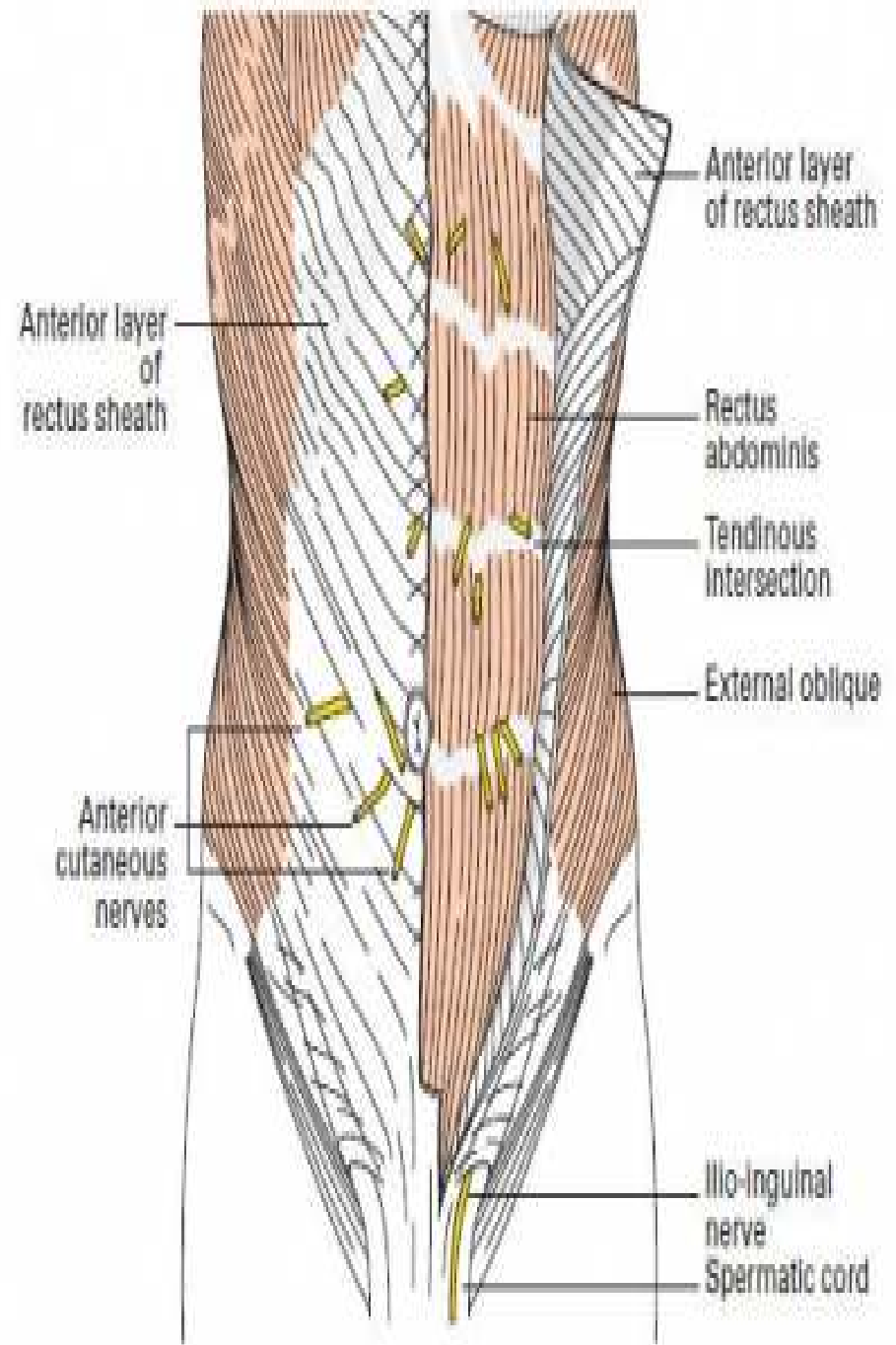


Anterior Abdominal Wall (Continue)

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.

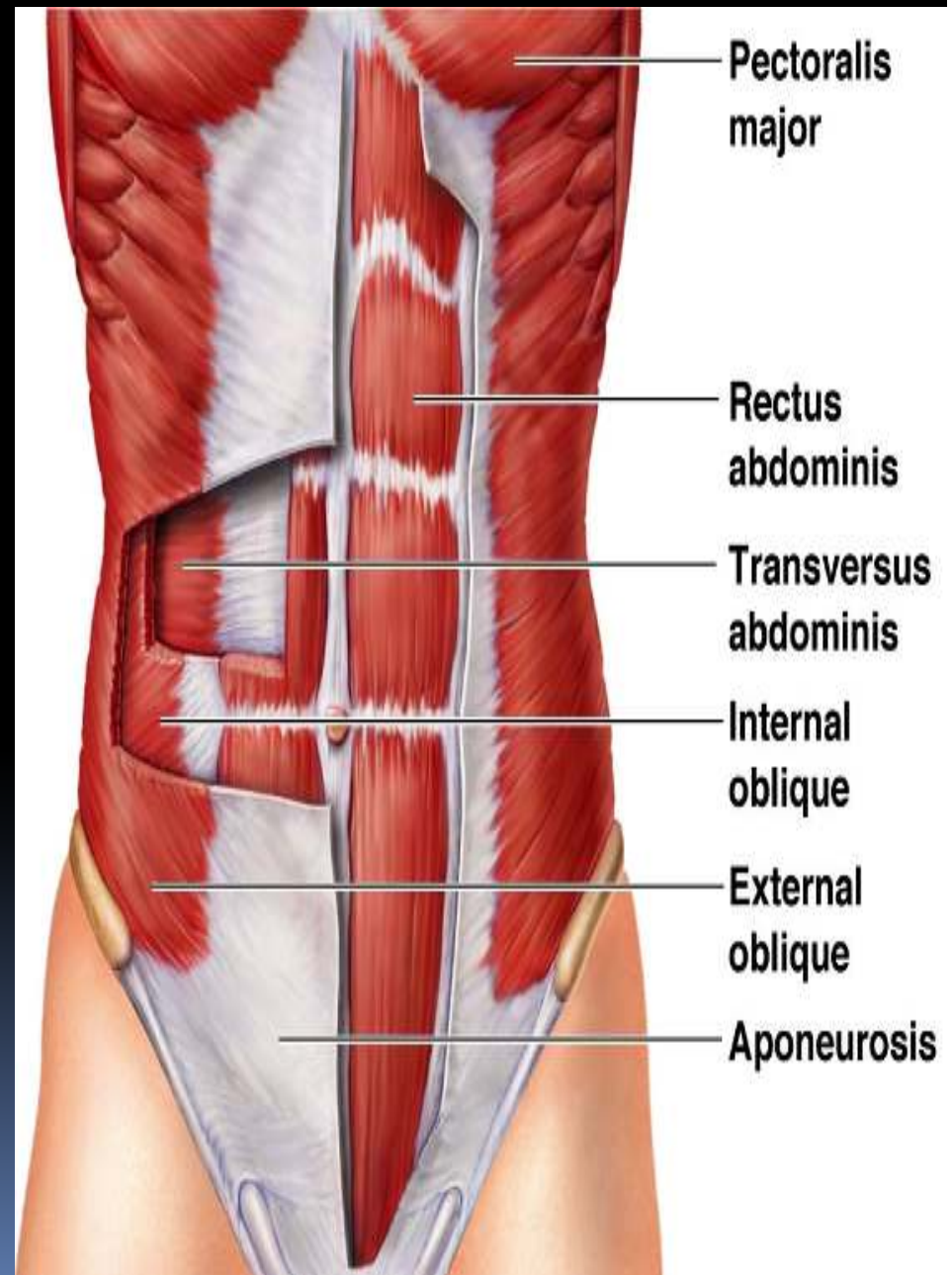


Formation of Rectus sheath:

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.

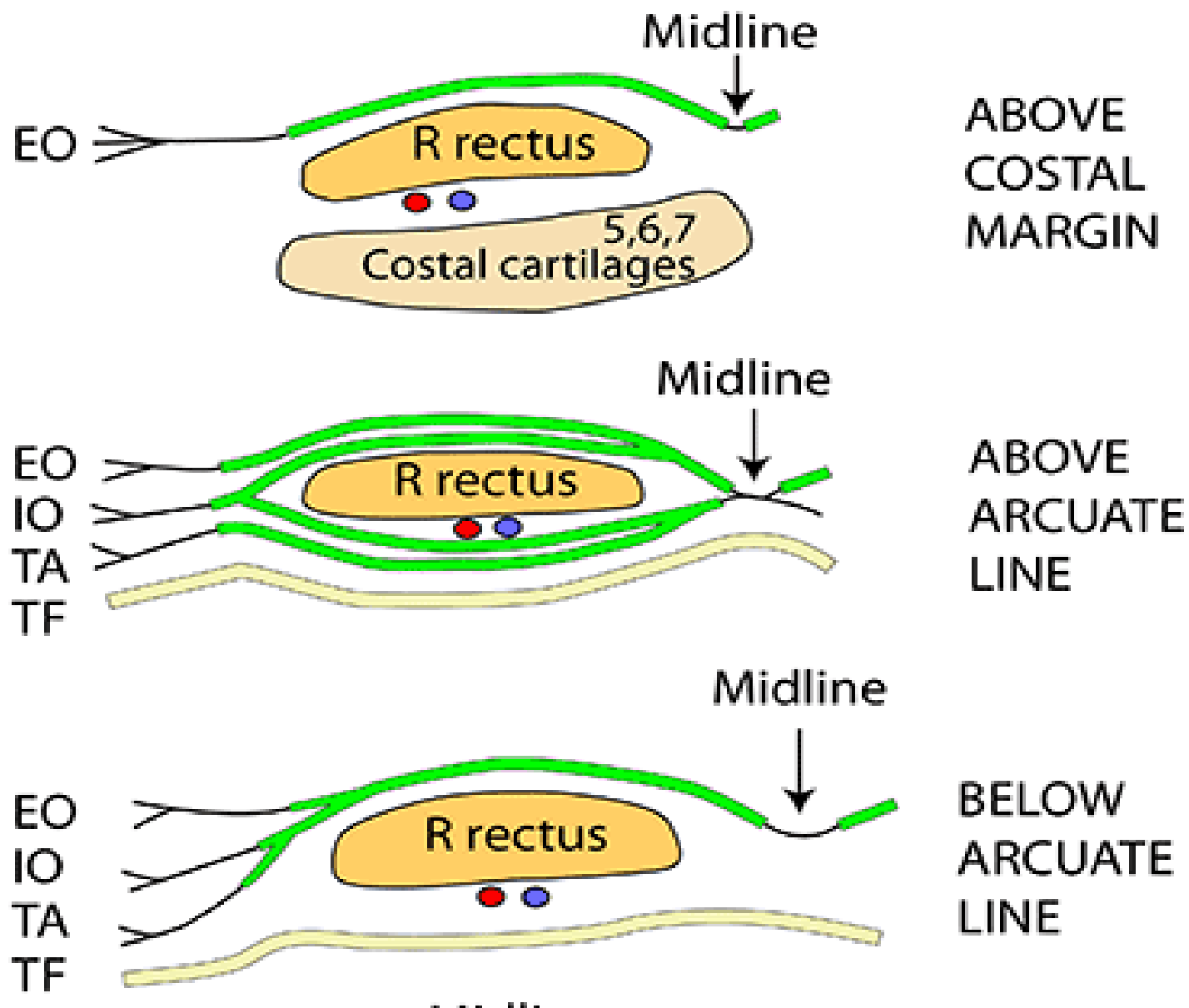
• **Posterior wall**: half of IO aponeurosis & transverses aponeurosis.

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

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

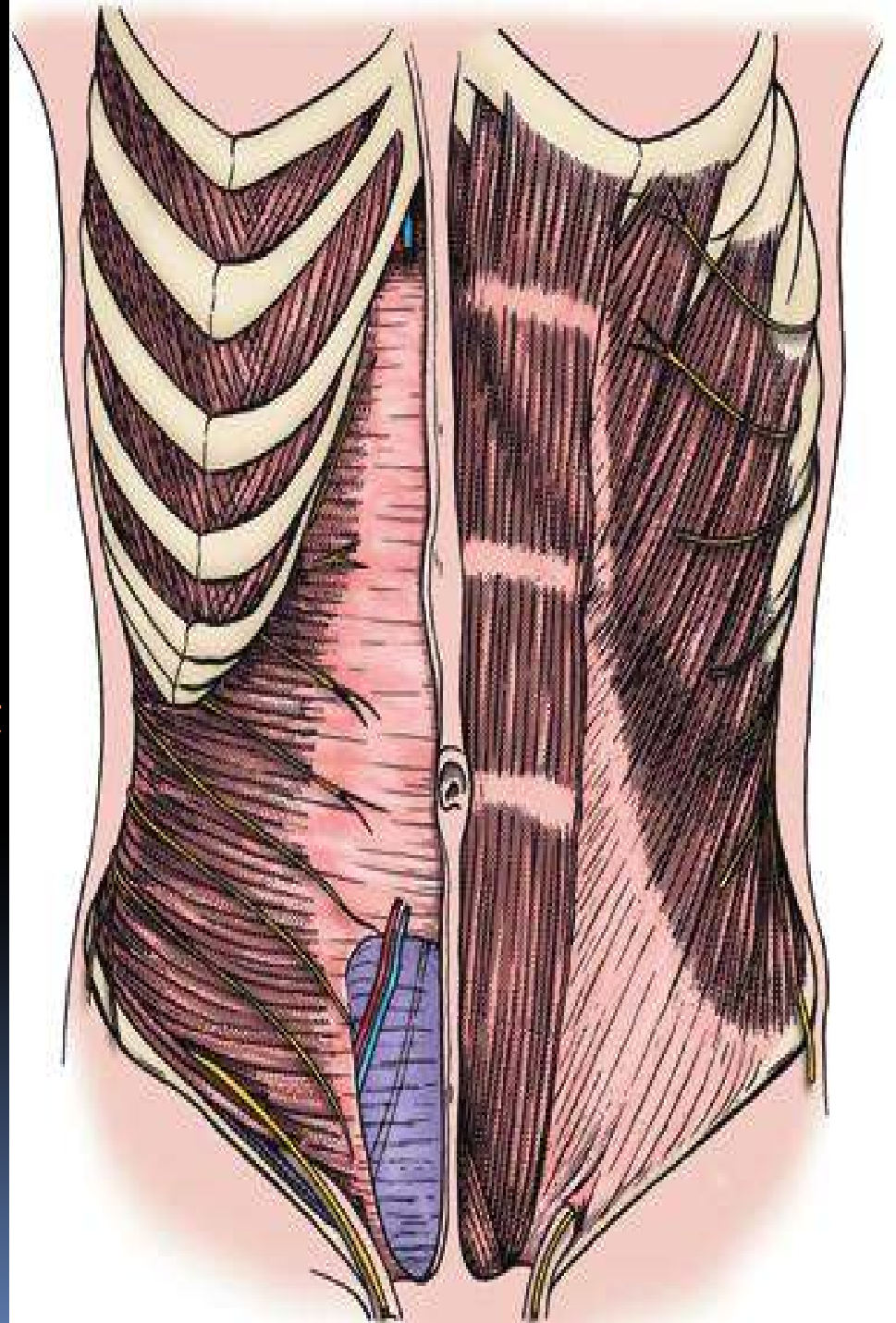
* **Posterior wall**: absent, only transversalis fascia

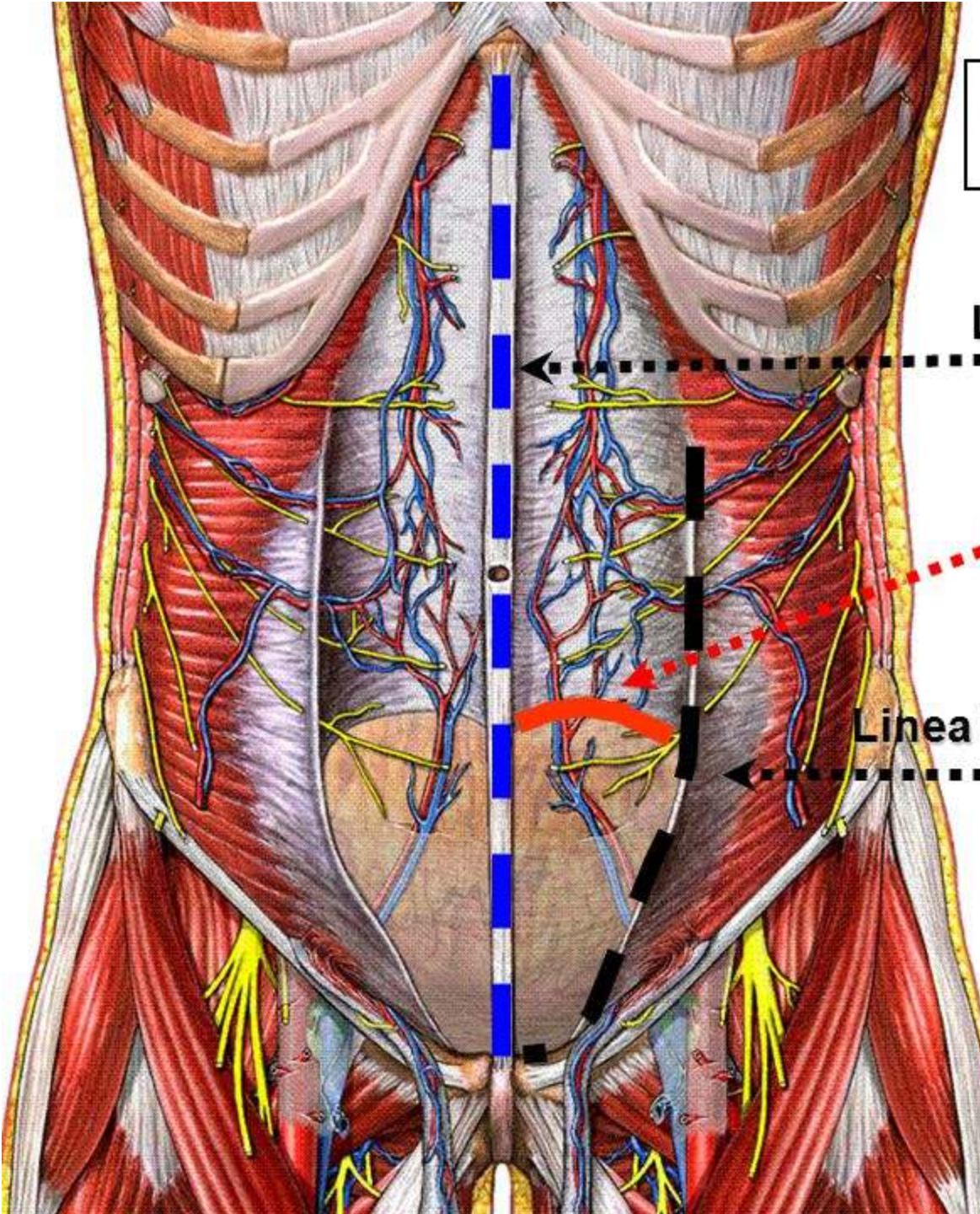
ABDOMINAL WALL MUSCLES & RECTUS SHEATH



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.





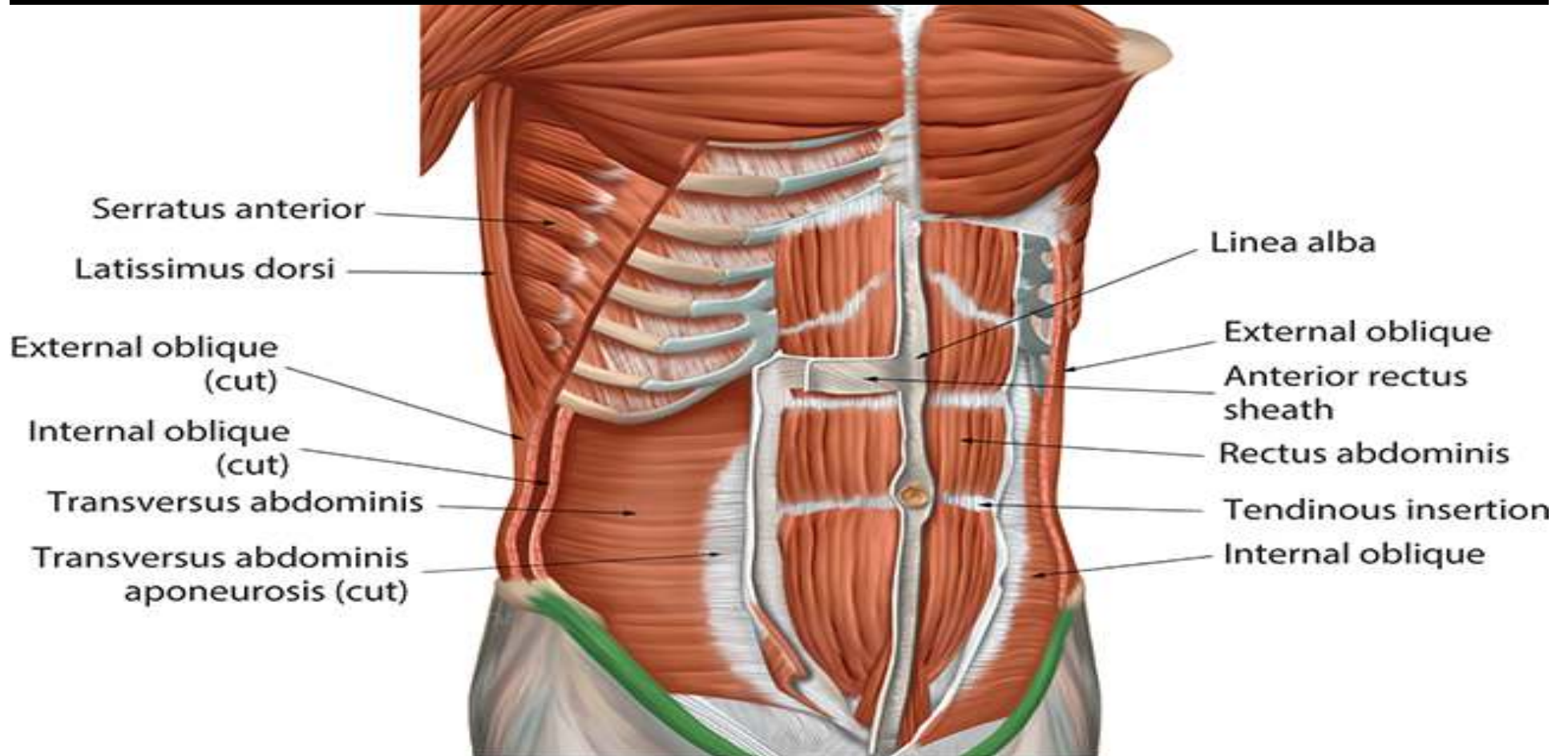
Rectus Sheath

Linea Alba **Medially**

Arcuate Line

Linea Semilunaris **Laterally**

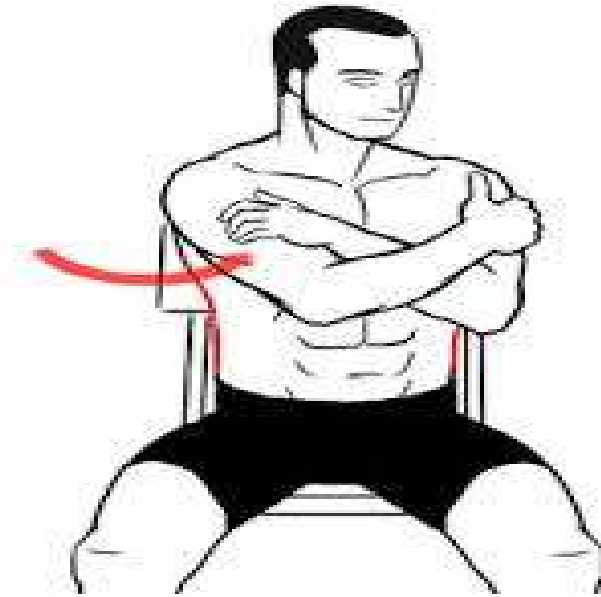
The rectus sheath is separated from each other by **linea alba** which extends from xiphoid process to symphysis pubis & separated laterally from lateral muscles at linea semilunaris.



Function Of Abdominal Muscles:

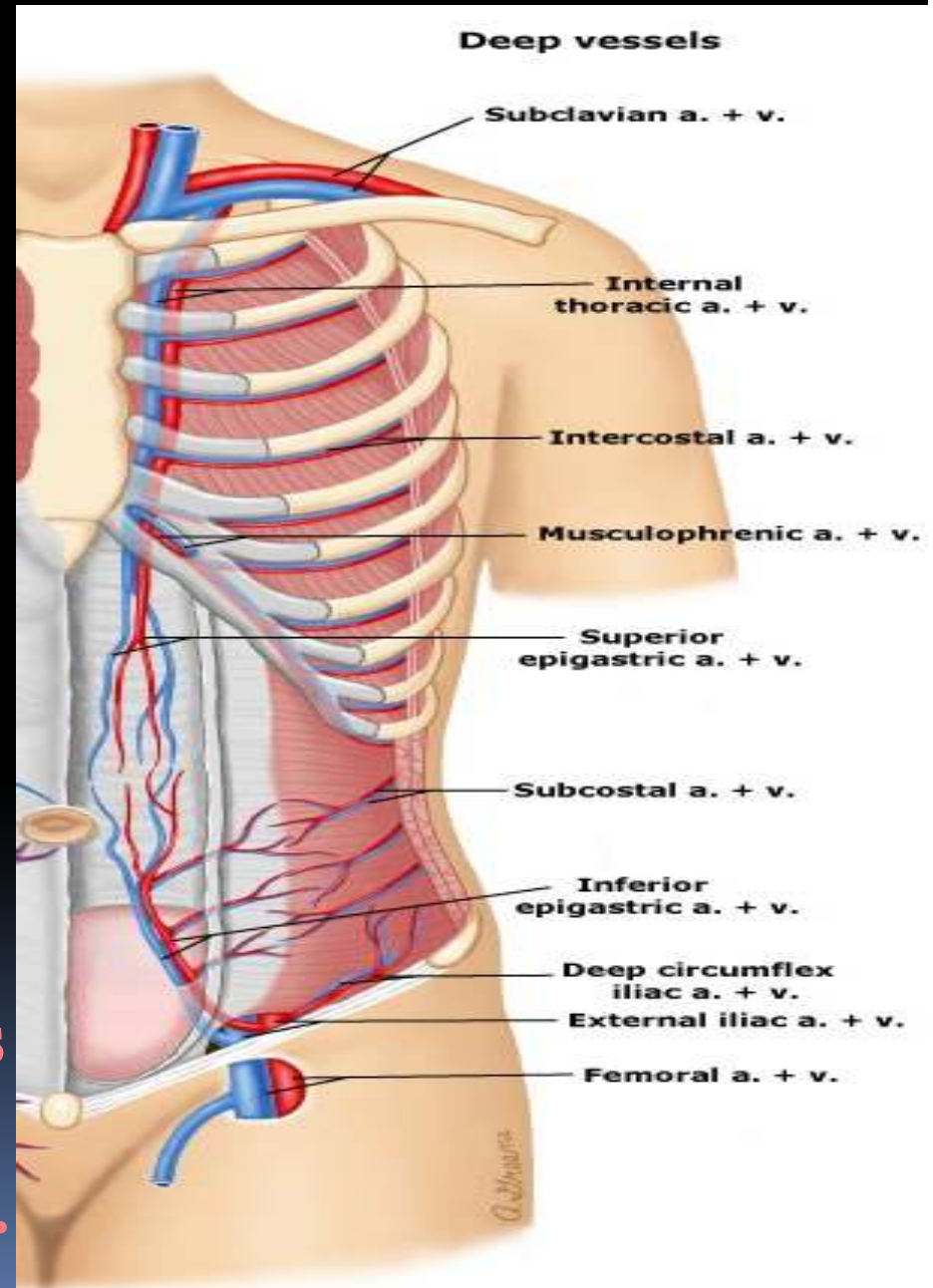
1) The oblique muscles, Transversus abdominis and Rectus abdominis: : flexing & rotation of trunk , Supports abdominal contents , compresses abdominal contents , assists respiration, coughing, micturition, defecation, parturition.

3) Pyramidalis: it only tenses linea alba.



Neurovascular Plane Of Abdominal Muscles:

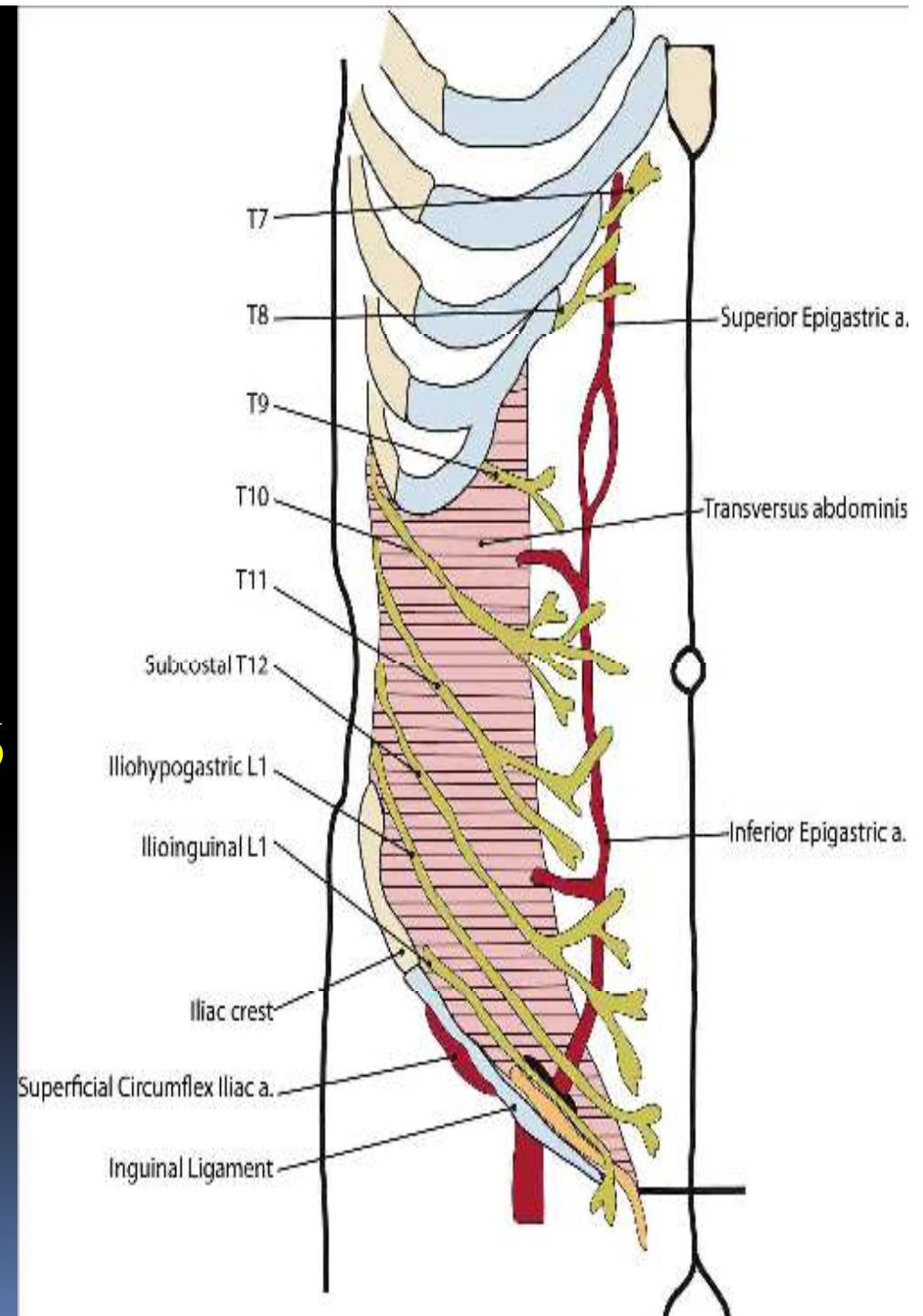
- Superior part of muscular wall -- **superior epigastric artery.**
- Inferior part of wall -- **inferior epigastric artery**
- Lateral part of wall -- **intercostal , subcostal arteries & deep circumflex iliac artery.**



➤ 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:

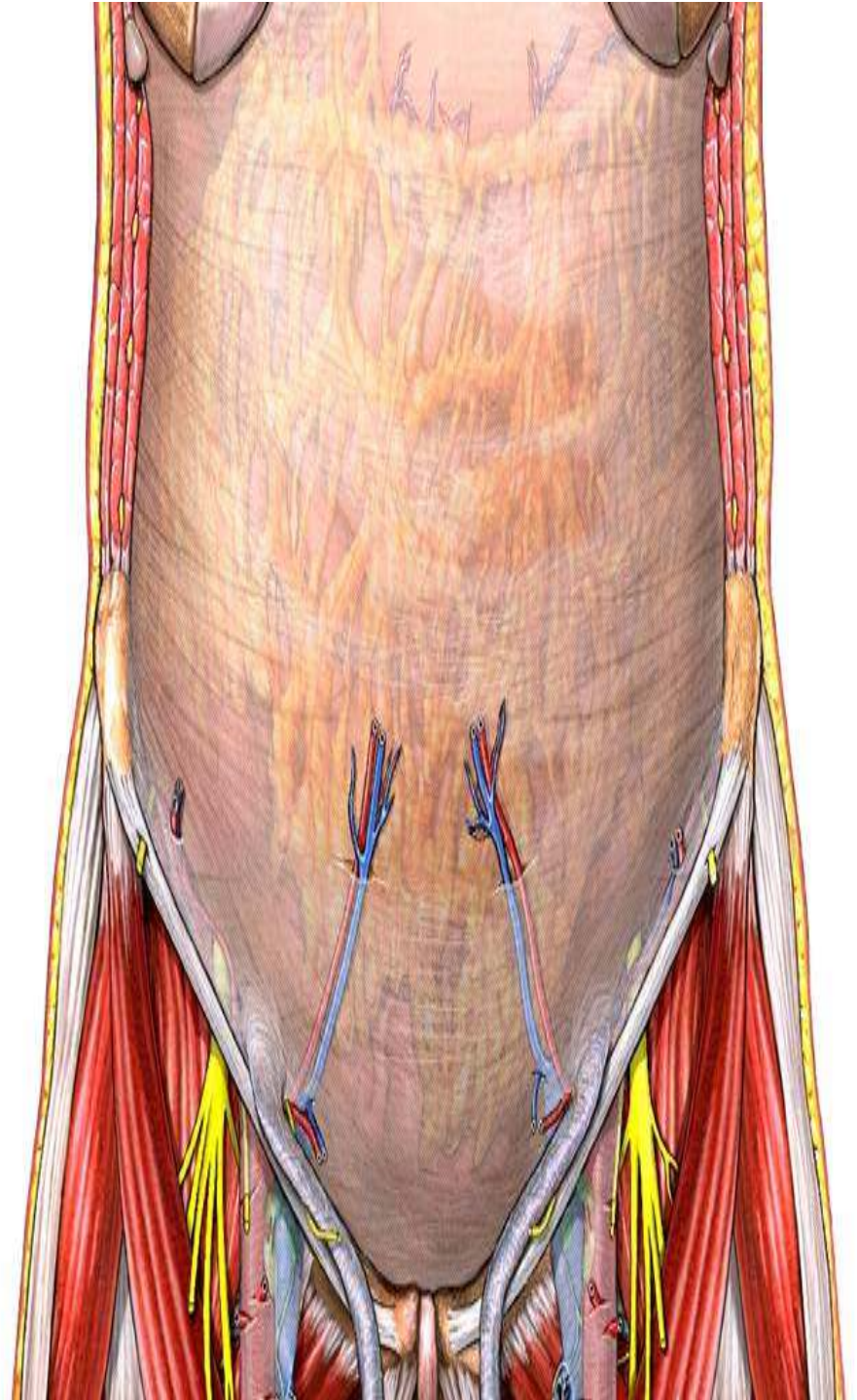
There is no lymph nodes in abdominal wall

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.

