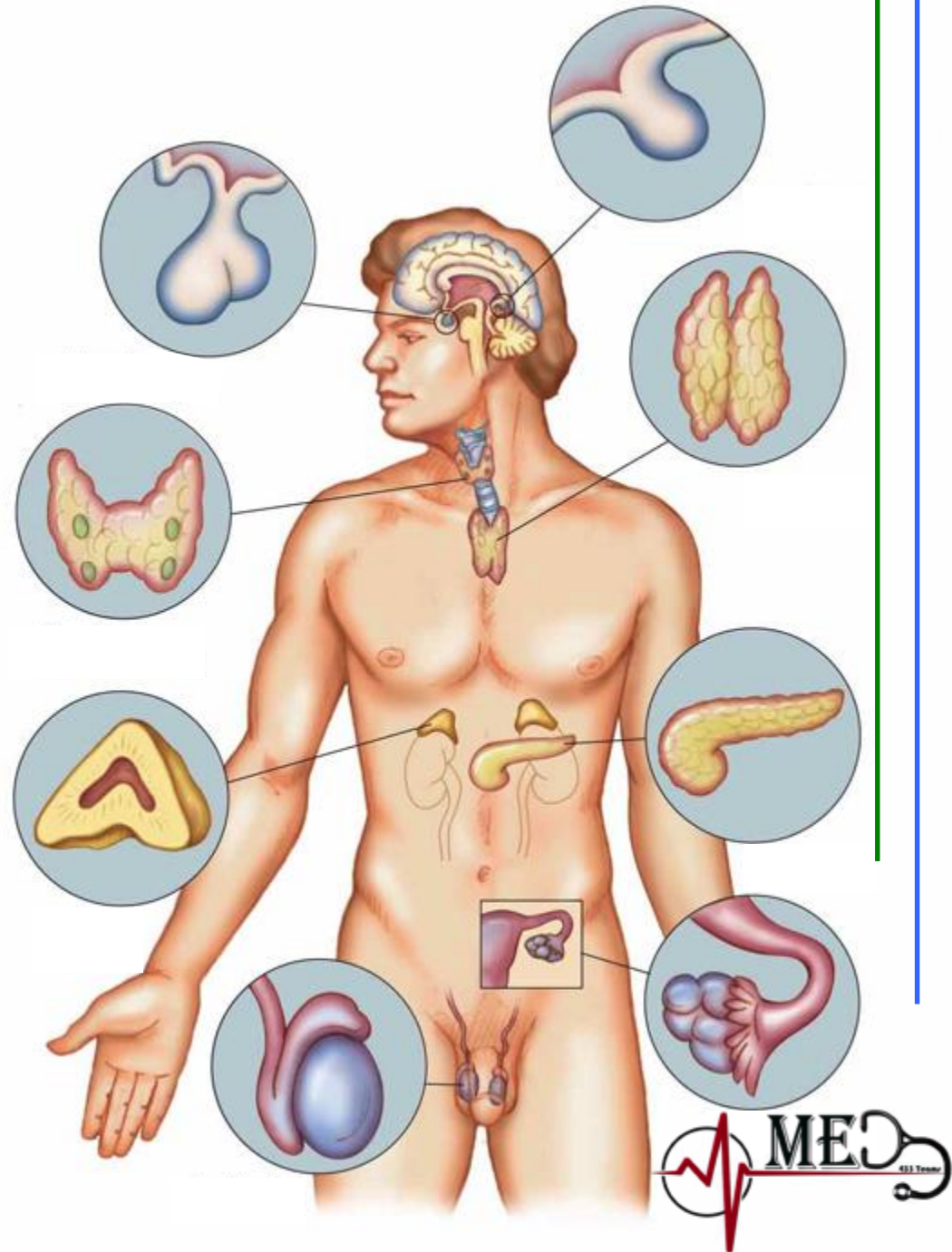
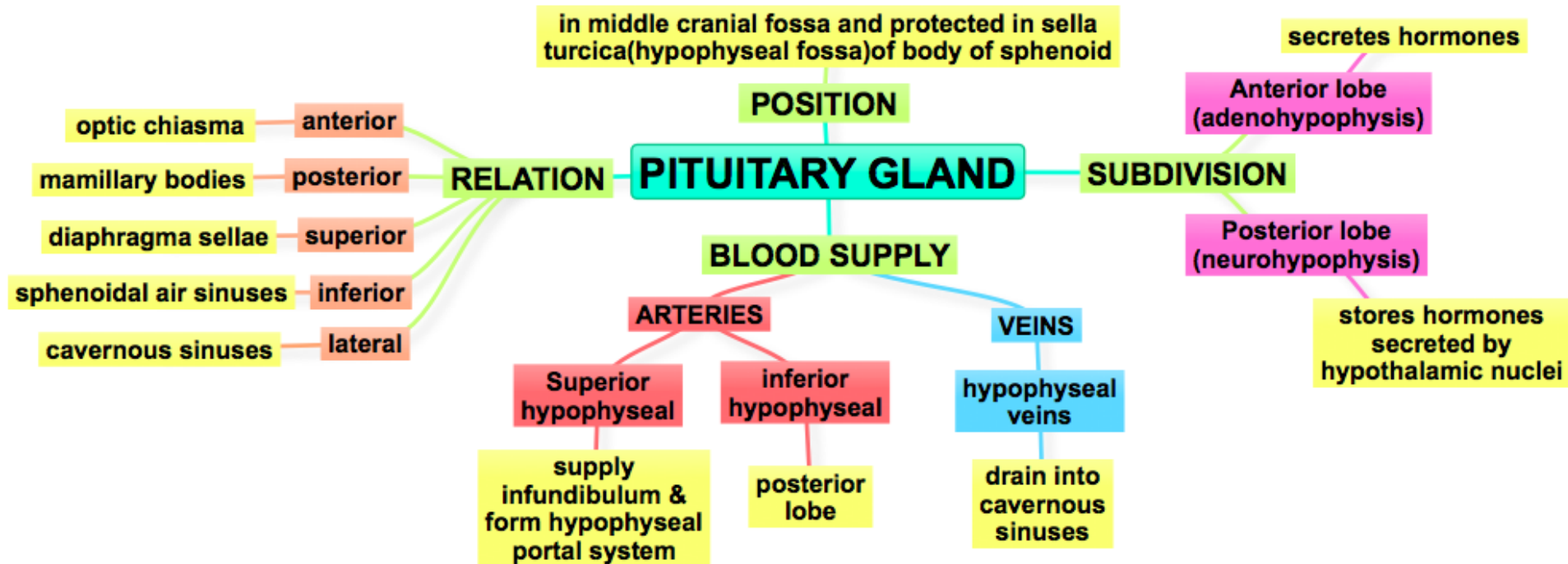


OSPE REVISION

Approved by Dr. Essam salama



Revision...

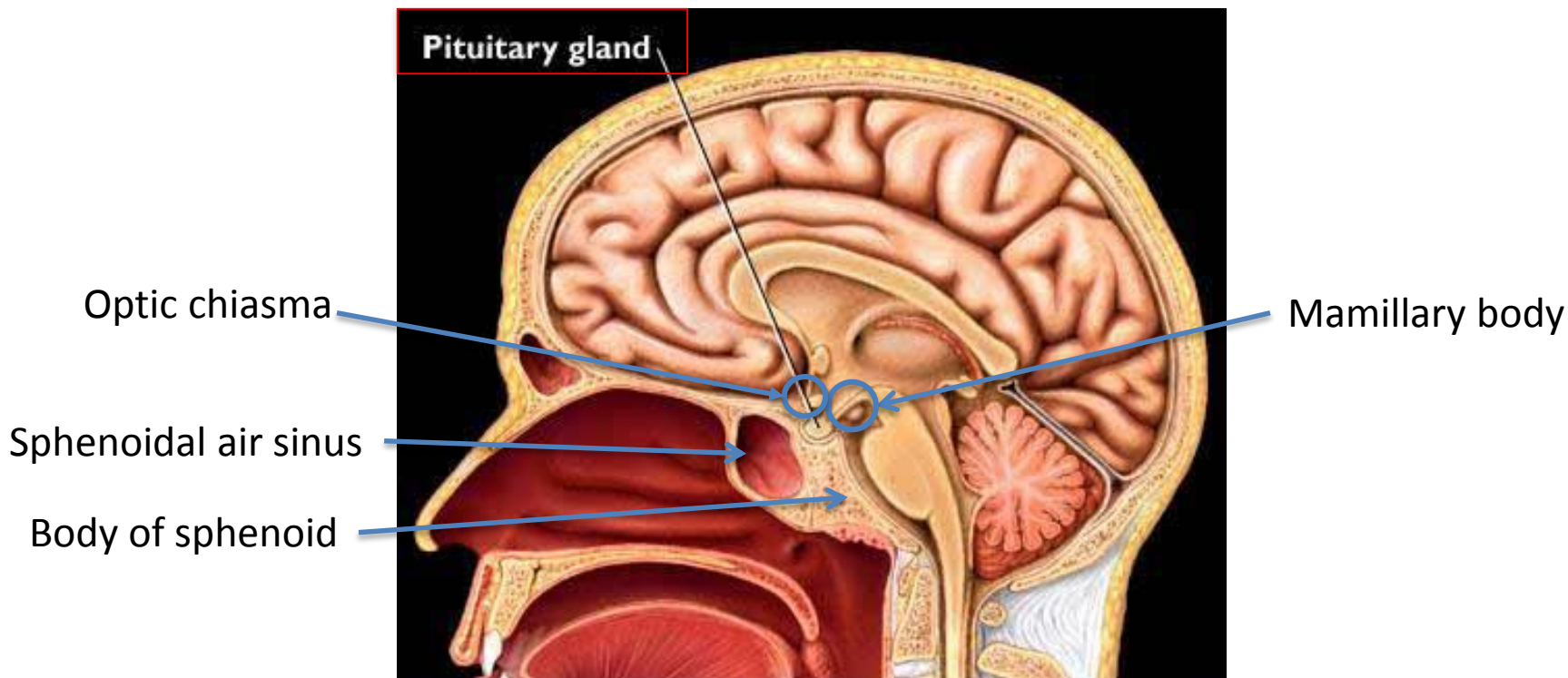


PITUITARY GLAND

anteriorly	posteriorly	superior	Inferior	laterally
Optic chiasma	Mamillary bodies	Diaphragma sellae	Sphenoidal air sinuses	Cavernous sinuses

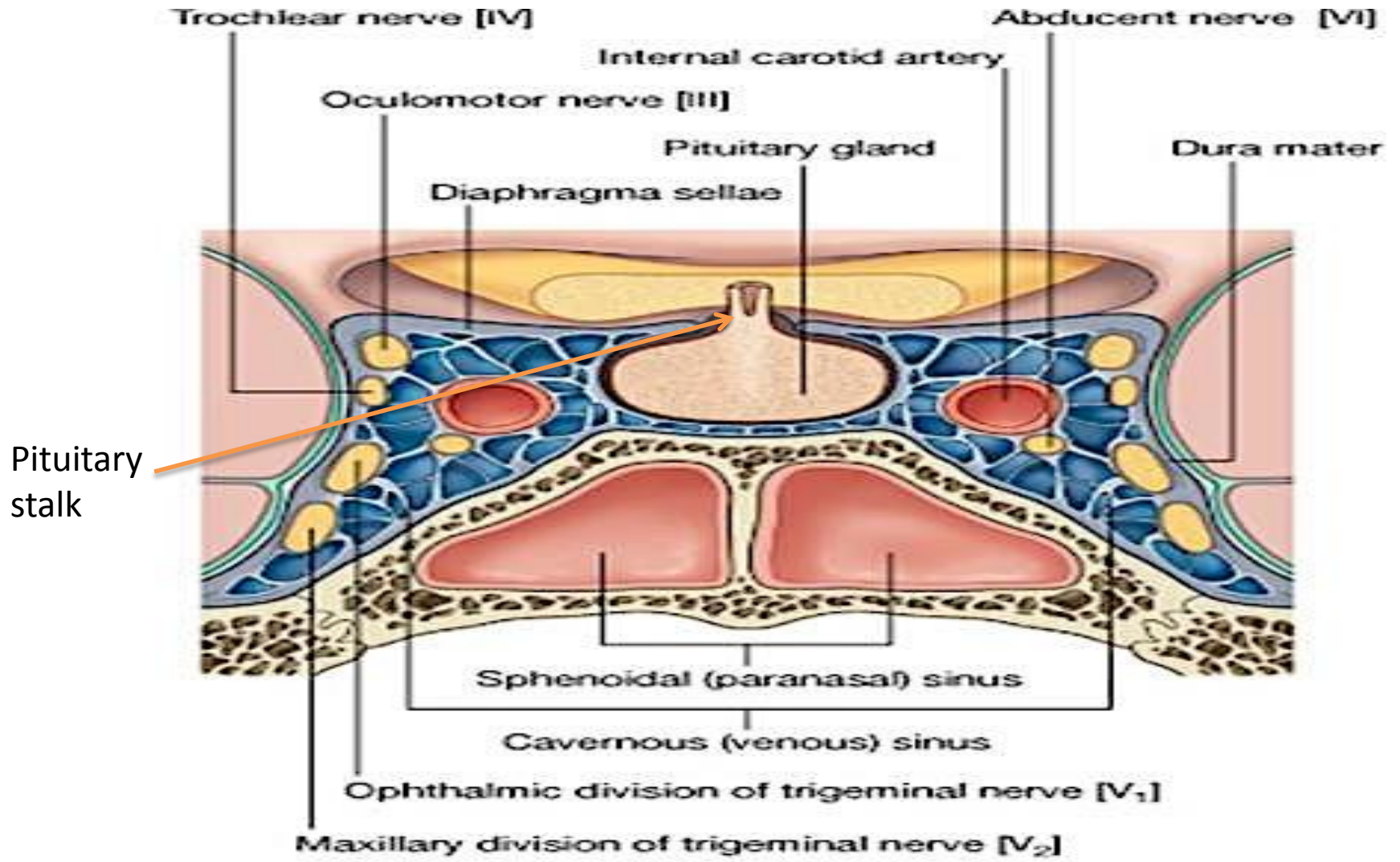
enlargement of pituitary gland (e.g. adenoma of the pituitary)

✓ pressure on optic chiasma (nasal field) will lead to Bilateral temporal eye field blindness



PITUITARY GLAND

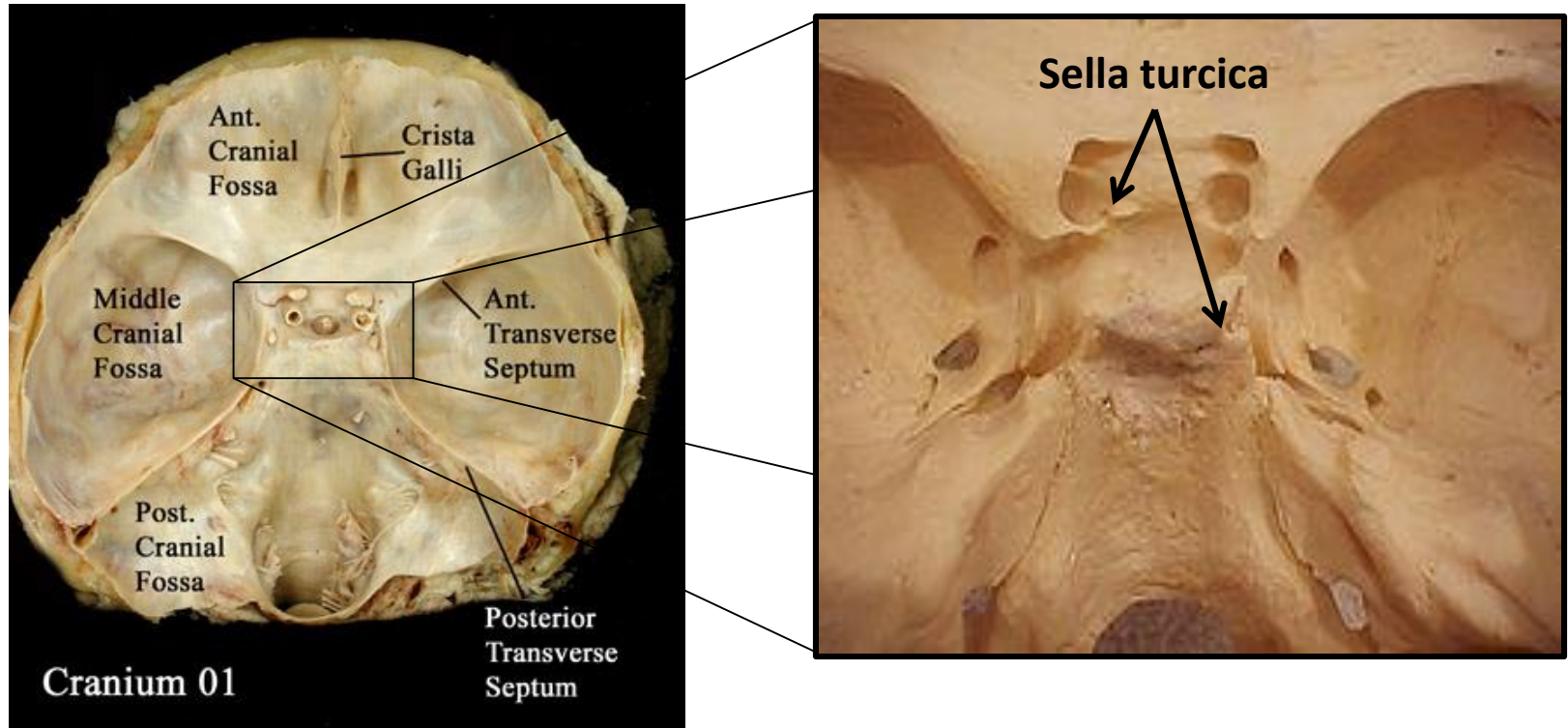
Important picture (see all labeled)



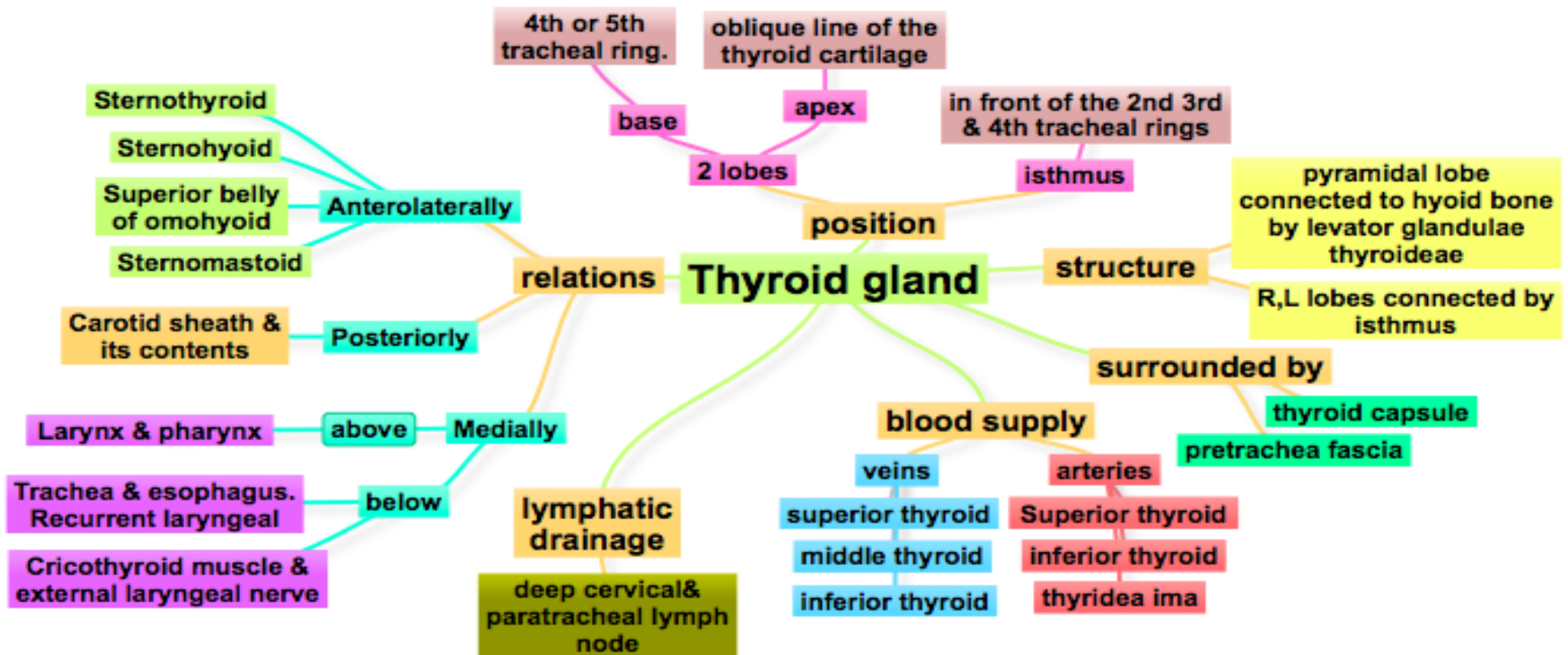
PITUITARY GLAND

Location:

located in middle cranial fossa and protected in sella turcica (hypophyseal fossa) of body of sphenoid.



Revision...



THYROID GLAND Lobes

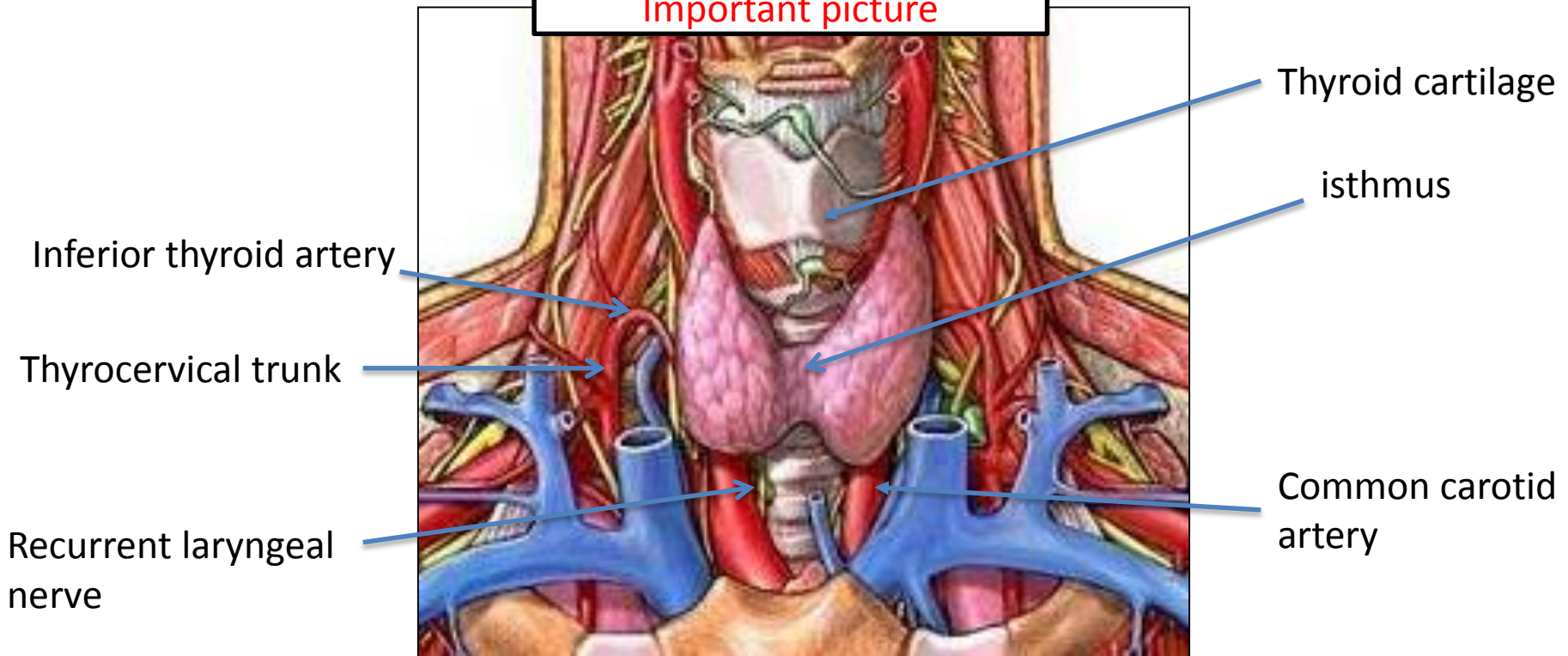
Composed of:

- 1-Right lobe.
- 2-Left lobe.
- 3-Pyramidal lobe (in 50% of people).

Connected by **isthmus** which covers the **2nd , 3rd and 4th** tracheal rings

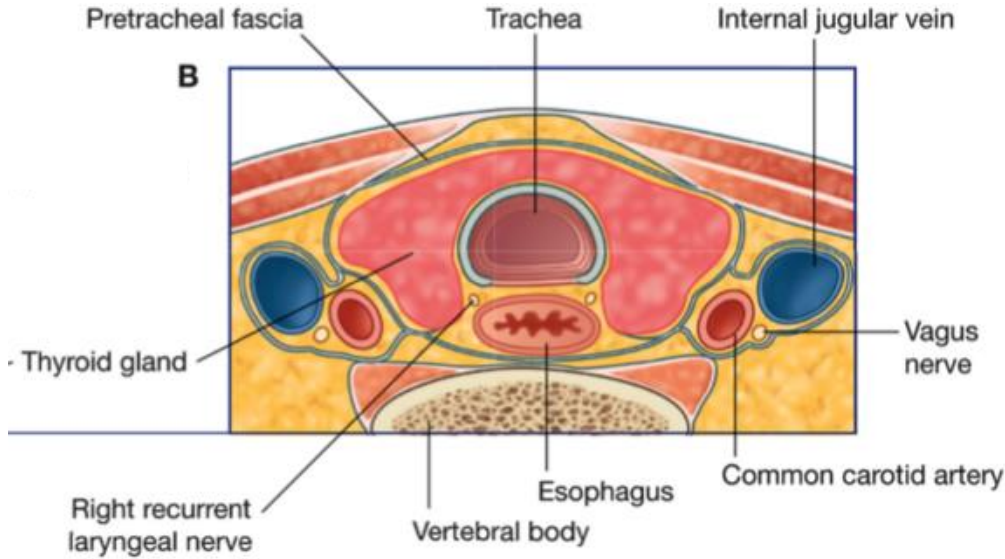
- ✓ Each lobe is pear- shaped, with its apex reaching up to the **oblique line** of thyroid cartilage.(place of attachment of the sternothyroid muscle)
- ✓ Its base lies at the level of **4th or 5th** tracheal rings.

Important picture

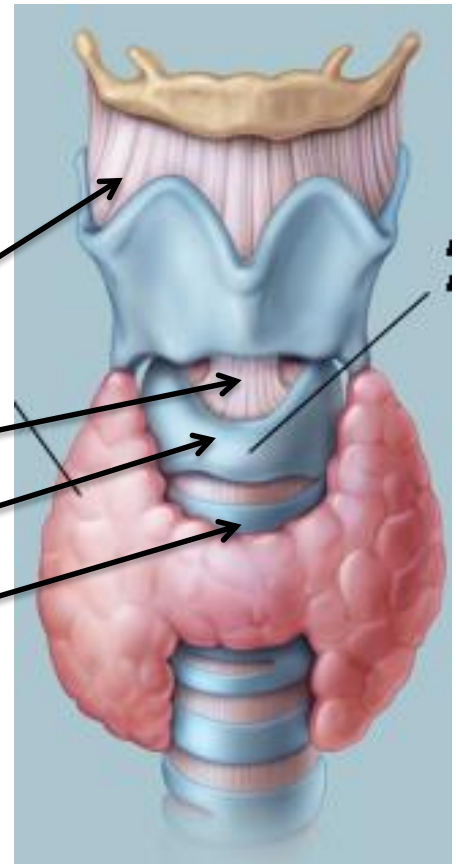


THYROID GLAND

Important pictures (see all labeled)



- Thyrohyoid membrane
- Cricothyroid ligament
- Cricoid cartilage
- Trachea (1st tracheal ring)



CLINICAL NOTES Thyroidectomy

When ligating thyroid arteries during thyroidectomy 2 nerves are at risk:

1- external laryngeal nerve:

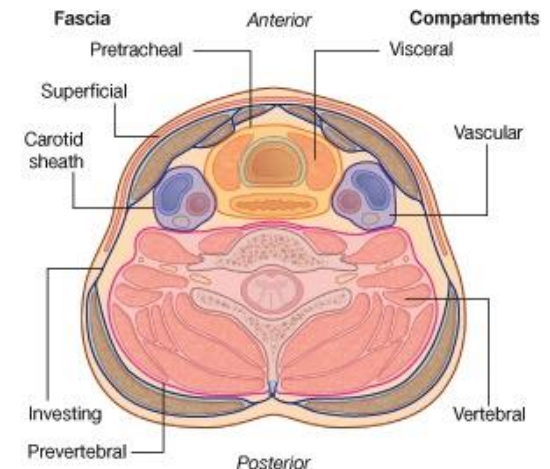
- ✓ Which runs close to the **superior thyroid artery**.
- ✓ To avoid damaging this nerve the superior thyroid artery should be ligated **within the upper pole of the gland** (because it separates from the nerve inside the gland)
- ✓ Damage to this nerve (which supplies the cricothyroid muscle) will cause hoarseness of voice.

2-recurrent laryngeal nerve:

- ✓ Which is related to the **inferior thyroid artery**.
- ✓ To avoid damaging this nerve the inferior thyroid artery should **ligated away from the gland** (because it approaches the nerve close to the gland).
- ✓ Damage to this nerve will cause Impaired breathing and speech.

Question: if a surgeon was to preform thyroidectomy which structures would he cut through to reach the thyroid gland?

1. Skin.
 2. Investing fascia.
 3. Pretracheal fascia.
 4. Thyroid capsule.
- } **coverings of the thyroid**



THYROID GLAND Blood supply

Arterial supply:

1- superior thyroid artery: a branch of external carotid artery.

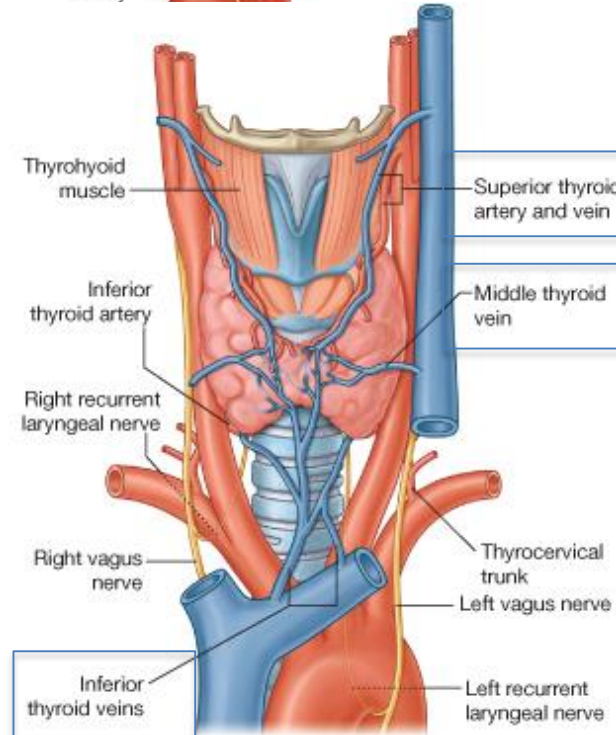
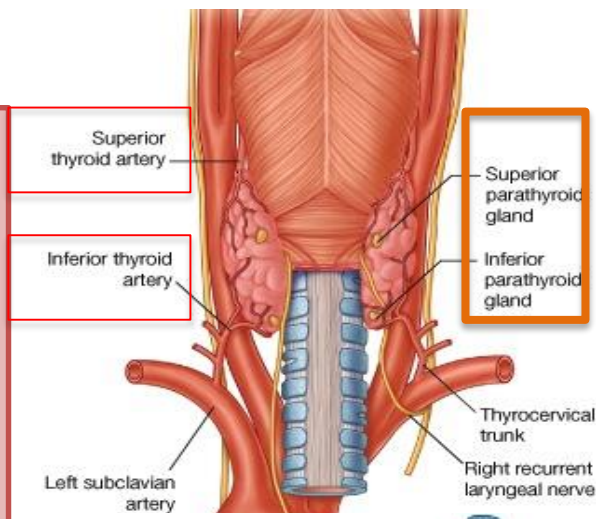
2- inferior thyroid artery: from **thyrocervical** trunk of the **1st** part of subclavian artery.

3- thyroid ima artery: (not always present)

Note: *see parathyroid glands in the picture*

Veins:

- 1-Superior thyroid vein
 - 2-Middle thyroid vein
 - 3-Inferior thyroid vein
- } Drain into **internal jugular vein**
— Drains into **left brachiocephalic vein**

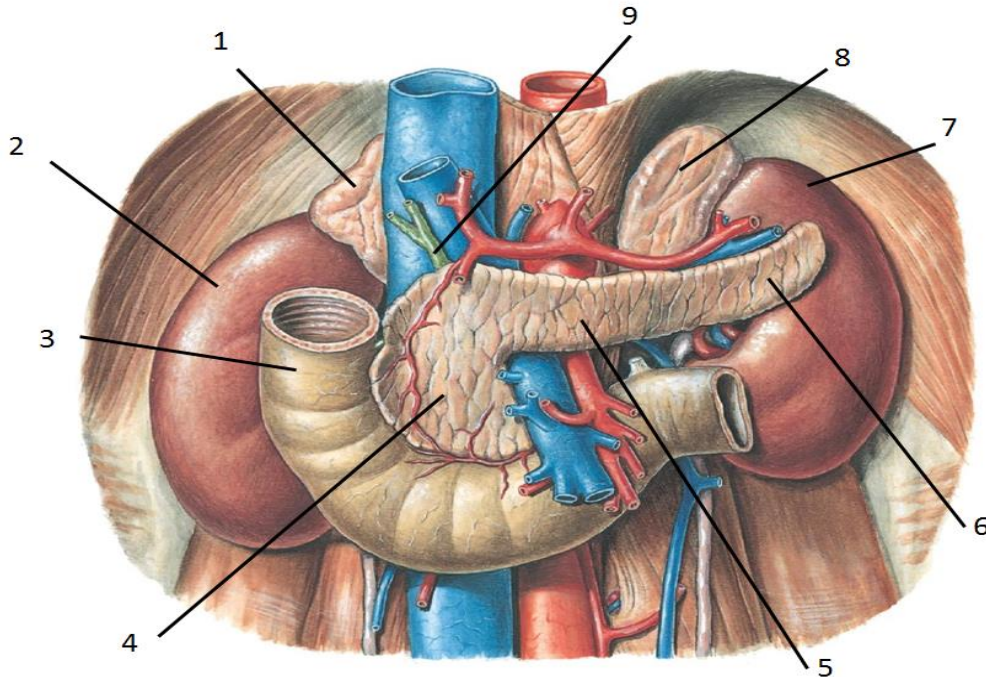


ADRENAL GLAND

Adrenal(suprarenal) glands are at the level of T12

	right suprarenal gland	left suprarenal gland
Anterior	Right lobe of the liver (anterolateral) & inferior vena cava. (anteromedial)	Pancreas, lesser sac, and stomach Spleen (in some resources)
Posterior	Diaphragm. (right crus)	Diaphragm. (left crus)
Medial	Celiac plexus and ganglia	Celiac plexus and ganglia

Important picture (see all labeled)



1. Right suprarenal gland.
2. Right kidney.
3. Duodenum.
4. Head of pancreas.
5. Body of pancreas.
6. Tail of pancreas.
7. Left kidney.
8. Left suprarenal gland.
9. Common bile duct.

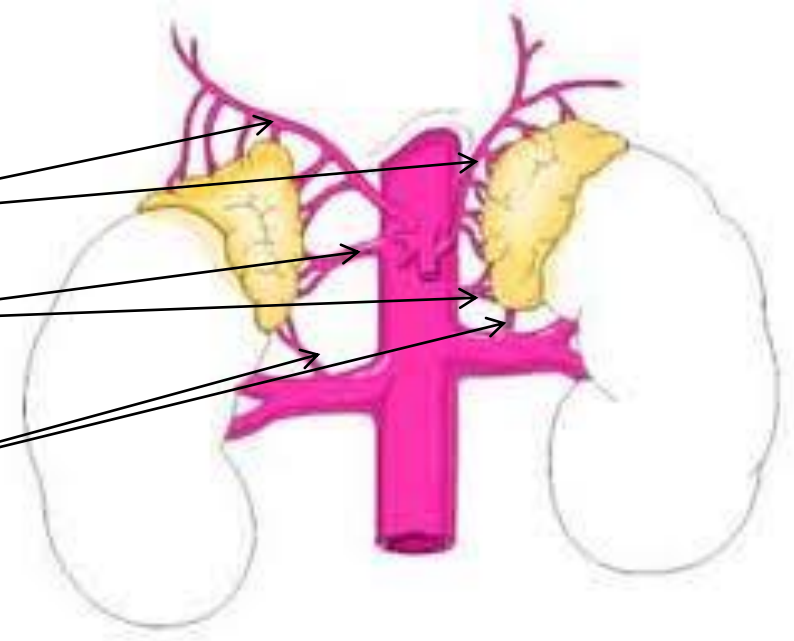
ADRENAL GLAND

Blood supply

1-Superior suprarenal artery from inferior phrenic artery

2-Middle suprarenal artery from abdominal aorta

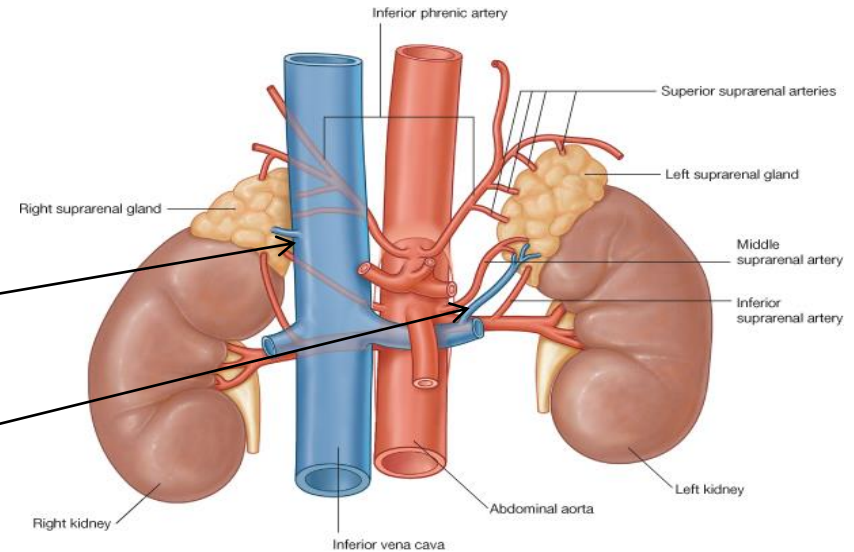
3-Inferior suprarenal artery from renal artery



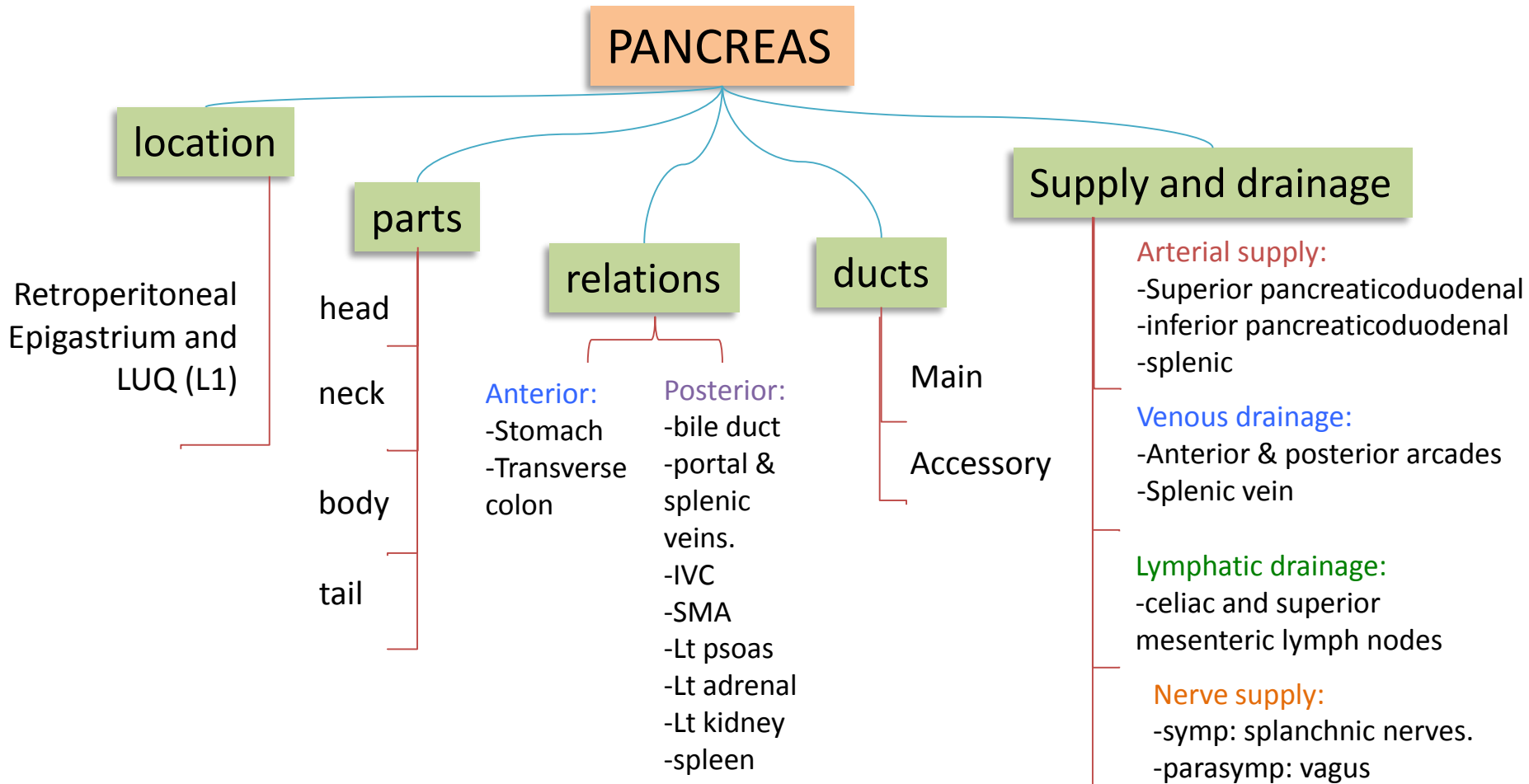
Venous drainage

Right adrenal vein drainages into inferior vena cava

Left Adrenal vein drainages into renal vein



Revision...



PANCREAS

Retroperitoneal at the **transpyloric plane (L1)**

Parts (and important notes):

1- Head: has the uncinete process.

2- Neck: lies in front of origin of superior mesenteric artery and the confluence of the portal vein.

3- Body: The splenic vein is embedded in its posterior Surface.

4- Tail: Lies within the splenicorenal ligament at the level of T12

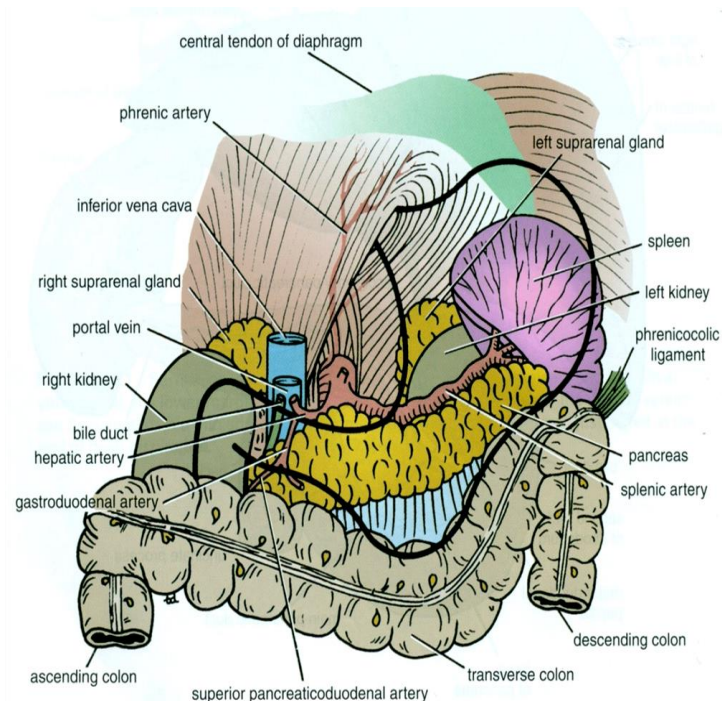
Relations:

Anterior:

1. The stomach (separated by the the lesser sac)
2. Transverse colon.
3. Transverse mesocolon.

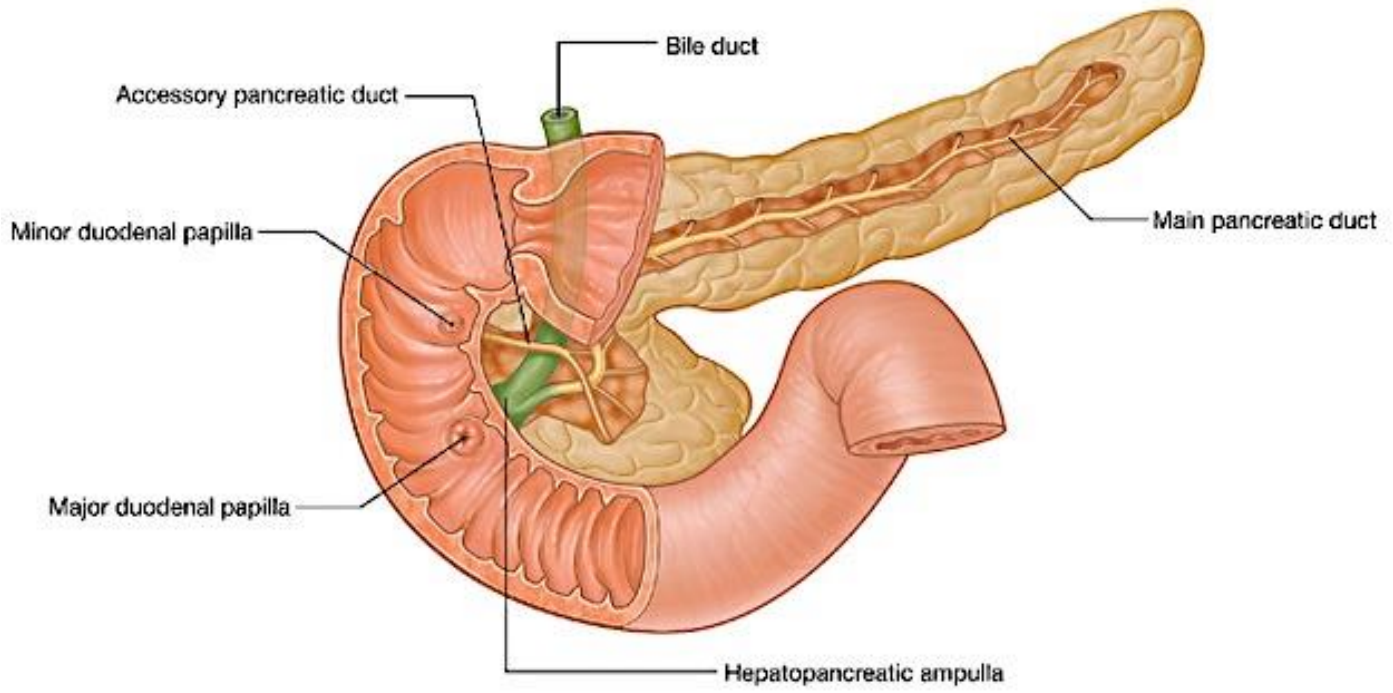
Posterior:

1. Bile duct.
2. Portal and splenic veins.
3. Inferior vena cava.
4. Aorta and origin of superior mesenteric artery.
5. Left psoas muscle.
6. Left adrenal gland.
7. Left renal vessels.
8. Upper 1/3rd of left kidney.
9. Hilum of spleen.



PANCREAS

Important picture (see all labeled)



Extra questions:

1- mention structures anterior to the body of the pancreas:

- Stomach.
- Transverse colon.
- Lesser sac.
- Transvers mesocolon.

2- two veins related to the body of the pancreas:

- Splenic vein.
- Left renal vein.

3- mention two nerves related to thyroid gland:

- Recurrent laryngeal nerve.
- External laryngeal nerve.

4- adrenal gland are at the level of:

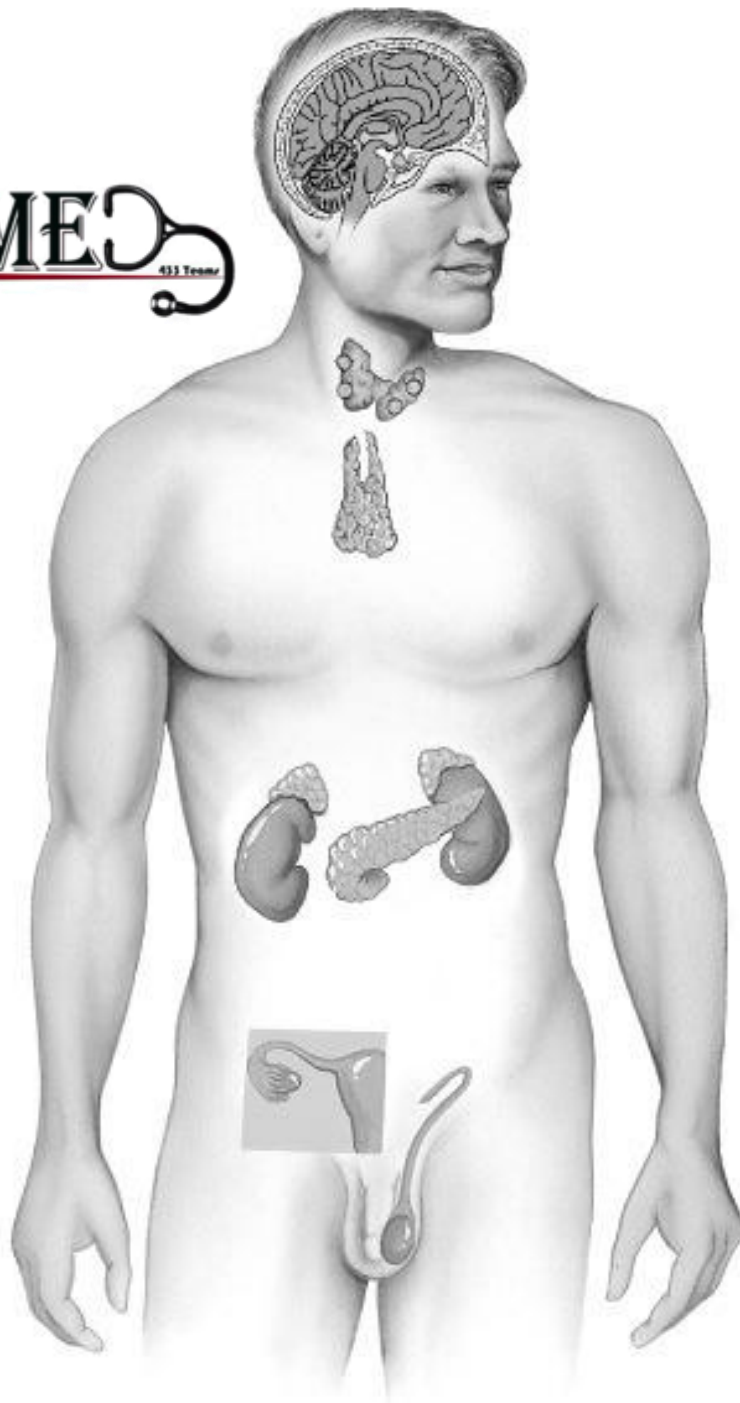
- T12

5- mention the blood supply (arterial supply) of the pituitary gland:

- Superior and inferior hypophyseal arteries (branches of internal carotid artery).

6- mention the venous drainage of the pituitary gland:

- Hypophyseal veins which drain into the cavernous sinuses.



GOOD LUCK

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