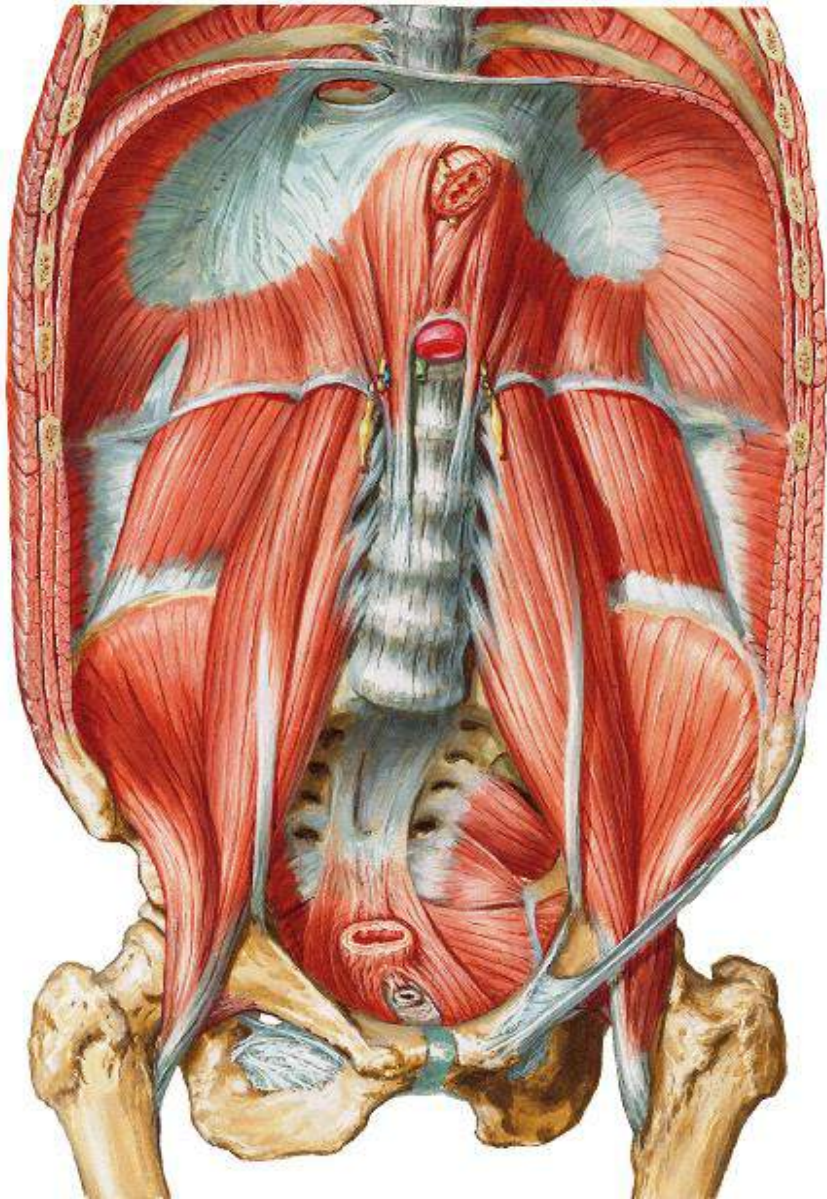


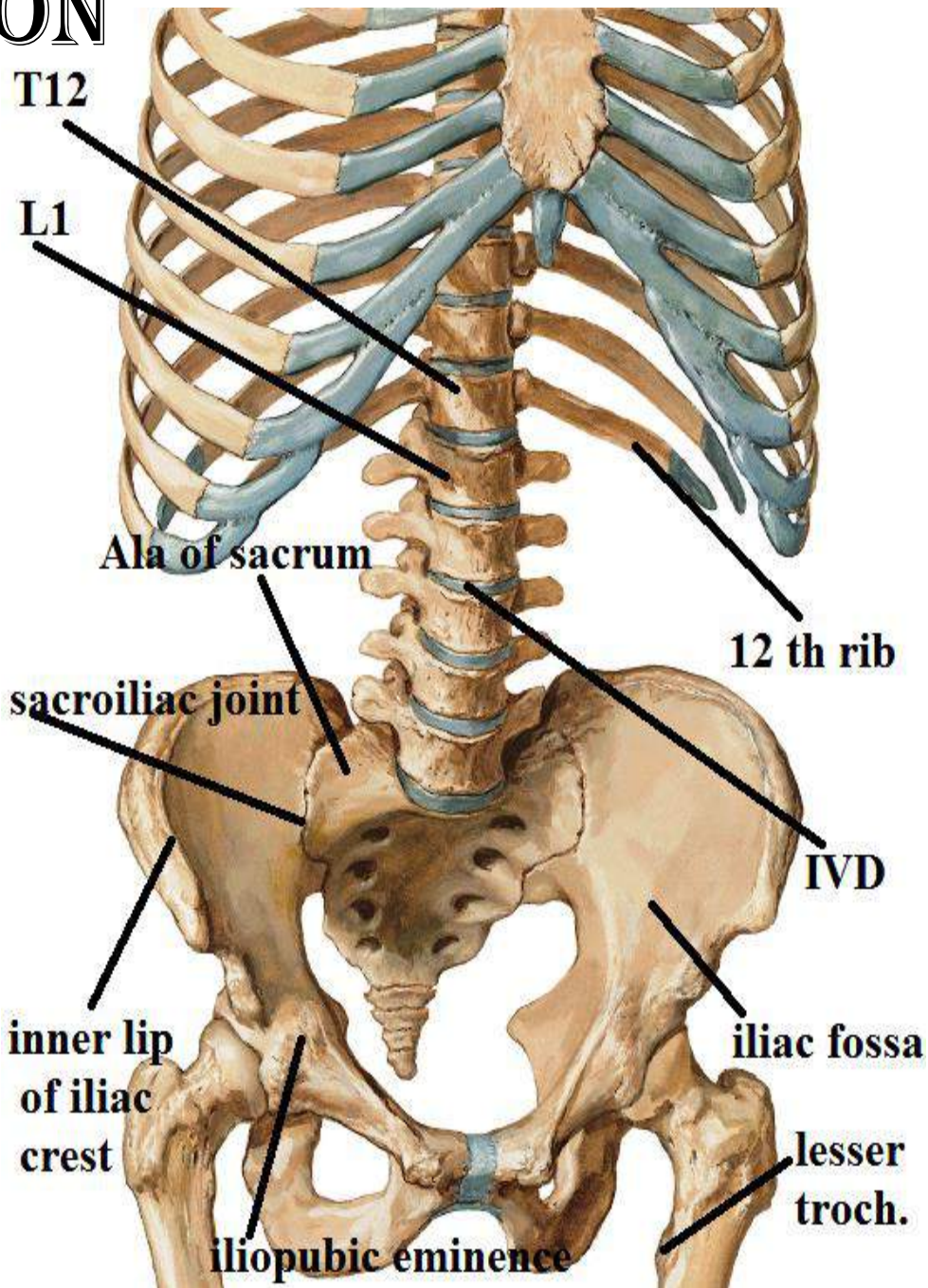
# POST. ABD. WALL & DIAPHRAGM



BY

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# SKELETON

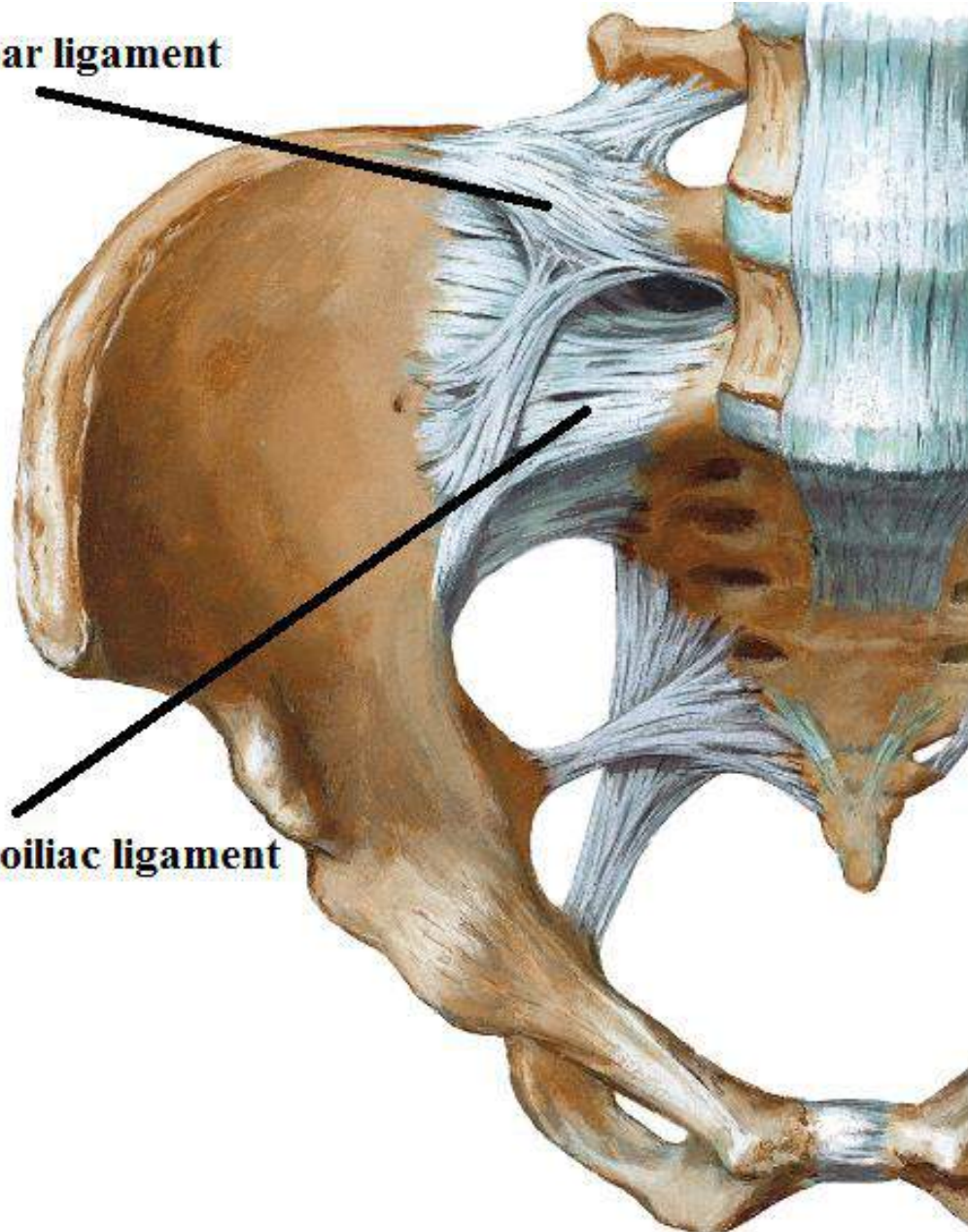




# SKELETON

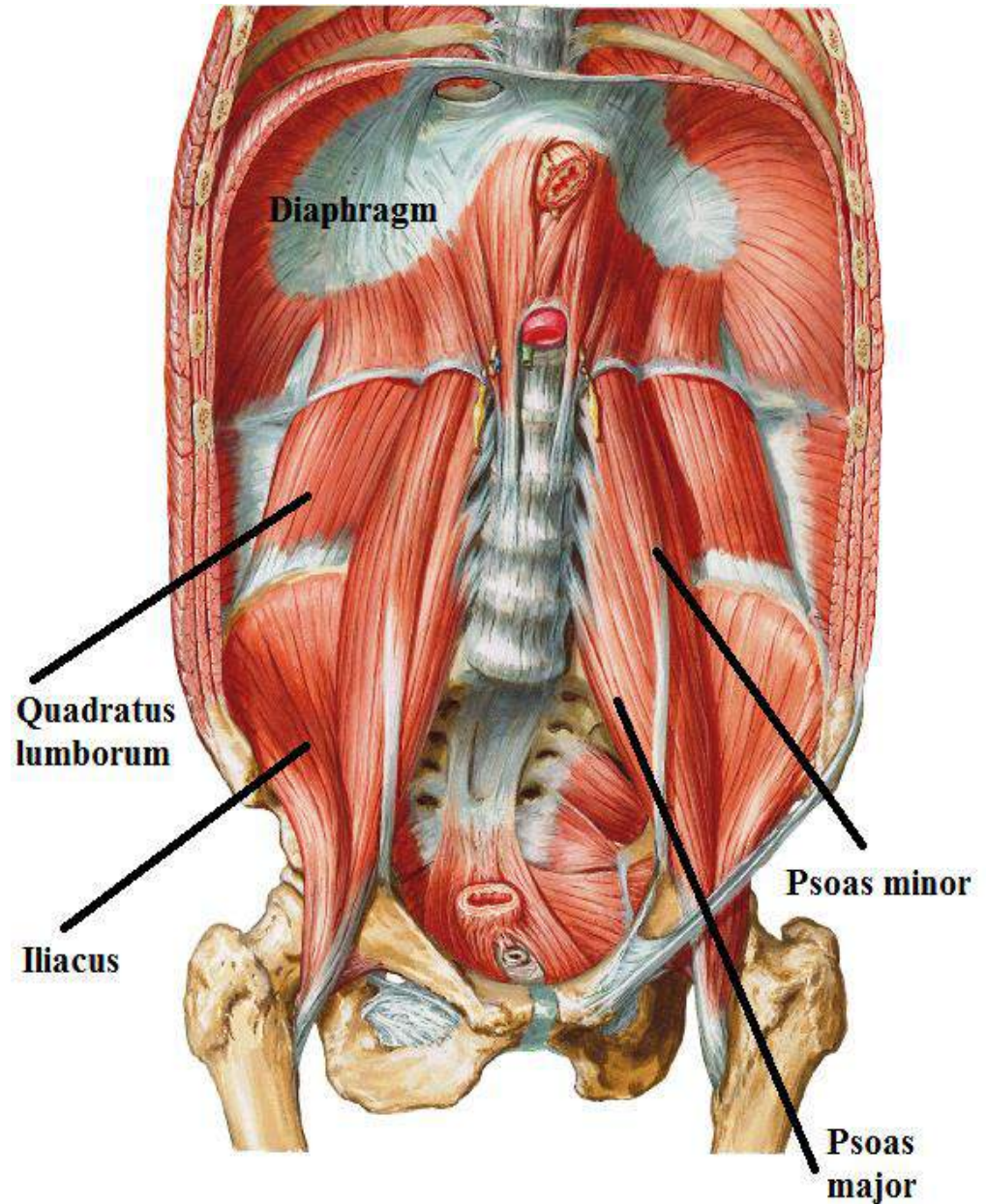
**Ilio lumbar ligament**

**Ant.sacroiliac ligament**



# POST. ABD. WALL MUSCLES

- 1- Quadratus lumborum
- 2- Iliacus
- 3- Psoas minor
- 4- Psoas major
- 5- Diaphragm



# POST. ABD. WALL MUSCLES

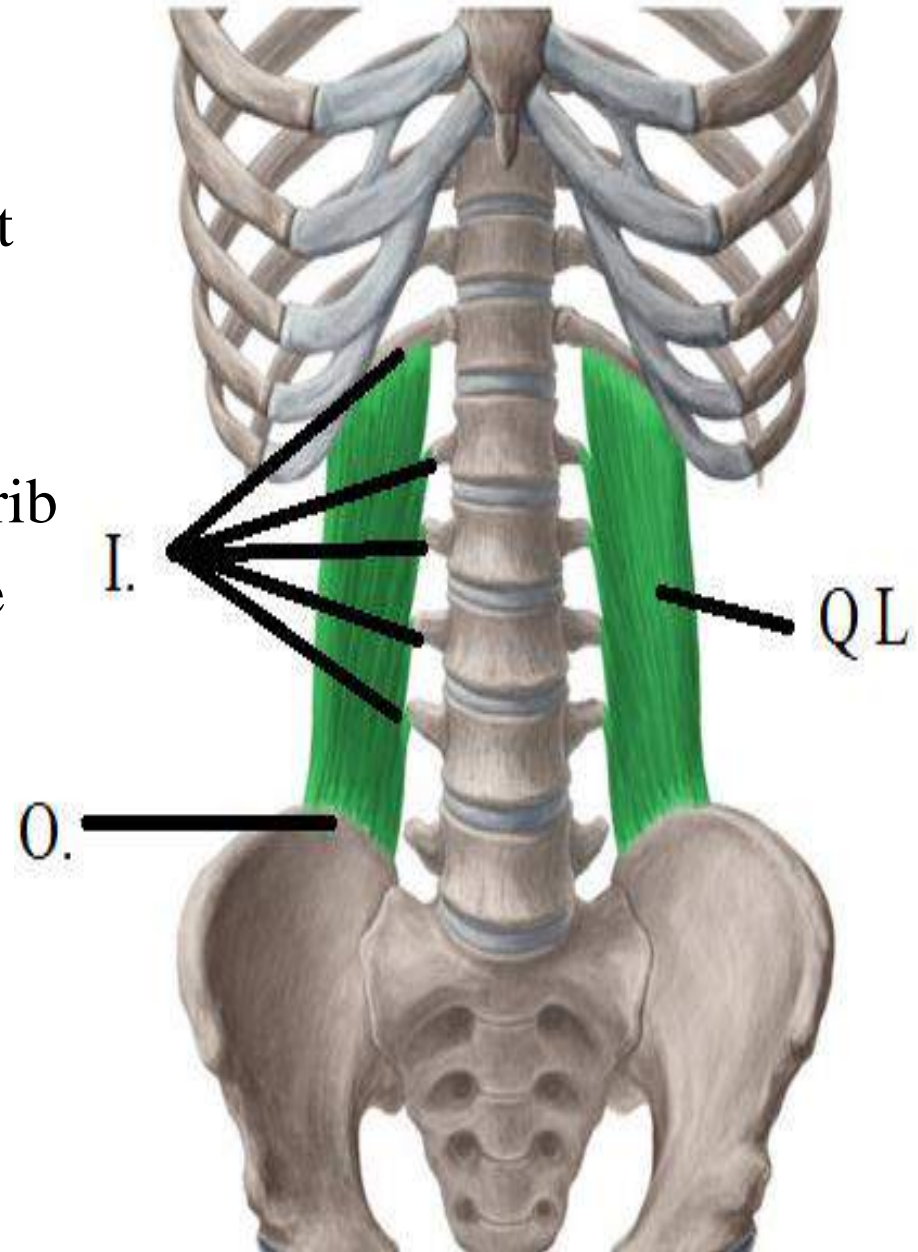
## 1- QUADRATUS LUMBORUM

O.:-

- post. 1/3 of inner lip of iliac crest
- ilio lumbar ligament

I.:-

- lower part of medial half of last rib
- tips of upper 4 lumbar transverse processes





# POST. ABD. WALL MUSCLES

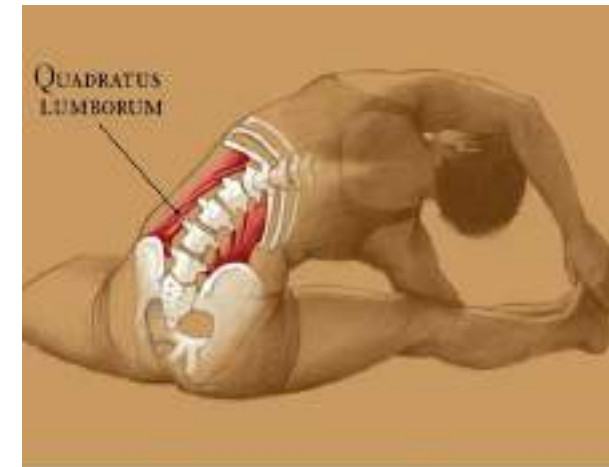
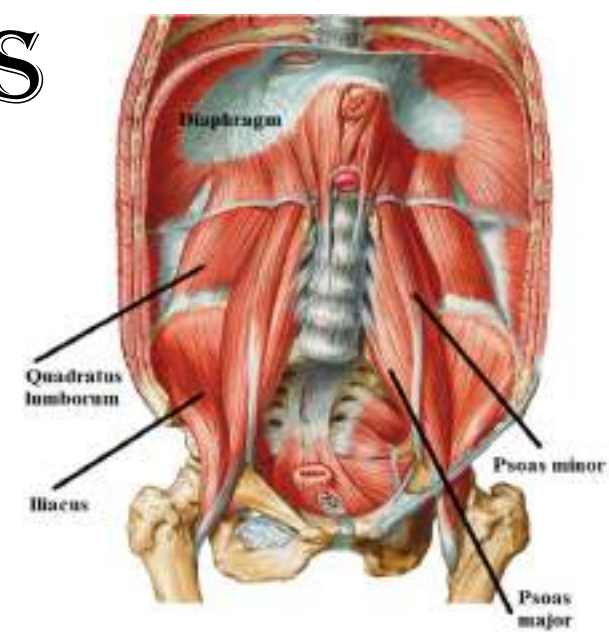
## 1- QUADRATUS LUMBORUM

A.:-

- fix last rib to allow good contraction of diaphragm
- one muscle do lateral flexion of the trunk
- 2 muscles extend the trunk.

N.S.:-

T12 & upper 4 lumbar nerves.



# POST. ABD. WALL MUSCLES

## ILIACUS

O.:-

- Iliac fossa
- Inner lip of iliac crest

I.:-

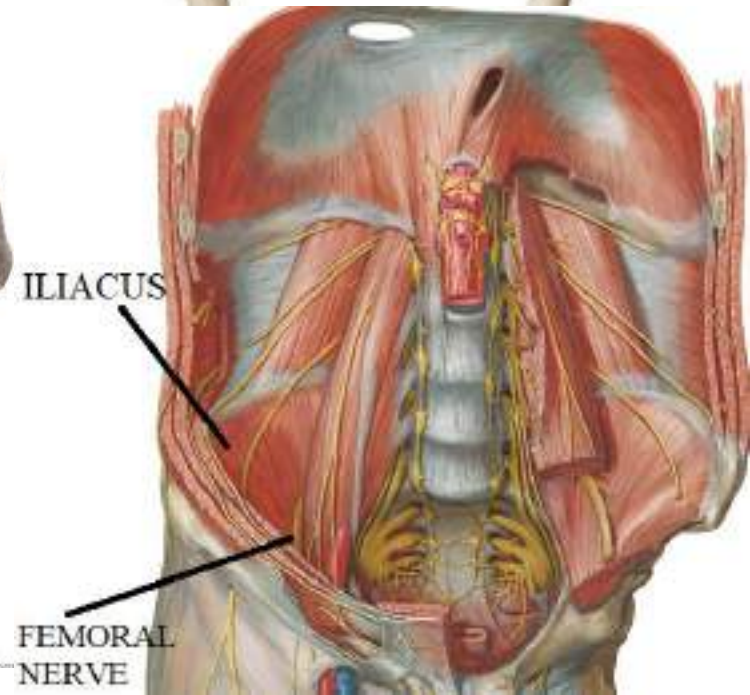
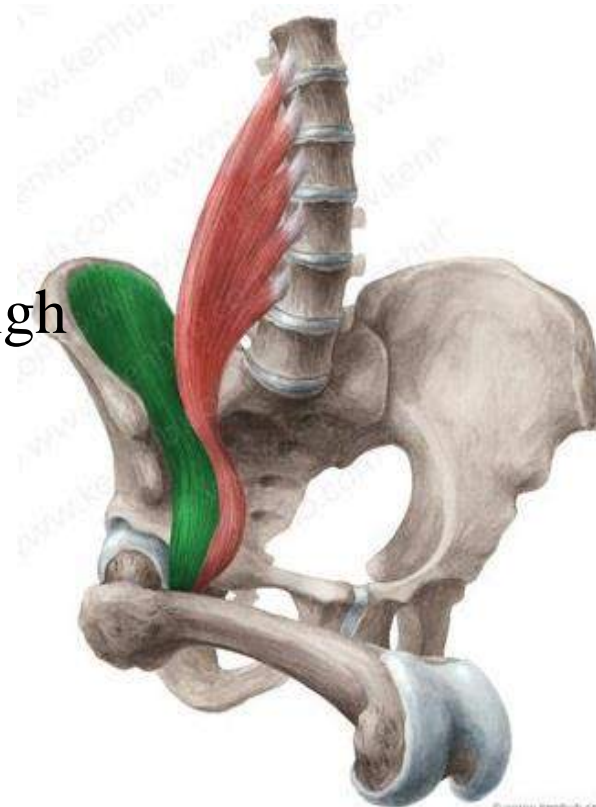
Lesser trochanter

A.:-

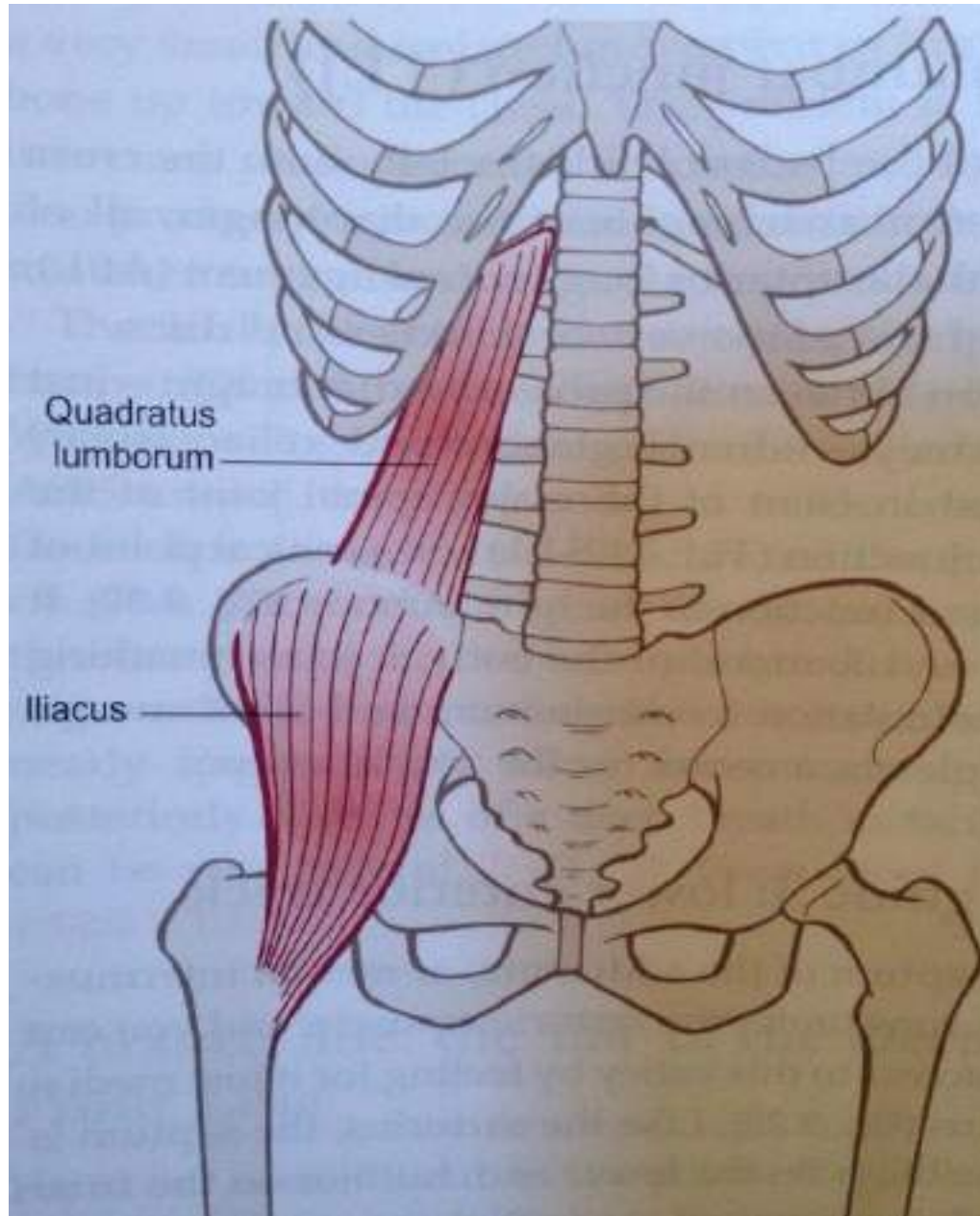
Flexion &  
lateral rotation of thigh

N.S.:-

femoral nerve



# POST. ABD. WALL MUSCLES





# POST. ABD. WALL MUSCLES

## PSOAS MAJOR

### O.:-

- 5 slips, each arise from sides of 2 adjacent lumbar vertebrae & IVD (1st. slip arise from T12 & L1 & disc in ( ))
- 5 tendinous arches bridging over lumbar vessels.
- front of the 5 lumbar transverse processes

### I.:-

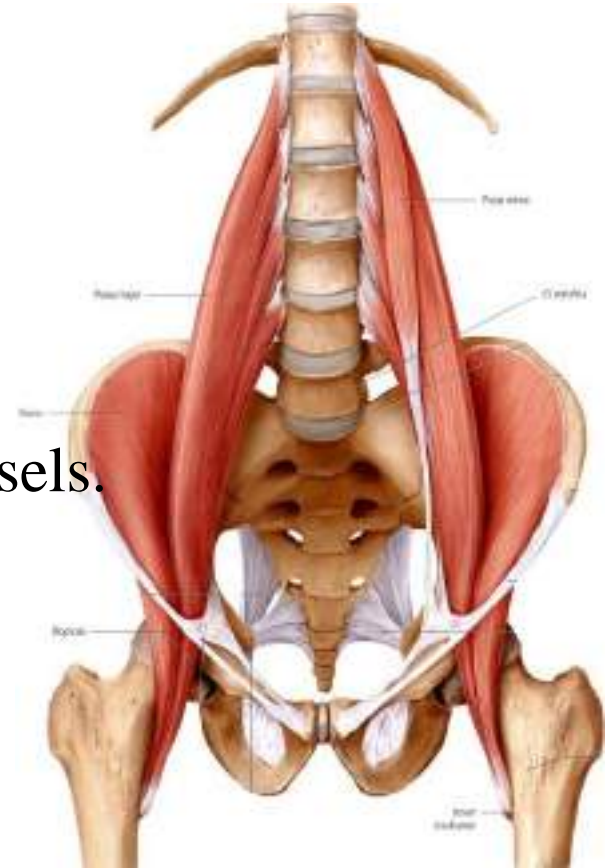
- Lesser trochanter

### A.:-

- Flexion & lateral rotation of thigh
- one muscle do lateral flexion of the trunk
- 2 muscles Flex trunk as sitting up from lying position

### N.S.:-

Lumbar nerves 1, 2, 3



# POST. ABD. WALL MUSCLES

## PSOAS MINOR (may be absent)

O.:-

- Sides of T12 & L1 & disc in ( )

I.:-

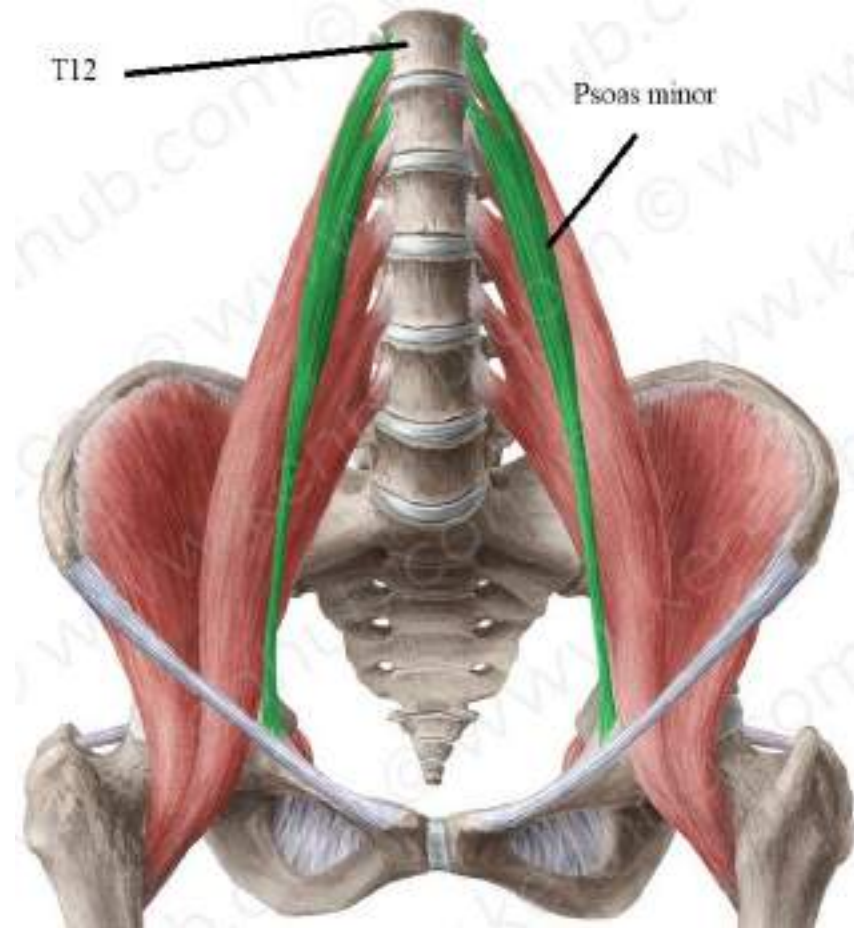
- Iliopubic eminence

A.:-

- Weak flexion of the trunk

- N.S.:-

1<sup>st</sup> lumbar nerve



# FASCIA OF POST. ABD. WALL

## 1- iliac fascia:

Site:- covers iliacus.

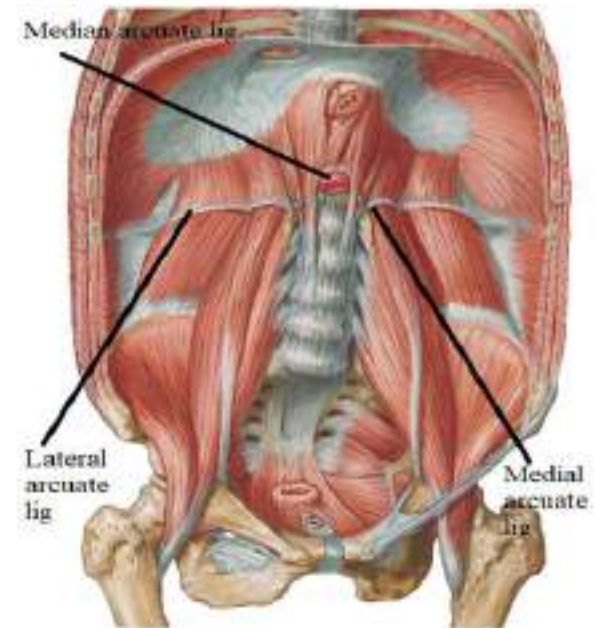
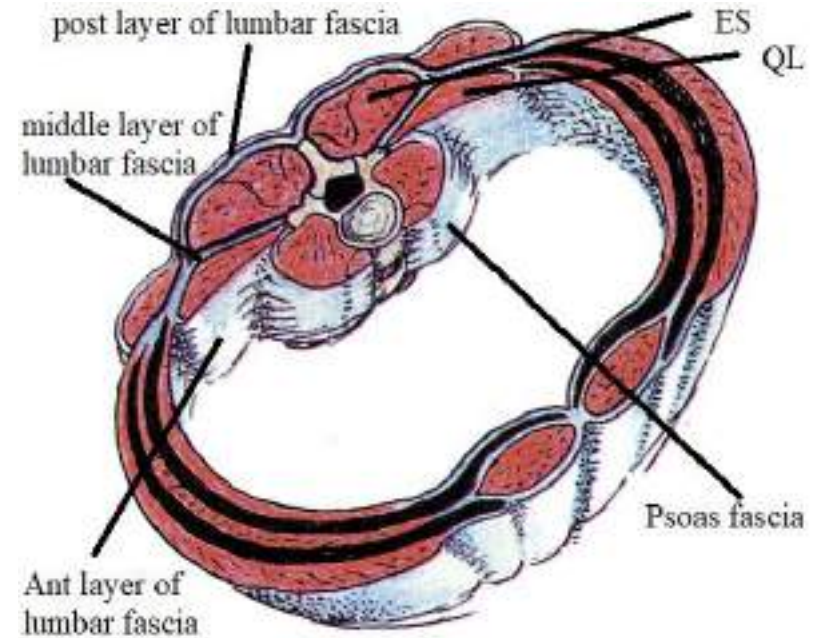
Special features:- prolong to form post. wall of femoral sheath.

## 2- psoas fascia:

Site:- covers psoas major

Special features:- thickened above forming **medial arcuate lig.**

which extends from body of L1 to tip of transverse process of L1





# FASCIA OF POST. ABD. WALL

## 3-lumbar (thoracolumbar) fascia:-

**Def.:** fascia invests quadratus lumborum & Erector spinae

**layers:**

### 1- ant. layer:

**Site:-**front of quadratus lumborum

**Special features:-**thickened above forming **lateral arcuate lig.**

which extends from tip of transverse process of L1 to last rib.

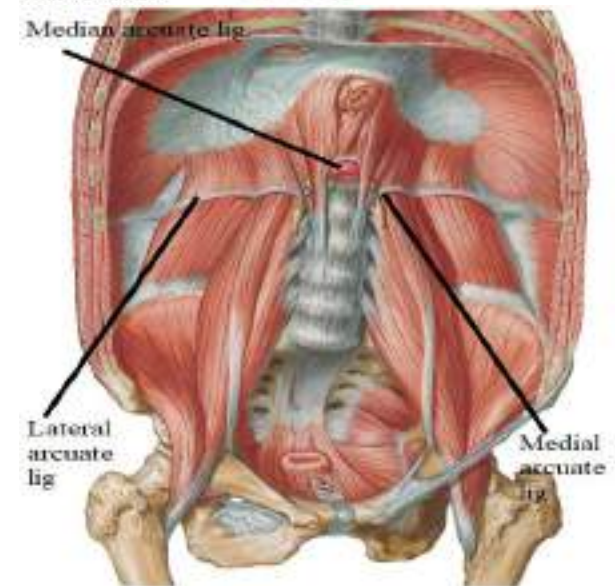
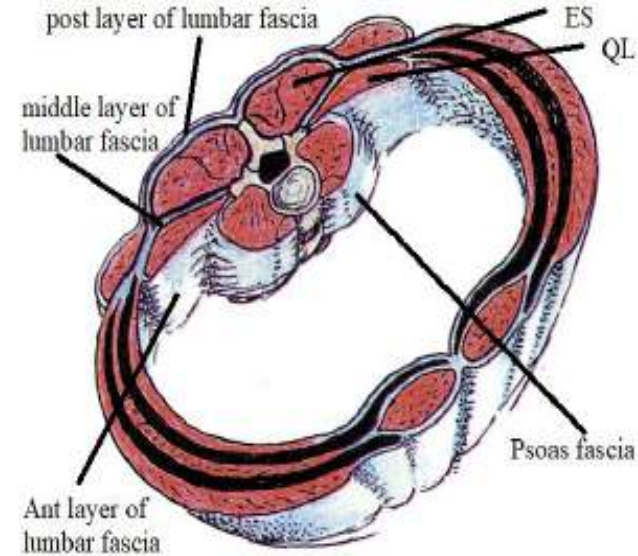
### 2- middle layer:

**Site:-**back of quadratus lumborum

**N.B.:** ant. & middle layers fuse at lateral border of quadratus lumborum to give origin to transversus abdominis & int. oblique

### 3- post. layer:

**Site:-**back of Erector spinae



# DIAPHRAGM

**Def.:-** fibro muscular partition ( ) thoracic & abdominal cavities.

**Shape:-** dome shape has

2 peripheral elevated muscular part (called copula)  
& central depressed tendinous part.

**Origin:-** (fleshy) from thoracic outlet,  
divided into 3 parts.

**1-sternal part:-**

2 slips from back of xiphoid process.

**2-costal part:-**

6 slips from inner surface of lower 6 c.c.

**3-lumbar (vertebral):-**

•Rt. crus:- from Rt. side of upper 3 lumbar v.

•Lt. crus:- from Lt. side of upper 2 lumbar v.

•median arcuate ligament:- ( ) Rt. & Lt crura

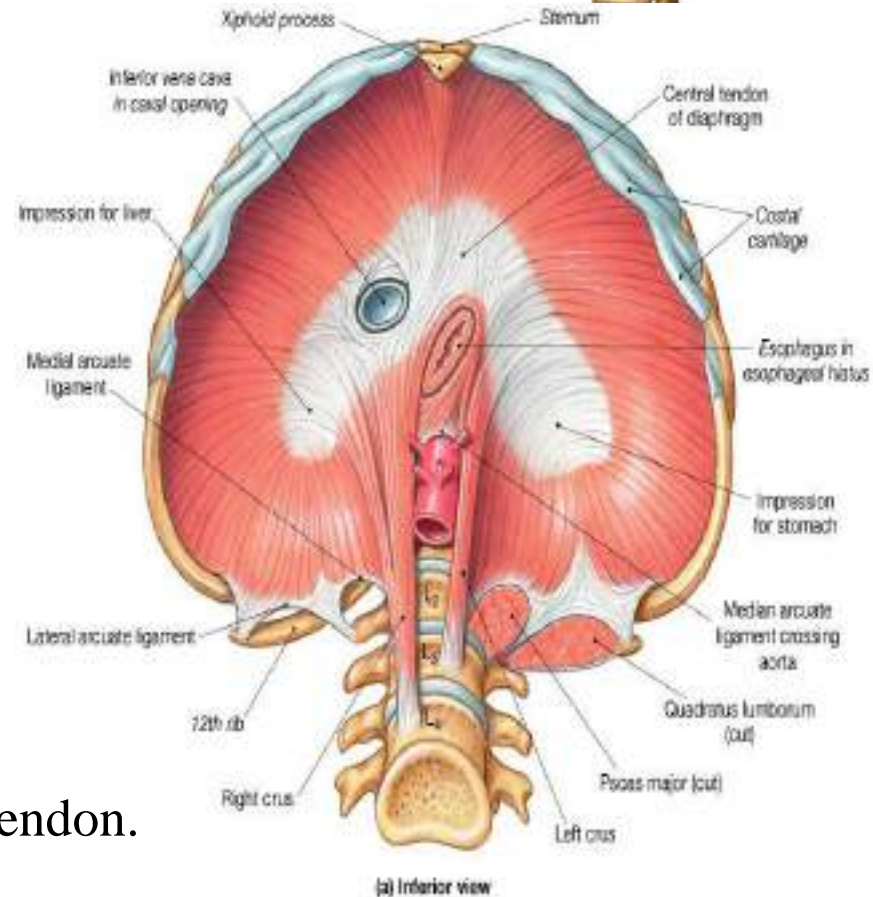
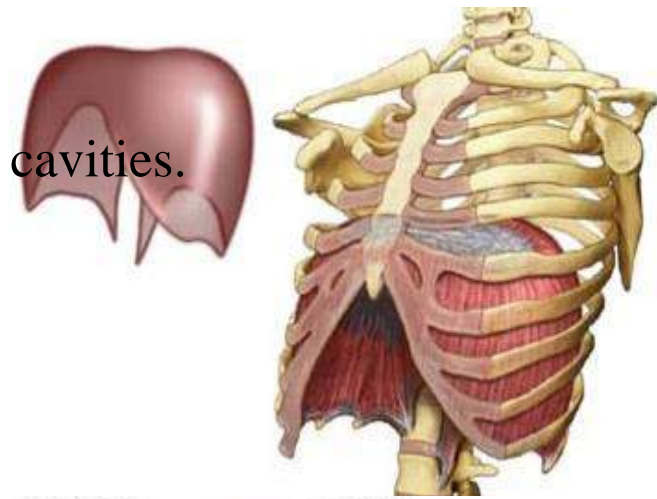
•2 medial arcuate ligaments:-

( ) body & tip of transverse process of L1

•2 lateral arcuate ligament:-

( ) tip of transverse process of L1 & last rib

**Insertion:-** fibers converge to attach to central tendon.



# DIAPHRAGM

## Openings of diaphragm

### Aortic Hiatus

**Site:-** level of T12 in median plane

**Boundaries:** Behind the median arcuate ligament & ( ) the 2 crura

**Transmits:-**

Aorta & Thoracic duct & Azygos vein

### oesophagus opening

**Site:-** level of T10 1" to Lt. of median plane

**Boundaries:-** Rt. crus of diaphragm

**Transmits:-**

Oesophagus & 2 vagi & Esophageal brans. of Lt gastric a.

### vena cava opening

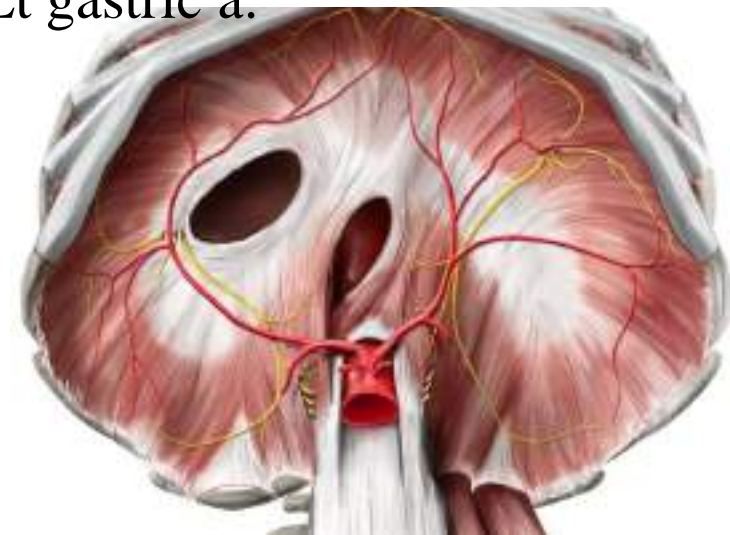
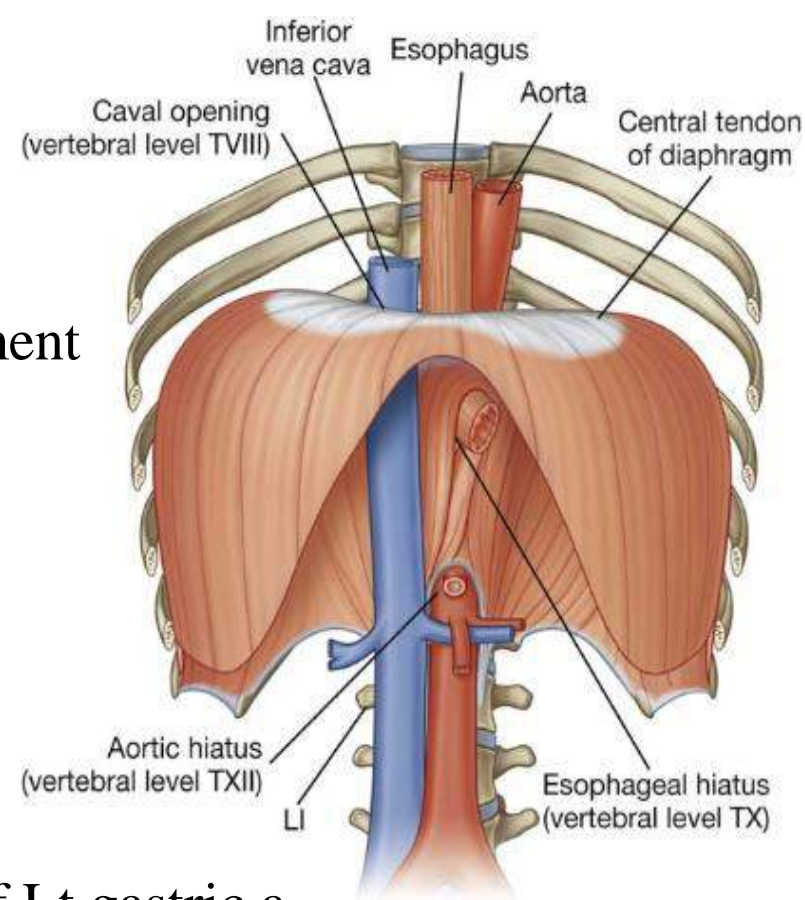
**Site:-** level of T8 1" to Rt. of median plane

**Boundaries:-** central tendon.

**Transmits:-**

IVC & Rt. phrenic n.

& Lymphatics from liver to mediastinal nodes





# DIAPHRAGM

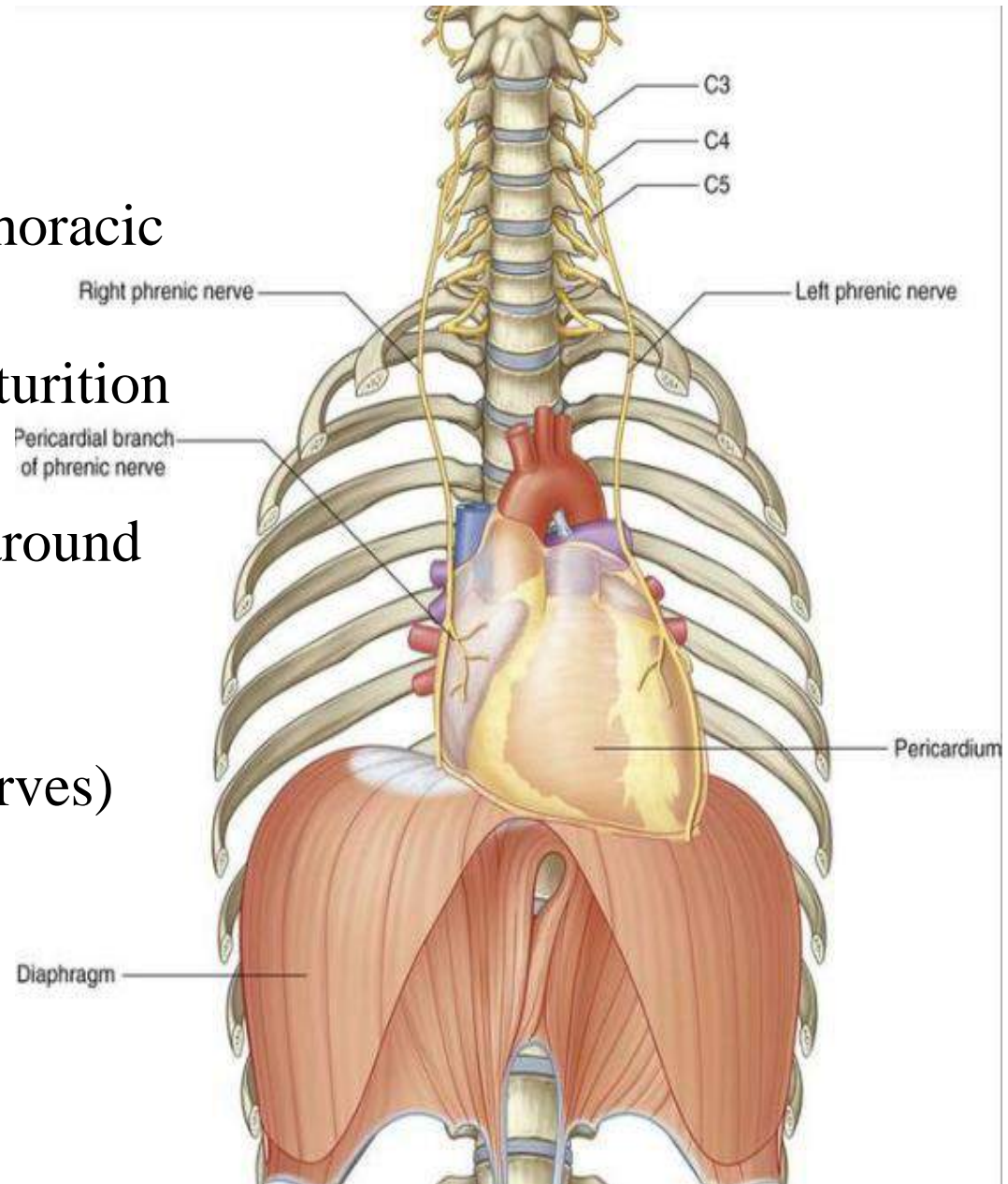
## Action:-

- 1-Main inspiratory muscle:-  
its descent forms -ve intra-thoracic pressure.
- 2-expulsive muscle as in micturition & defecation & delivery.
- 3-Rt. crus act as a sphincter around esophagus.

## Nerve supply:-

**motor:** phrenic n.(C3, 4, 5 nerves)

**sensory:** phrenic n. &  
lower 6 thoracic nerves



THANQ