

The Suprarenal & Pituitary Glands

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SUPRARENAL GLANDS

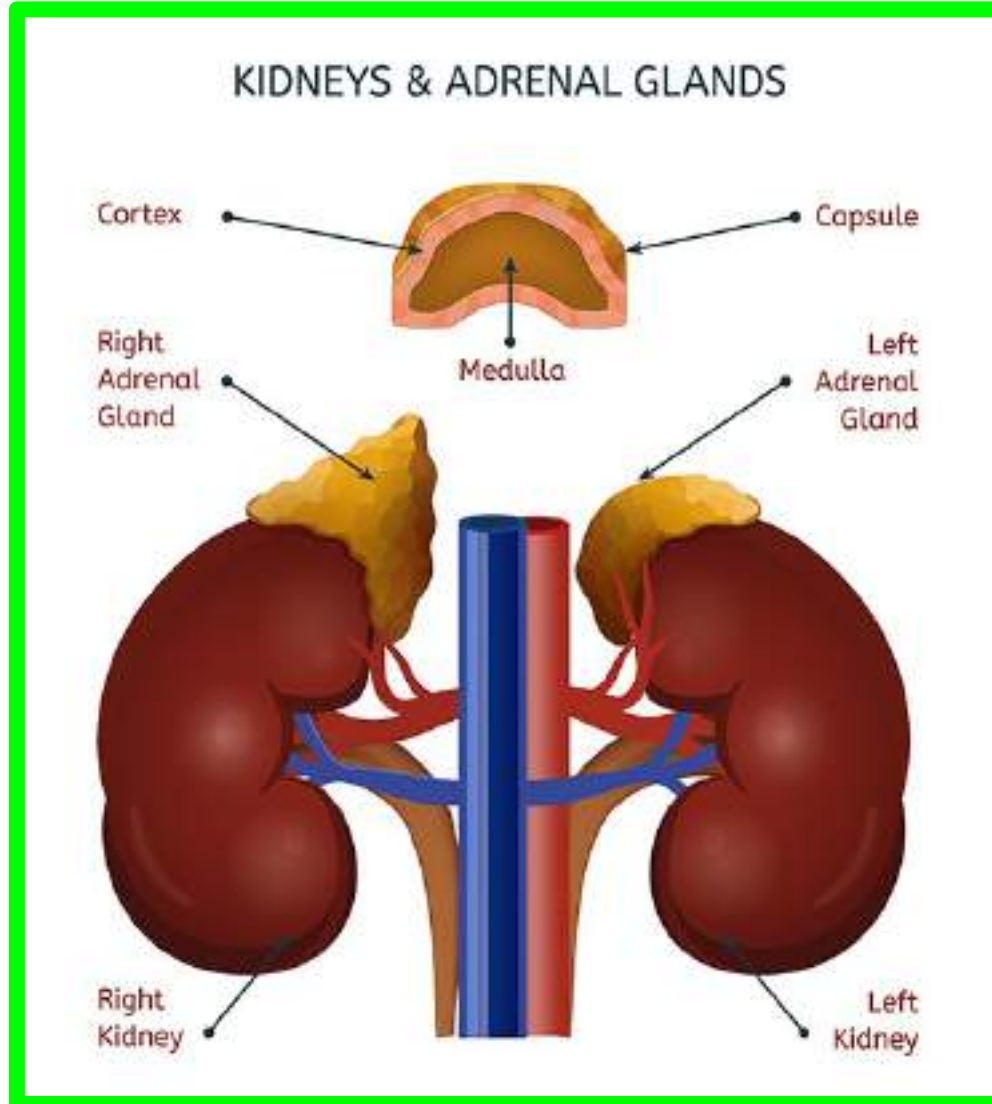
They are **2 small** endocrine glands (each one is **about 5 gm**), closely related to the upper poles of the **Rt. And Lt. kidneys**

Rt. Suprarenal Gland

❖ **Shape:** Triangular

Lt. Suprarenal Gland

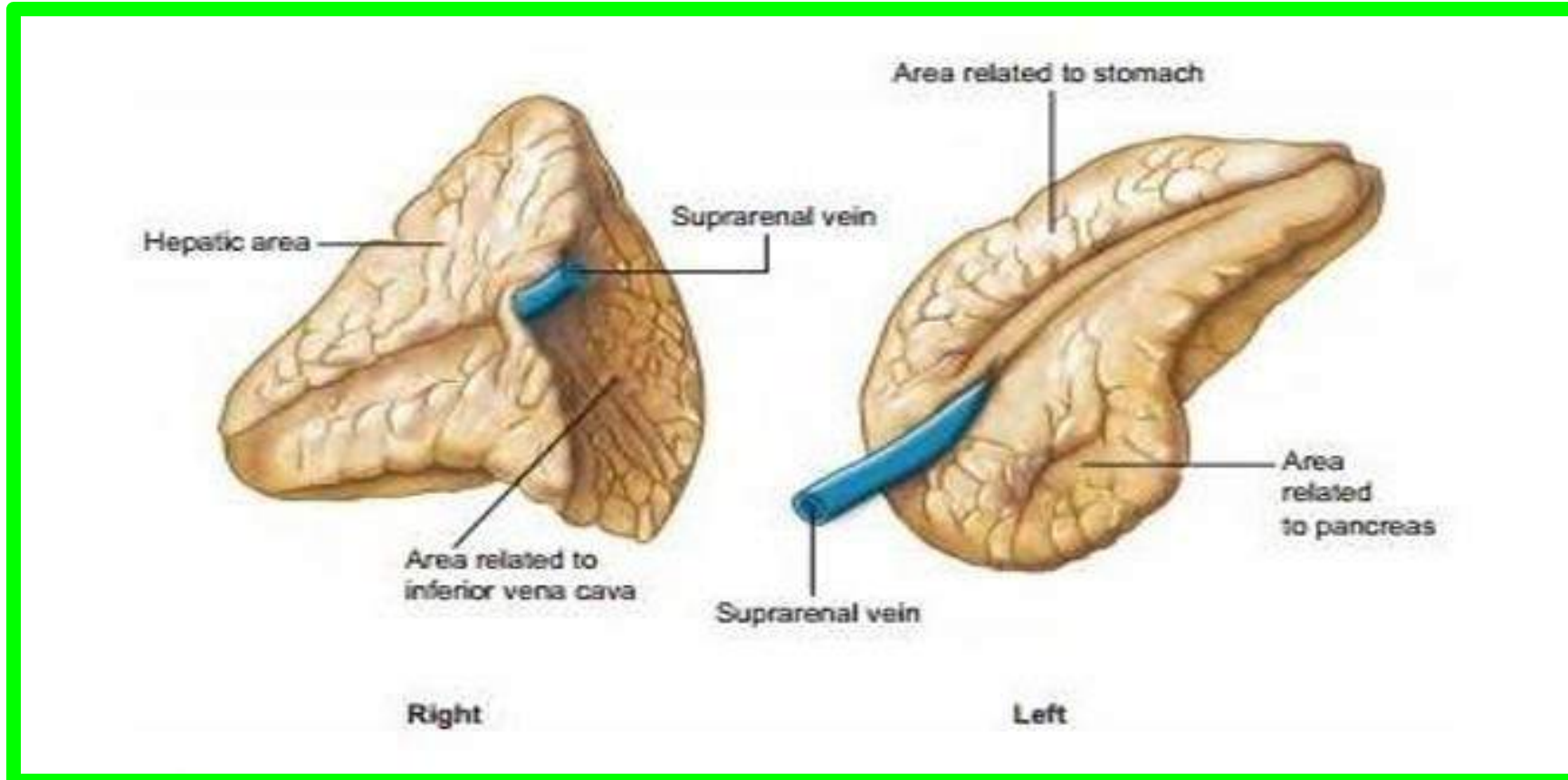
❖ **Shape:** Semilunar



Rt. Suprarenal Gland

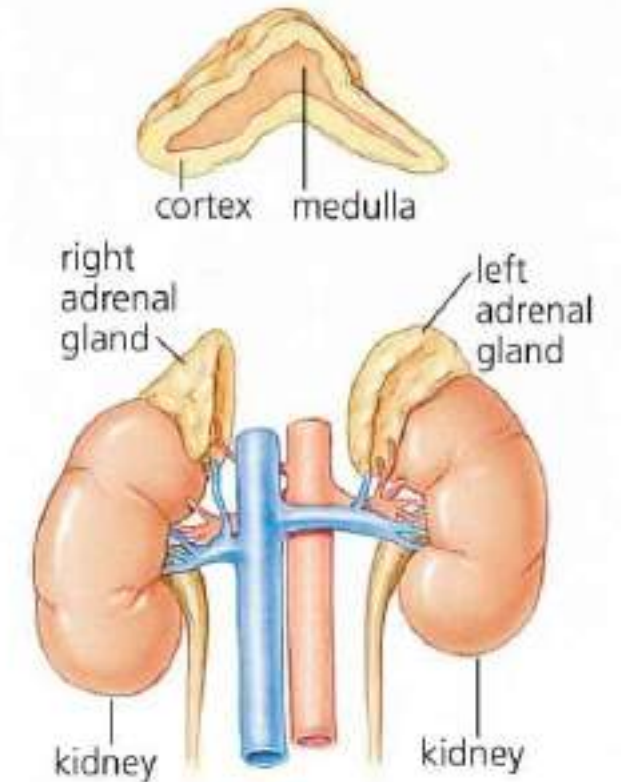
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- ❖ **Site:** Higher in position, not reaching the hilum of the Rt. kidney
- ❖ **It hilum:** is directed upward



Lt. Suprarenal Gland

- ❖ **Site:** lower in position, reaching the hilum of the Lt. kidney
- ❖ **It hilum:** is directed downward

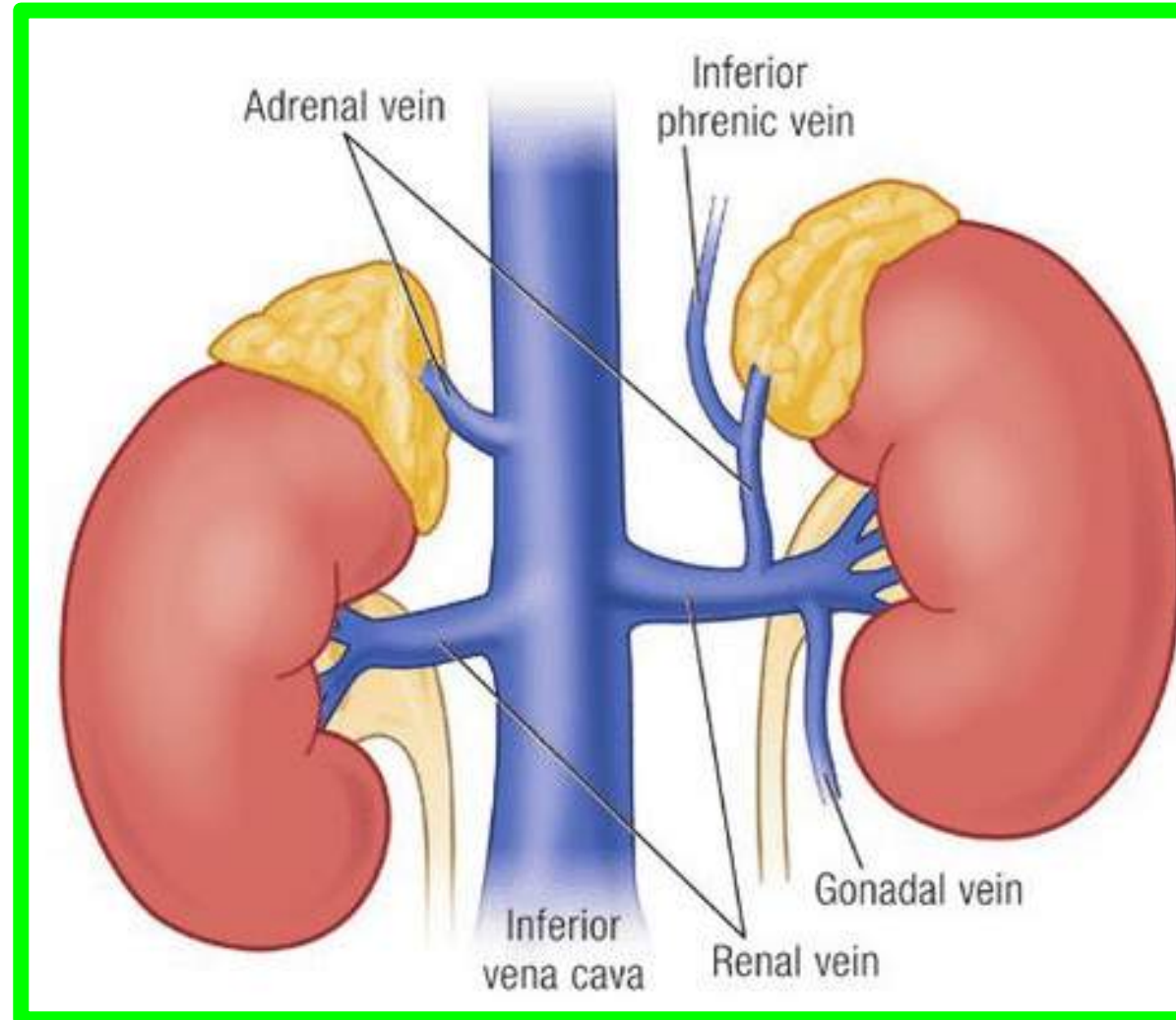


Rt. Suprarenal Gland

❖ **Its vein:** is very short and end in **IVC**

Lt. Suprarenal Gland

❖ **Its vein:** is longer & open into the **lt. renal vein**



Rt. Suprarenal Gland

❖ Posterior relation:

A. Rt. Crus of the diaphragm

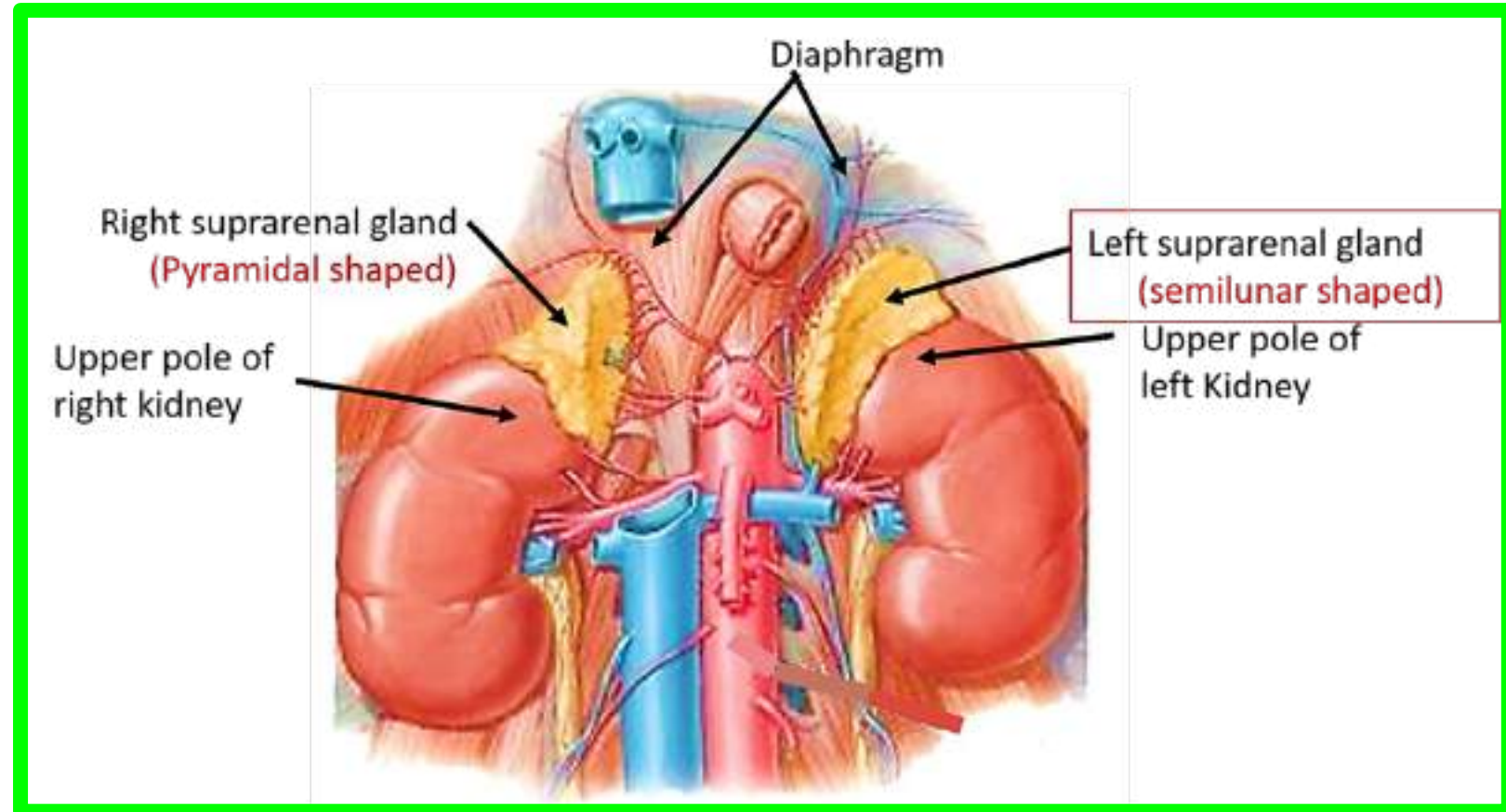
B. Upper part of the Ant. Surface of the Rt. Kidney

Lt. Suprarenal Gland

❖ Posterior relation:

A. Lt. Crus of the diaphragm

B. Upper part of the Ant. Surface of the Lt. Kidney



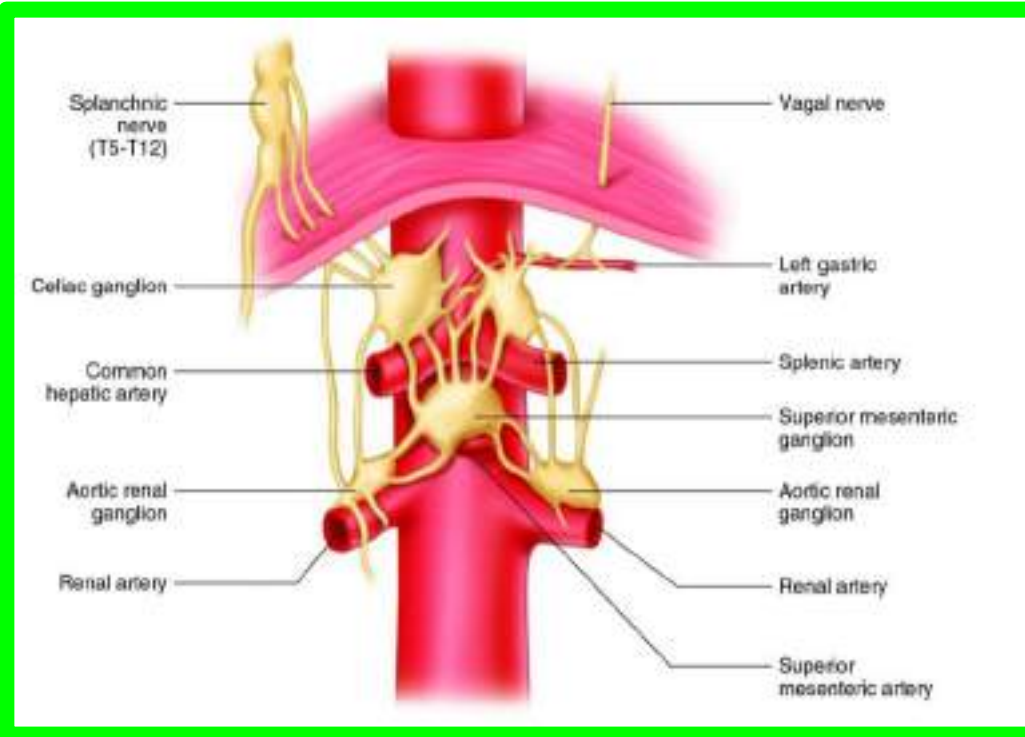
Rt. Suprarenal Gland

❖ Medial relation:

A. Rt. Celiac ganglion

B. Rt. Inferior phrenic artery

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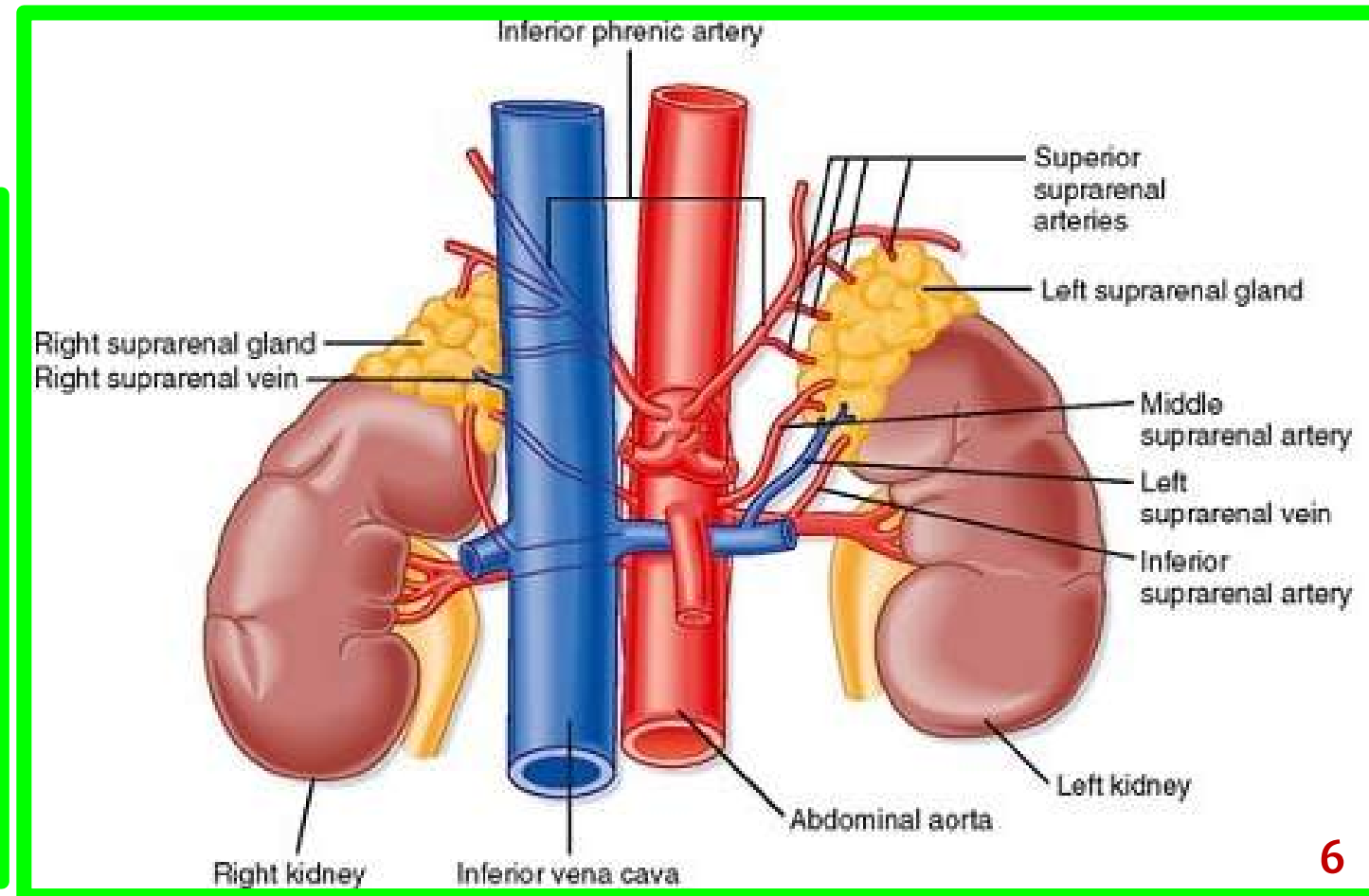


Lt. Suprarenal Gland

❖ Medial relation:

A. Lt. Celiac ganglion

B. Lt. Inferior phrenic artery



Rt. Suprarenal Gland

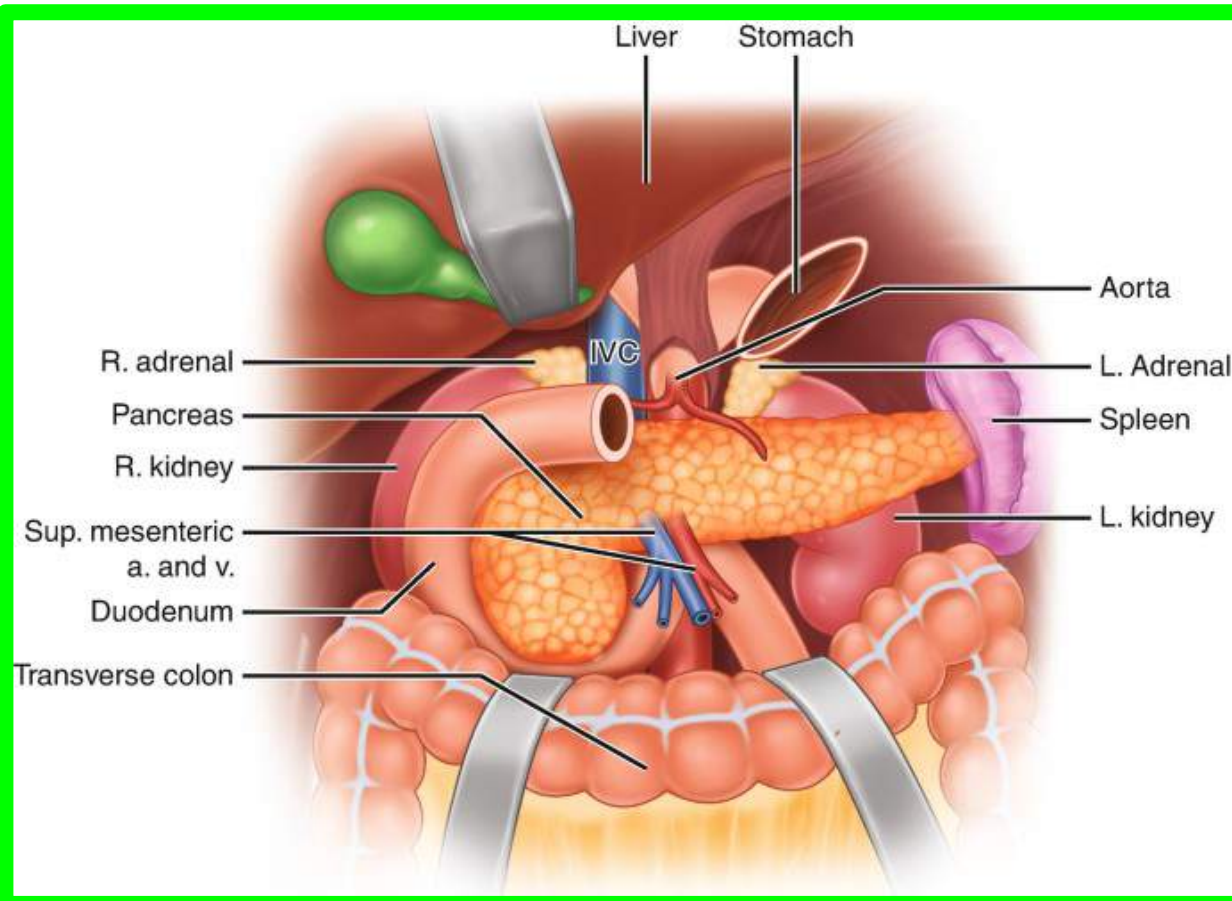
❖ Anterior relation:

- A. Bare area of the liver laterally
- B. I.V.C medially

Lt. Suprarenal Gland

❖ Anterior relation:

- A. Stomach & lesser sac of peritoneum (above)
- B. Body of the pancreas & splenic artery (below)



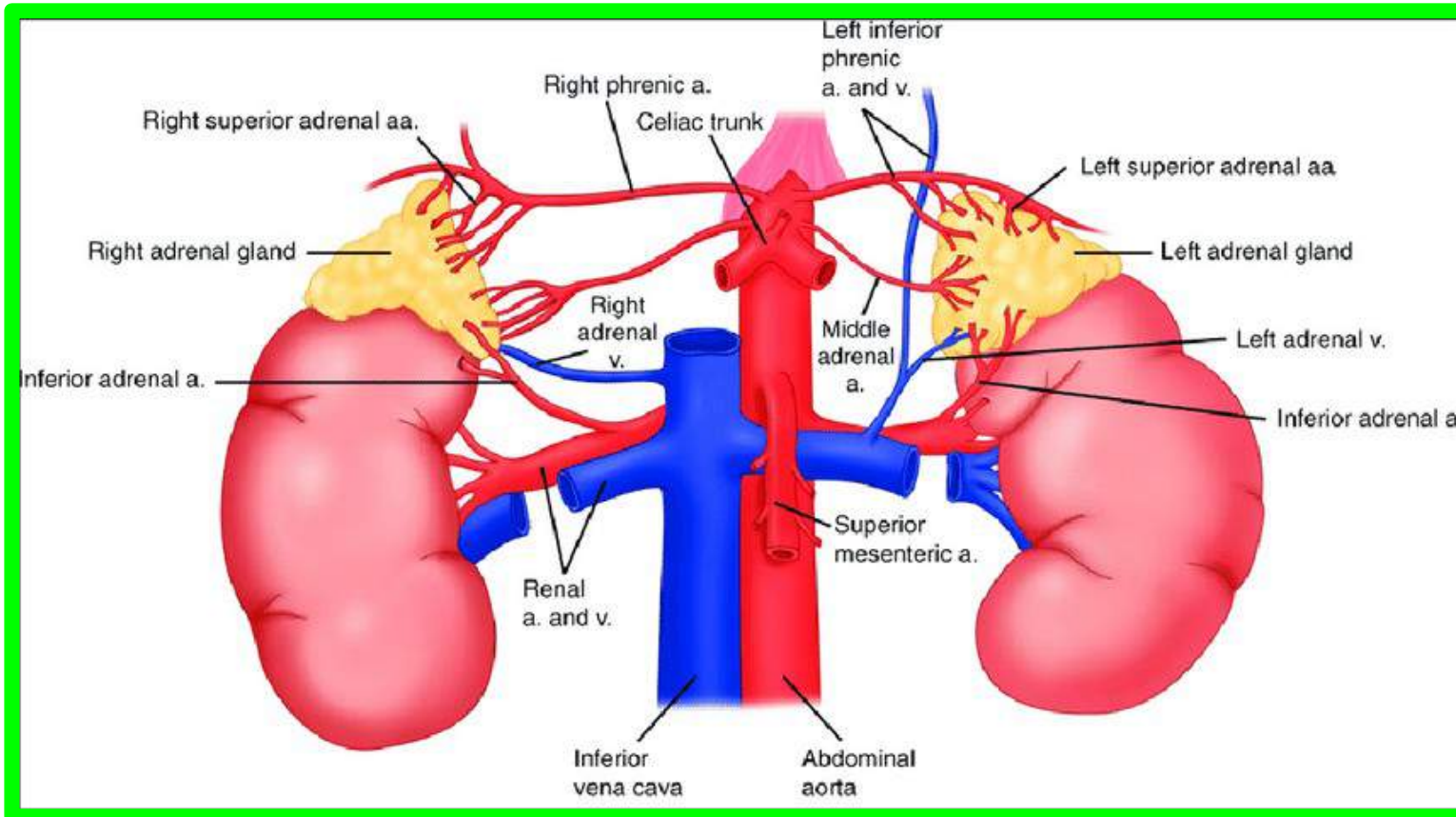
Arterial Supply

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❖ Each gland is supplied by 3 arteries:

1. **Superior suprarenal artery:** Arises from the **inferior phrenic A.**
2. **Middle suprarenal artery:** Arises from the **abdominal aorta**
3. **Inferior suprarenal artery:** Arises from the **renal Artery**

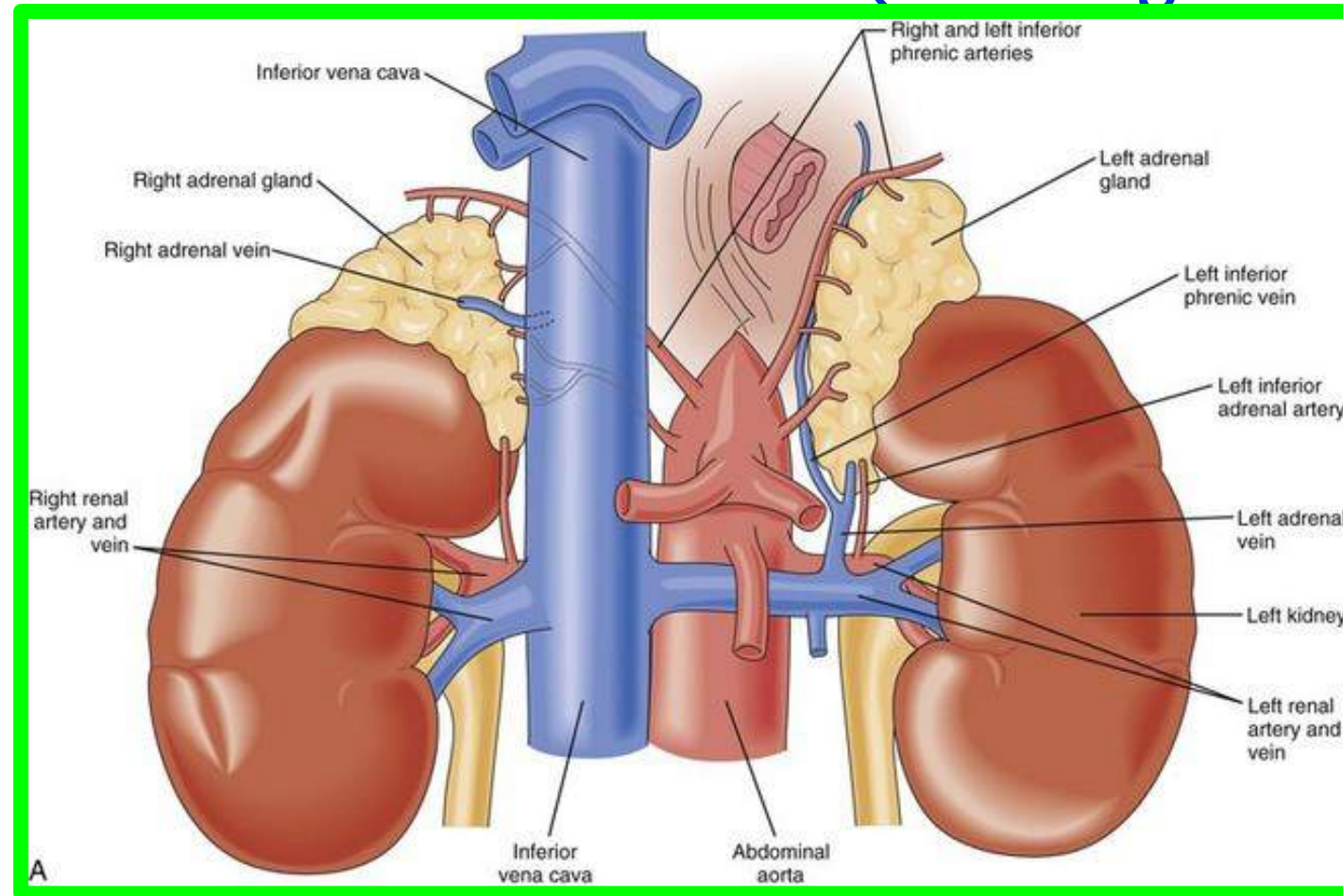


Venous drainage

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❖ One vein emerge from each gland:

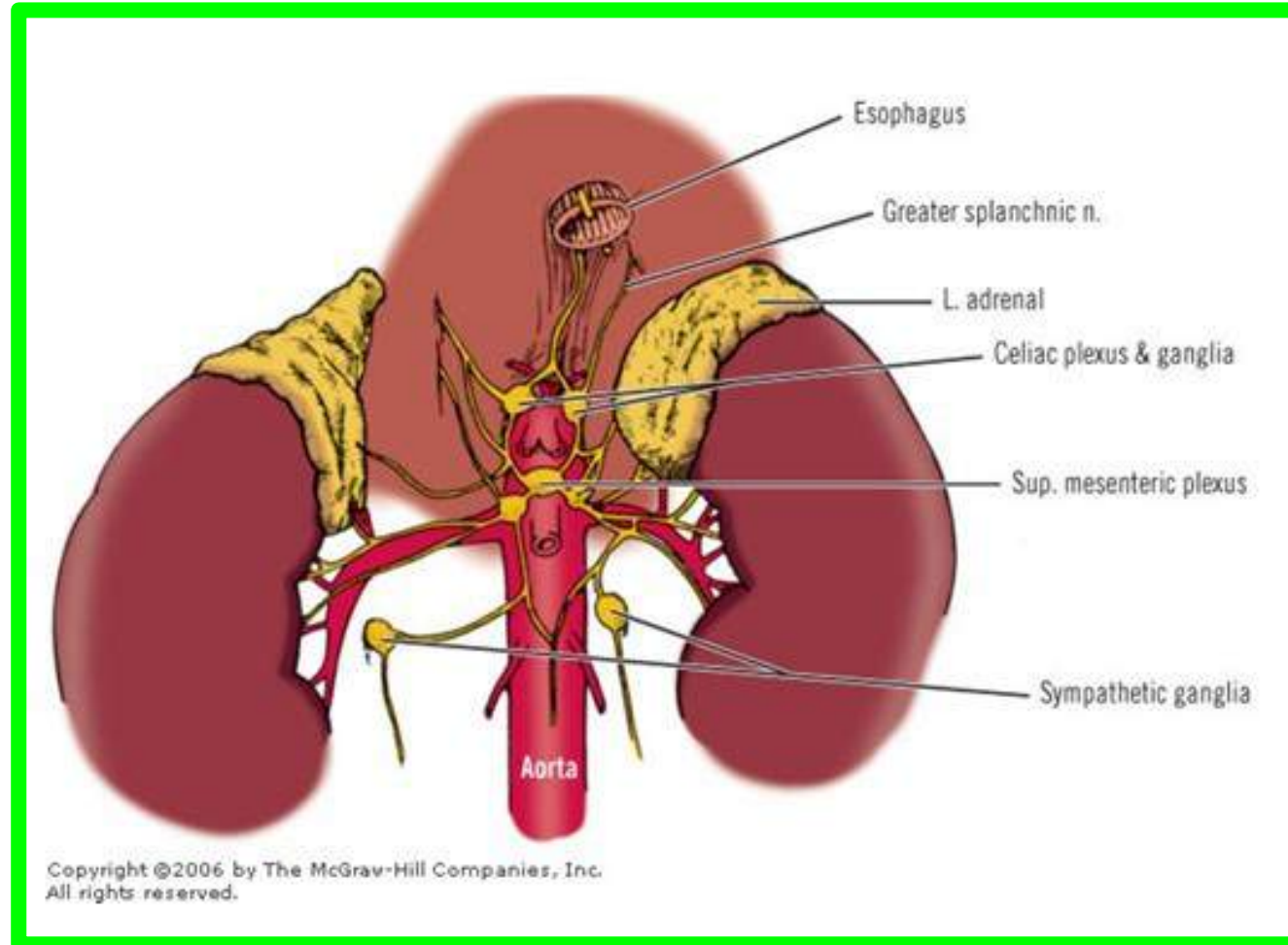
1. The Rt. Suprarenal vein: End in the IVC (Like Rt. Gonadal vein)
2. The Lt. suprarenal vein: End in the Lt. renal vein (Like Lt. gonadal vein)



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Nerve supply

Suprarenal medulla is richly supplied by preganglionic sympathetic fibers ending on its chromaffin cells which are homologues with postganglionic sympathetic neurons



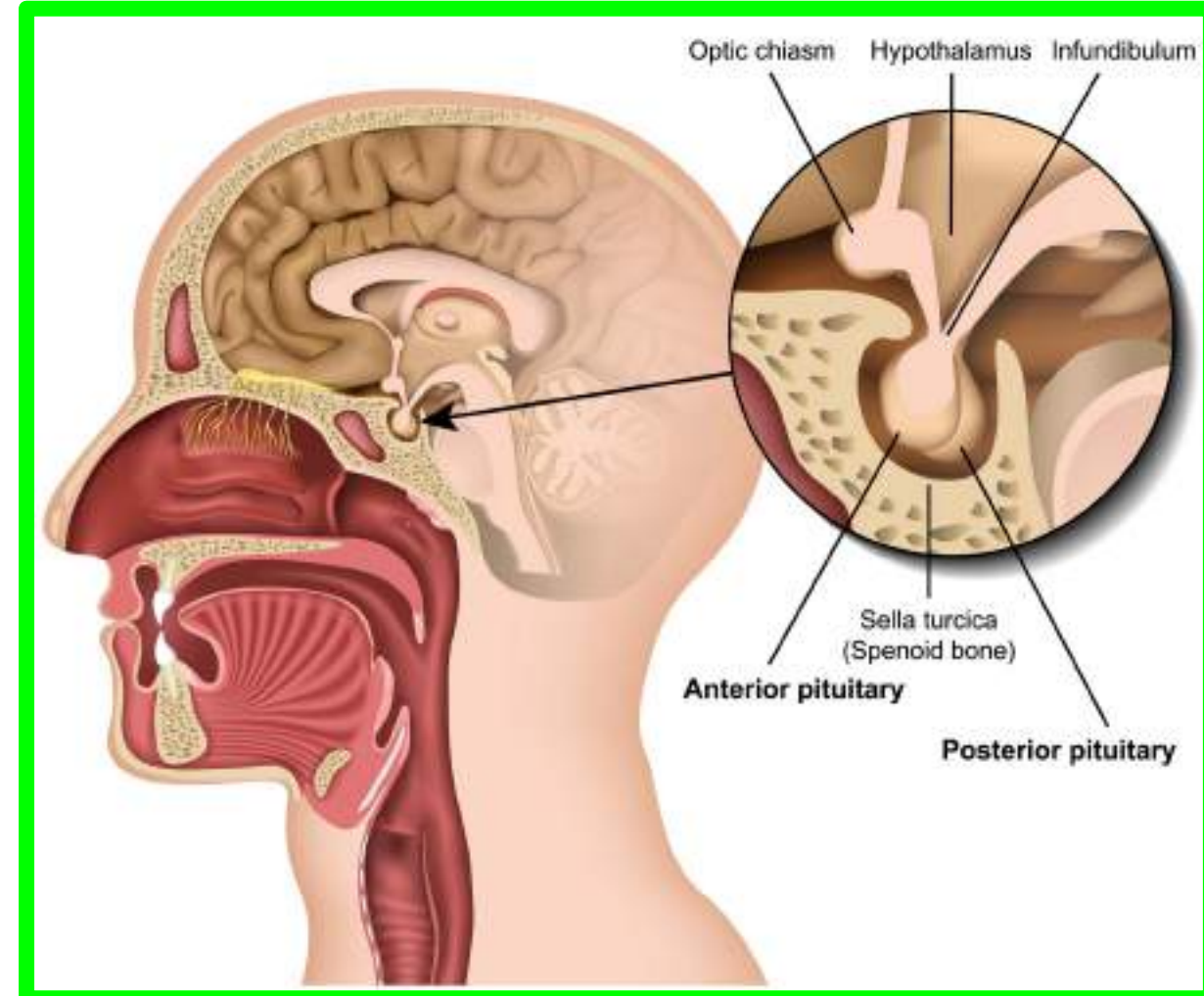
Pituitary Gland (Hypophysis Cerebri)

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Location and Description

- ❖ is a small, oval structure attached to the undersurface of the brain by the **infundibulum**
- ❖ is well protected by virtue of its location in the **sella turcica** of the sphenoid bone
- ❖ is often referred to as the master endocrine gland.
- ❖ it is vital to life.



Pituitary Gland (Hypophysis Cerebri)

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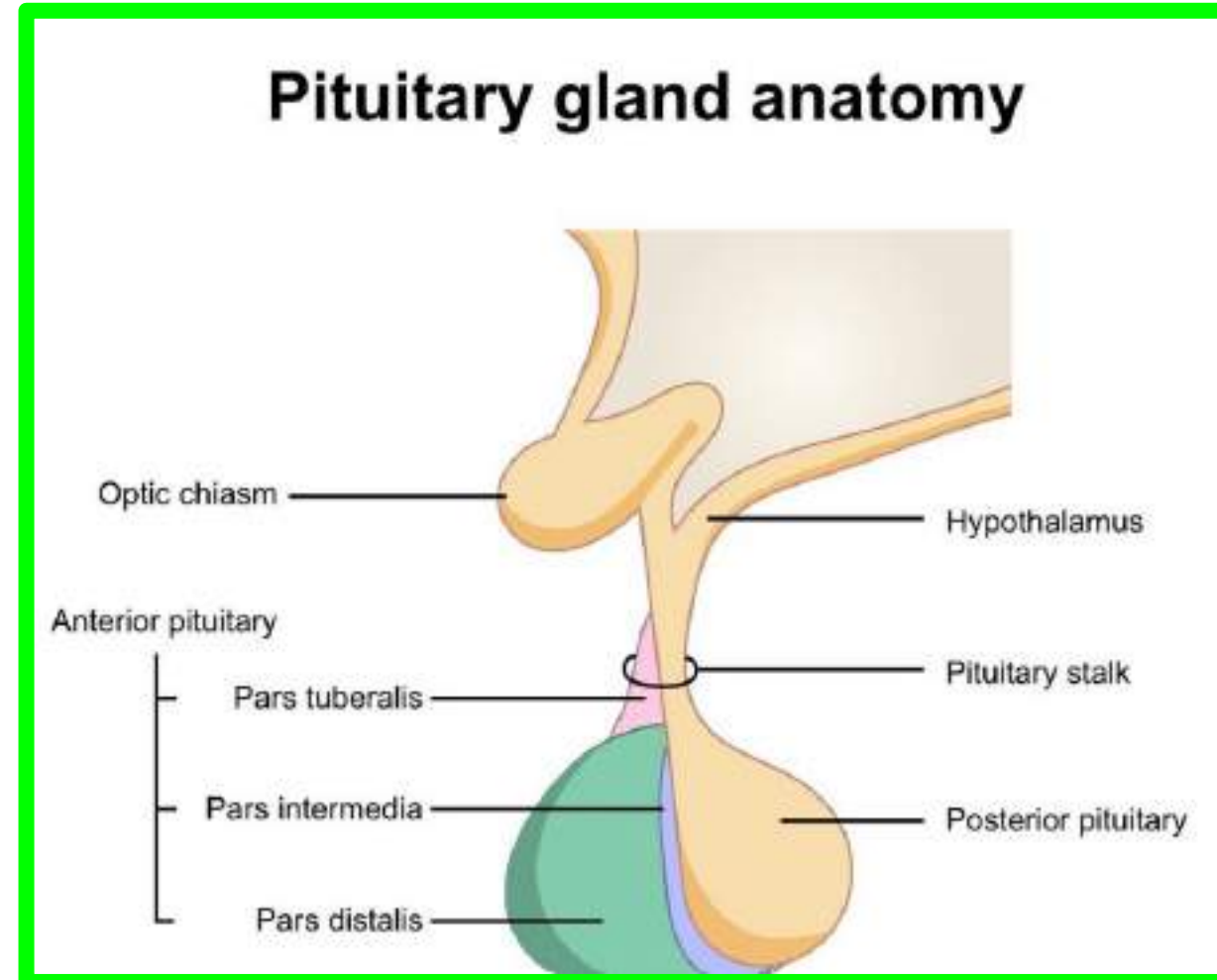
- ❖ It is divided into an **anterior lobe**, or **adenohypophysis**,
- ❖ and a **posterior lobe**, or **neurohypophysis**.

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- ❖ **The anterior lobe** is subdivided into:
 - ✓ The **pars anterior** (**pars distalis**) and
 - ✓ The **pars intermedia**,

which may be separated by a cleft that is a remnant of an embryonic pouch.

- ❖ A projection from the pars anterior, **the pars tuberalis**, extends up along the anterior and lateral surfaces of the **pituitary stalk**.



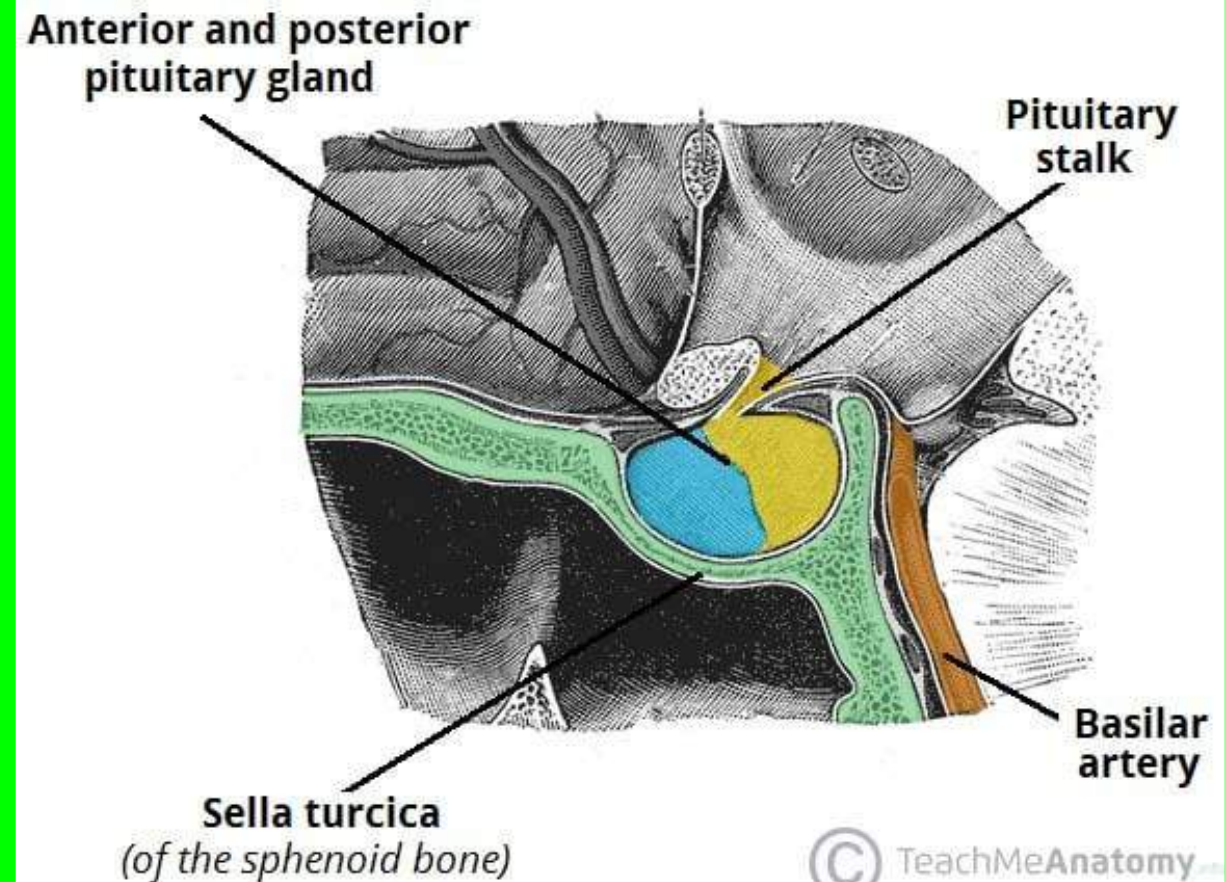
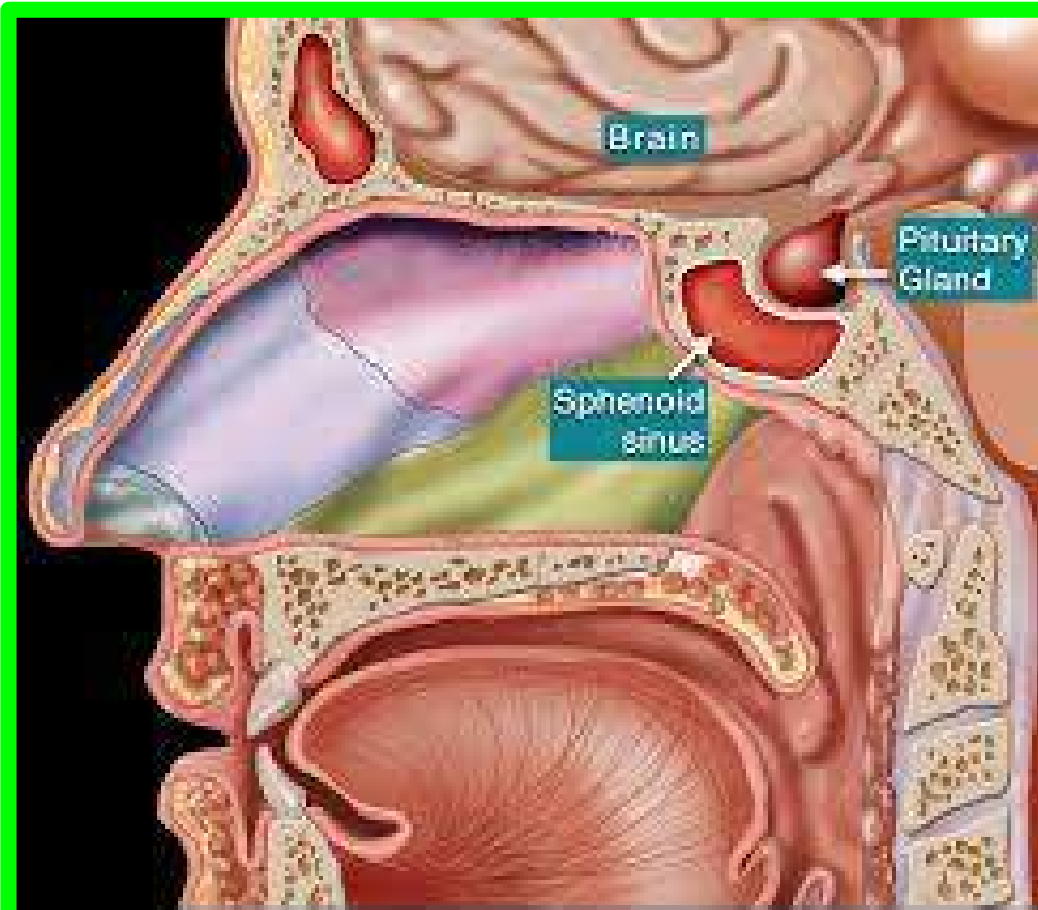
Pituitary Gland (Hypophysis Cerebri)

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Relations

■ ■ **Anteriorly:** The sphenoid sinus

■ ■ **Posteriorly:** The dorsum sellae, the **basilar artery**, and the **pons**



Pituitary Gland (Hypophysis Cerebri)

■ ■ **Superiorly:** The **diaphragma sellae**, which has a central aperture that allows the passage of the infundibulum.

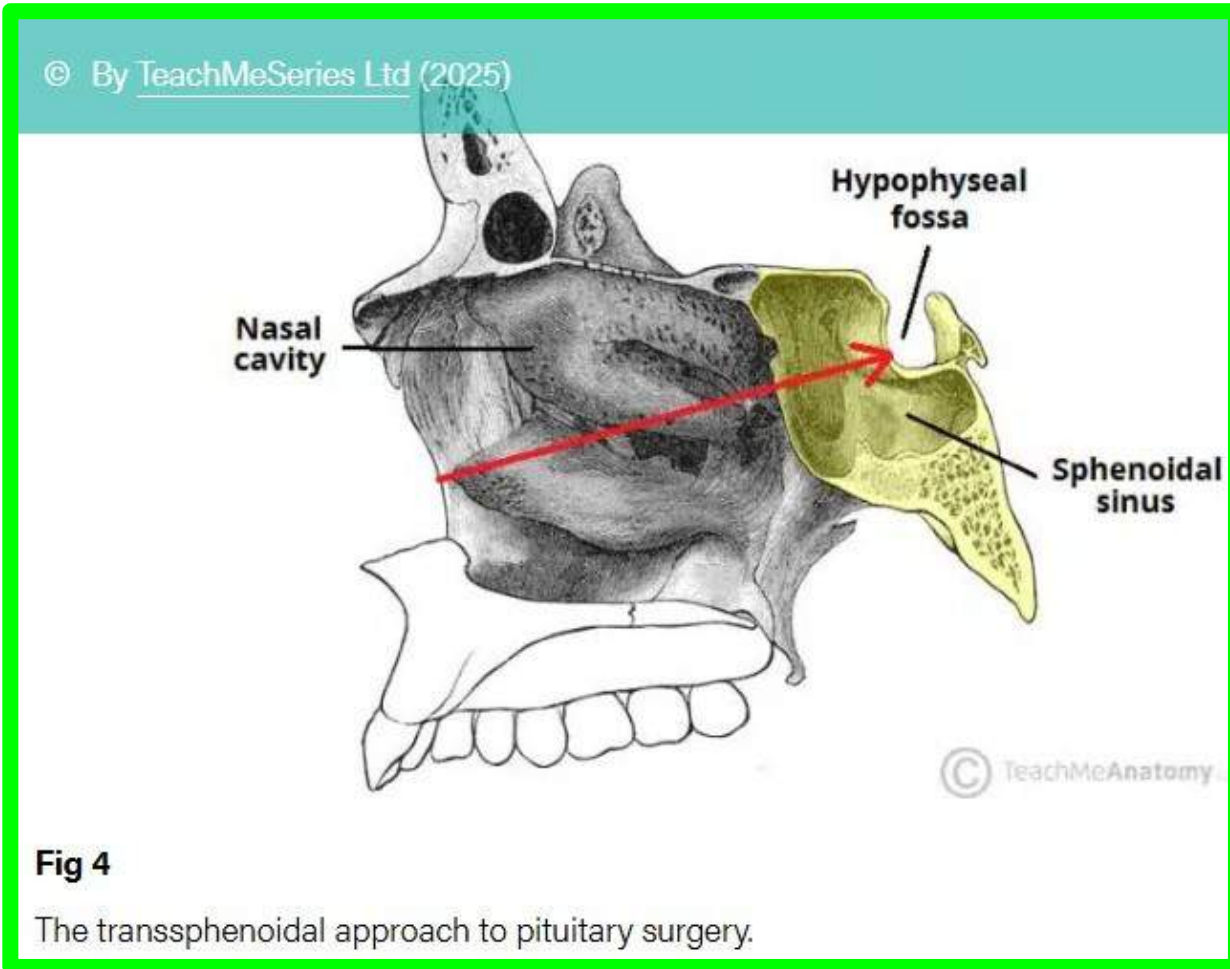
The **diaphragma sellae** separates **the anterior lobe** from **the optic chiasma**



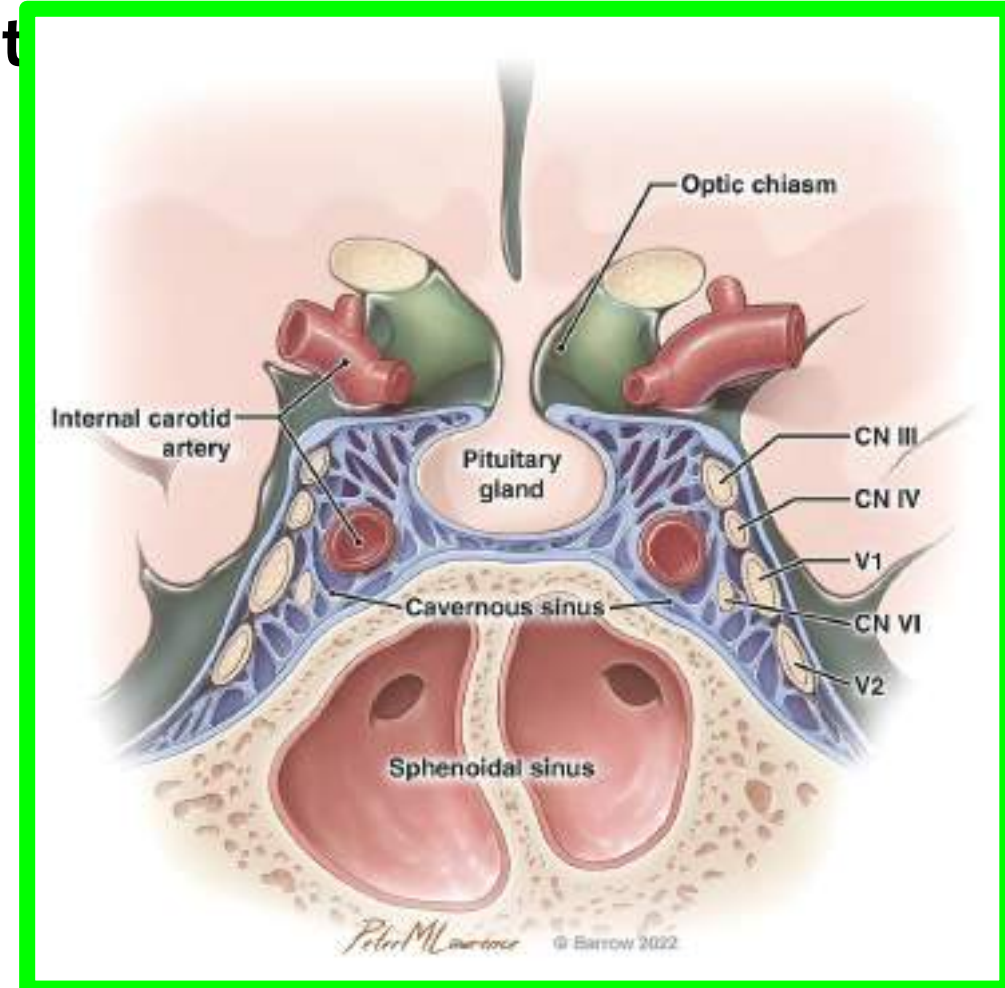
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Pituitary Gland (Hypophysis Cerebri)

■ ■ Inferiorly: The body of the sphenoid, with its **sphenoid air sinuses**

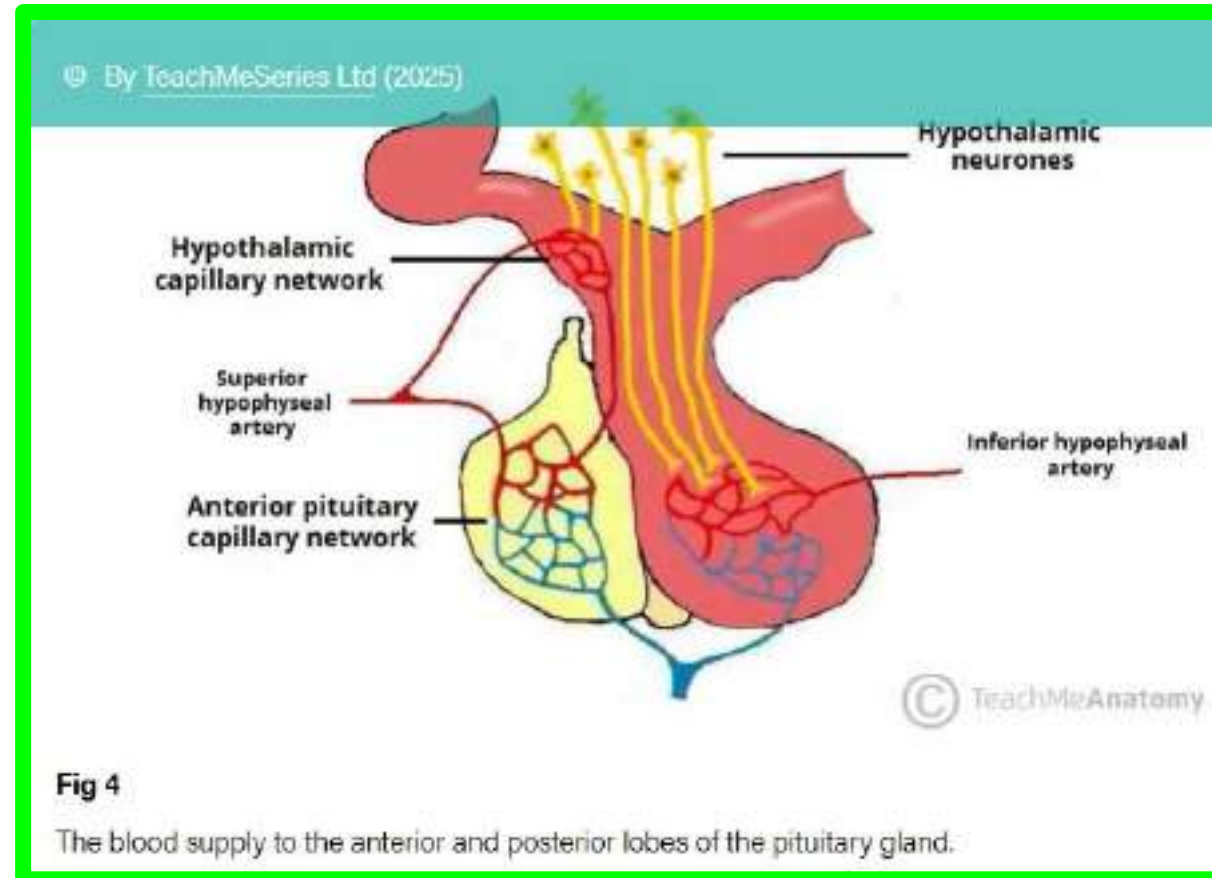
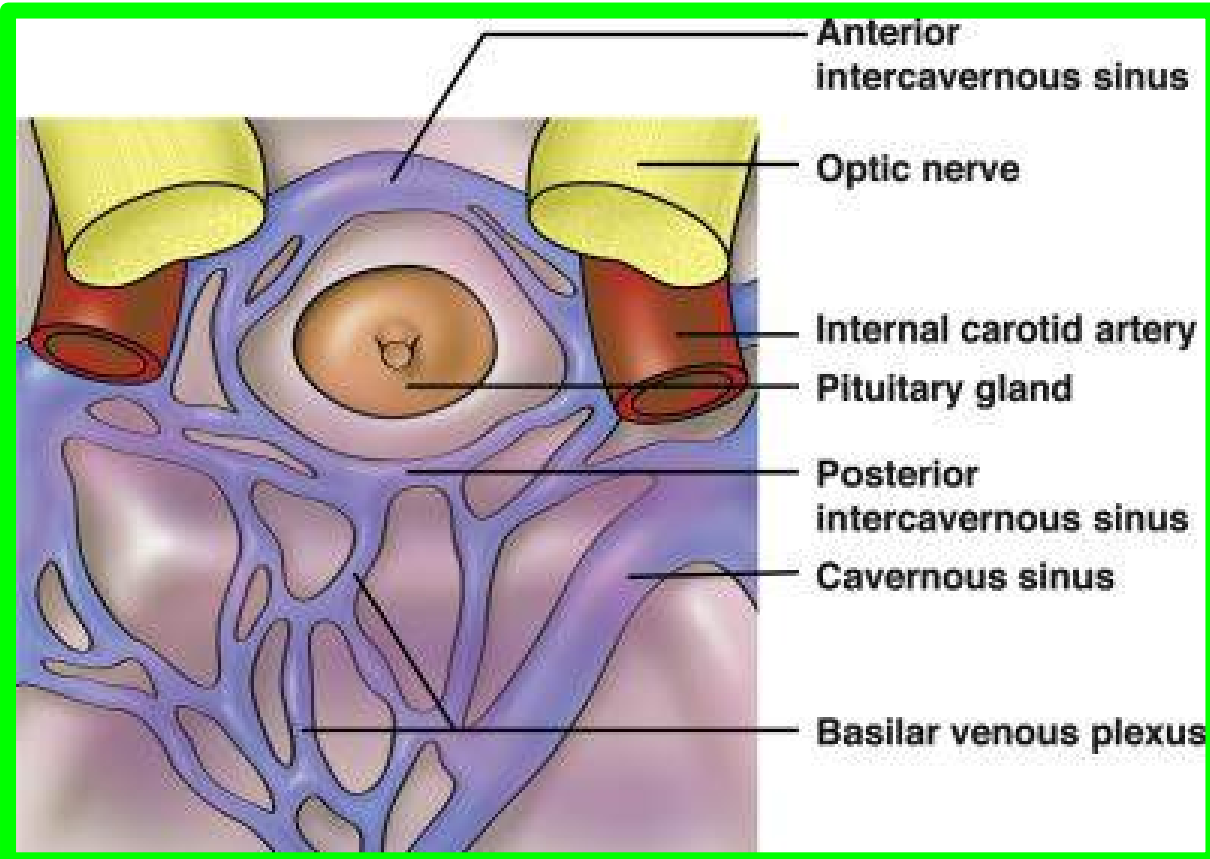


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Blood Supply

- ❖ The arteries are derived from the **superior and inferior hypophyseal arteries**, branches of **the internal carotid artery**.
- ❖ The **veins** drain into **the intercavernous sinuses**.





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