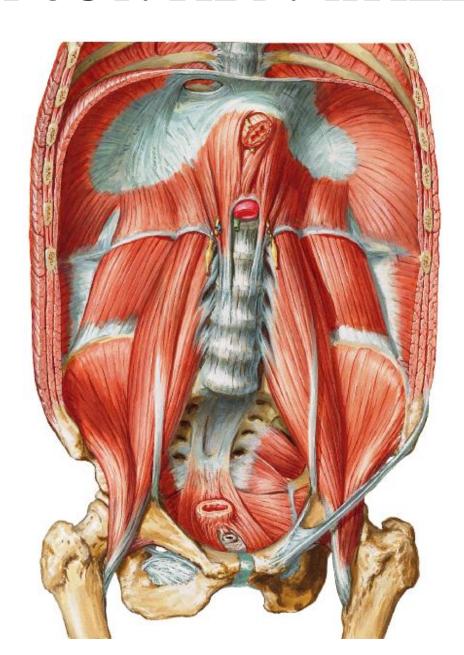
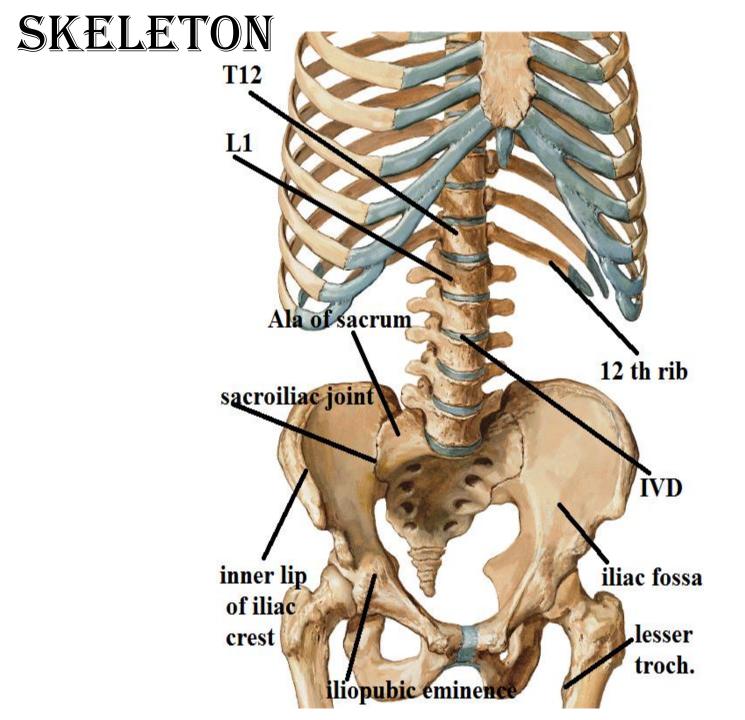
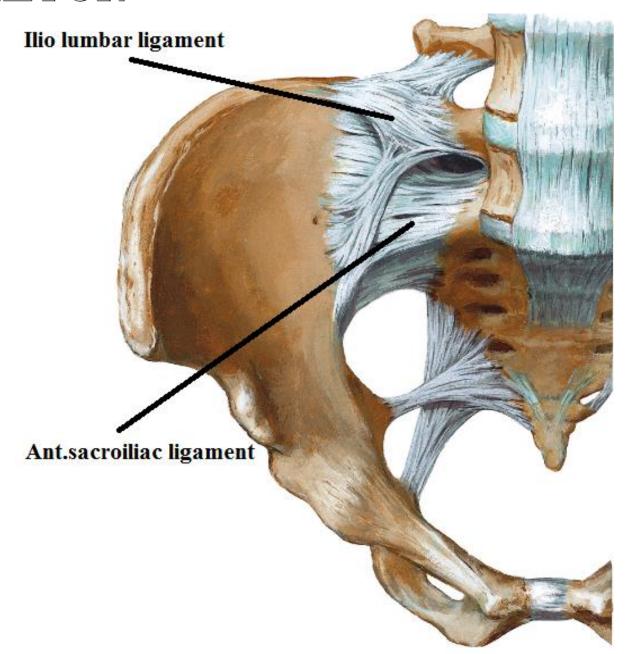
# POST. ABD. WALL & DIAPHRAGM



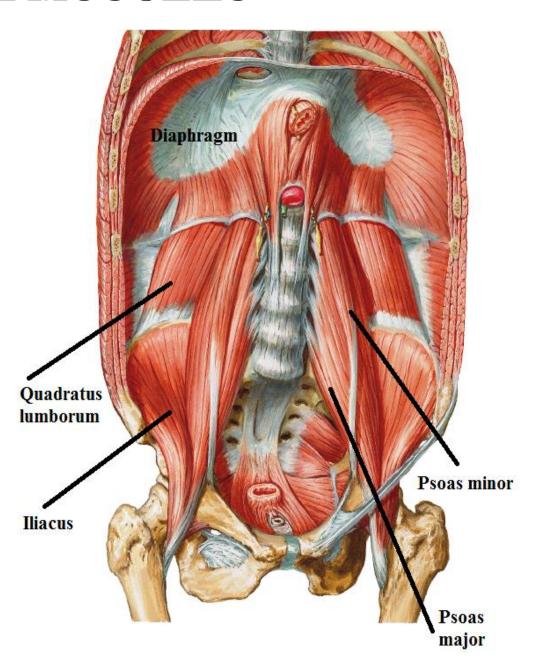
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# SKELETON



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



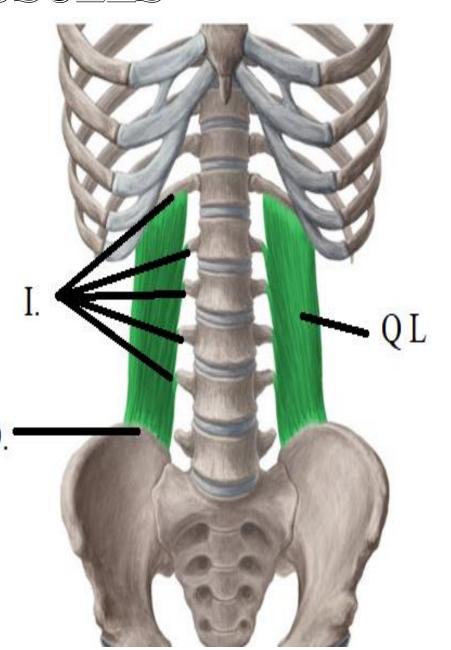
# 1- QUADRATUS LUMBORUM

## 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



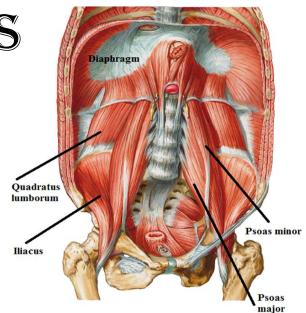
## 1- QUADRATUS LUMBORUM

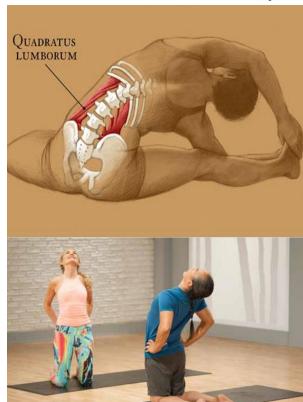
#### A.:-

- 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.





## **ILIACUS**

O.:-

• Iliac fossa

Inner lip of iliac crest

I.:-

Lesser trochanter

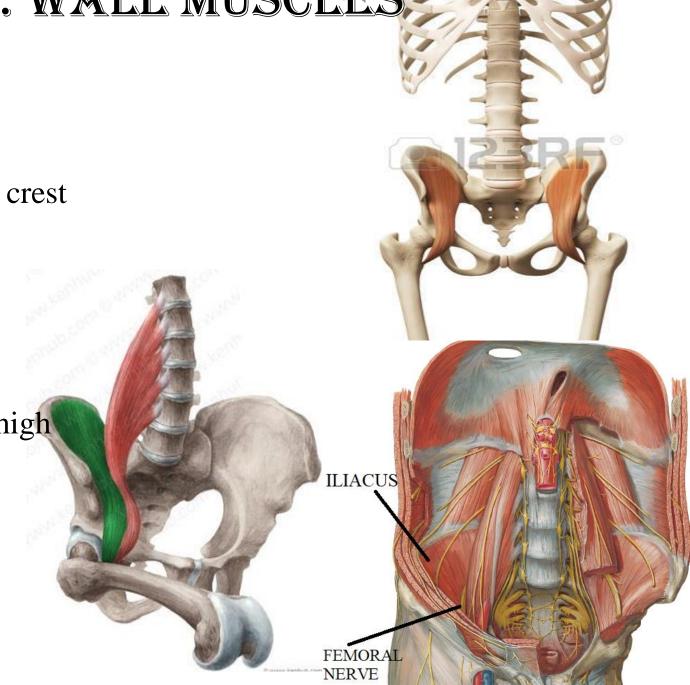
A.:-

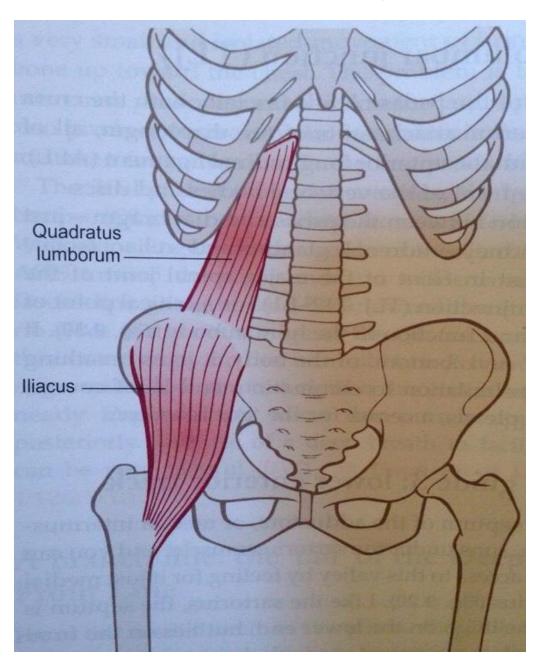
Flexion &

lateral rotation of thigh

N.S.:-

femoral nerve





## **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.:-

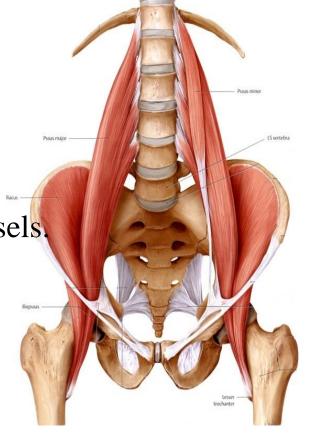
Lesser trochanter

#### 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



# **PSOAS MINOR** (may be absent)

O.:-

• Sides of T12 & L1 & disc in ( )

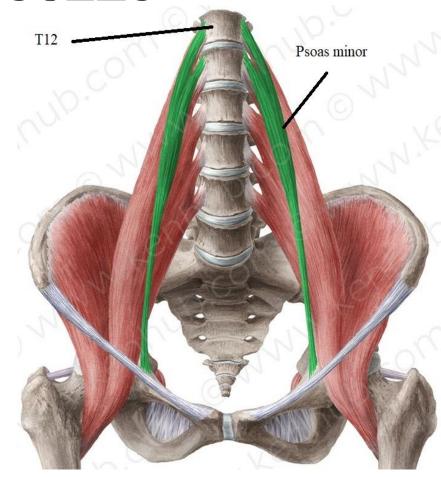
I.:-

Iliopubic eminence

A.:-

- Weak flexion of the trunk
- N.S.:-

1st 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

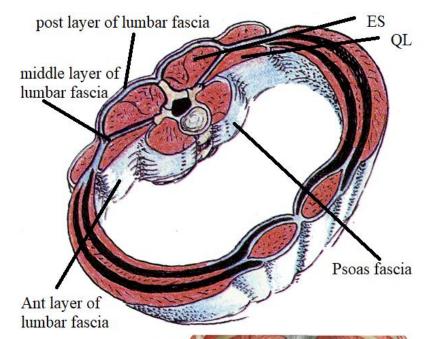
Special features:-thickened above

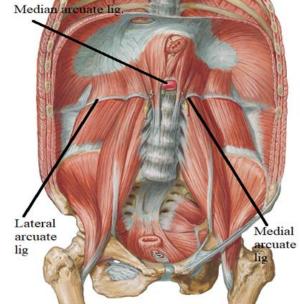
forming medial arcuate lig.

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:

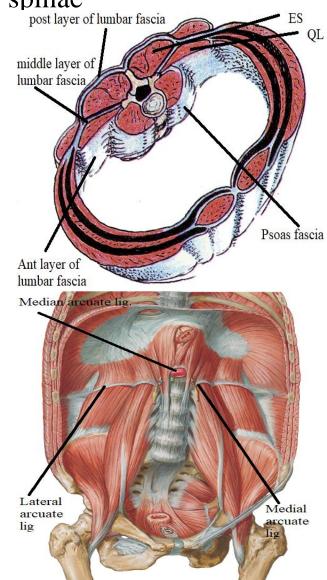
## 1- ant. layer:

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.

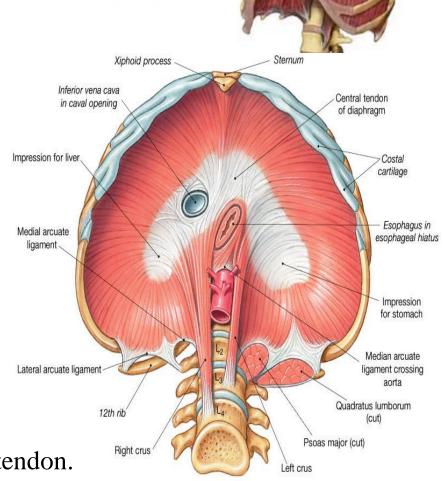
#### 2-costal part:-

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.



(a) Inferior view

# DIAPHRAGM

# **Openings of diaphragm**

#### **Aortic Hiatus**

Site:- level of T12 in median plane

Boundaries: Behind the median arcuate ligament

& ( ) the 2 crura

#### Transmites:-

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

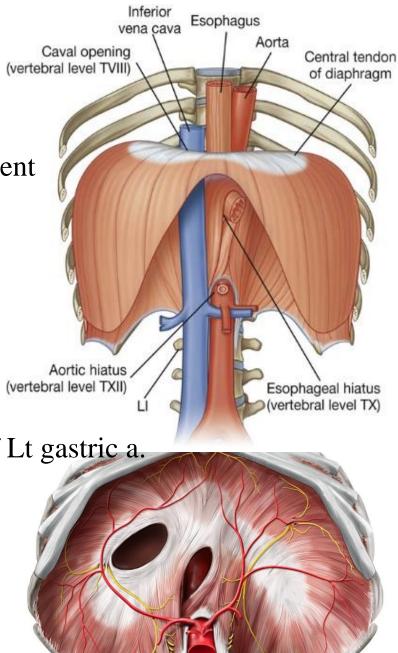
Site:- level of T8 1" to Rt. of median plane

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

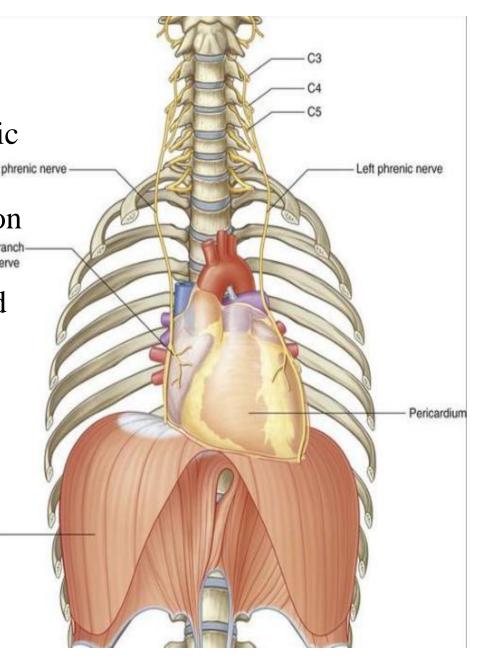
esophagus.

# Nerve supply:-

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

sensory: phrenic n. &

lower 6 thoracic nerves



#