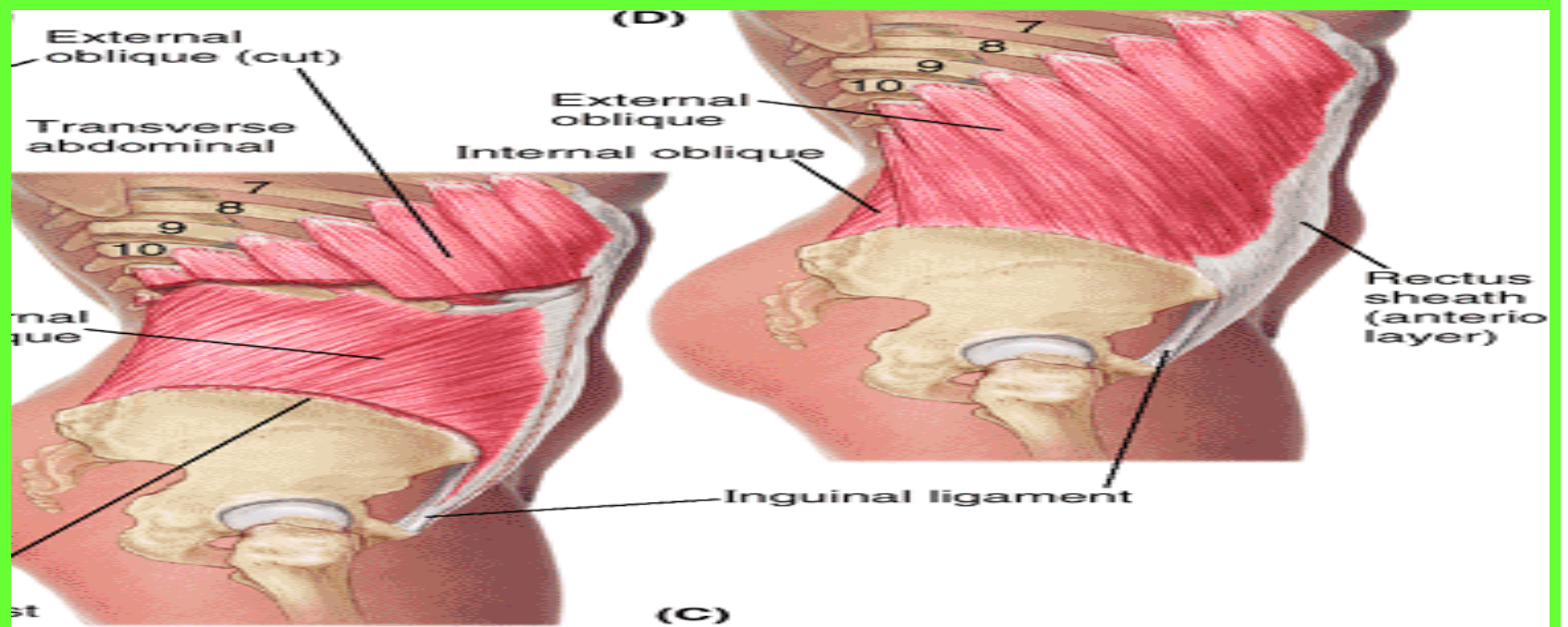
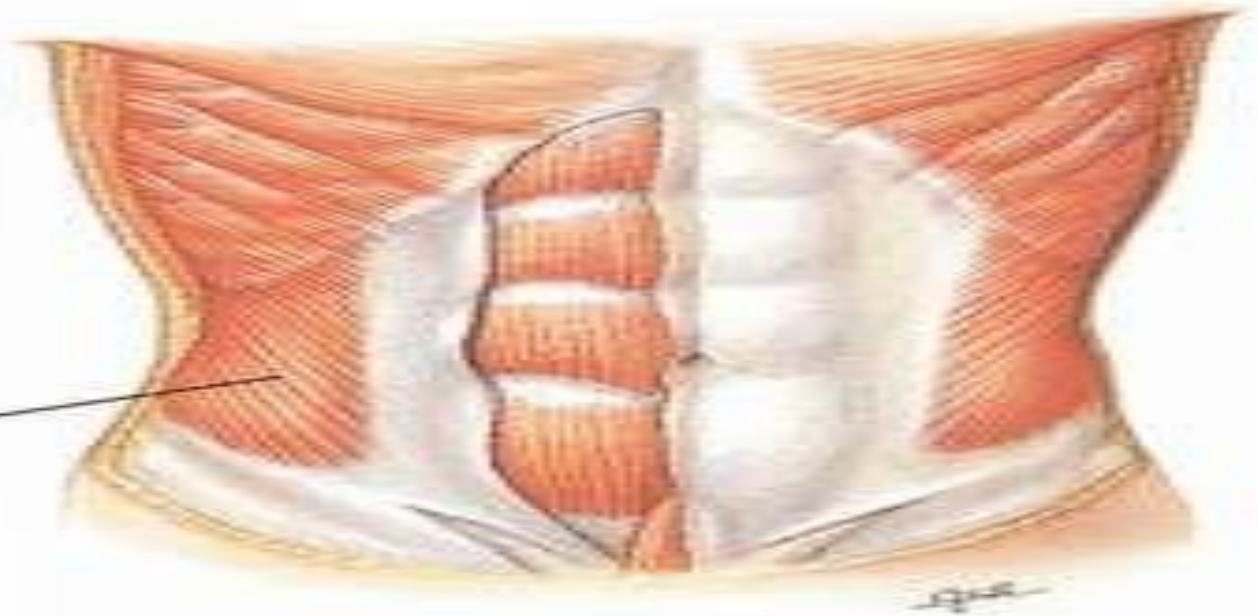
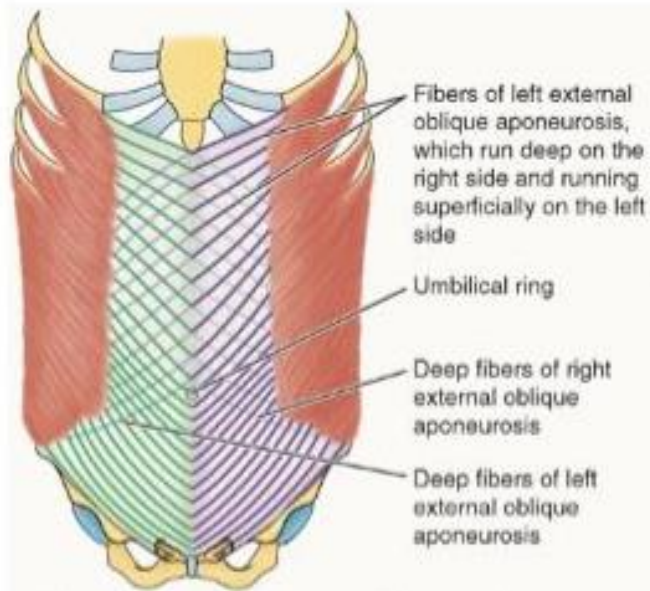




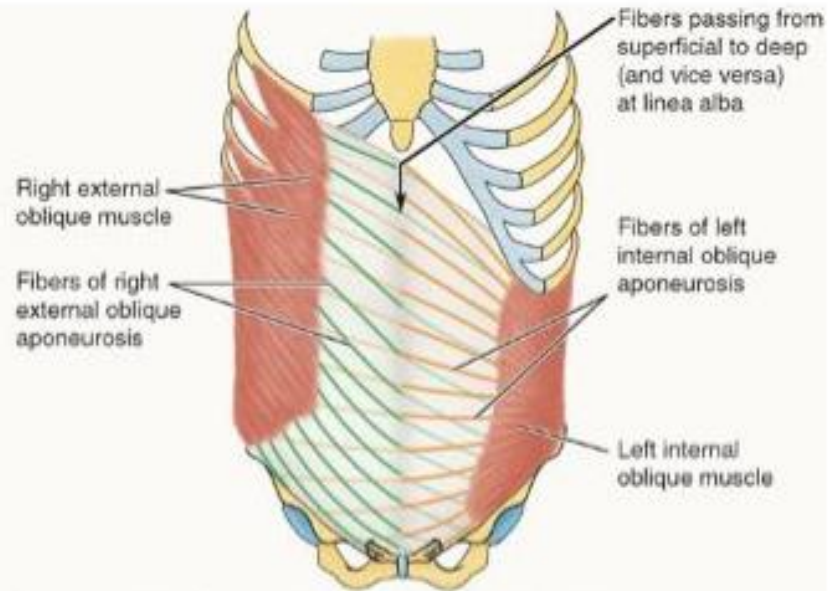
External abdominal oblique





**Intramuscular** exchange of superficial and deep fibers within aponeuroses of contralateral external oblique muscles.

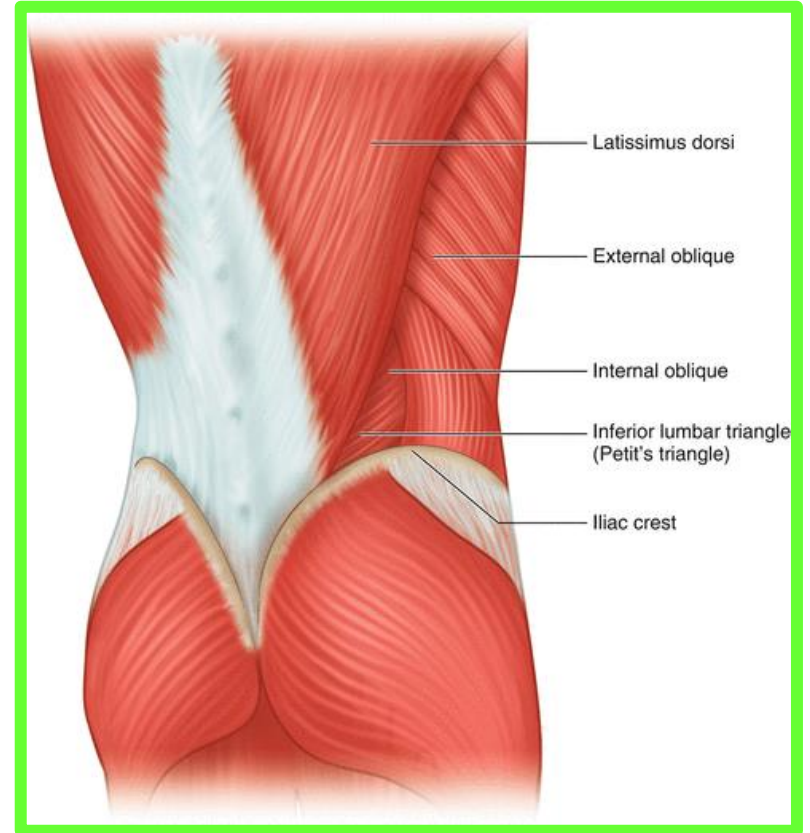
**(A) Anterior views**

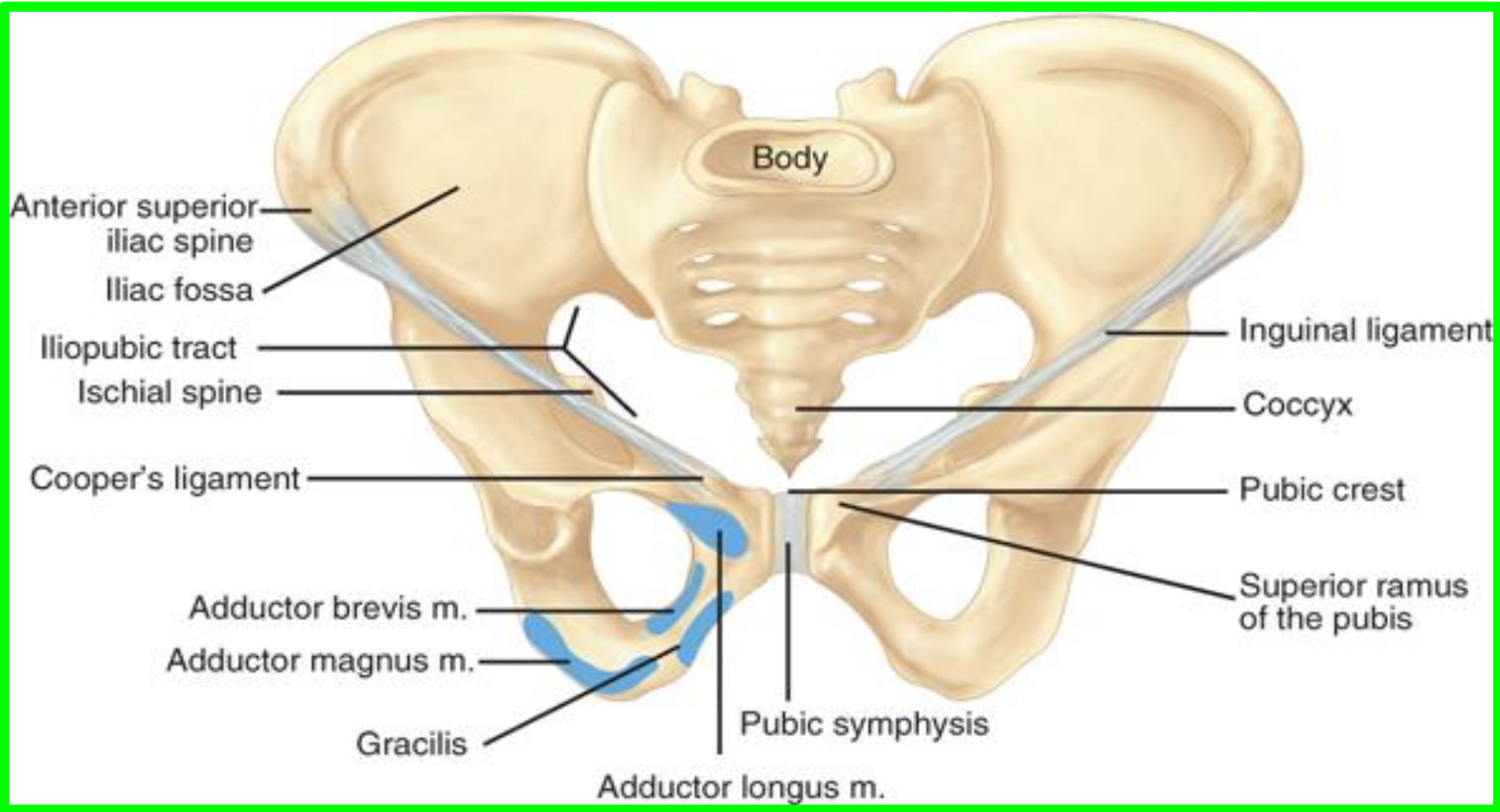


**Intermuscular** exchange of fibers between aponeuroses of contralateral external and internal oblique muscles.

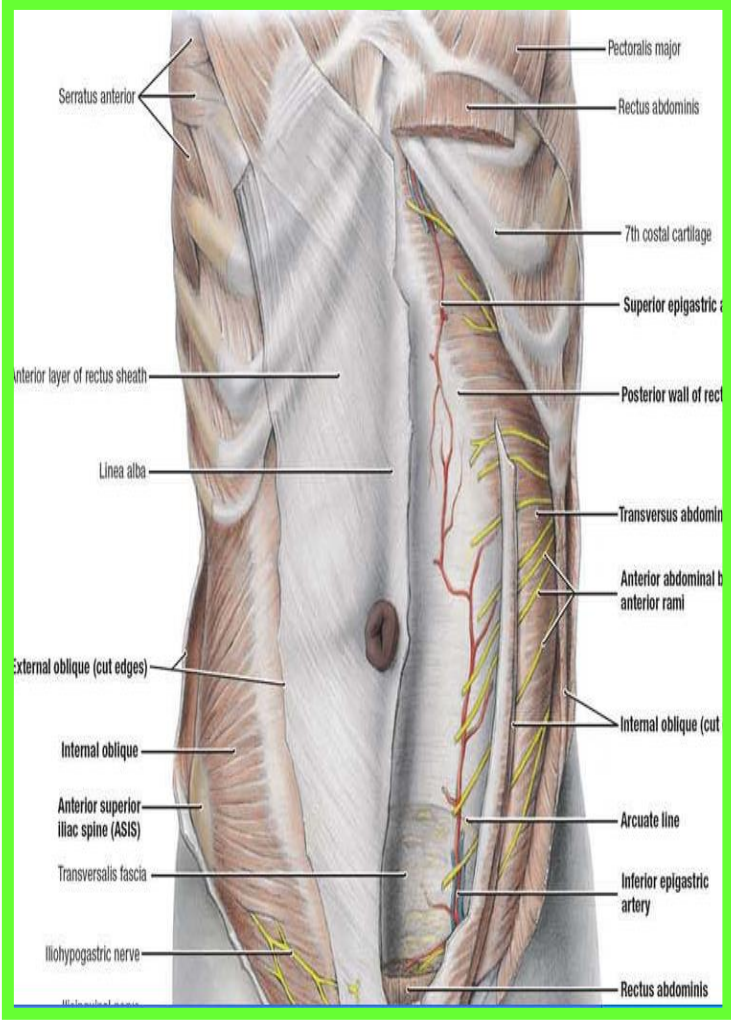
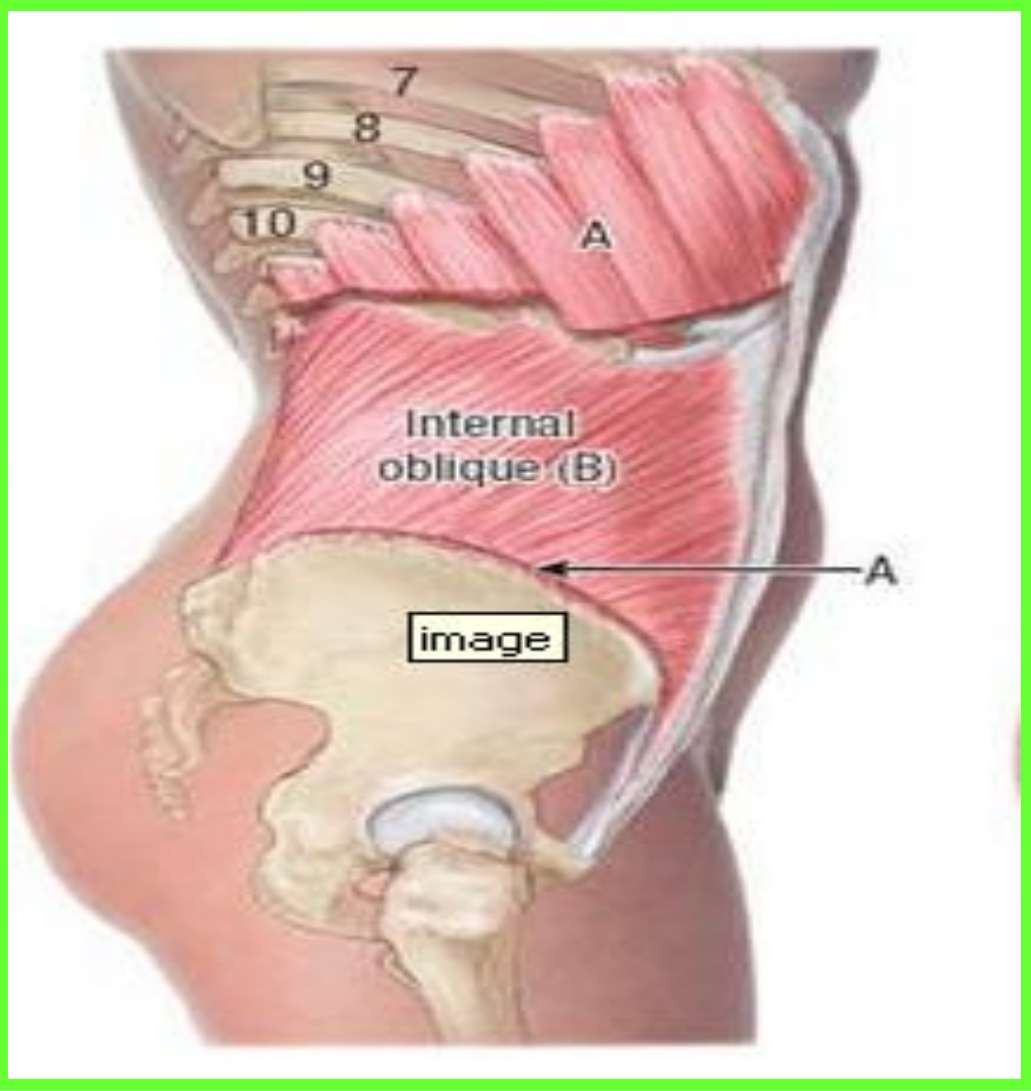
Rectus sheath

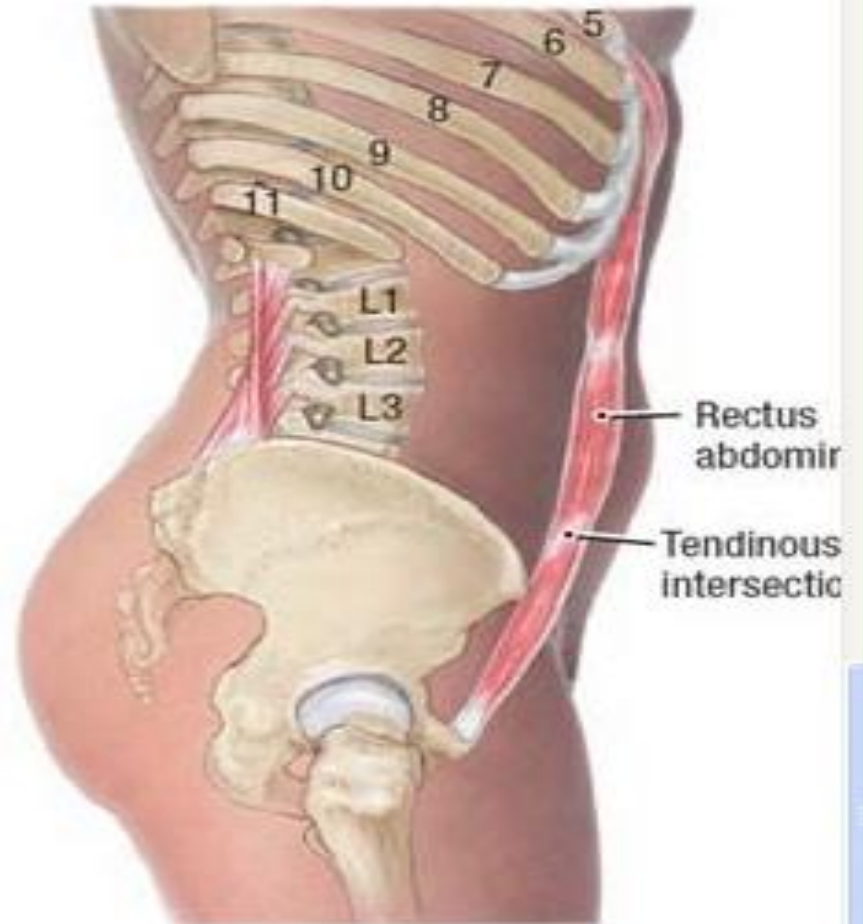
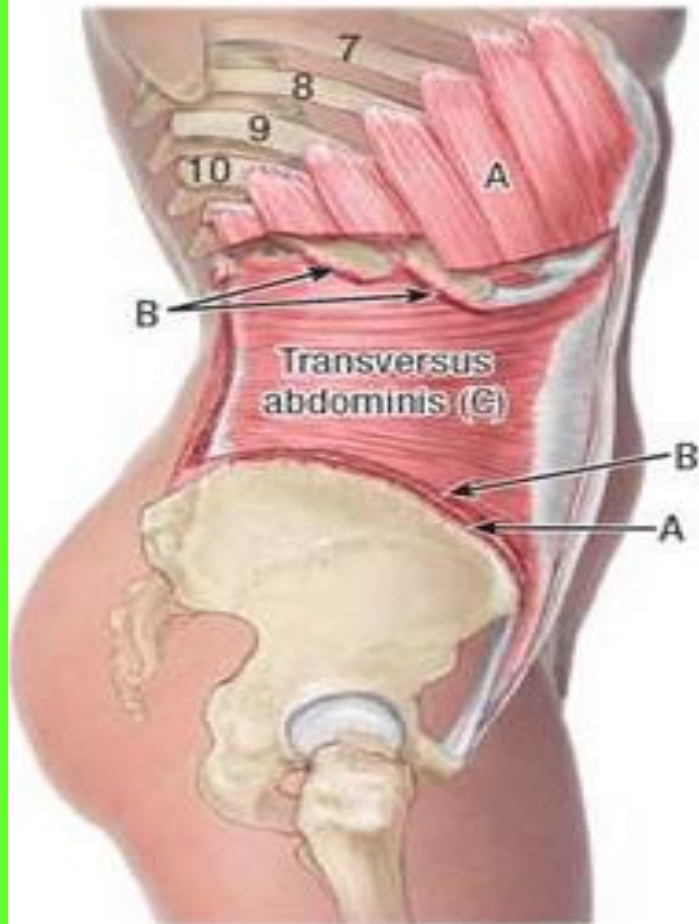
Aponeurosis of transversus





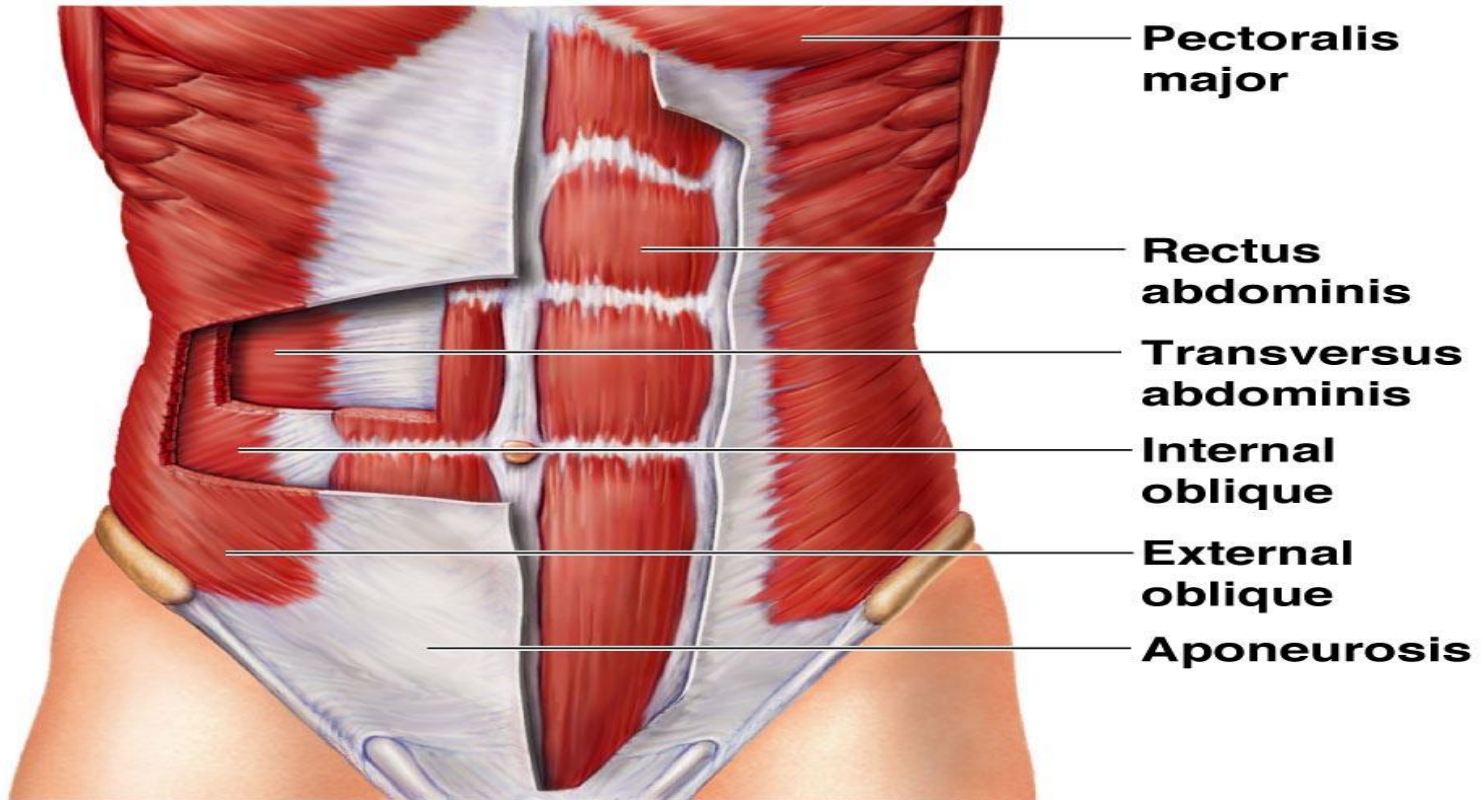




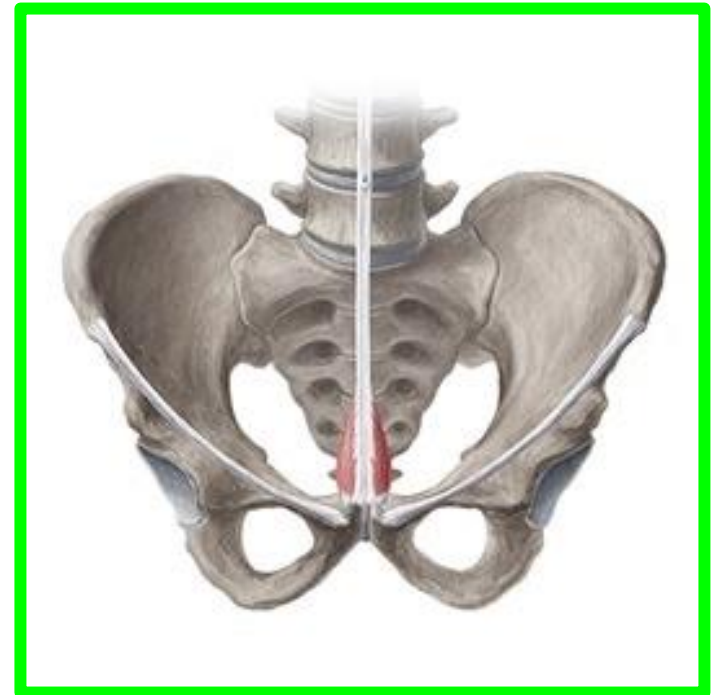
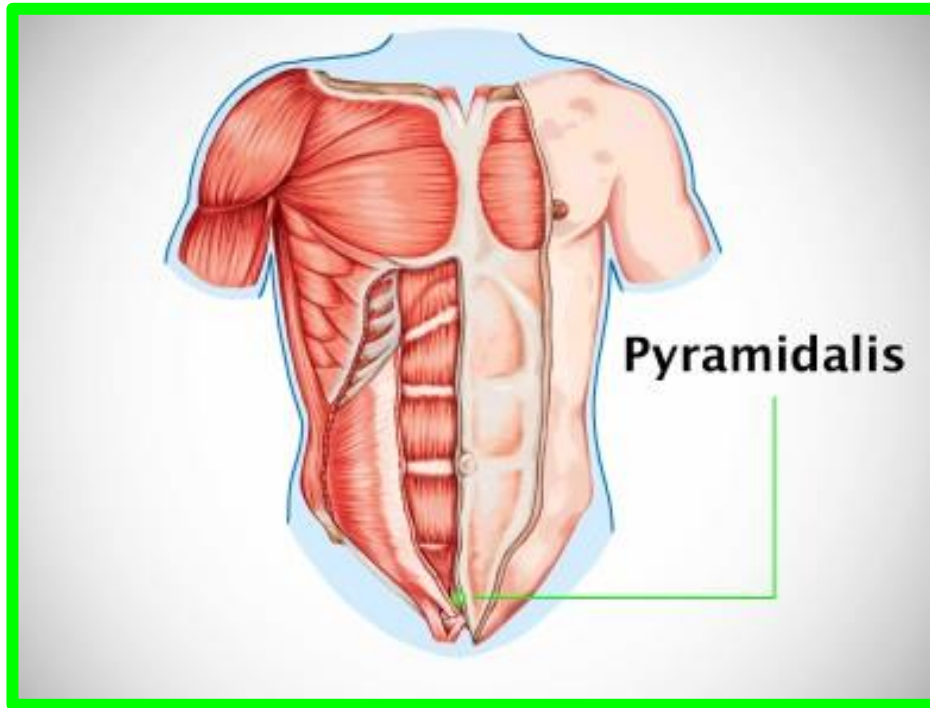




# **Rectus Abdominis Muscle**

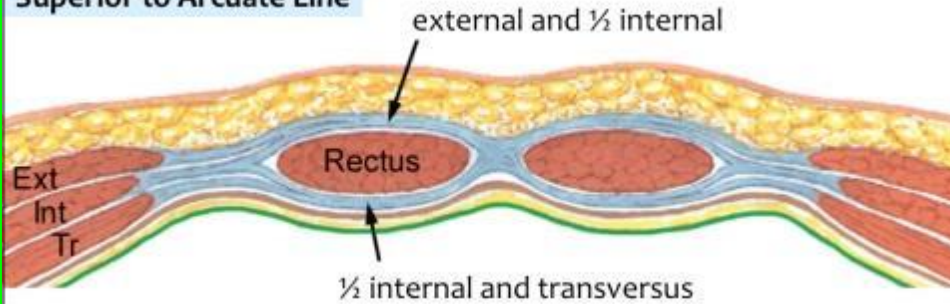


# PYRAMIDALIS

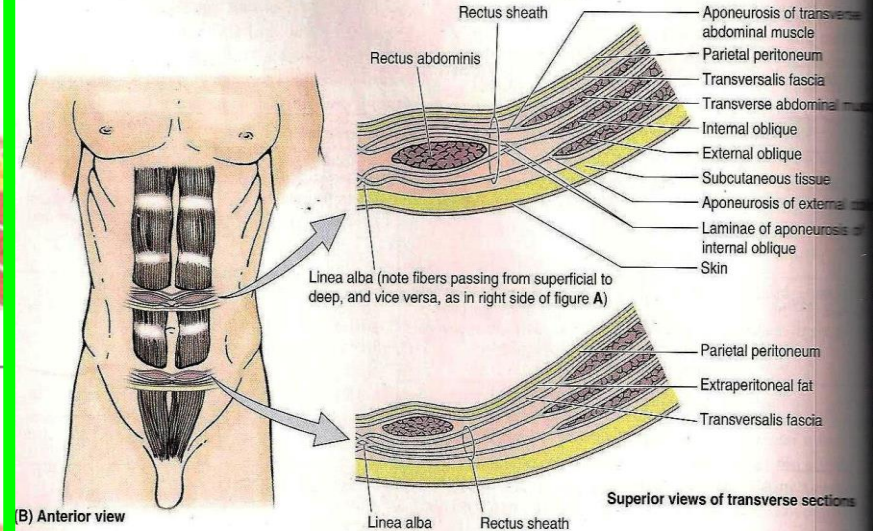
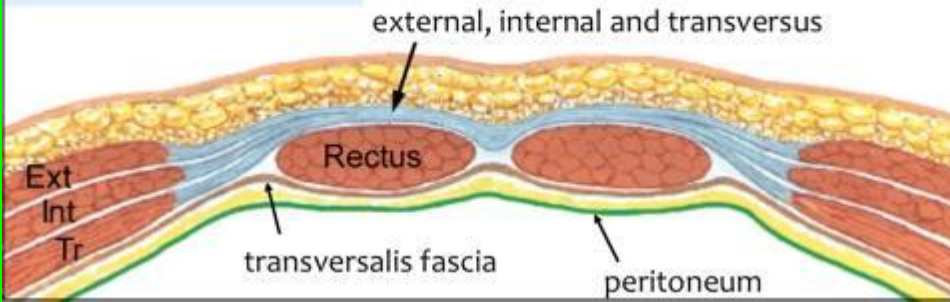


# Rectus Sheath

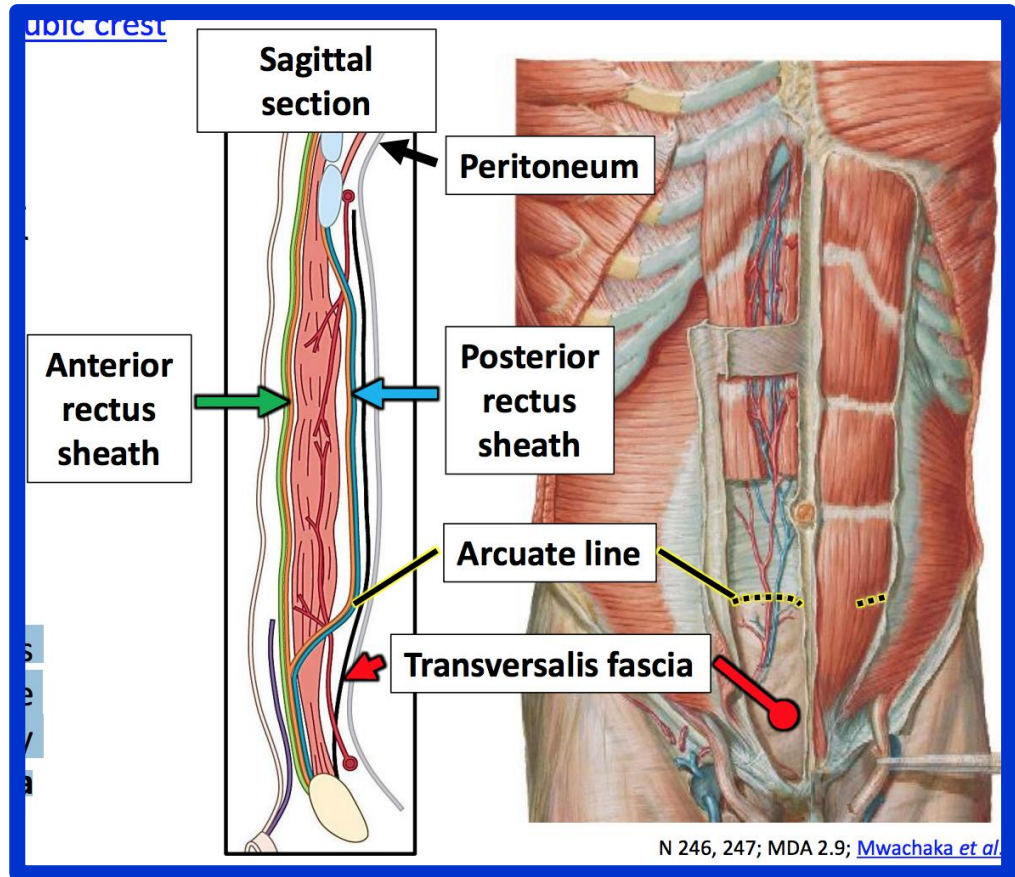
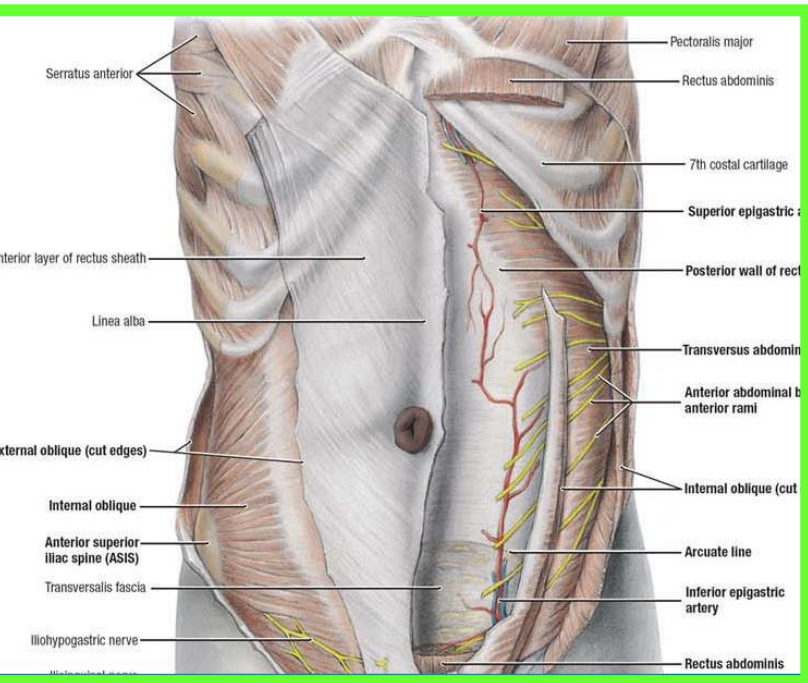
## Superior to Arcuate Line



## Inferior to Arcuate Line







# Contents of the rectus sheath

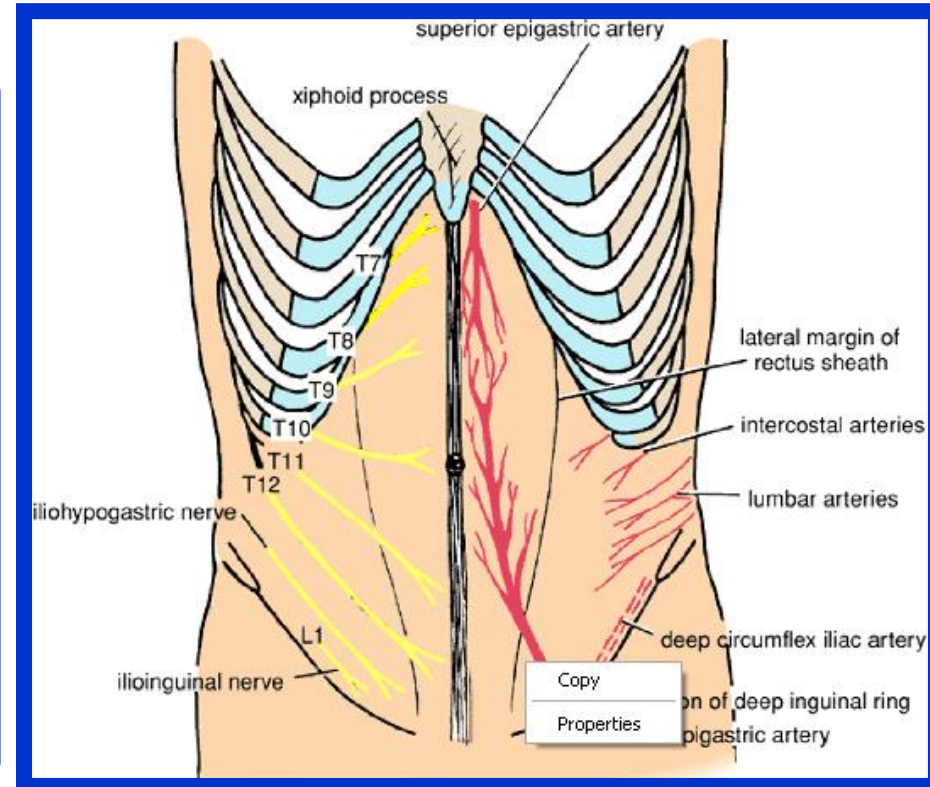
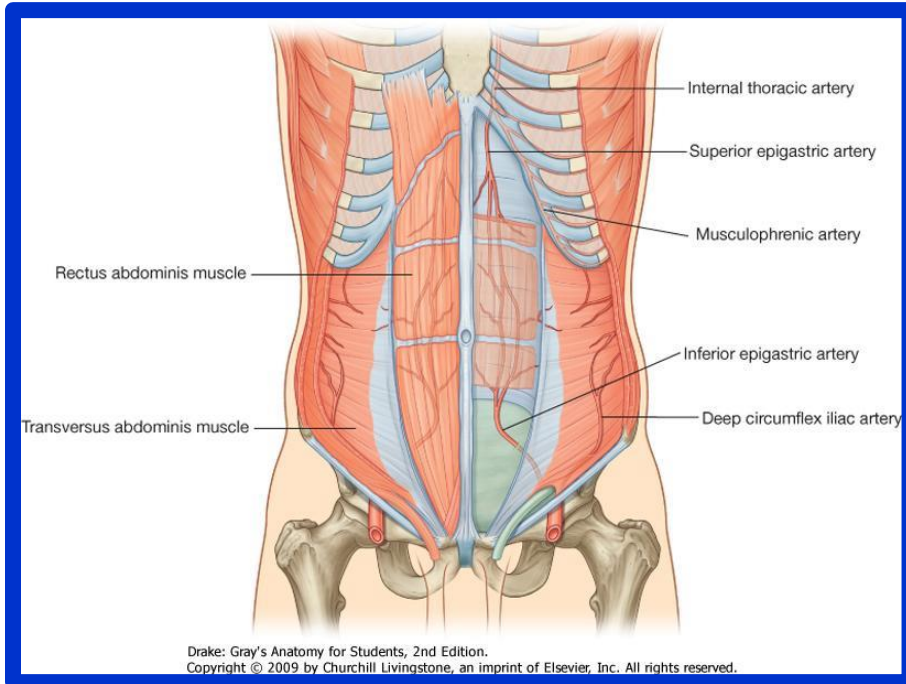
The rectus muscle ✓

Pyramidalis muscle ✓

Intercostal nerves T7 – T11 ✓

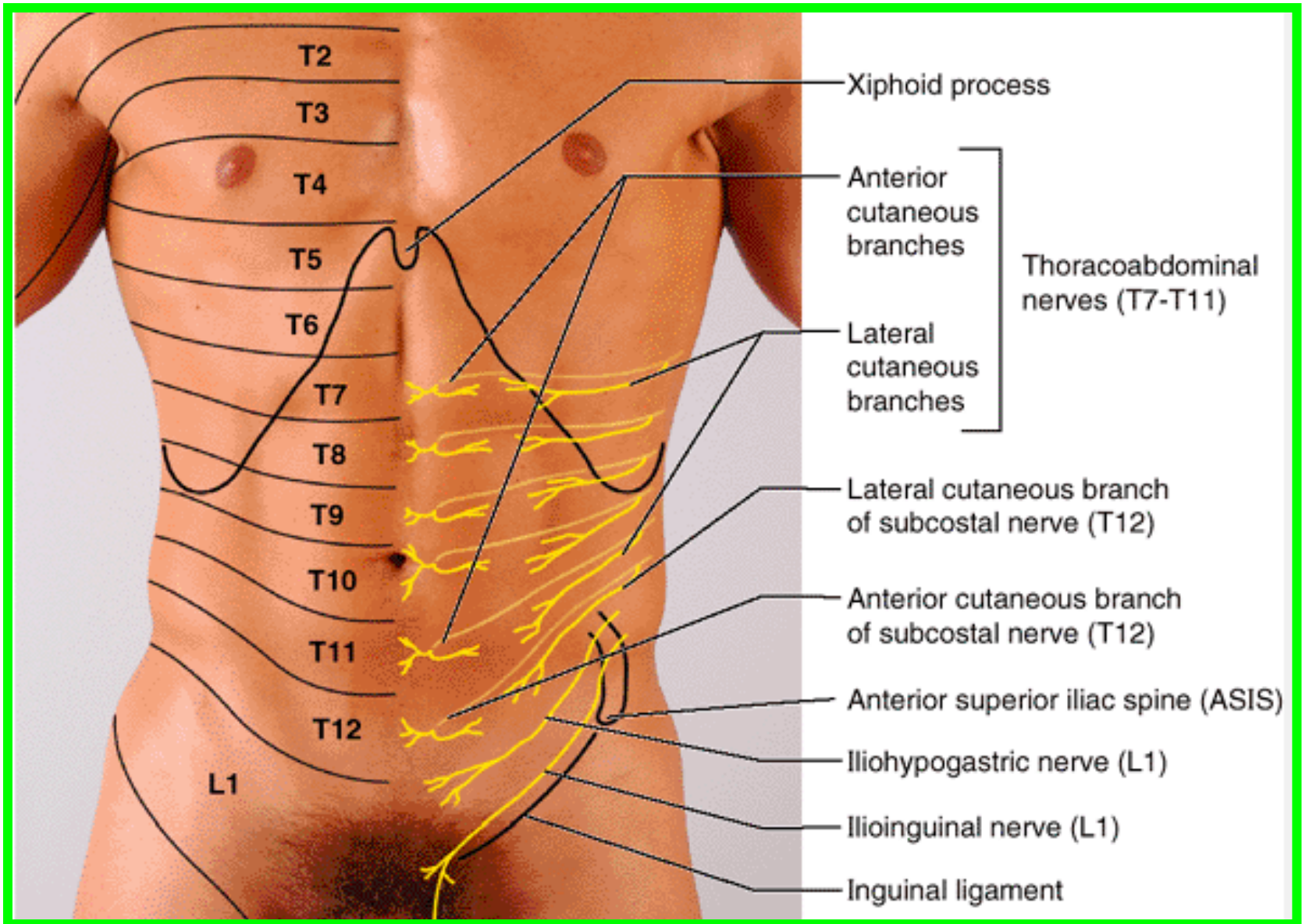
Superior & Inferior Epigastric vessels ✓

Lymphatic vessels ✓



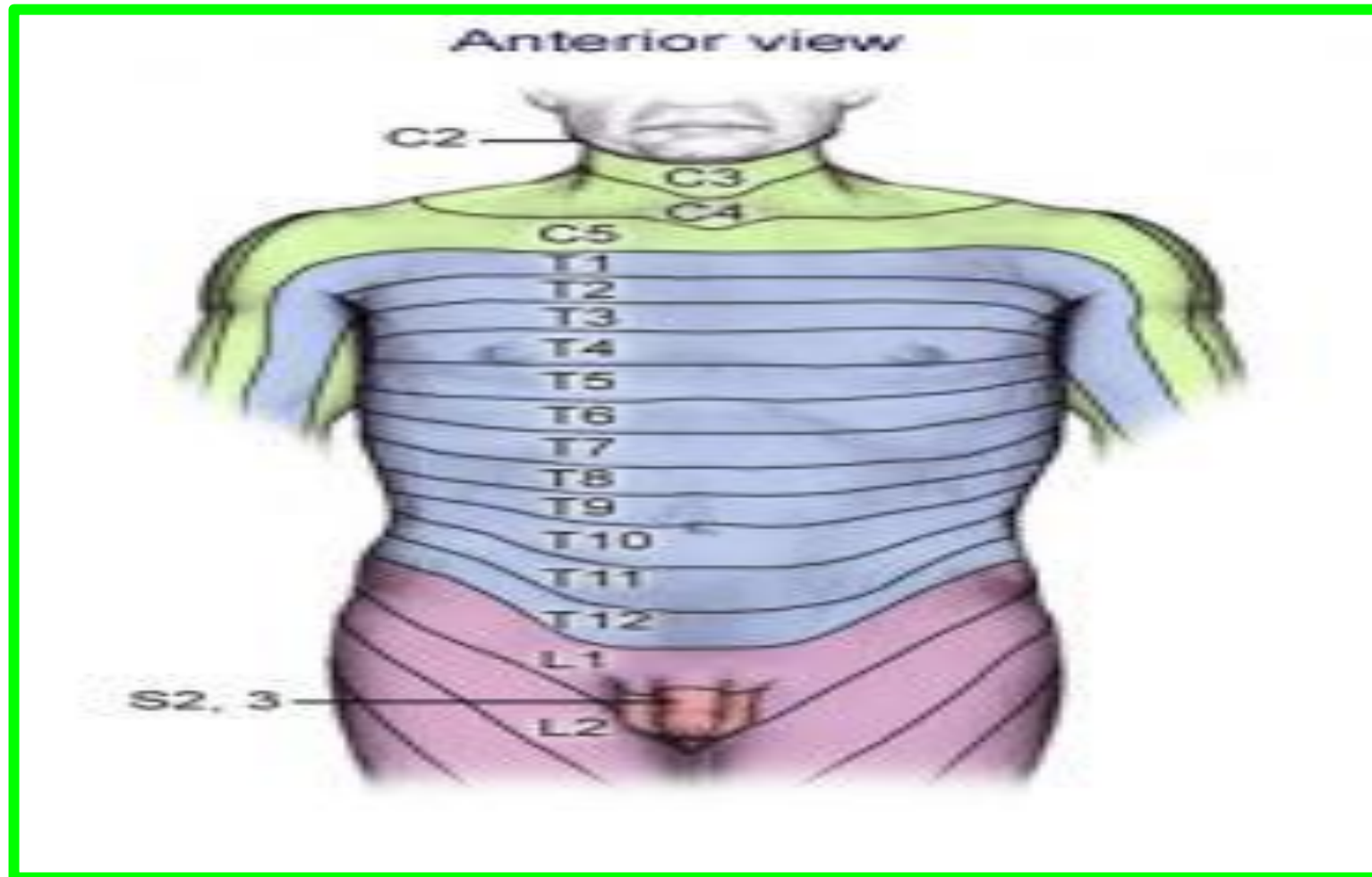


# Nerves of the Anterolateral Abdominal Wall

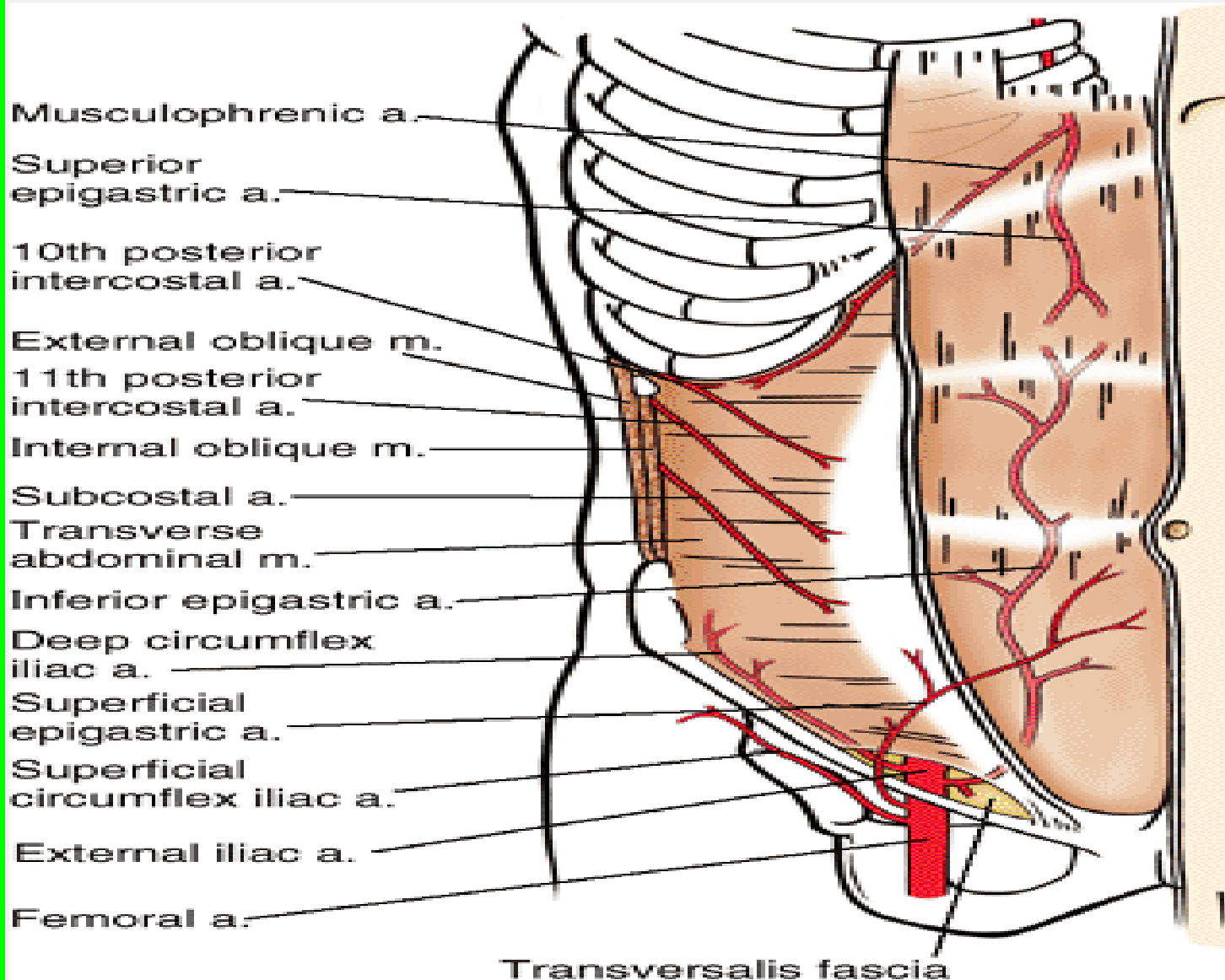




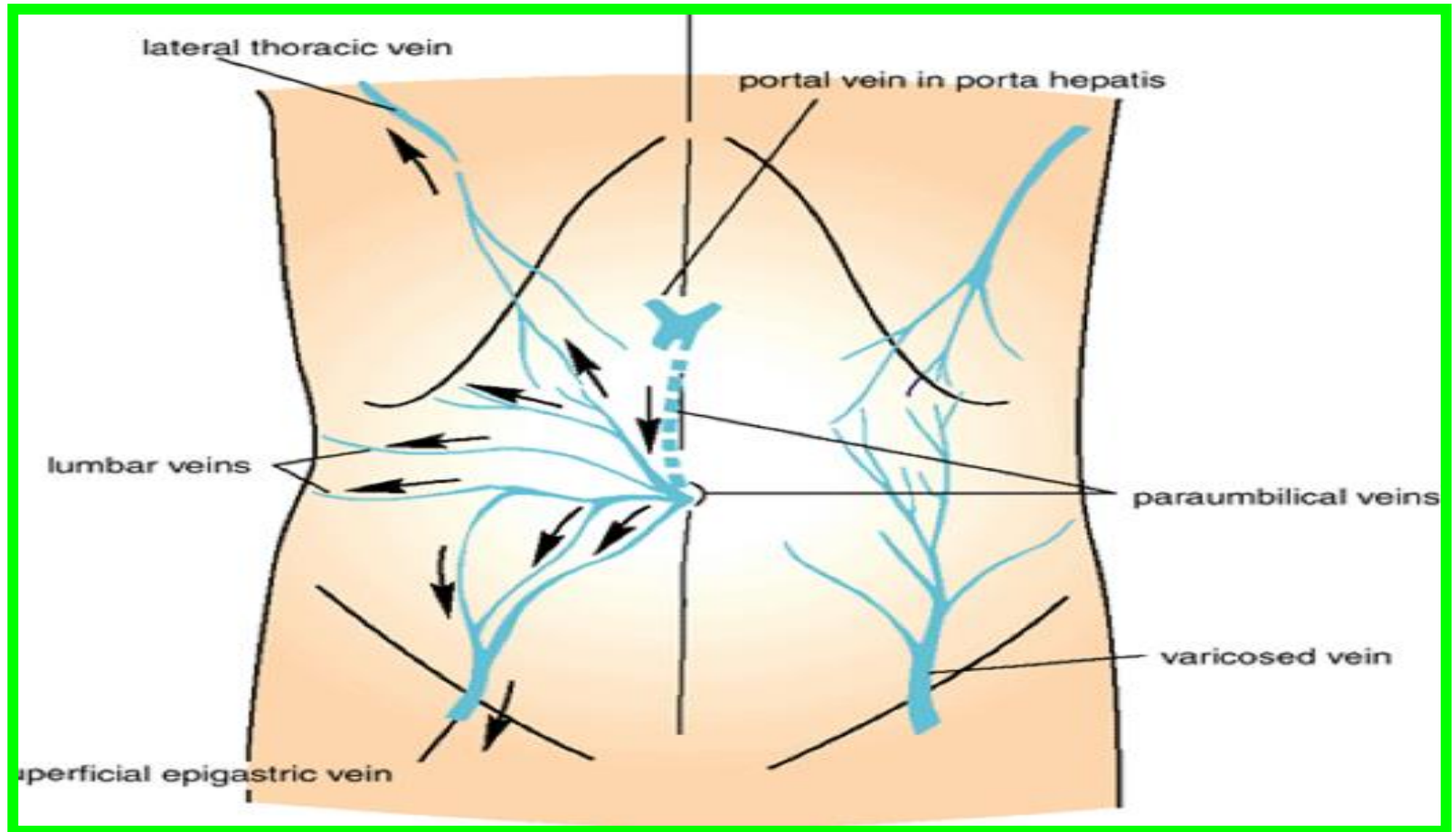
# Nerves of the Anterolateral Abdominal Wall



# Arteries of the Anterolateral Abdominal Wall

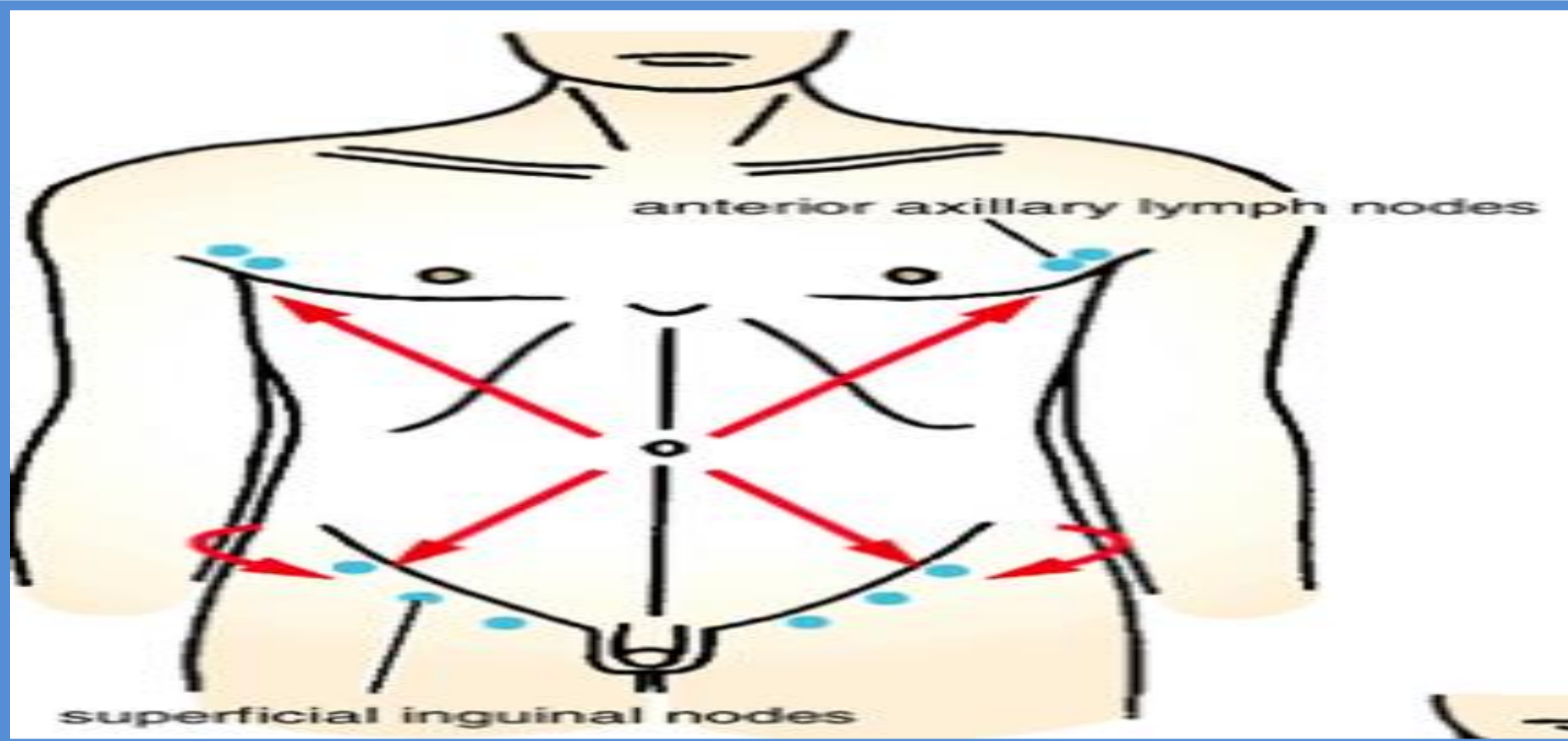


# Veins of the Anterior Abdominal Wall

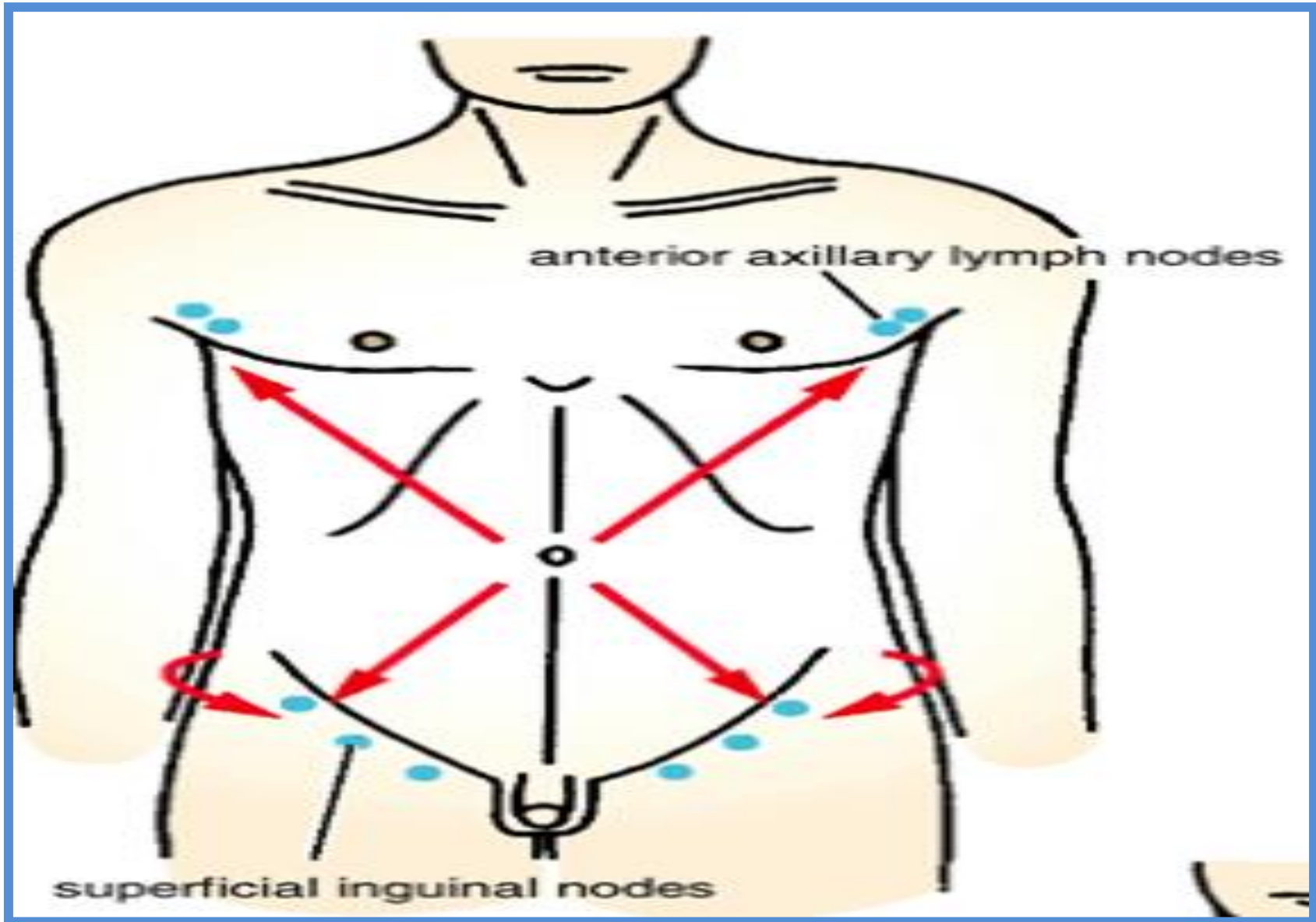




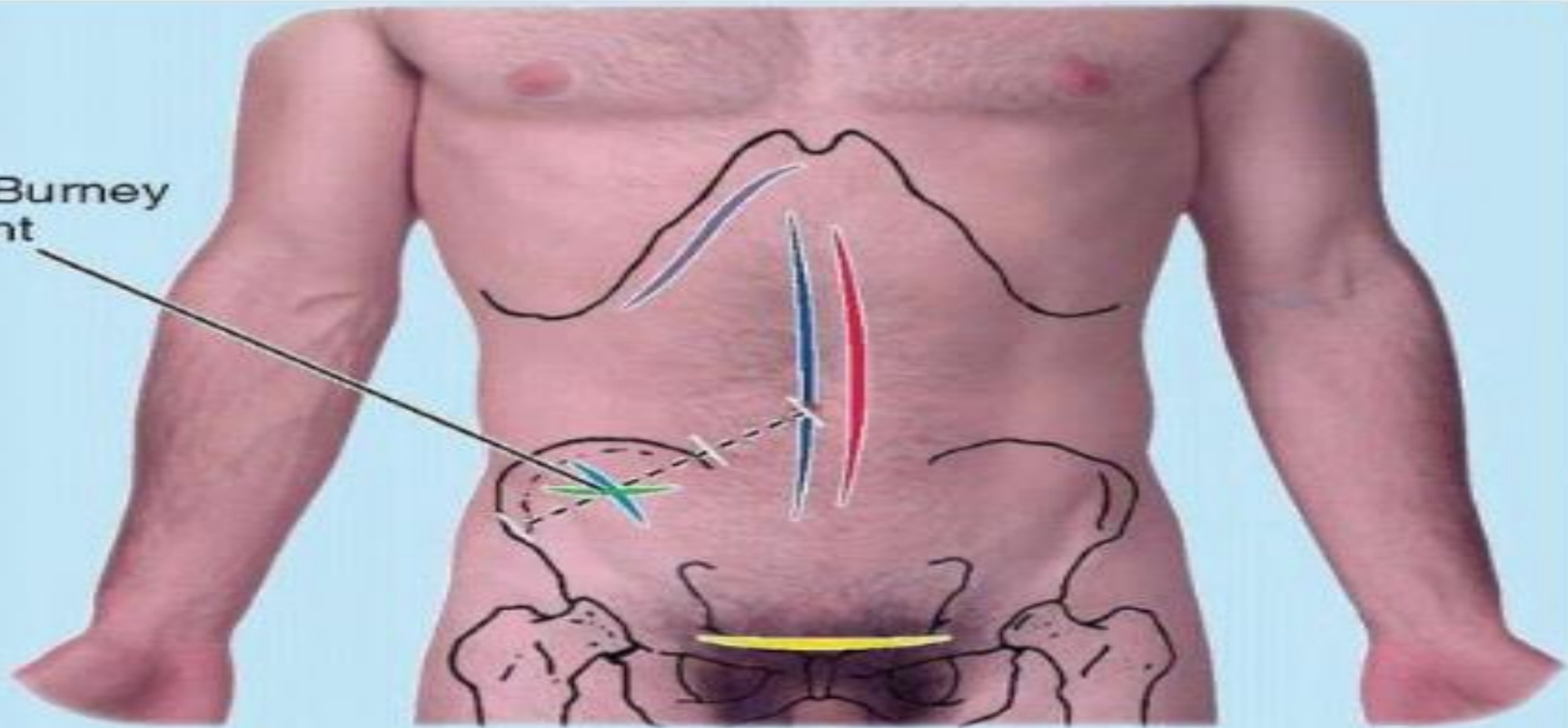
# Lymph Drainage of the Anterior Abdominal Wall









# Lymph Drainage of the Anterior Abdominal Wall



McBurney point

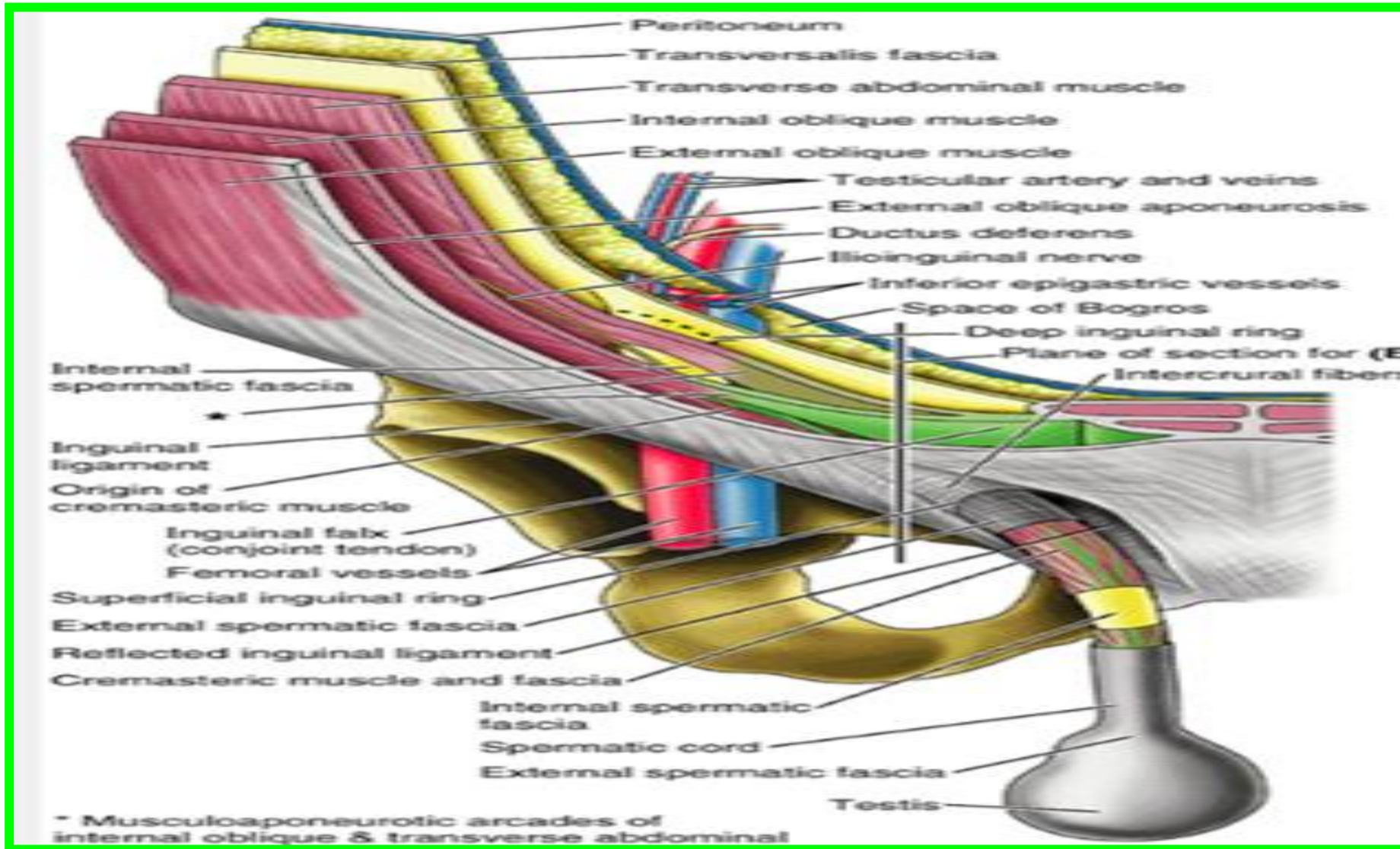


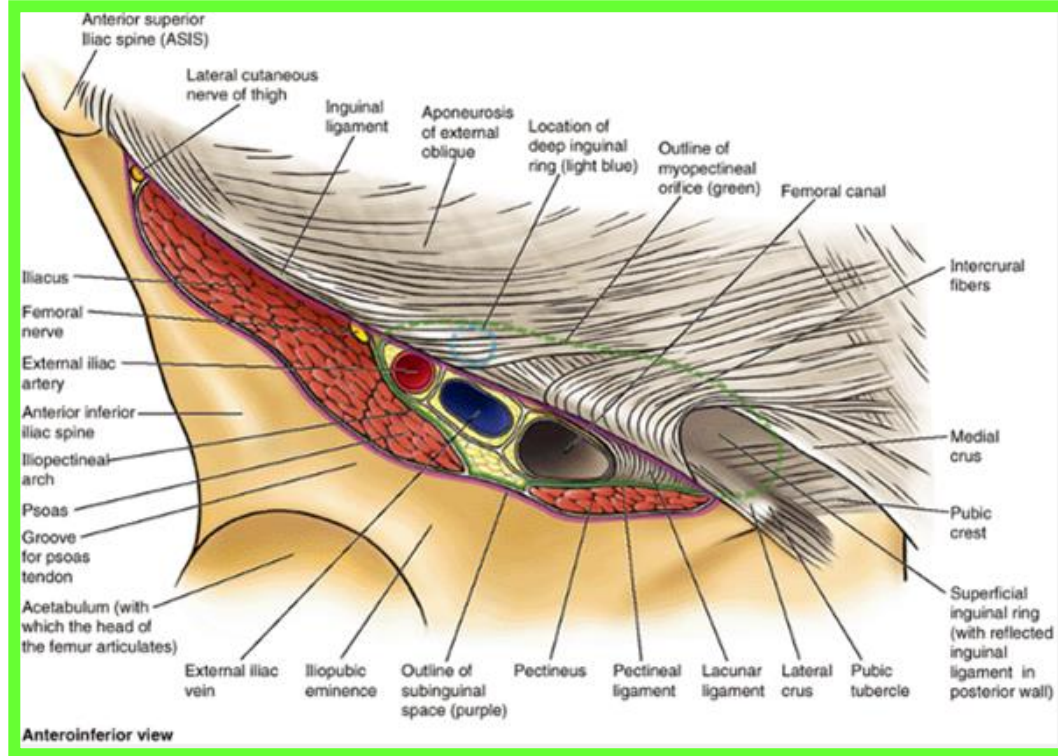
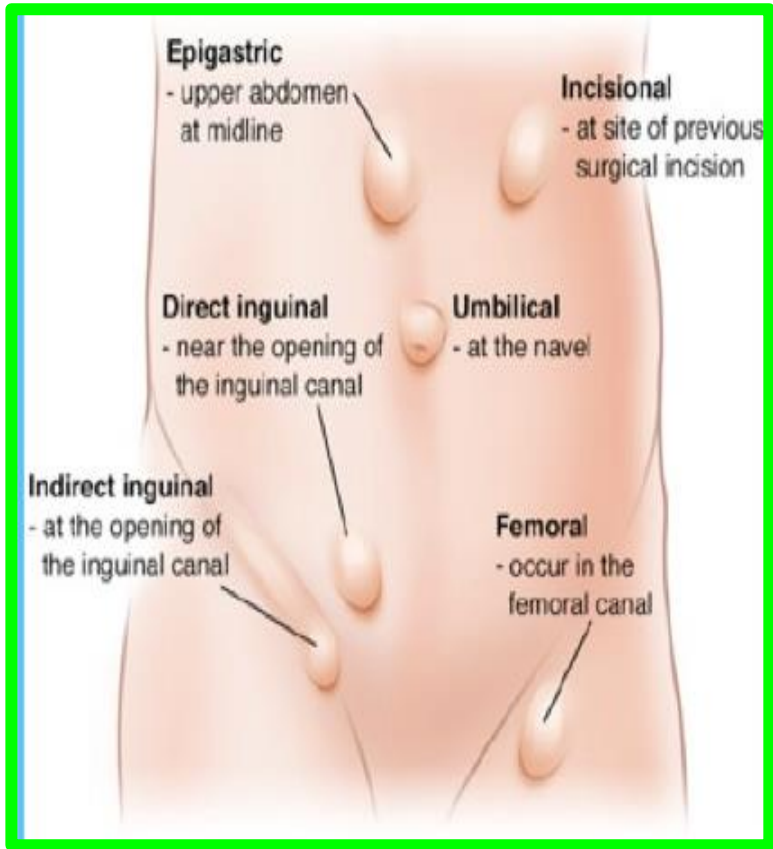
### Key

-  Median or midline incision
-  Left paramedian incision
-  Gridiron (muscle-splitting) incision (traditional McBurney incision and horizontal incision)
-  Suprapubic (Pfannenstiel) incision
-  Transverse (abdominal) incision
-  Subcostal incision

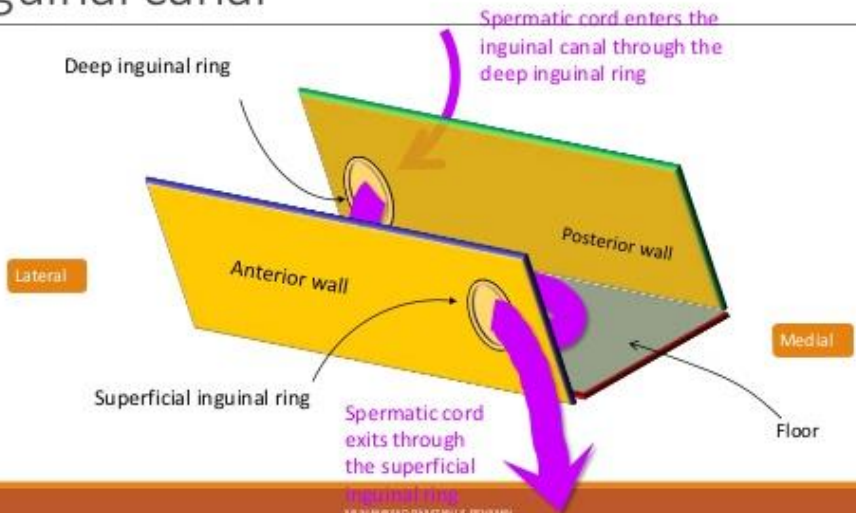


# Inguinal Region

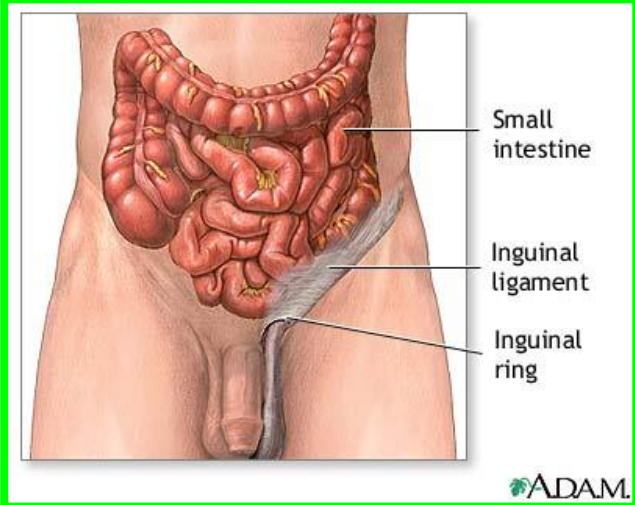




# Inguinal canal



MUHAMMAD RAZVAN ULL BEHAWI



ADAM

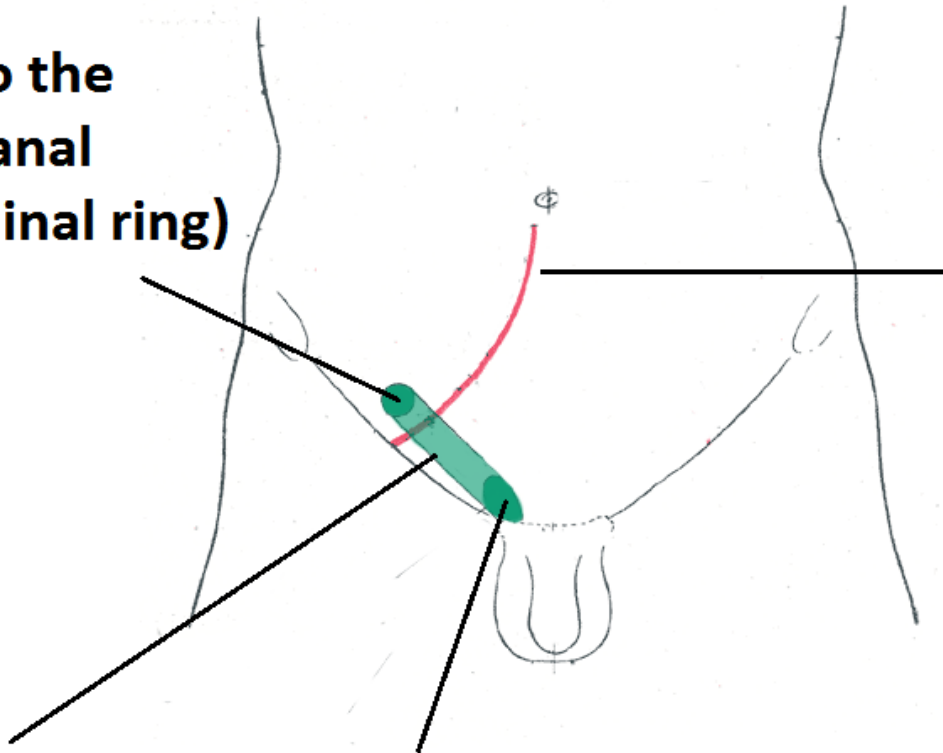


**Opening to the  
inguinal canal  
(deep inguinal ring)**

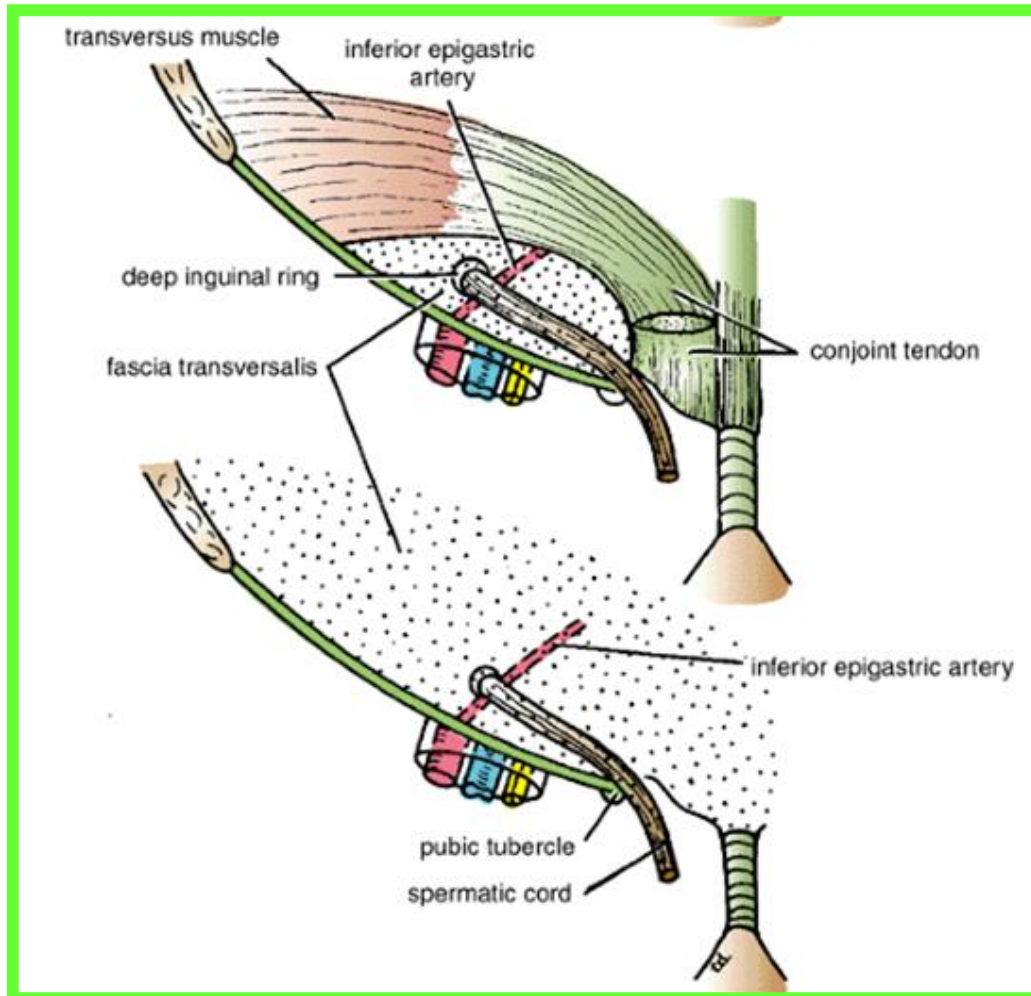
**Inferior  
epigastric vessels**

**Inguinal canal**

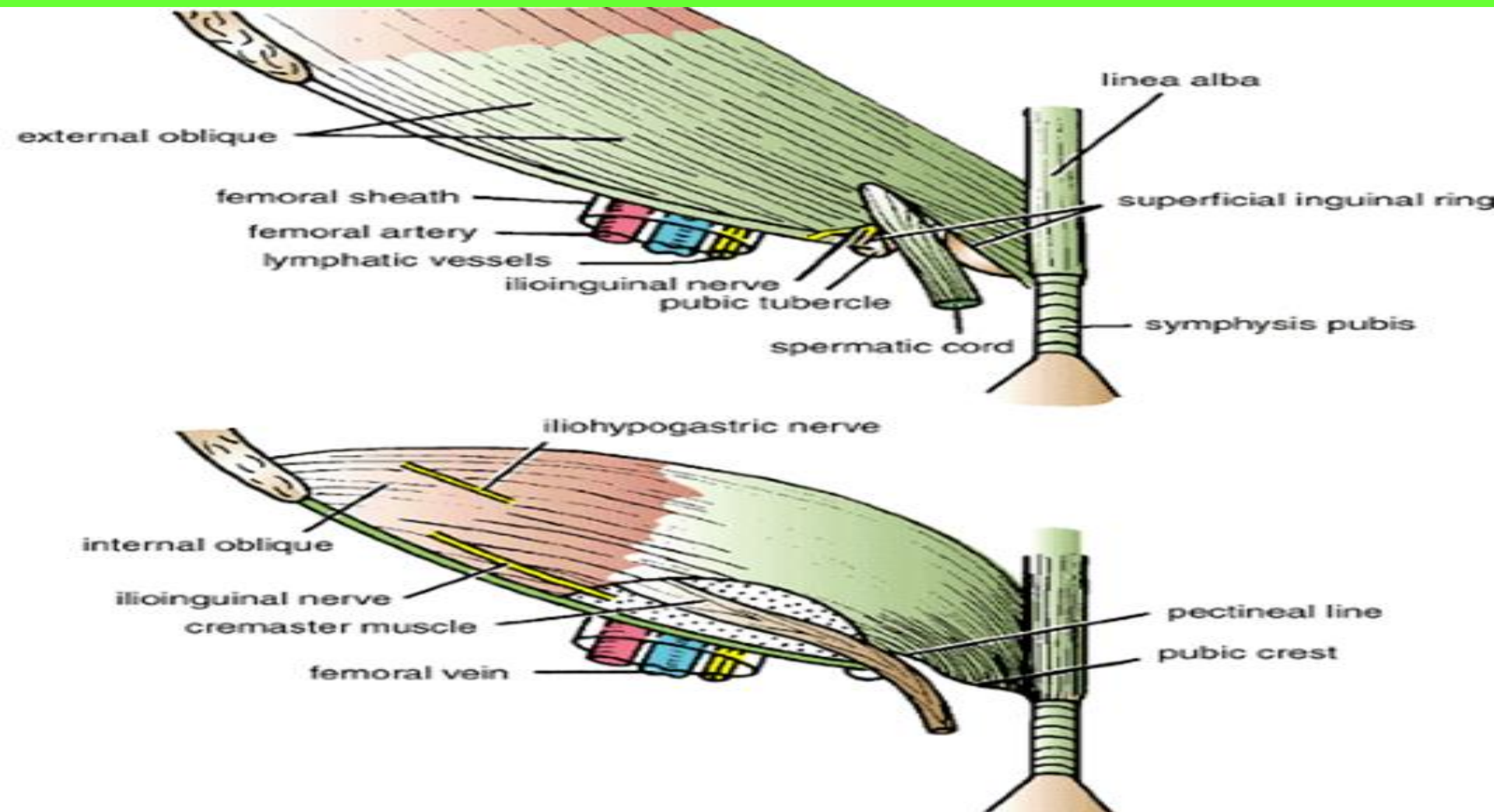
**Exit from the inguinal canal  
(superficial inguinal ring)**



## The deep inguinal ring, □



## The deep inguinal ring





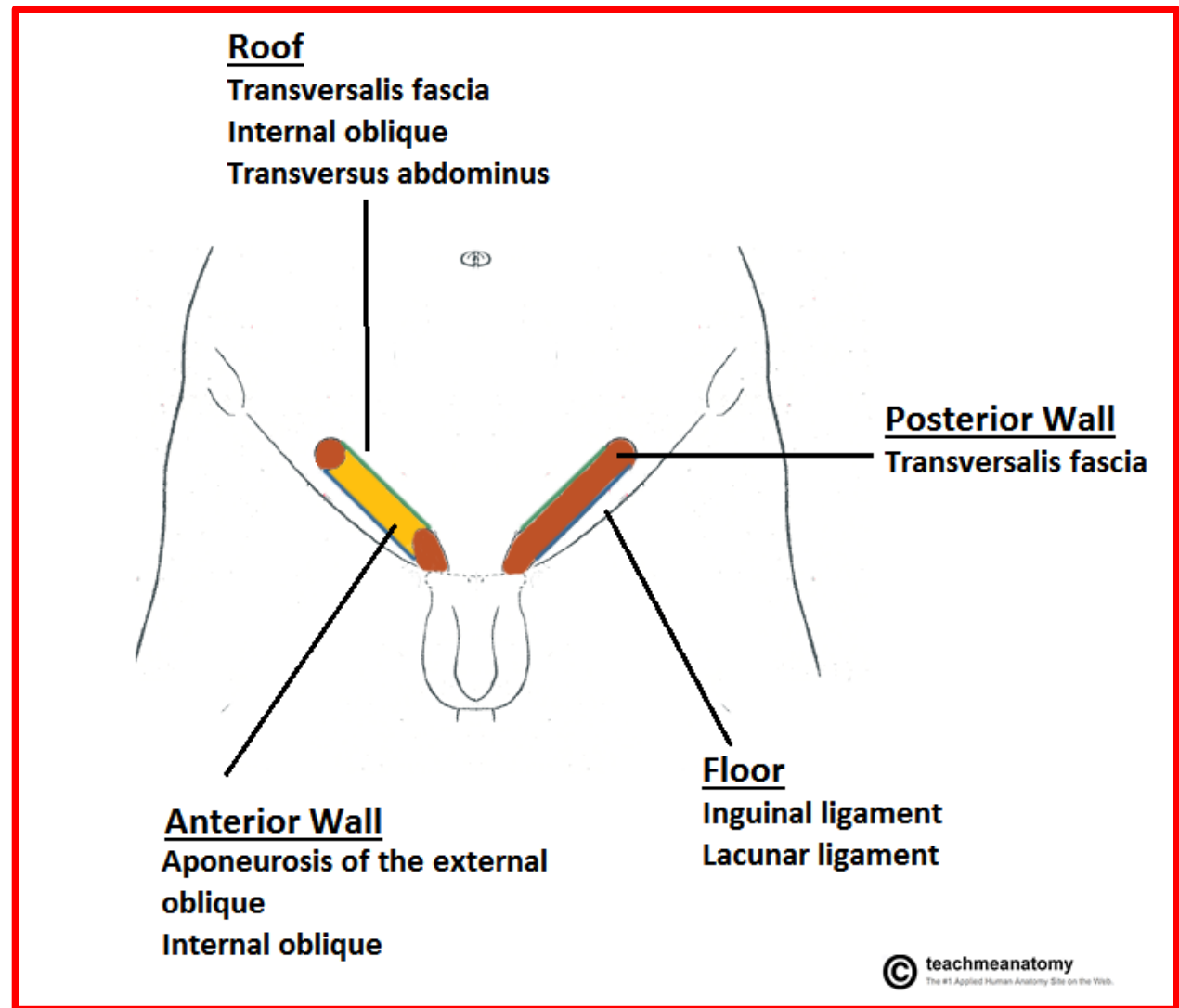
# Walls of the Inguinal Canal

Anterior wall ✓

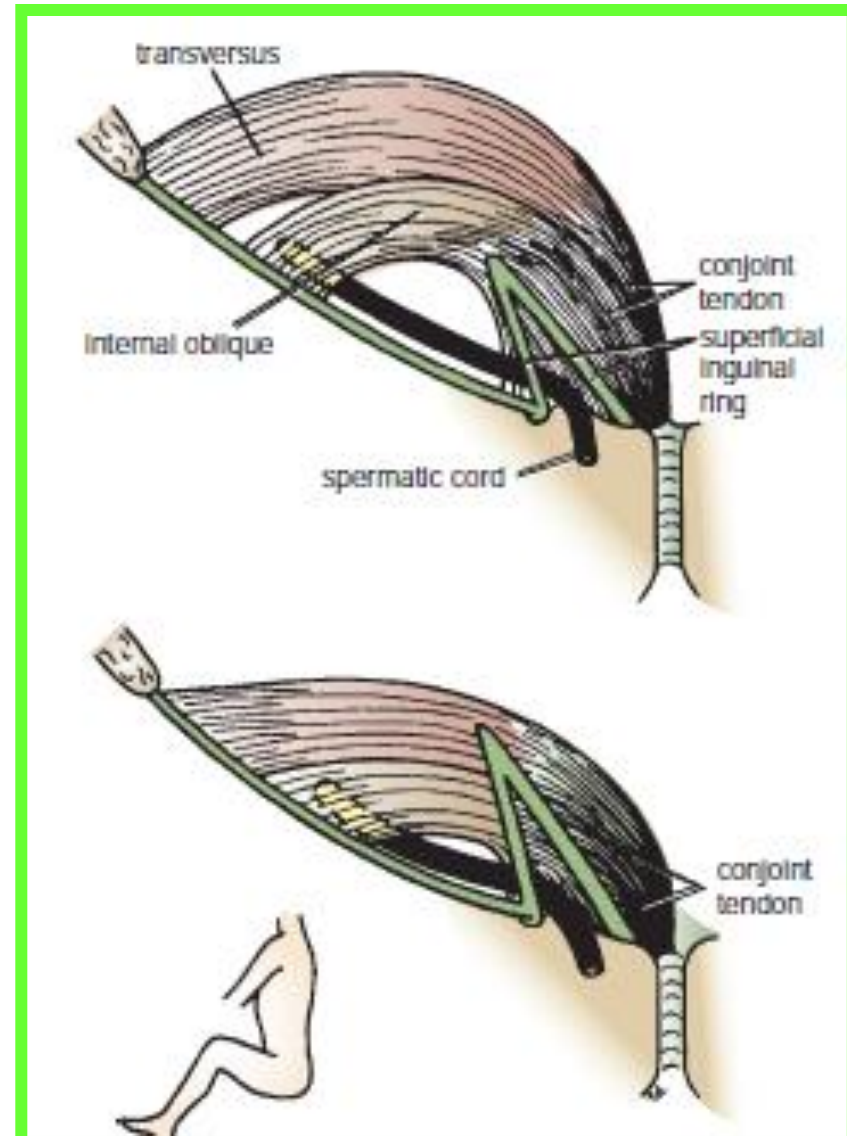
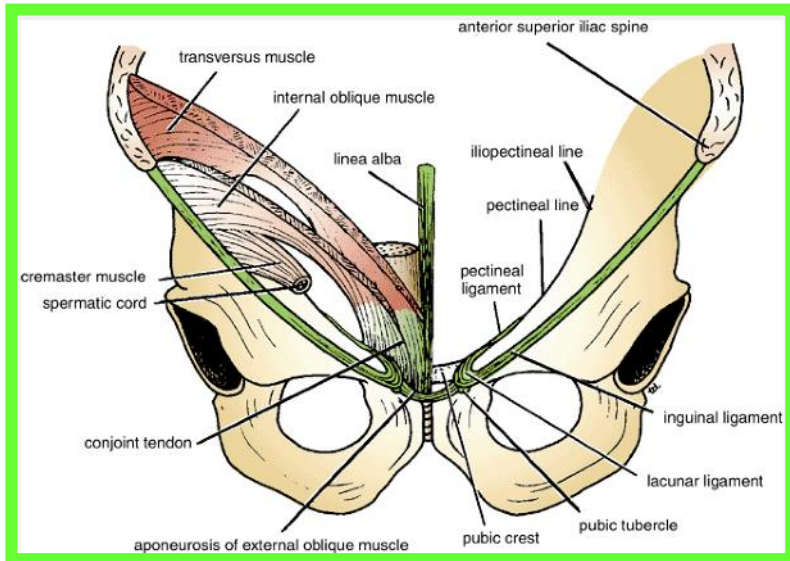
Posterior wall ✓

Roof ✓

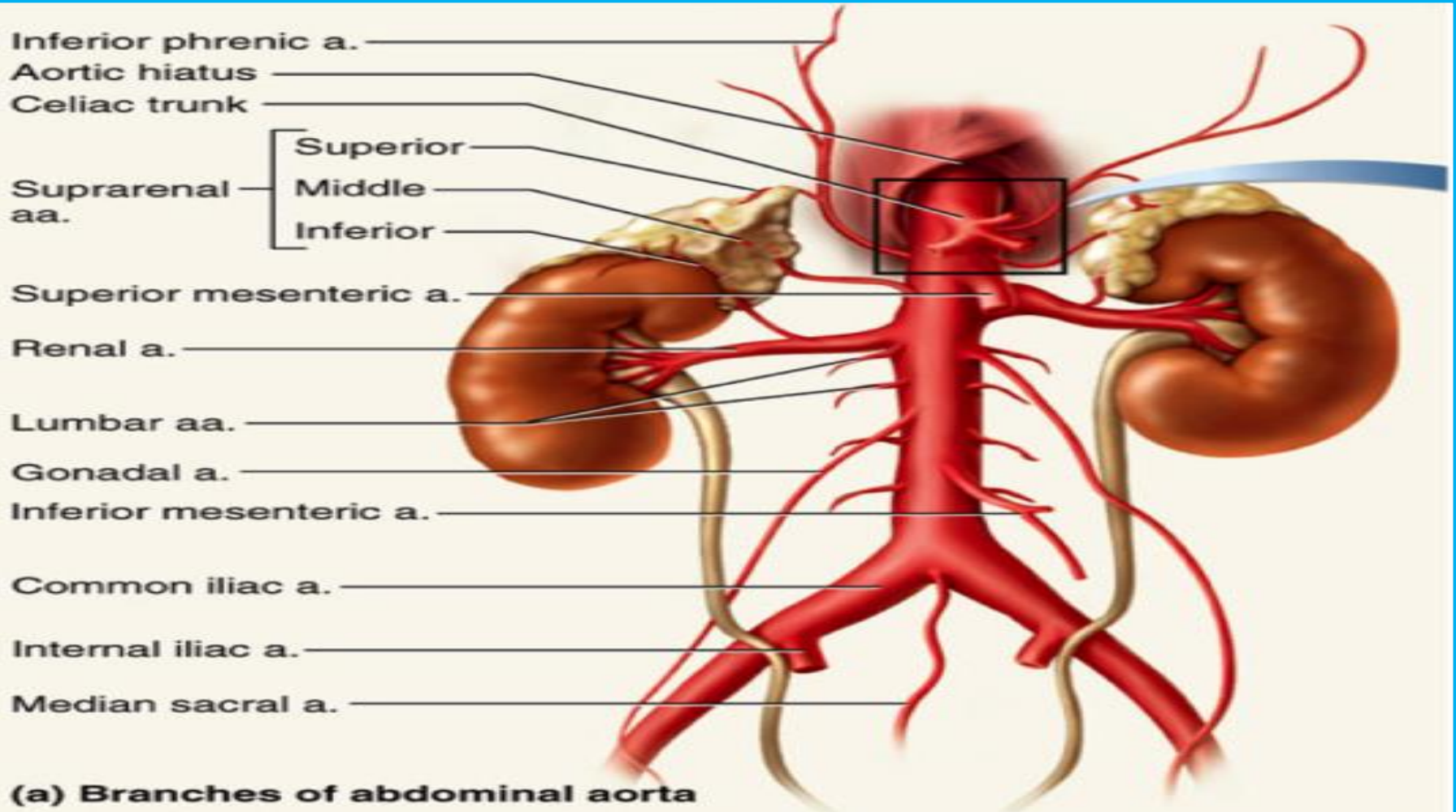
Floor ✓



# Walls of the Inguinal Canal

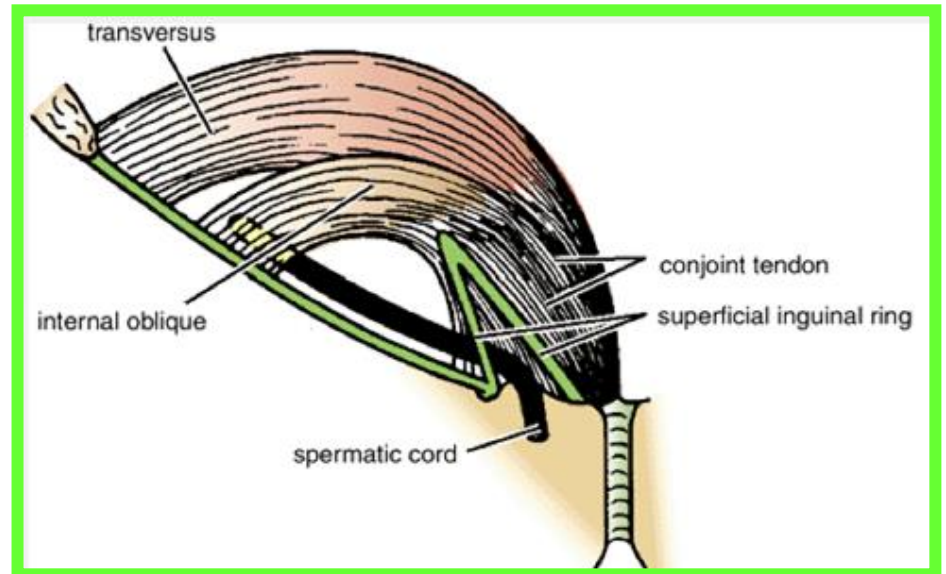
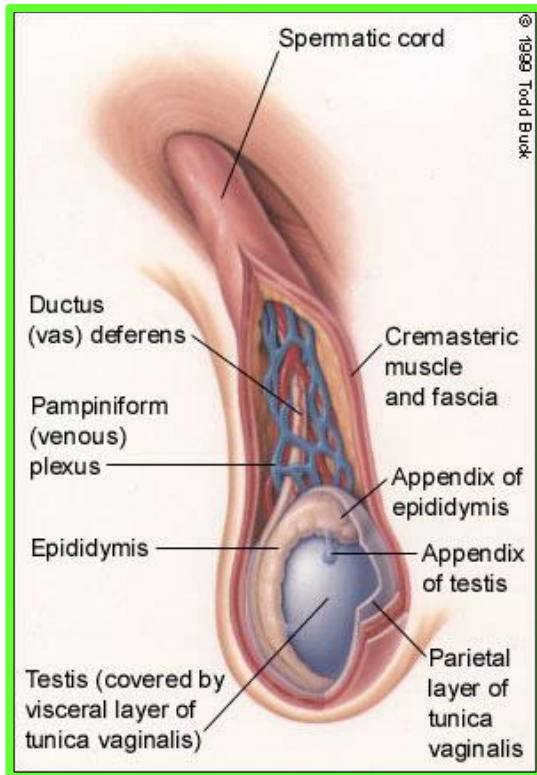


# Testicular Artery ❖

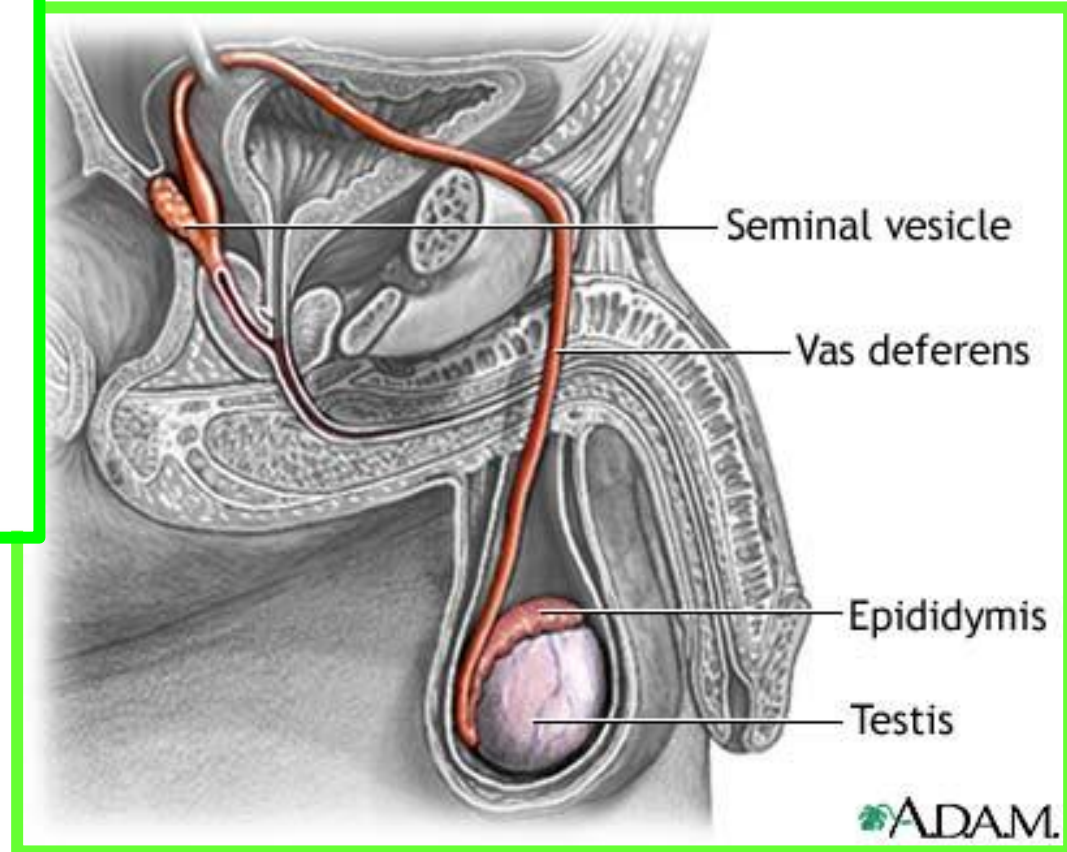
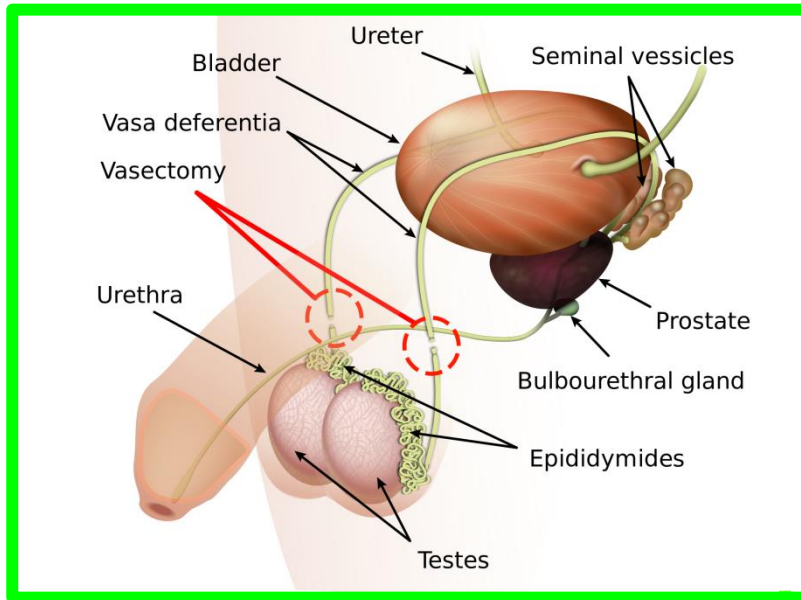




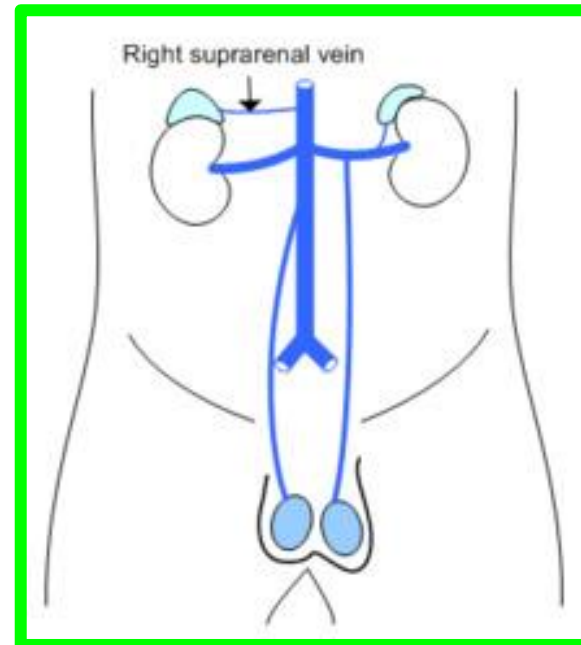
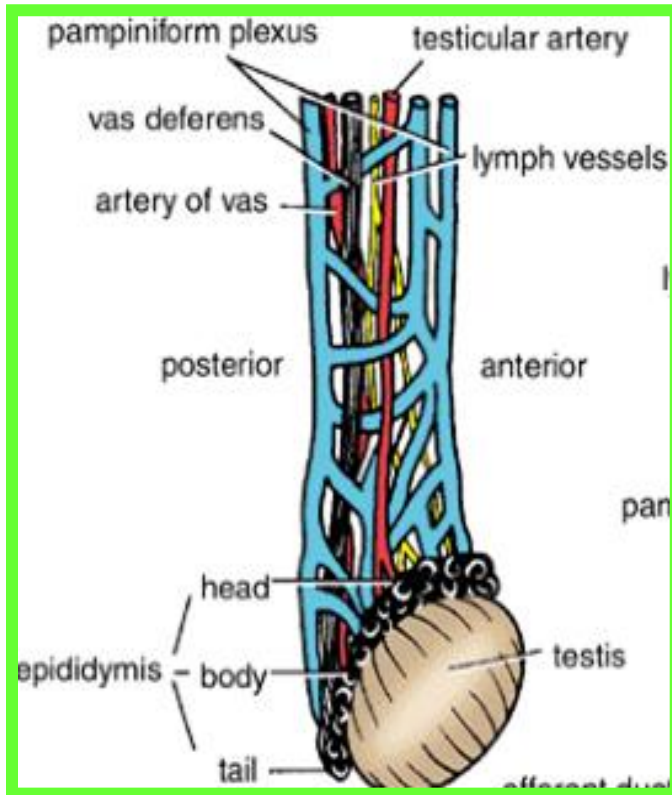
# Spermatic Cord



# Vas Deferens (Ductus Deferens) ❖



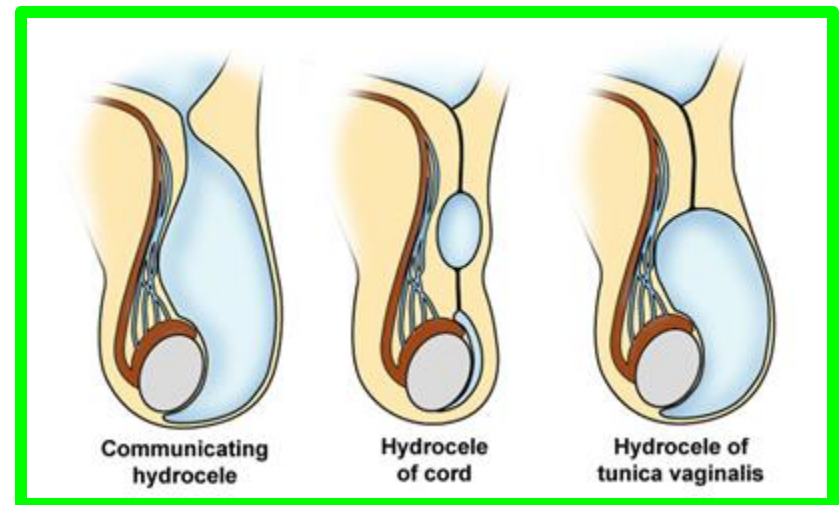
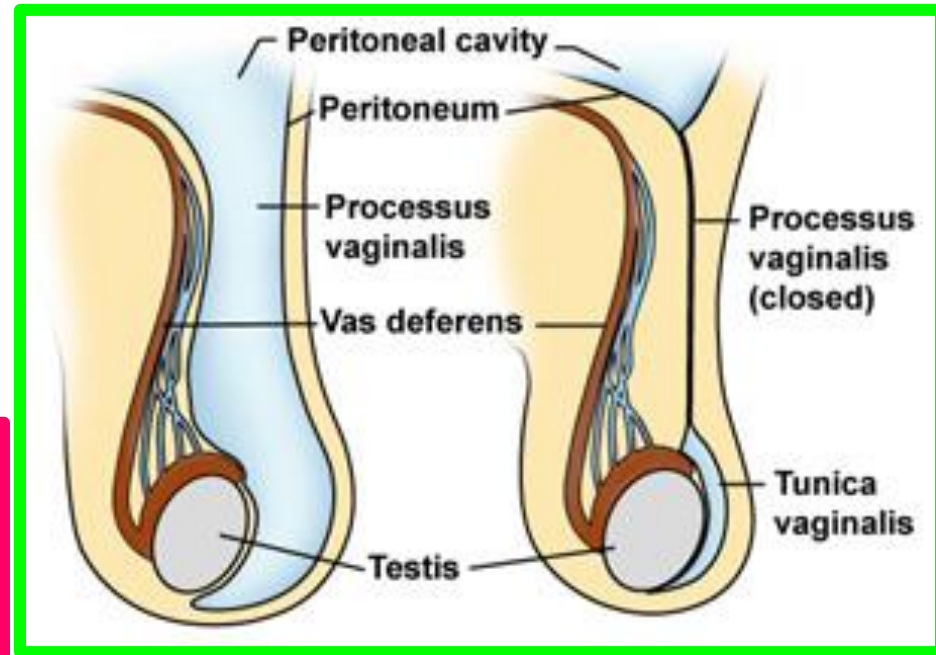
# Testicular Veins ❖





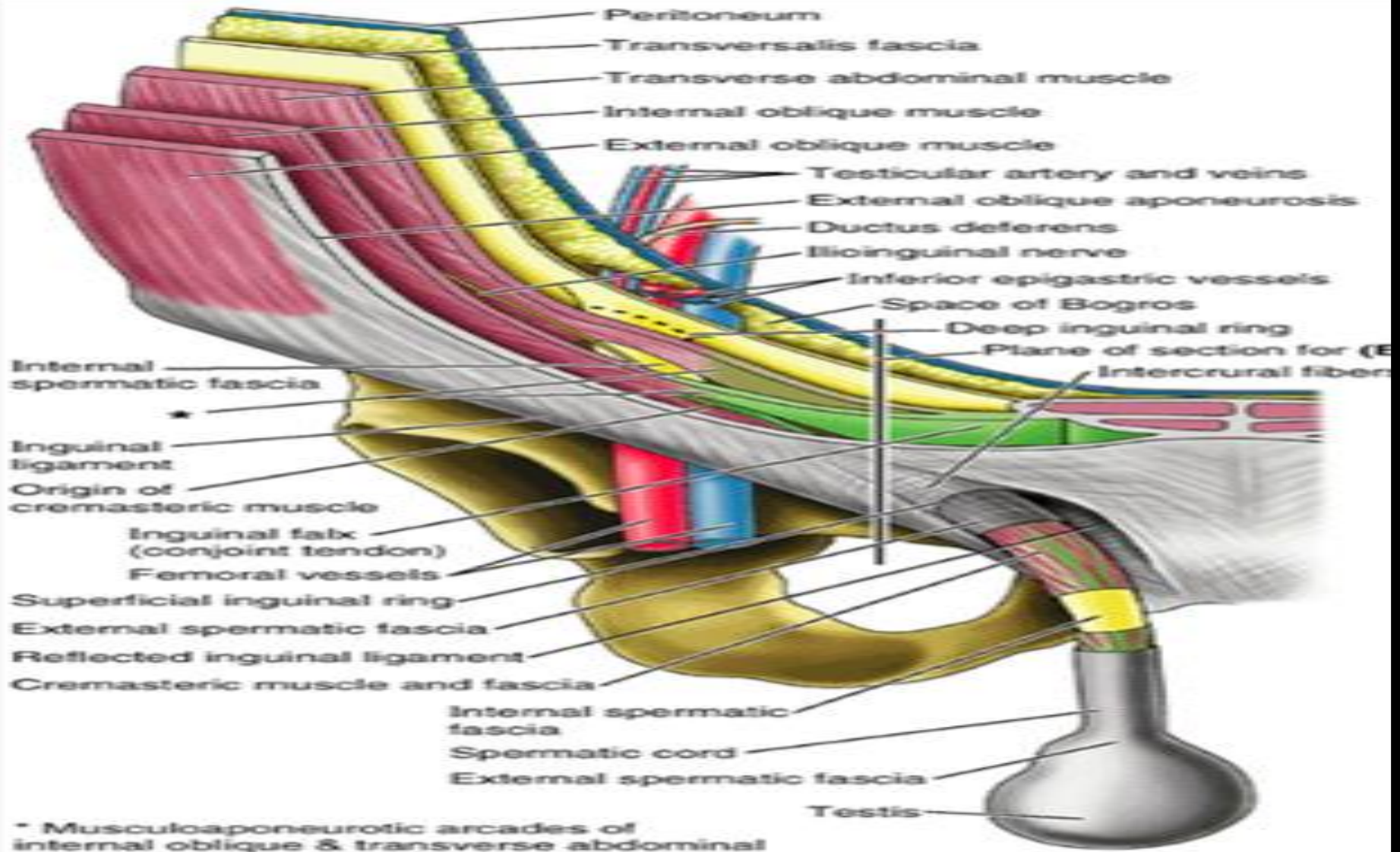
# Processus Vaginalis ❖

The remains of the processus Vaginalis are present within the cord

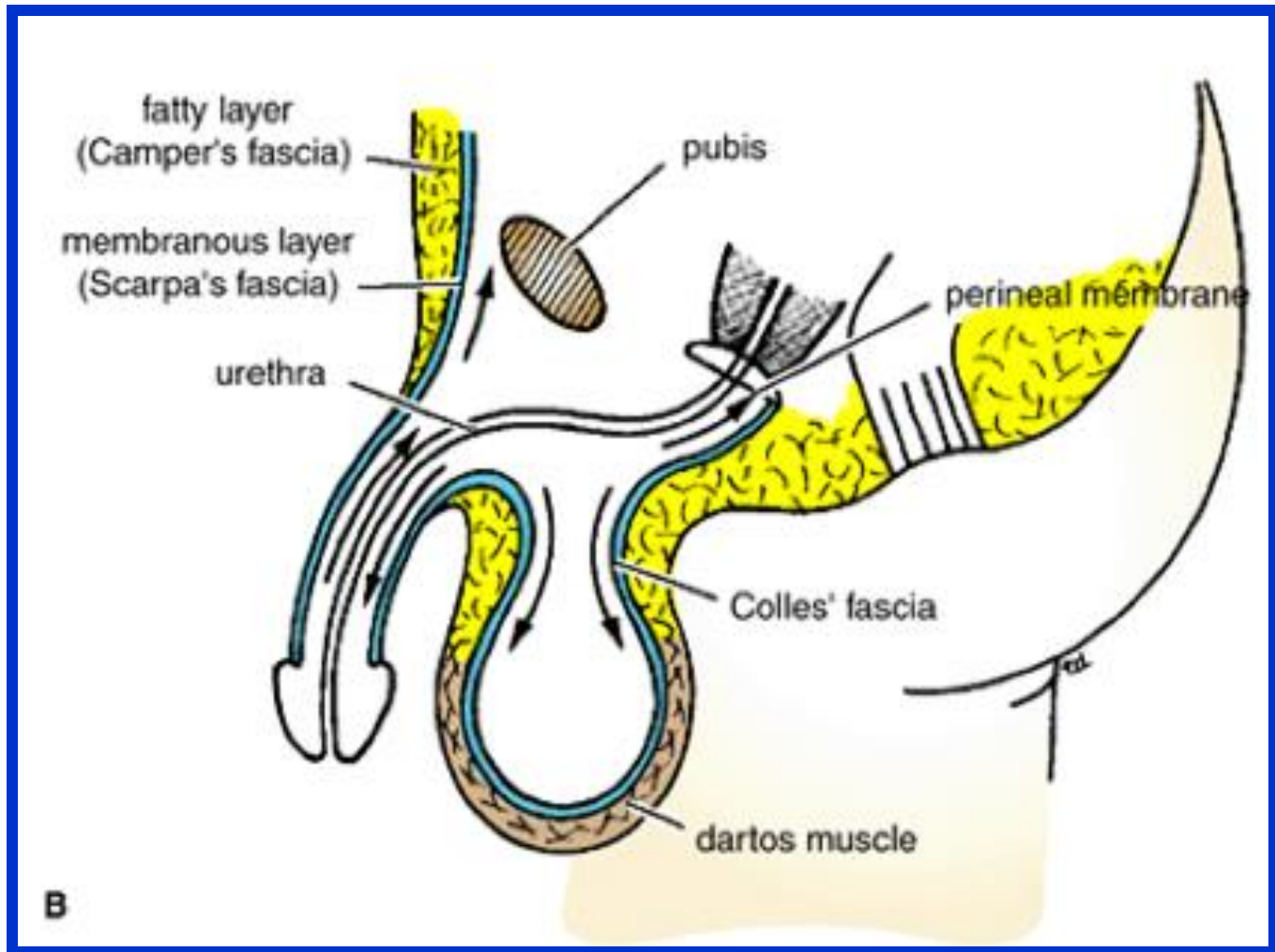


**Hydrocele of Spermatic Cord and/or Testis ????**

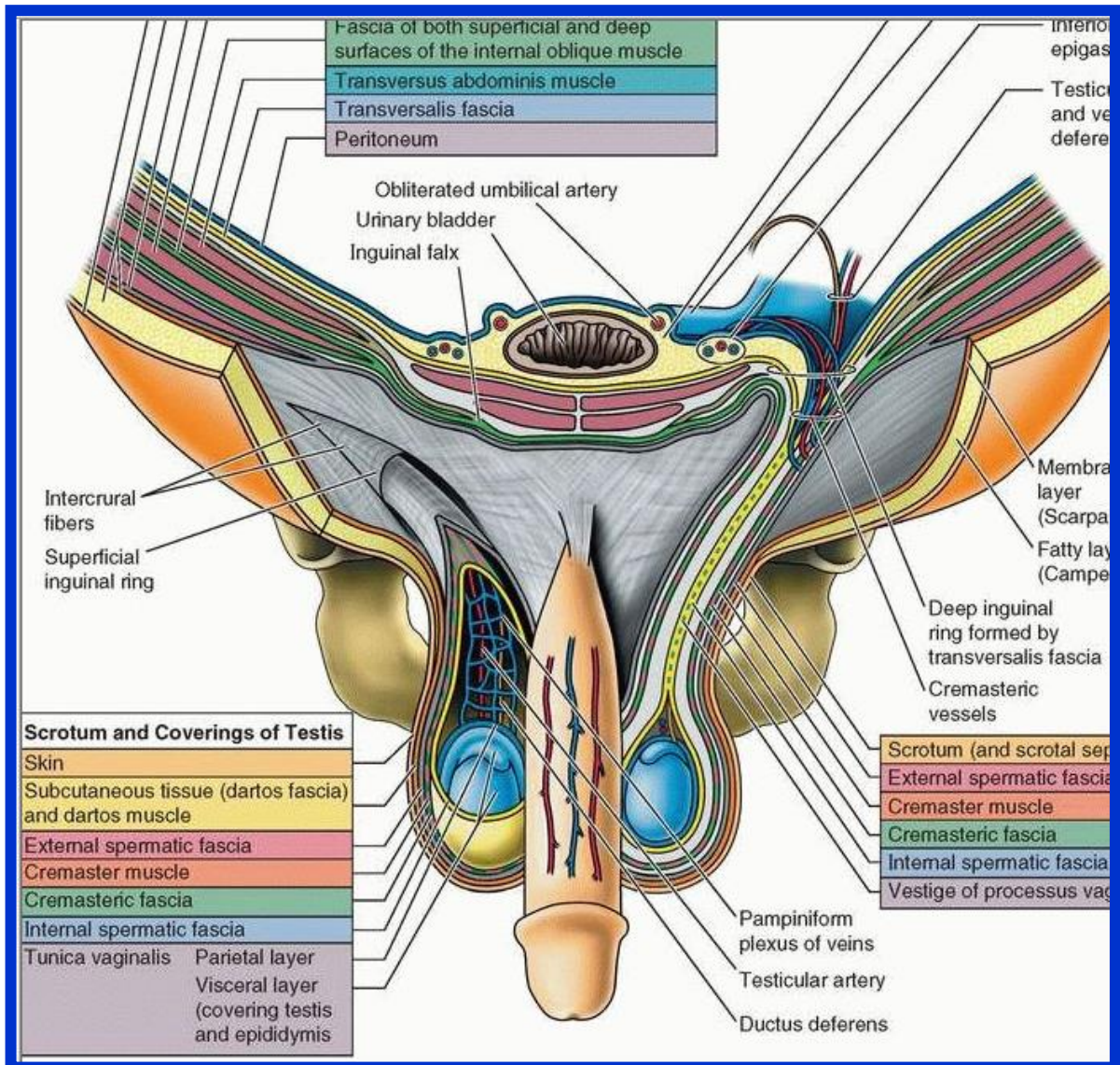
# Coverings of the Spermatic Cord (the Spermatic Fasciae)

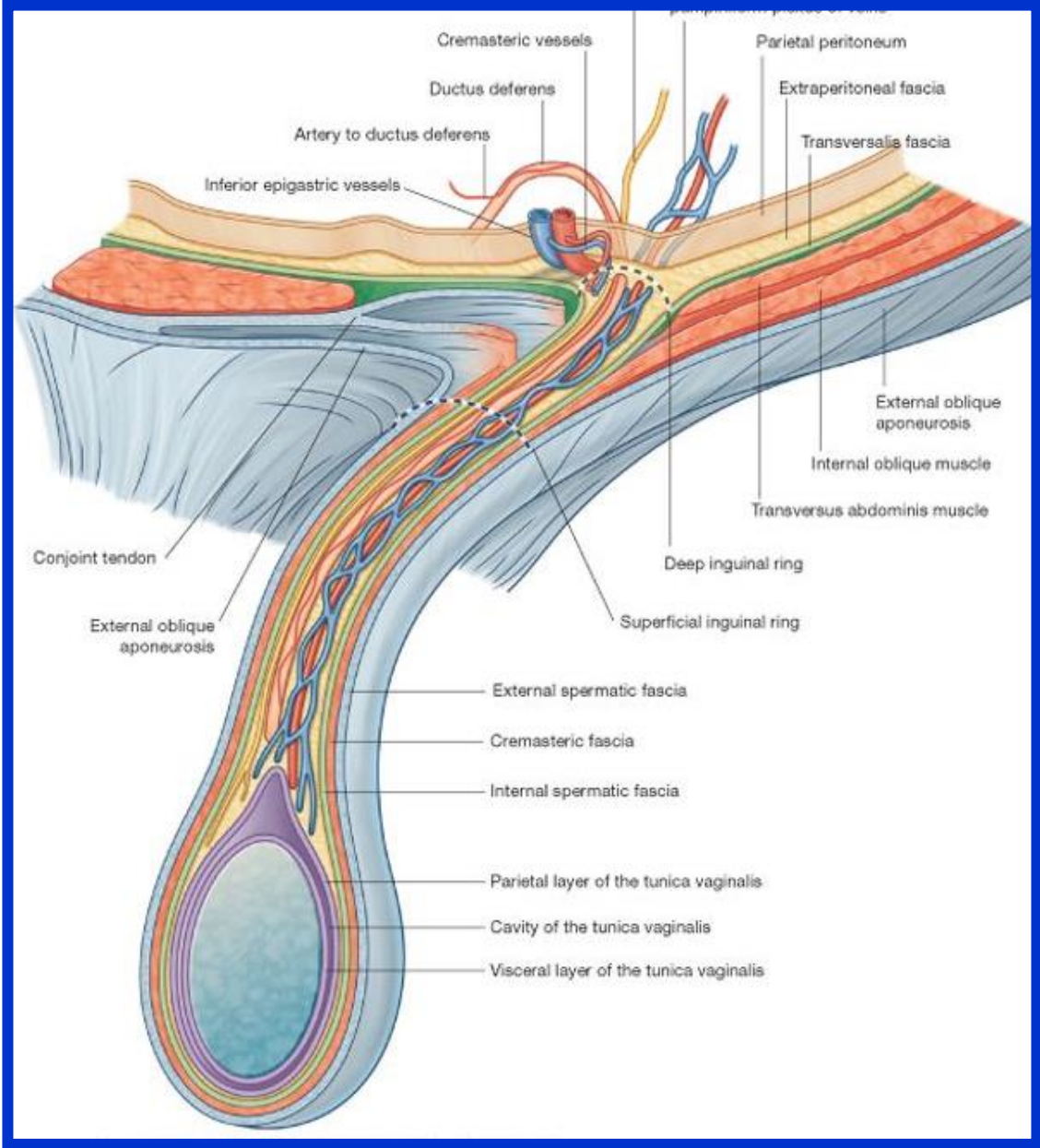


# Scrotum

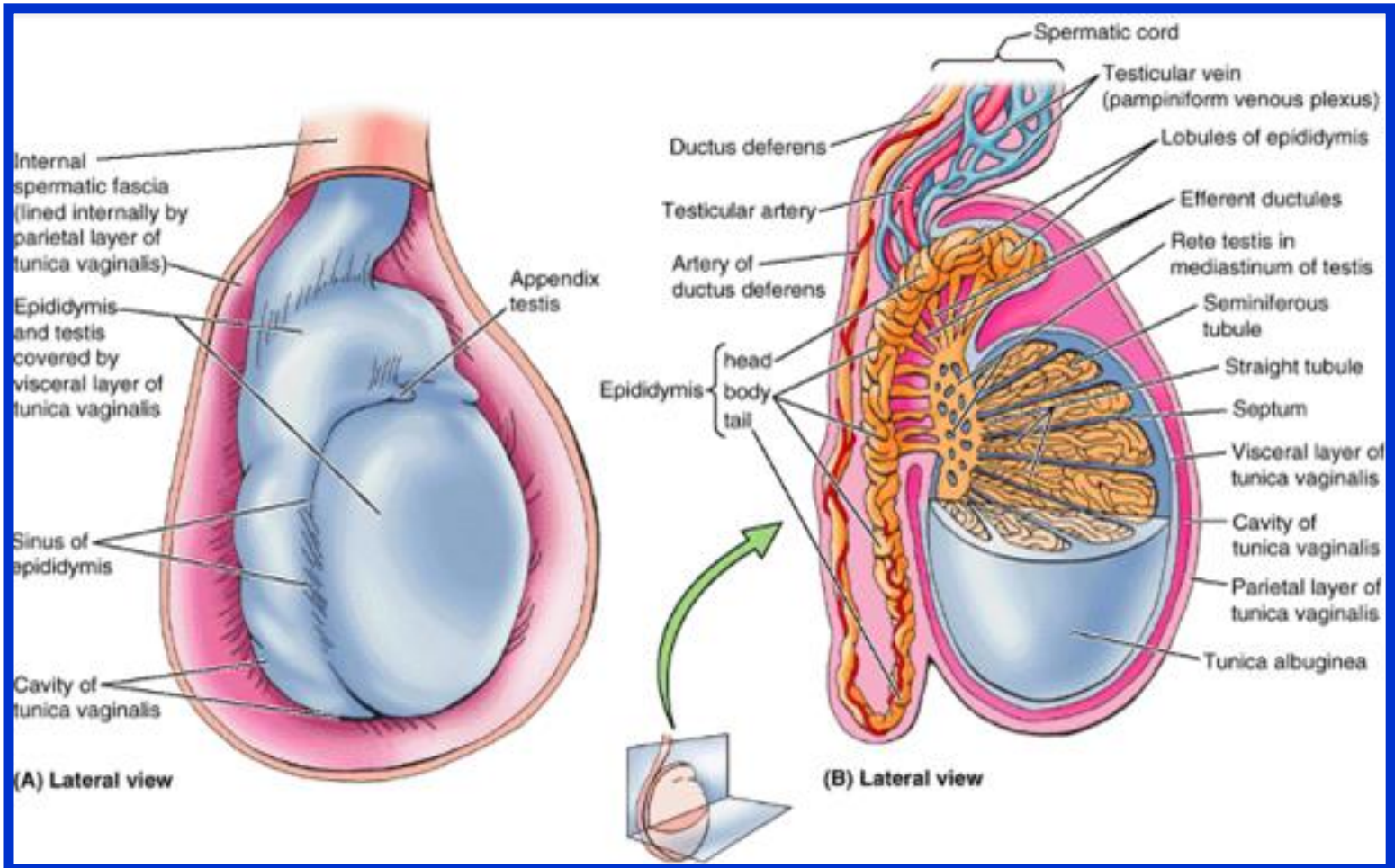




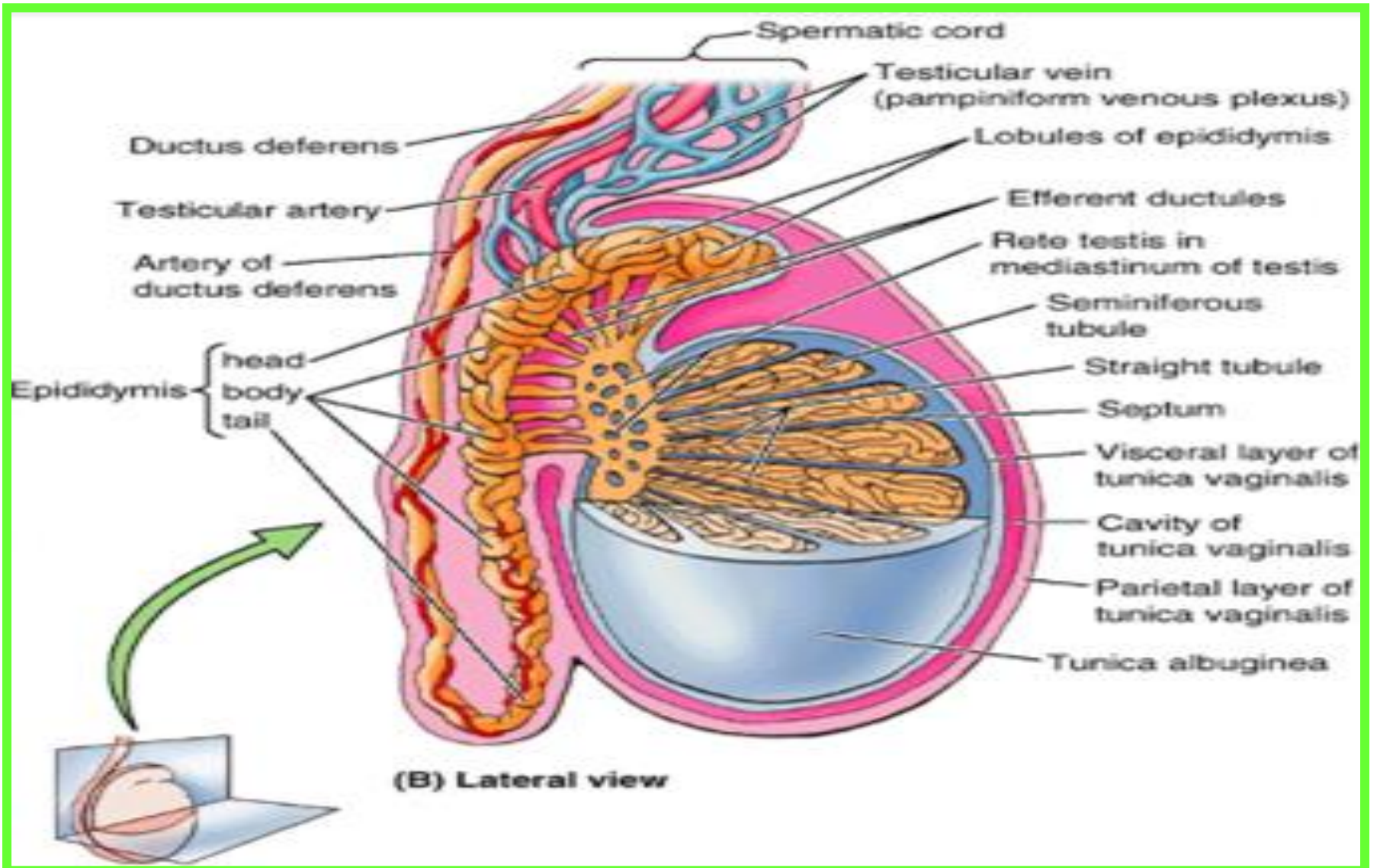




# Testis

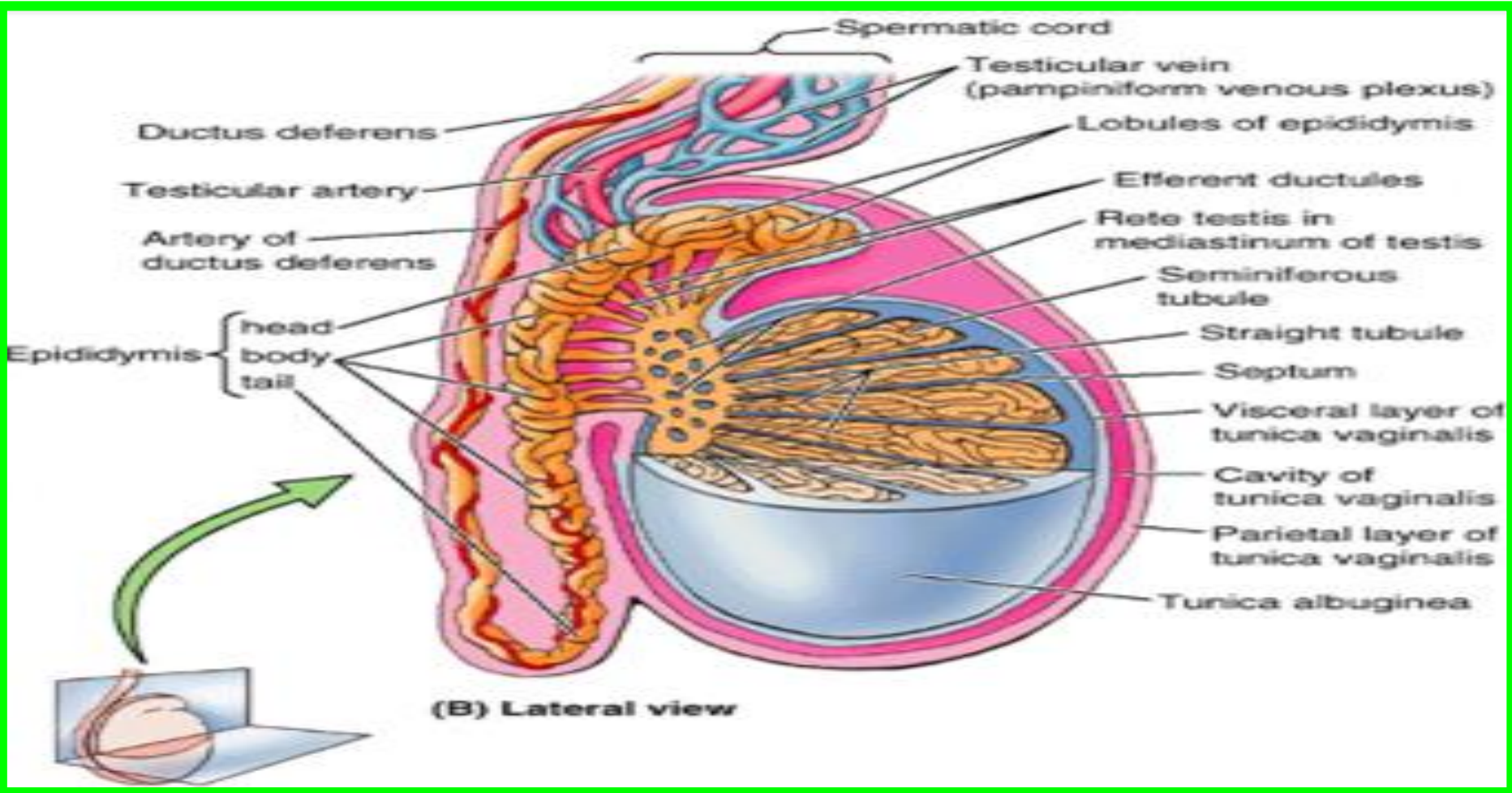




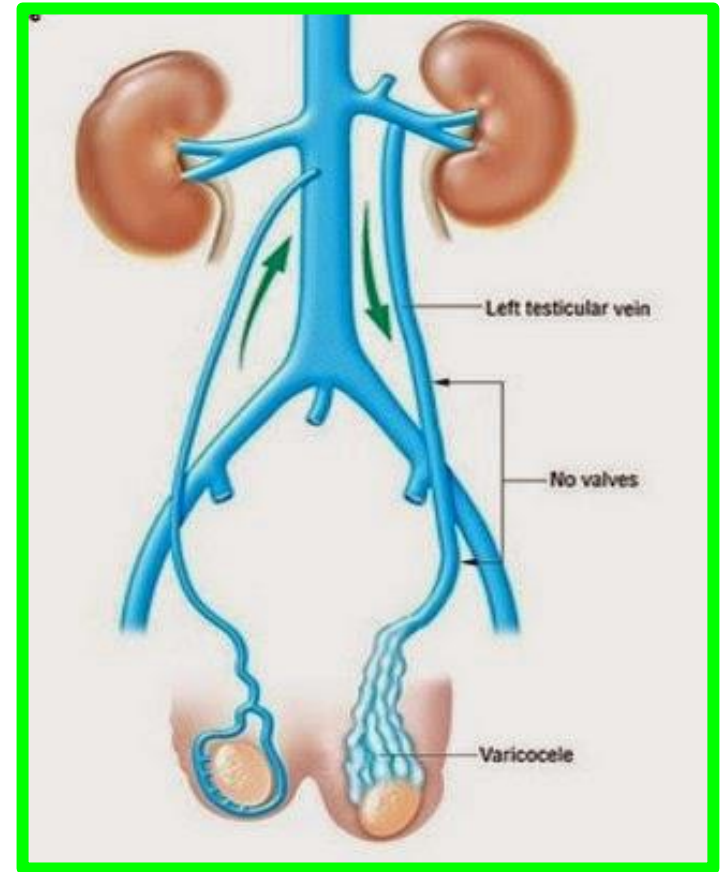
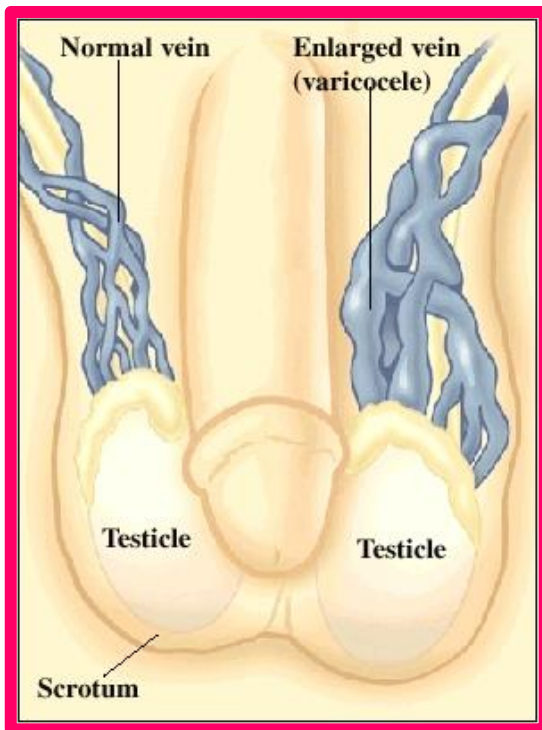




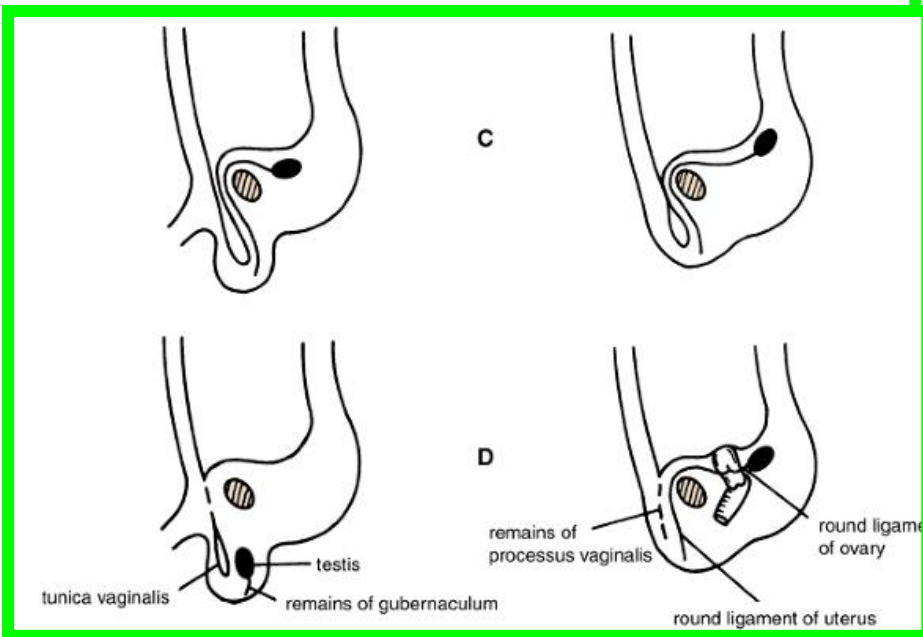
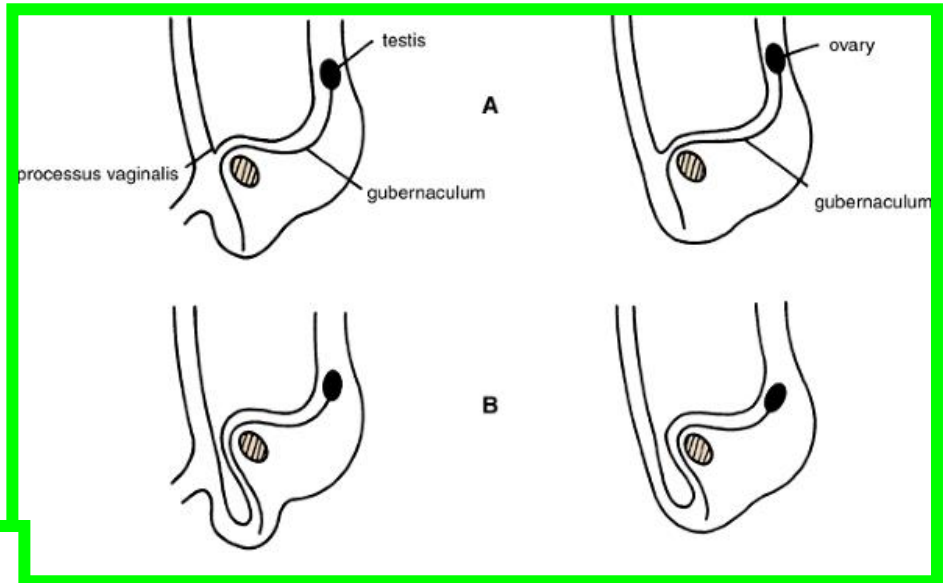
# Epididymis



# Blood Supply of the Testis and Epididymis



# Formation of the inguinal canals and descent of testes



Dr. Aiman Qais Afar

Thursday 17 March 2022



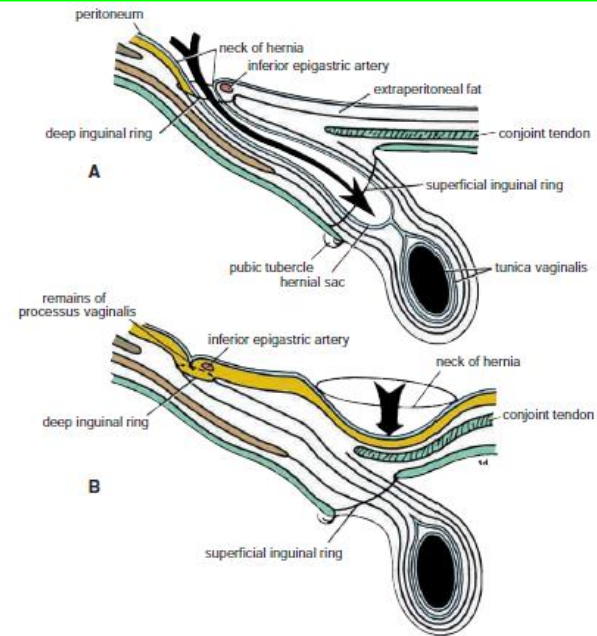
Indirect inguinal hernia

Small intestine

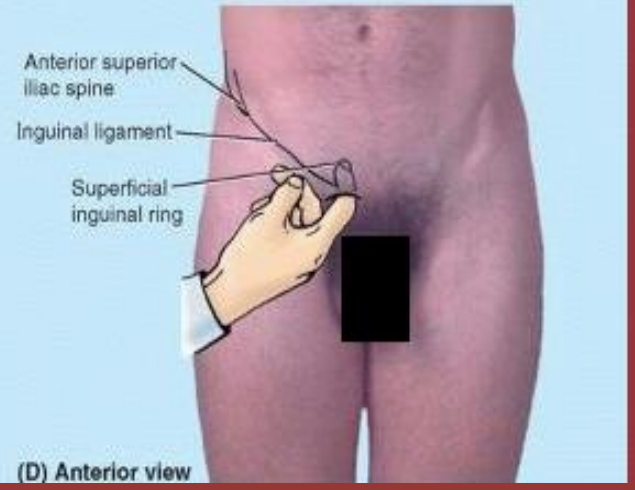
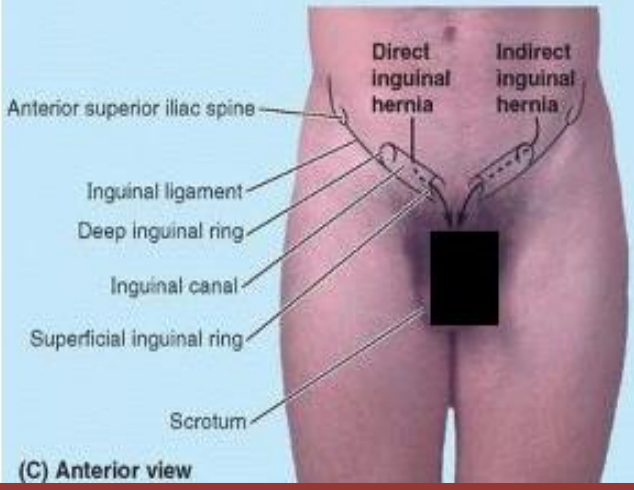
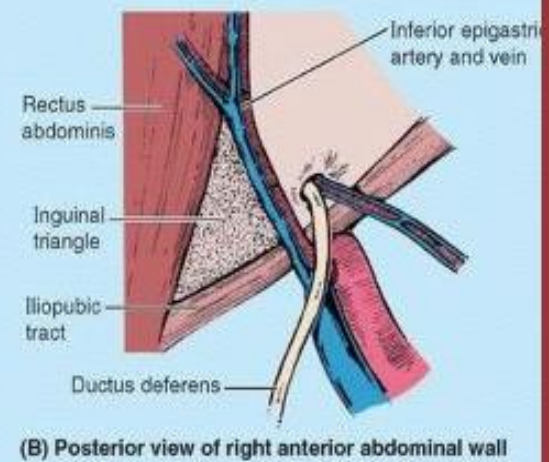
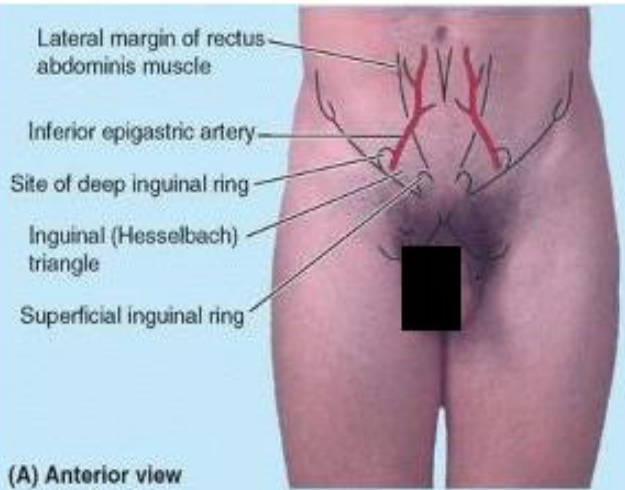
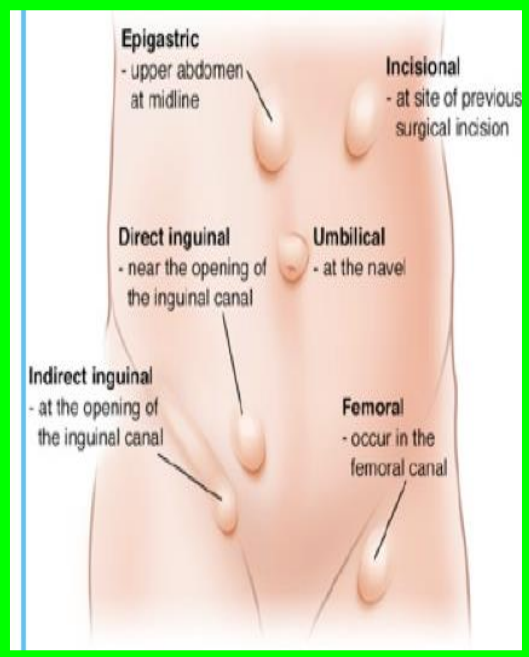
Inguinal canal

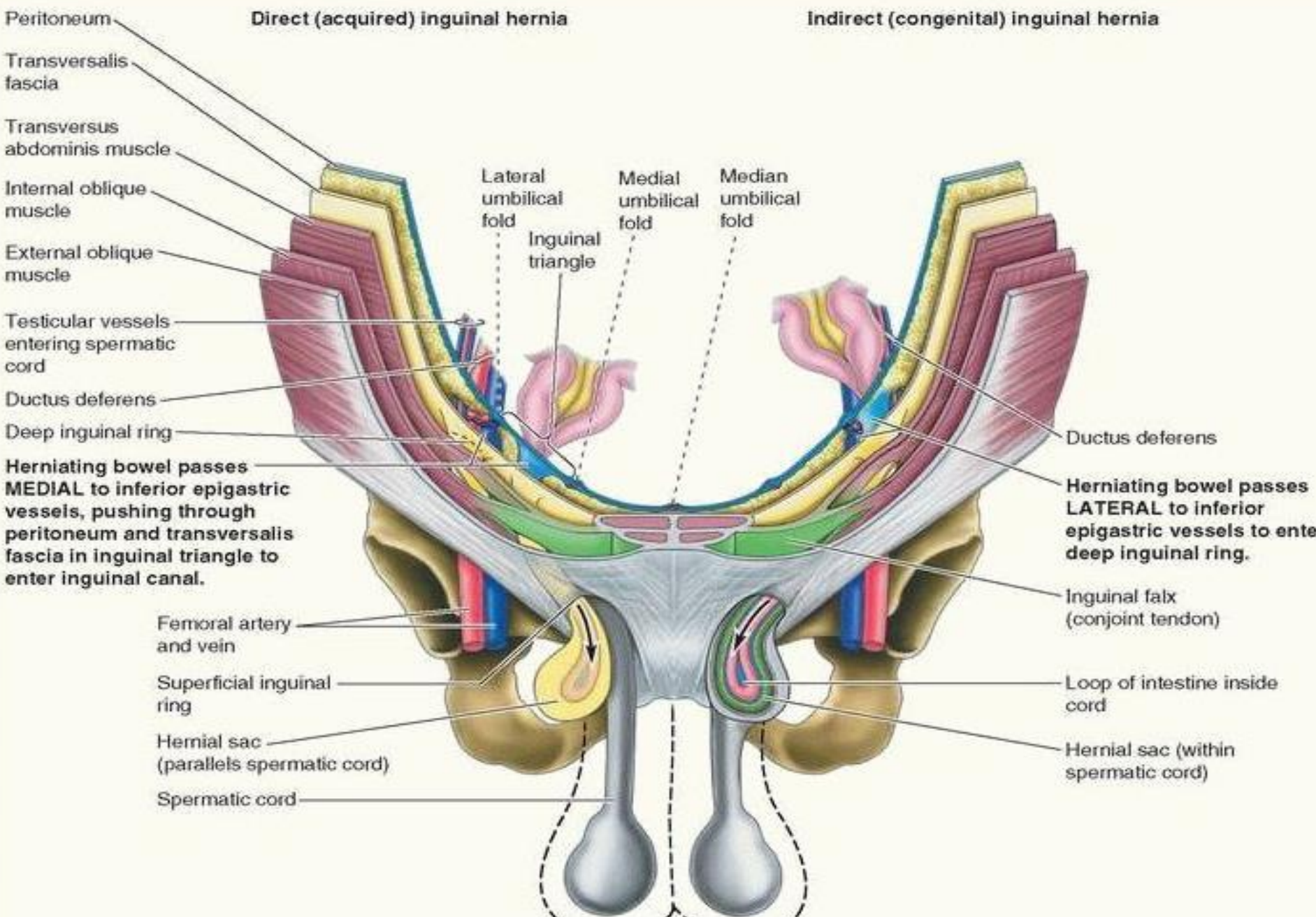


Direct inguinal hernia









**Direct (acquired) inguinal hernia**

**Indirect (congenital) inguinal hernia**

- Peritoneum
- Transversalis fascia
- Transversus abdominis muscle
- Internal oblique muscle
- External oblique muscle
- Testicular vessels entering spermatic cord
- Ductus deferens
- Deep inguinal ring
- Herniating bowel passes **MEDIAL** to inferior epigastric vessels, pushing through peritoneum and transversalis fascia in inguinal triangle to enter inguinal canal.
- Femoral artery and vein
- Superficial inguinal ring
- Hernial sac (parallels spermatic cord)
- Spermatic cord

- Lateral umbilical fold
- Inguinal triangle
- Medial umbilical fold
- Median umbilical fold

- Ductus deferens
- Herniating bowel passes **LATERAL** to inferior epigastric vessels to enter deep inguinal ring.
- Inguinal falx (conjoint tendon)
- Loop of intestine inside cord
- Hernial sac (within spermatic cord)

