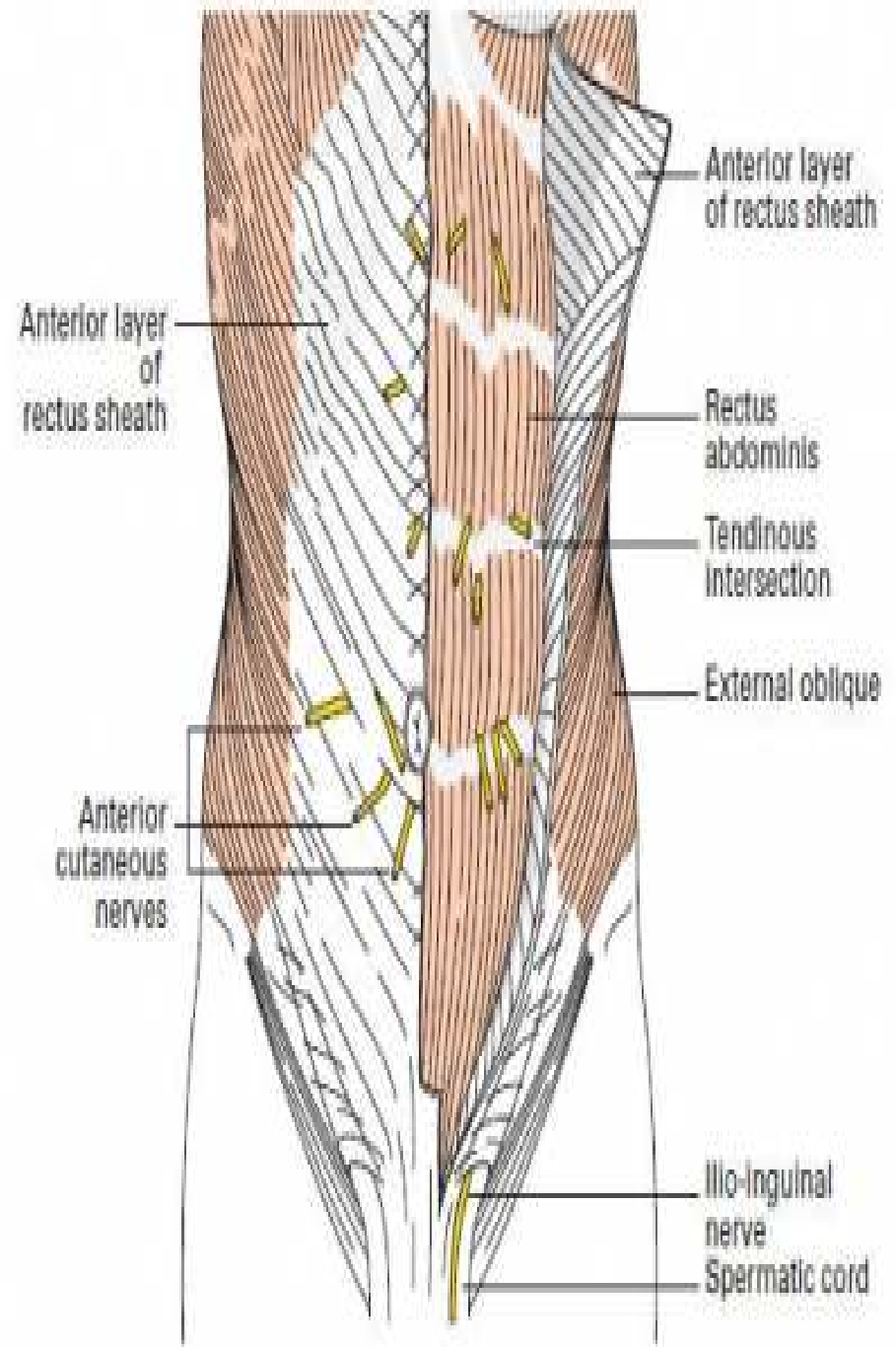


# Anterior Abdominal Wall (Continue)

# Rectus Sheath:

Long fibrous sheath enclosed rectus muscle. Its has anterior & posterior wall. **Contents of rectus sheath:**

1. Rectus abdominis & Pyramidalis muscles.
2. Anterior rami of lower 6 thoracic nerves.
3. Superior & inferior epigastric vessels.
4. Lymphatic vessels.

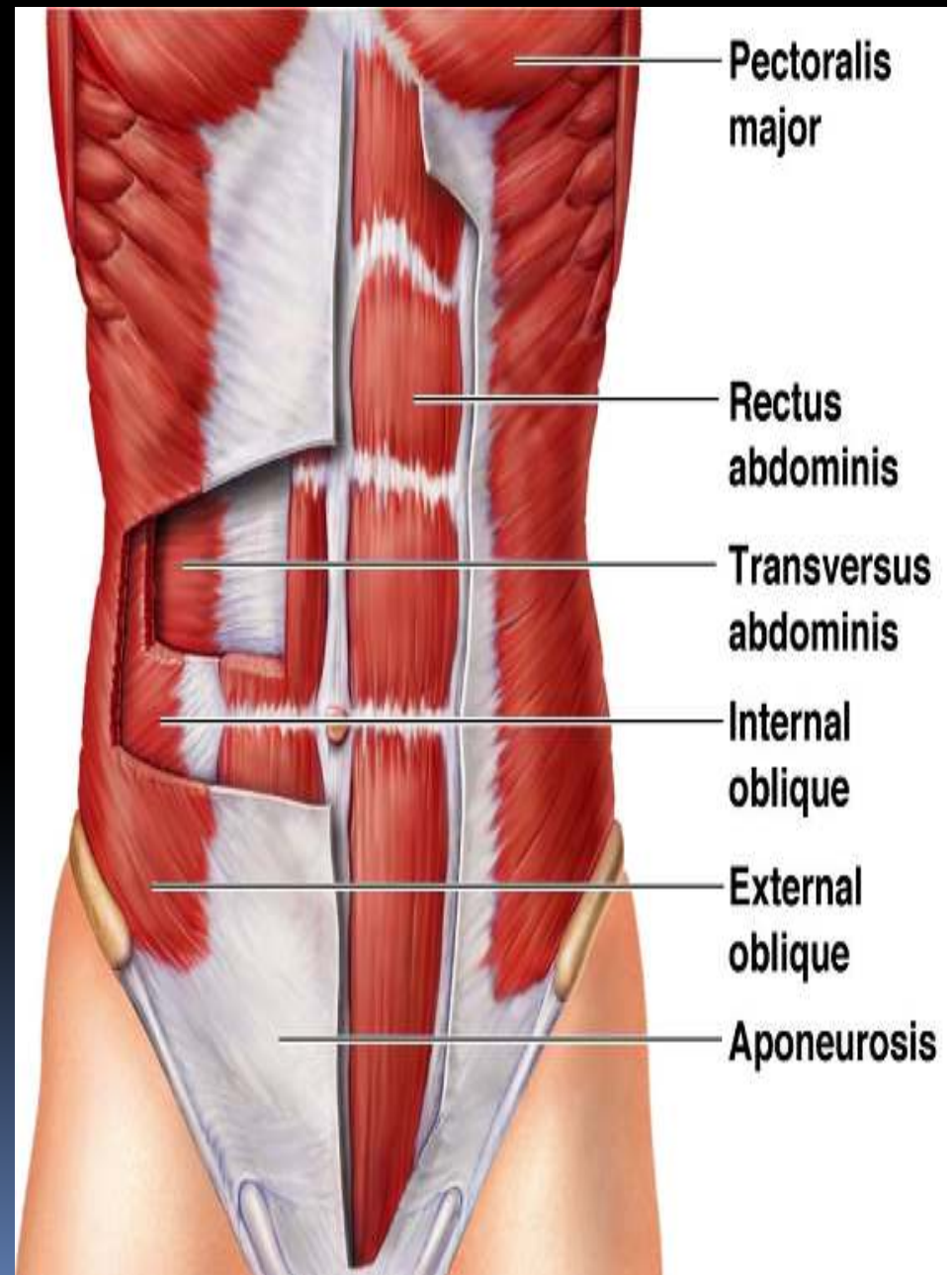


# Formation of Rectus sheath:

Its forms of aponeurosis of 3 lateral abdominal muscles. It has 3 distinct arrangements:

## (1) Above the costal margin:

- \* **Anterior wall:** aponeurosis of external oblique.
- \* **Posterior wall:** thoracic wall (5th, 6th & 7th costal cartilage & intercostals spaces).



**(2) Between costal margin & level of anterior superior**

**iliac spine** :I.O. aponeurosis split to enclose rectus muscle.

\* **Anterior wall**: aponeurosis of EO & half of IO aponeurosis.

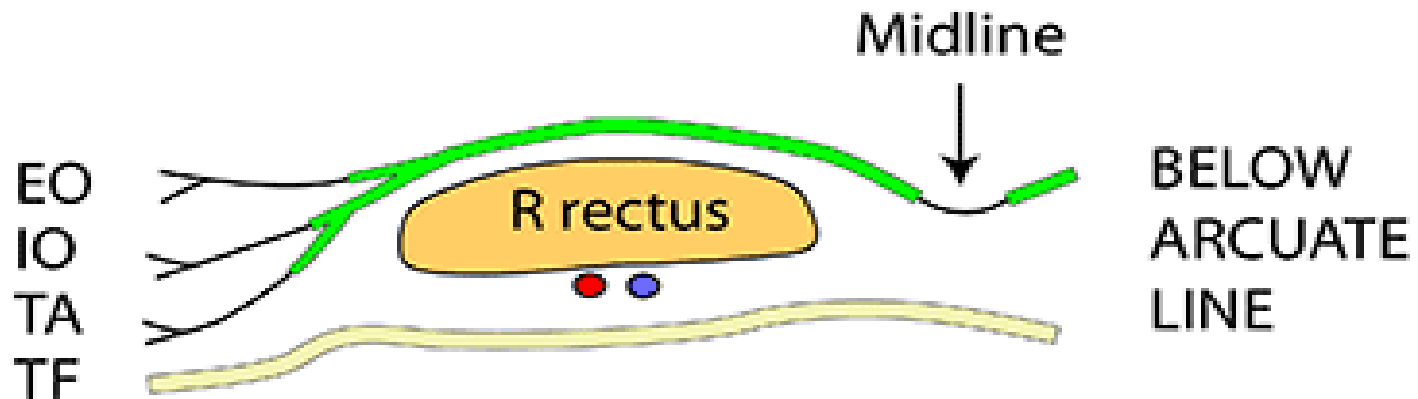
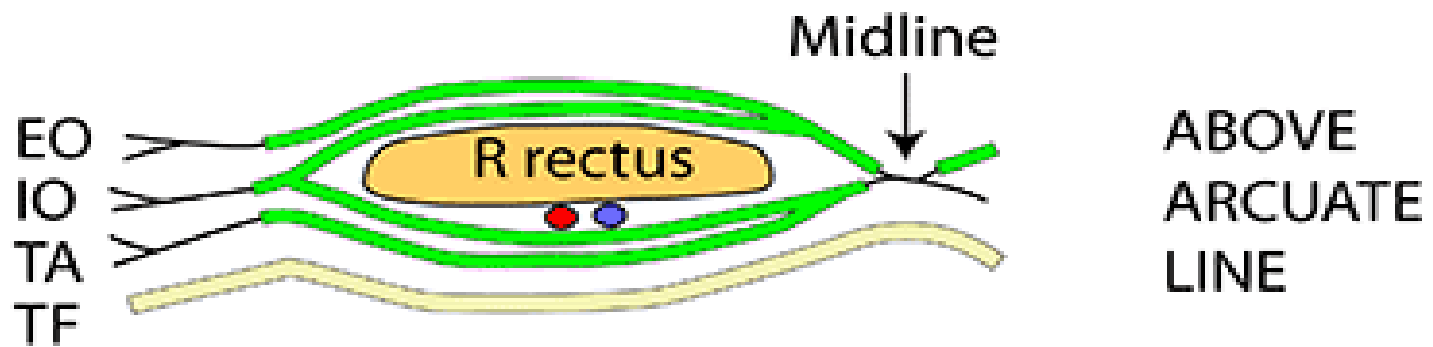
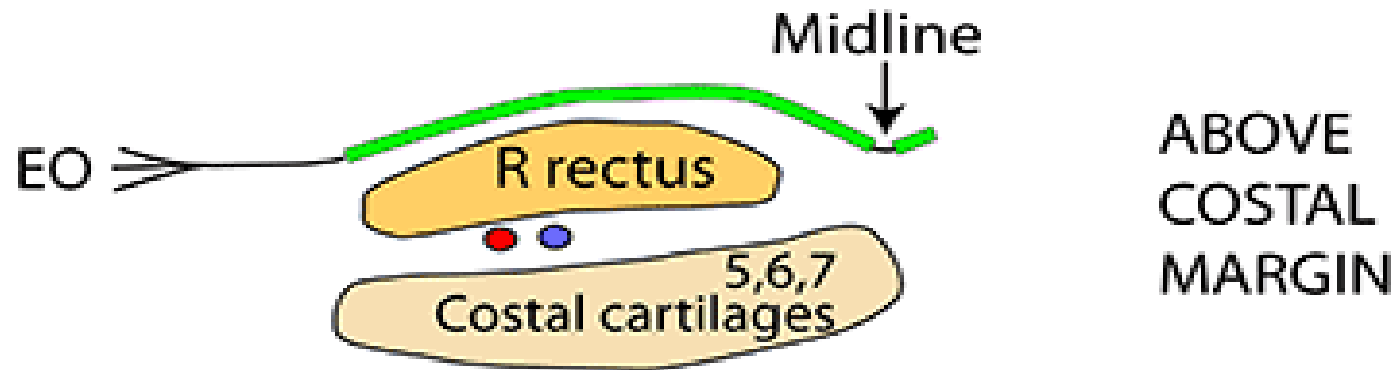
• **Posterior wall**: half of IO aponeurosis & transverses aponeurosis.

**(3) Between the level of anterior superior iliac spine and pubis:**

\* **Anterior wall**: aponeurosis of all the three lateral muscles.

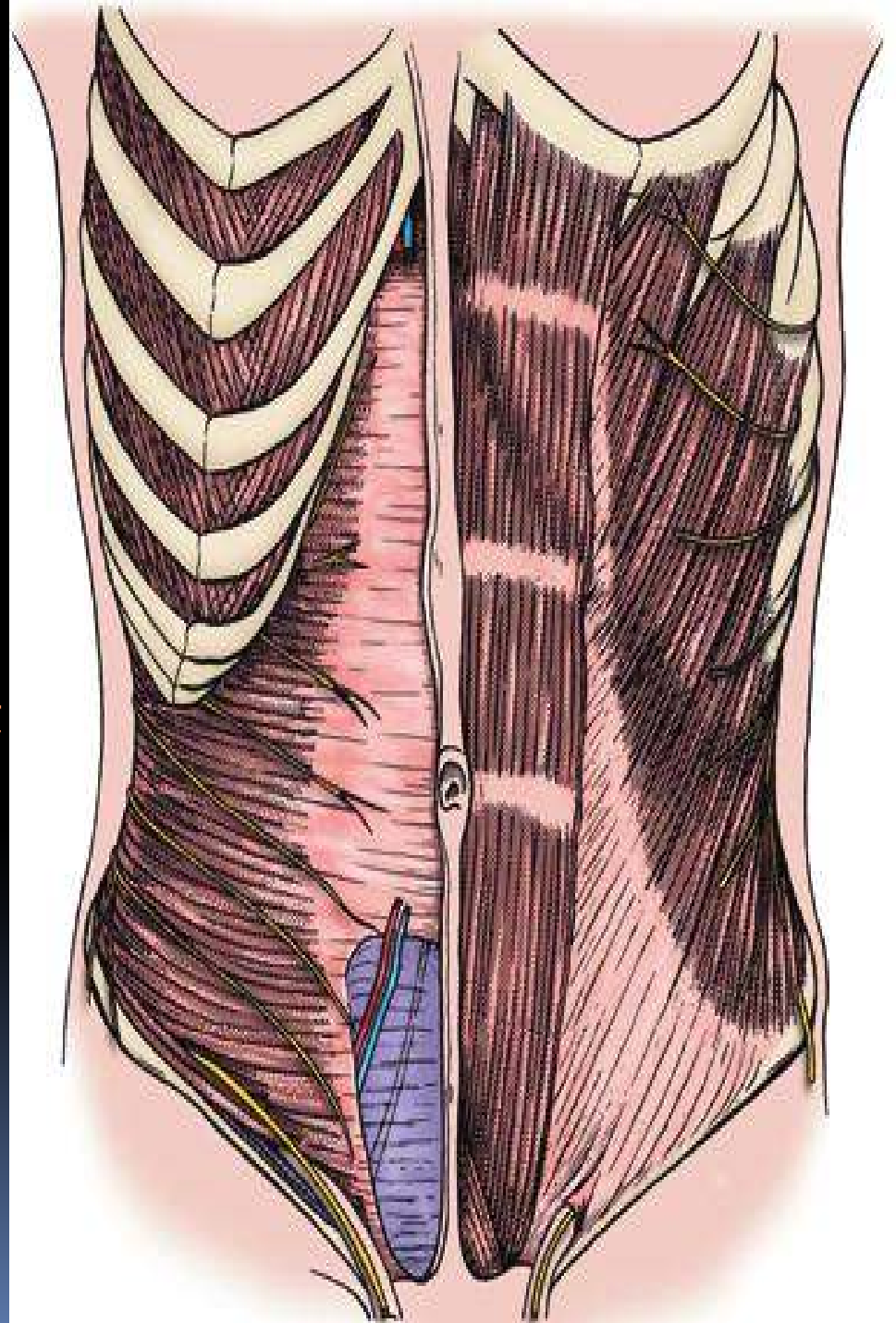
\* **Posterior wall**: absent, only transversalis fascia

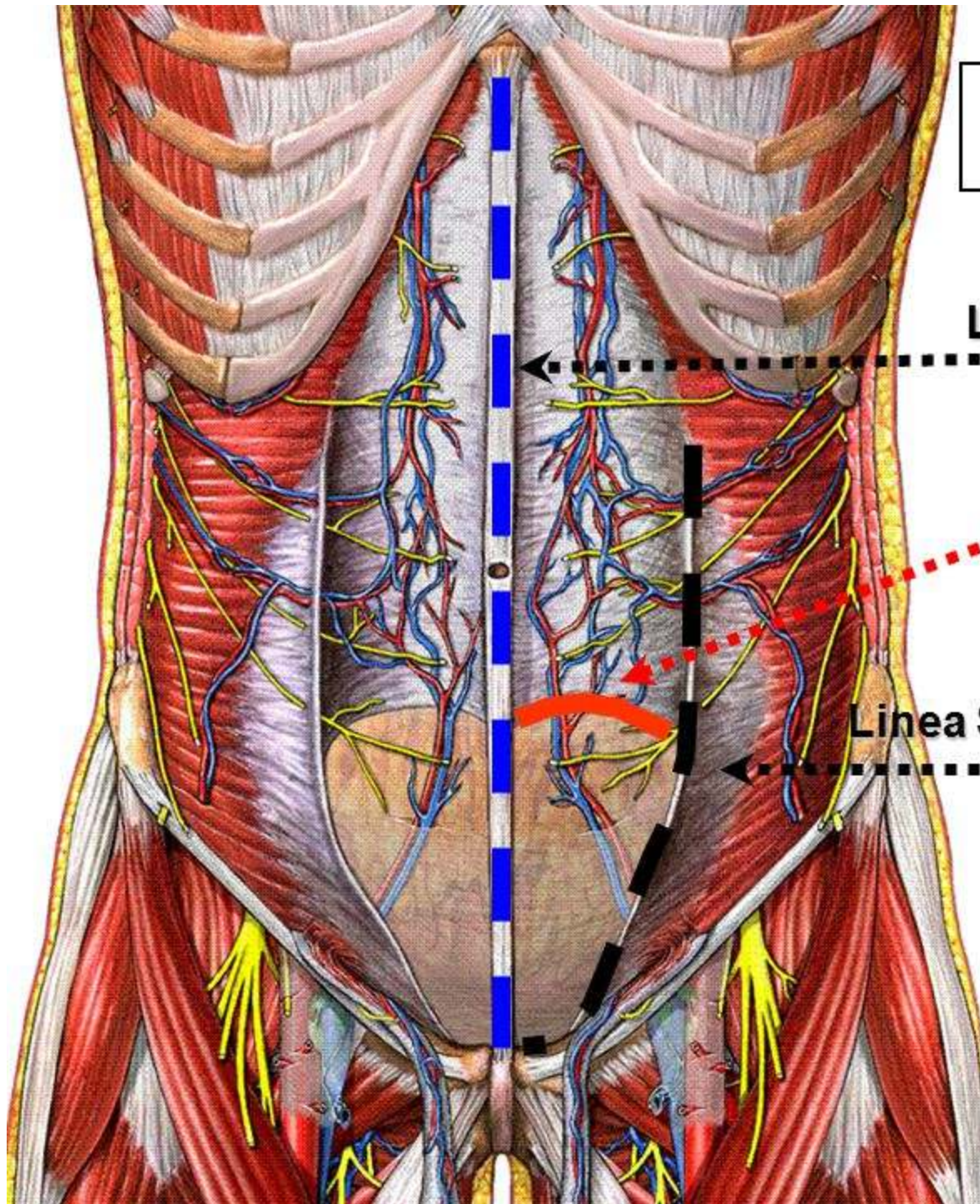
# ABDOMINAL WALL MUSCLES & RECTUS SHEATH



The **posterior wall** has a free curved line called **arcuate line** at level of anterior superior iliac spine.

**The inferior epigastric artery enters rectus sheath at this level and anastomoses with superior epigastric artery.**





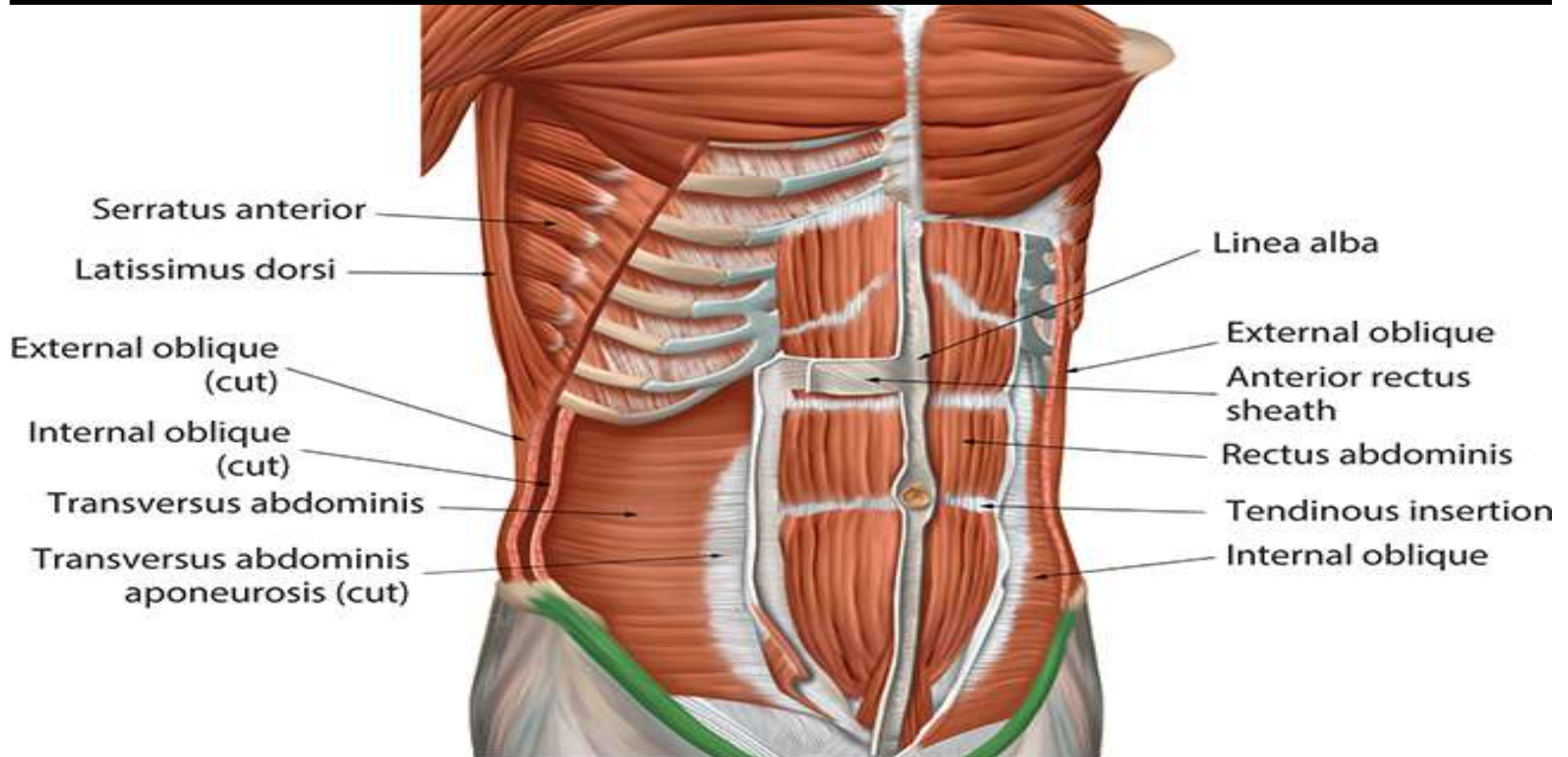
# Rectus Sheath

Linea Alba **Medially**

Arcuate Line

Linea Semilunaris **Laterally**

The rectus sheath is separated from each other by **linea alba** which extends from xiphoid process to symphysis pubis & separated laterally from lateral muscles at linea semilunaris.

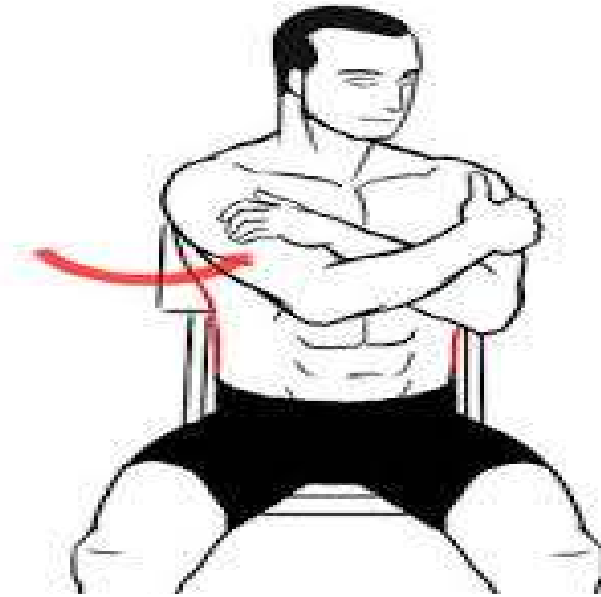




# Function Of Abdominal Muscles:

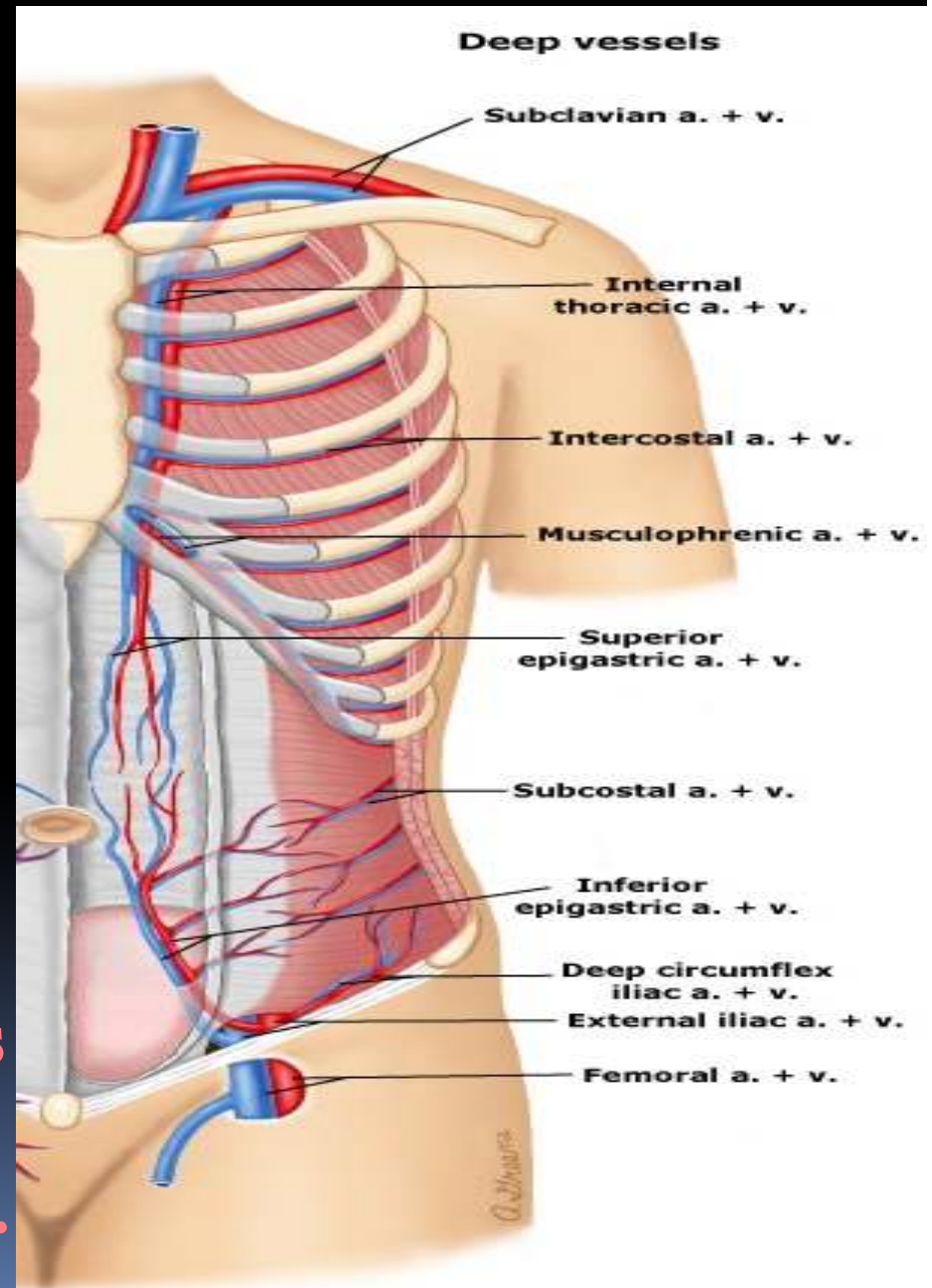
1) The oblique muscles, Transversus abdominis and Rectus abdominis: : flexing & rotation of trunk , Supports abdominal contents , compresses abdominal contents , assists respiration, coughing, micturition, defecation, parturition.

3) Pyramidalis: it only tenses linea alba.



# Neurovascular Plane Of Abdominal Muscles:

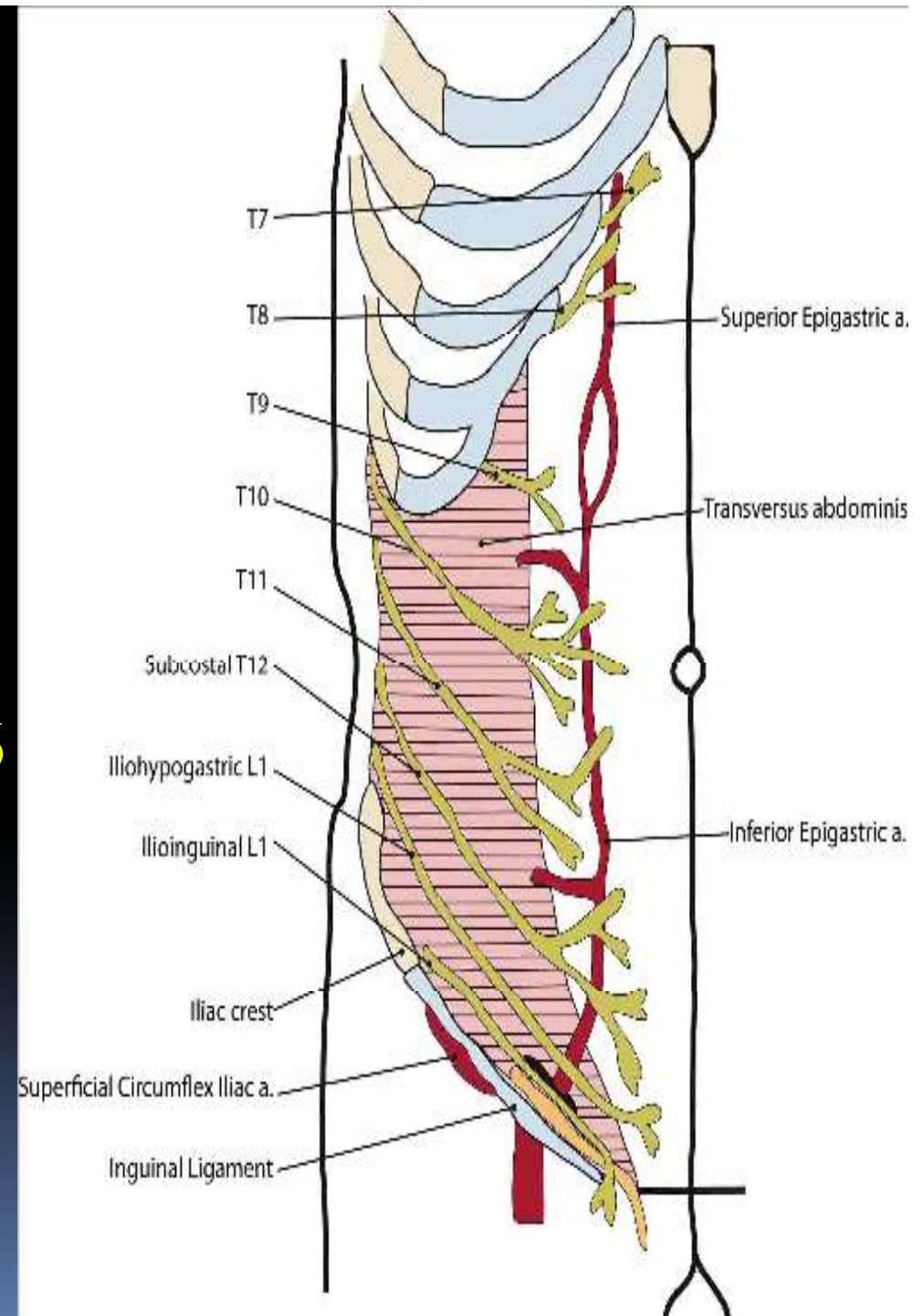
- Superior part of muscular wall -- **superior epigastric artery.**
- Inferior part of wall -- **inferior epigastric artery**
- Lateral part of wall -- **intercostal , subcostal arteries & deep circumflex iliac artery.**



➤ Lateral muscles --- lower 6 thoracic nerves & iliohypogastric & ilioinguinal nerves (L1).

➤ The rectus muscle --lower 6 thoracic nerves .

➤ The pyramidalis is supplied by 12th thoracic nerve.



# Deep Lymphatic Of Anterior Abdominal Wall:

It also called **Extraperitoneal lymphatic.**

**Above umbilicus:** through internal thoracic lymph nodes to the mediastinal lymph nodes.

**Below umbilicus:** to the external iliac and para-aortic lymph nodes.

**Note:**

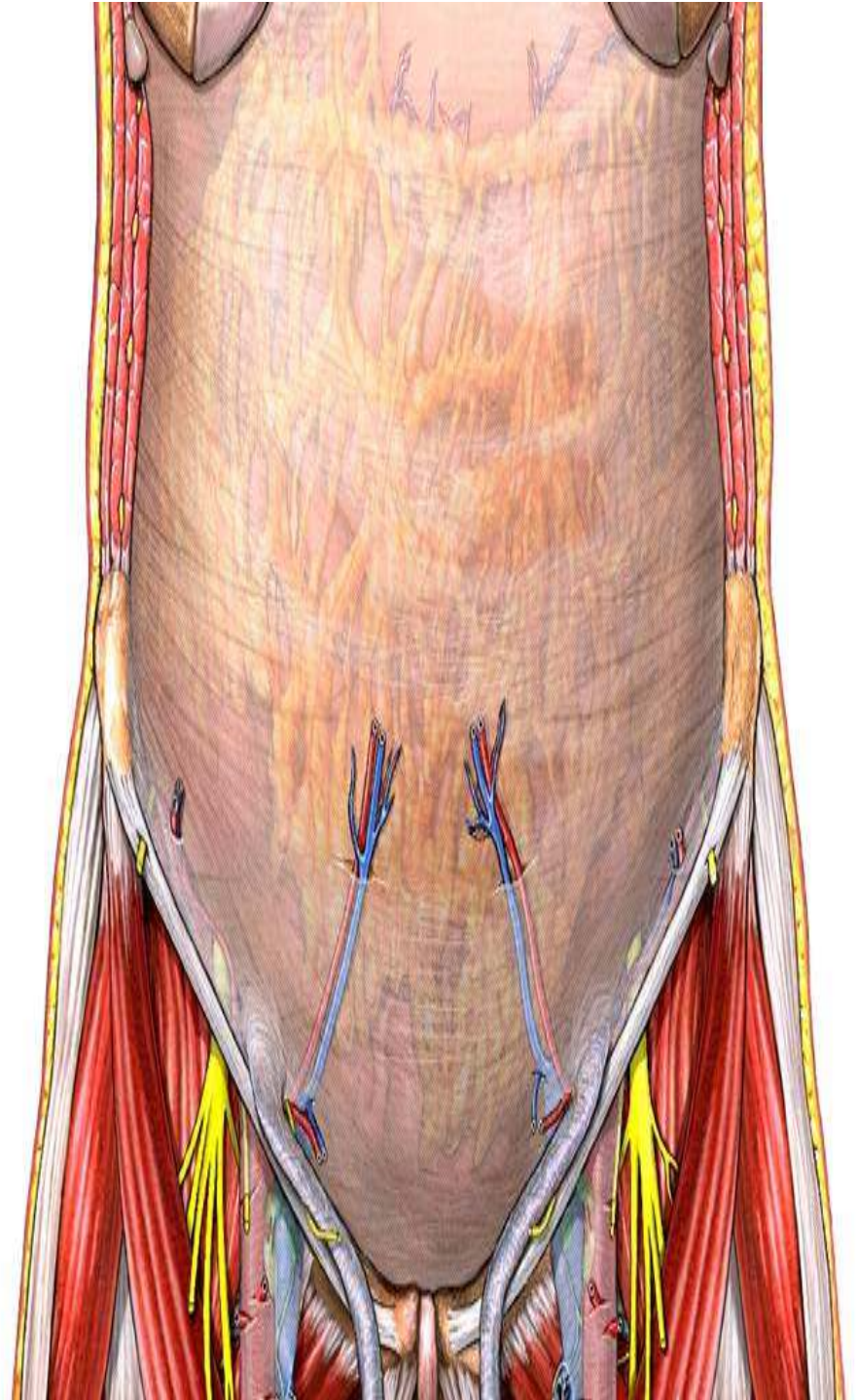
**There is no lymph nodes in abdominal wall**

# Transversalis Fascia:

It is a continuous thin fascial layer lines transversus abdominis muscle. It extends downward into thigh to form femoral sheath.

## Extraperitoneal fat:

Thin layer of connective tissue & variable amount of fat between transversalis fascia & parietal peritoneum.



Garry Wood  
MP

inguinal lig.

Henle's lig.

lacunar lig.

