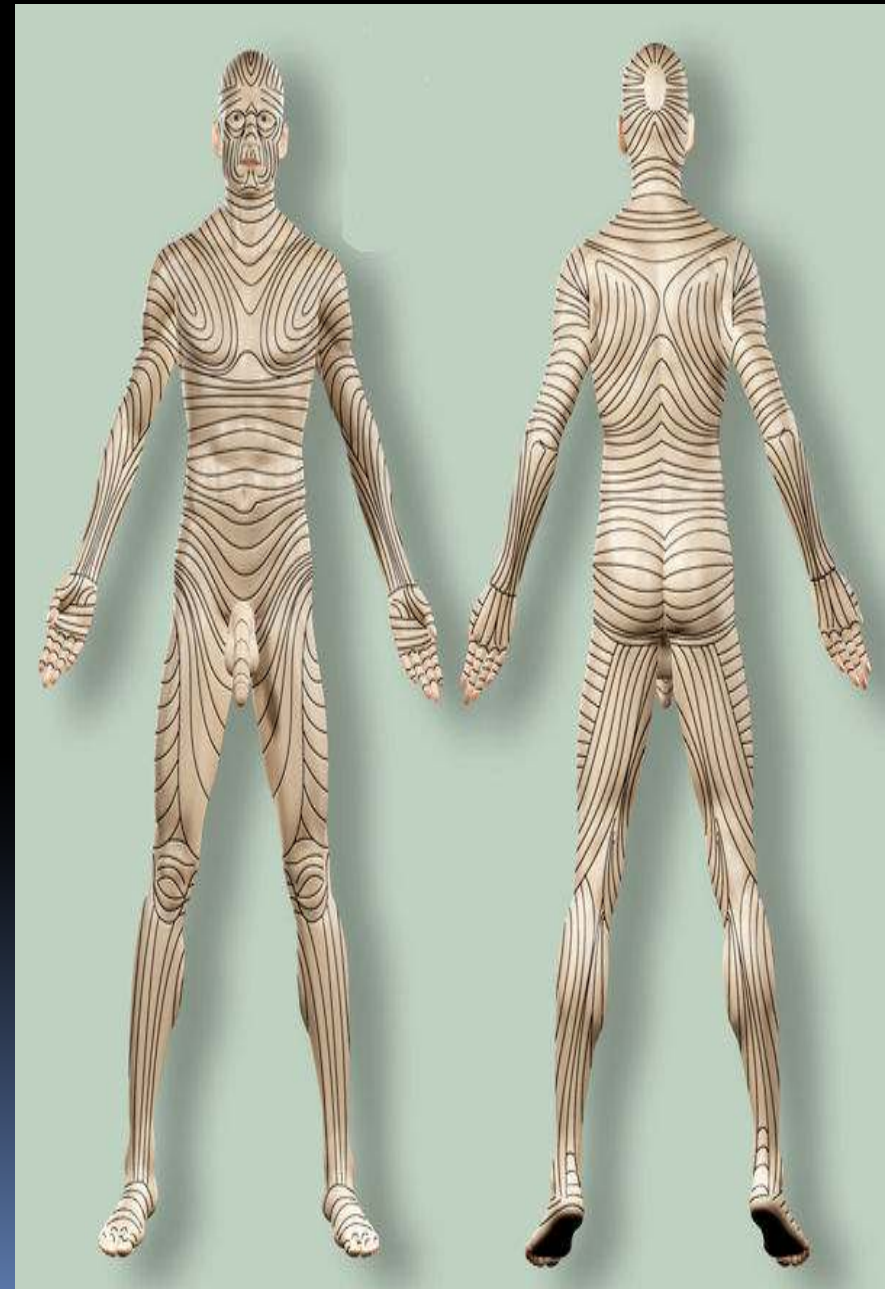
- 1) Skin.
- 2) Superficial fascia:
 - a) Fatty superficial layer (Camper's fascia)
 - b) Membranous deep layer (Scarpa's fascia)
- 3) Deep fascia.
- 4) External oblique m.
- 5) Internal oblique m.
- 6) Transversus abdominis
- 7) Transversalis fascia
- 8) Extraperitoneal fat
- 9) Parietal peritoneum





Skin Of Anterior Abdominal Wall:

- The texture varies :thin in front & thick behind.
- Hair distribution varies according to age, sex and race.
- Natural cleavage lines (**Langer's lines**) are constant , run horizontally around abdominal Wall. Its important for cosmetic appearance healed incision.



Superficial Fascia: it divides into:

a) Superficial or fatty layer

“**fascia of Camper**”: continue with fatty layer of the body & its extremely thick.

b) Deep or membranous layer “fascia of Scarpa” : its thin and fades out as;

➤ **Laterally & above:** it continues with the superficial fascia of the back & the thorax.



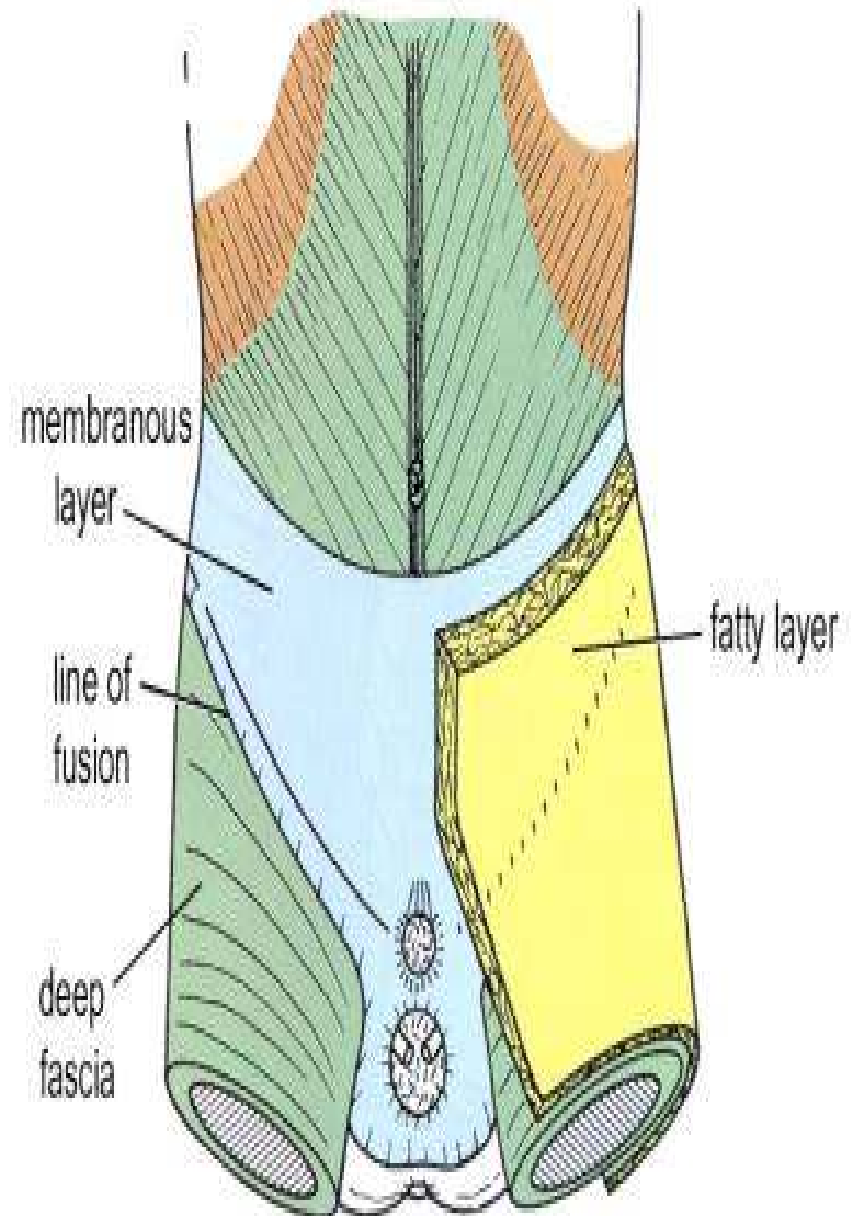
➤ **Inferiorly :**

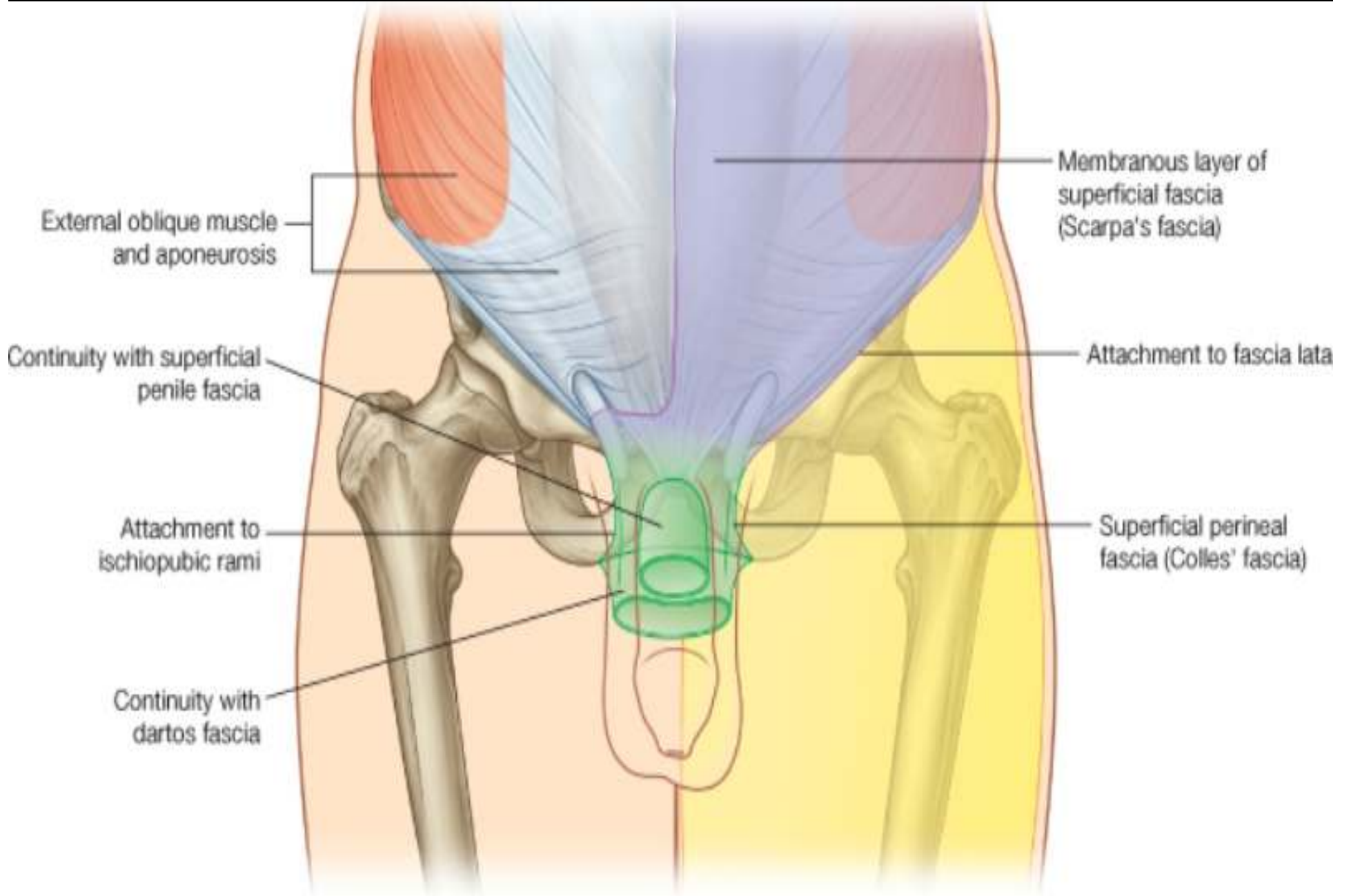
• *laterally* passes into front of thigh where it fuse with deep fascia below inguinal ligament (fascia lata) .

• **Mid line :** it forms a tubular sheath of genitalia .

➤ **Below perineum:** enters wall of scrotum or labia majora then attached to margin of pubic arch and posteriorly it fuse with perineal body & perineal membrane.

Superficial Fascia





➤ **In scrotum:** the fatty layer of the superficial fascia is represented as a layer of smooth muscle “Dartos muscle”. The membranous layer persists as a separate layer called “Colle’s fascia”.

Deep Fascia:

It is a layer of areolar tissue covering the muscles.

