



Gross Anatomy

Dry Lab #3

Clinical Correlates

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Carotid Endarterectomy

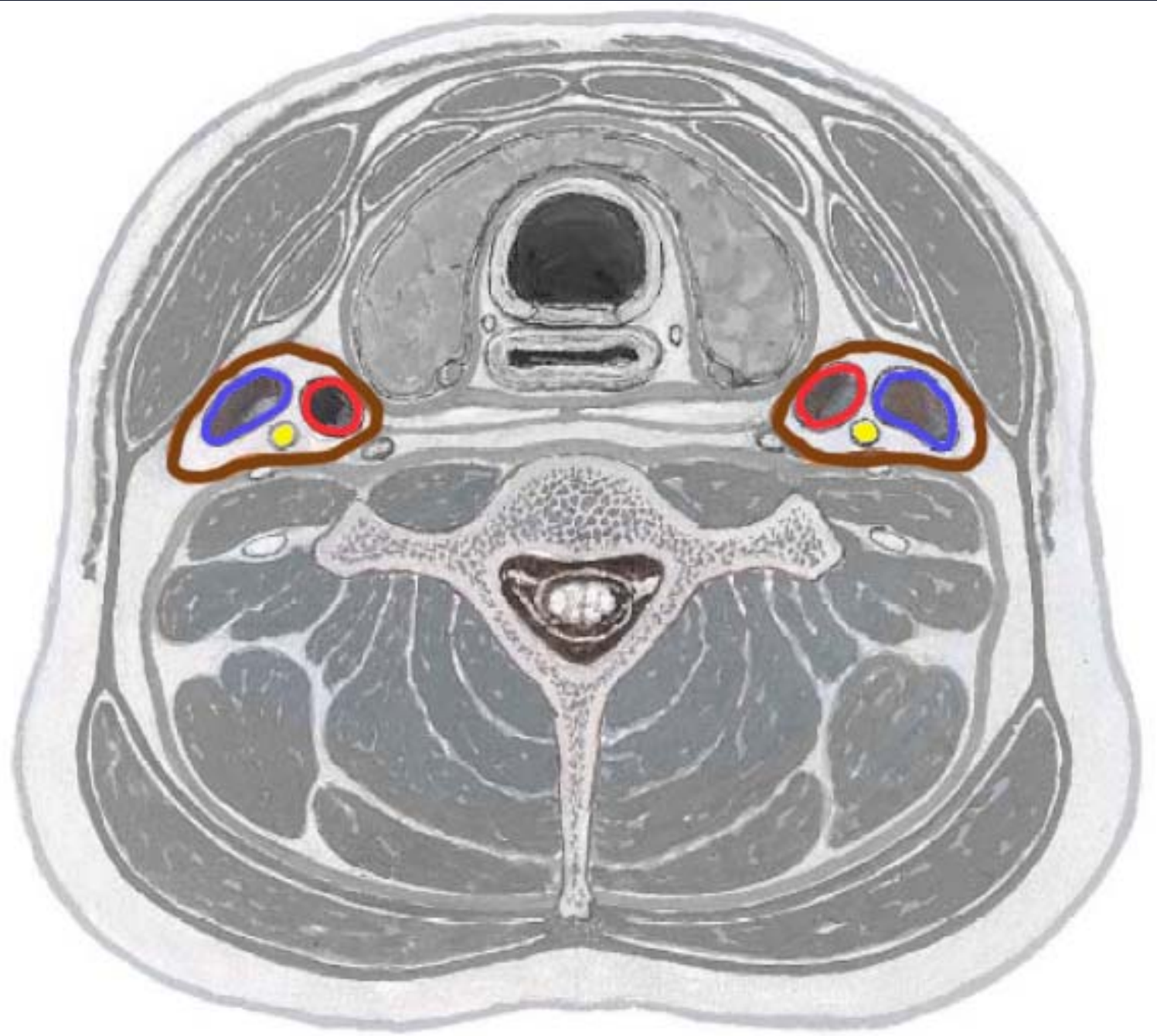
- Landmarks
- Layers

Carotid sheath

IJV

Carotid a.

Vagus n.

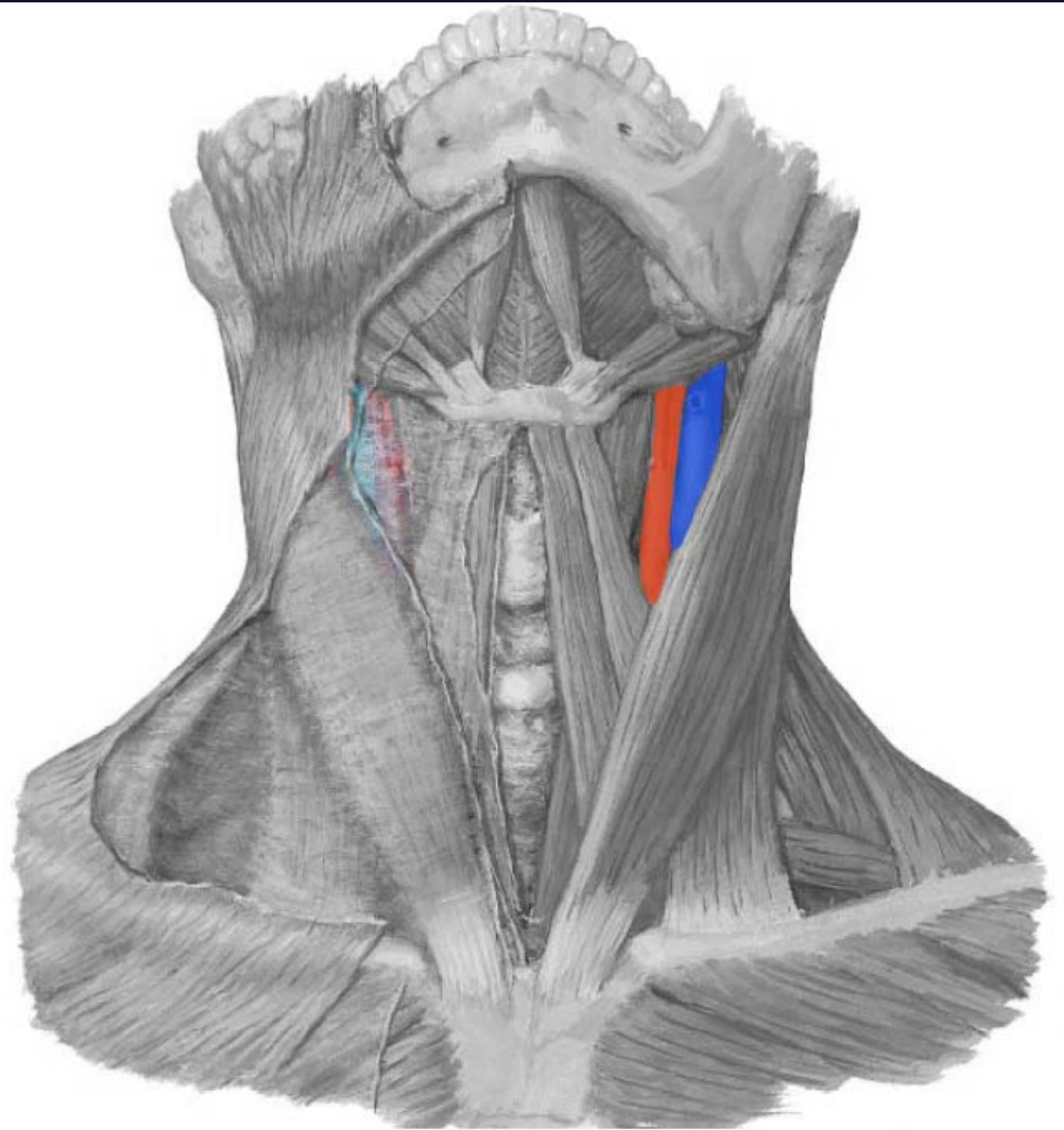


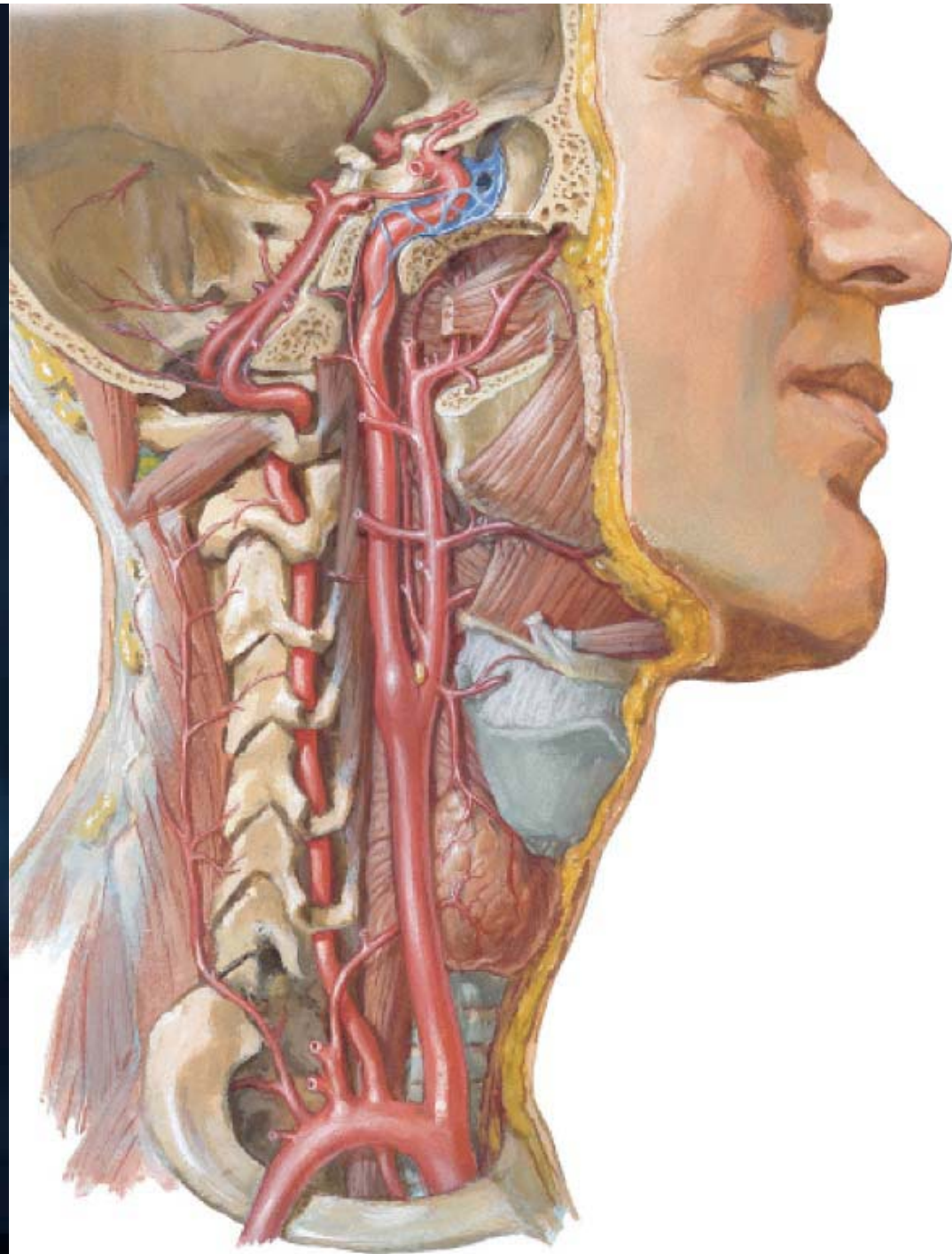
Carotid sheath

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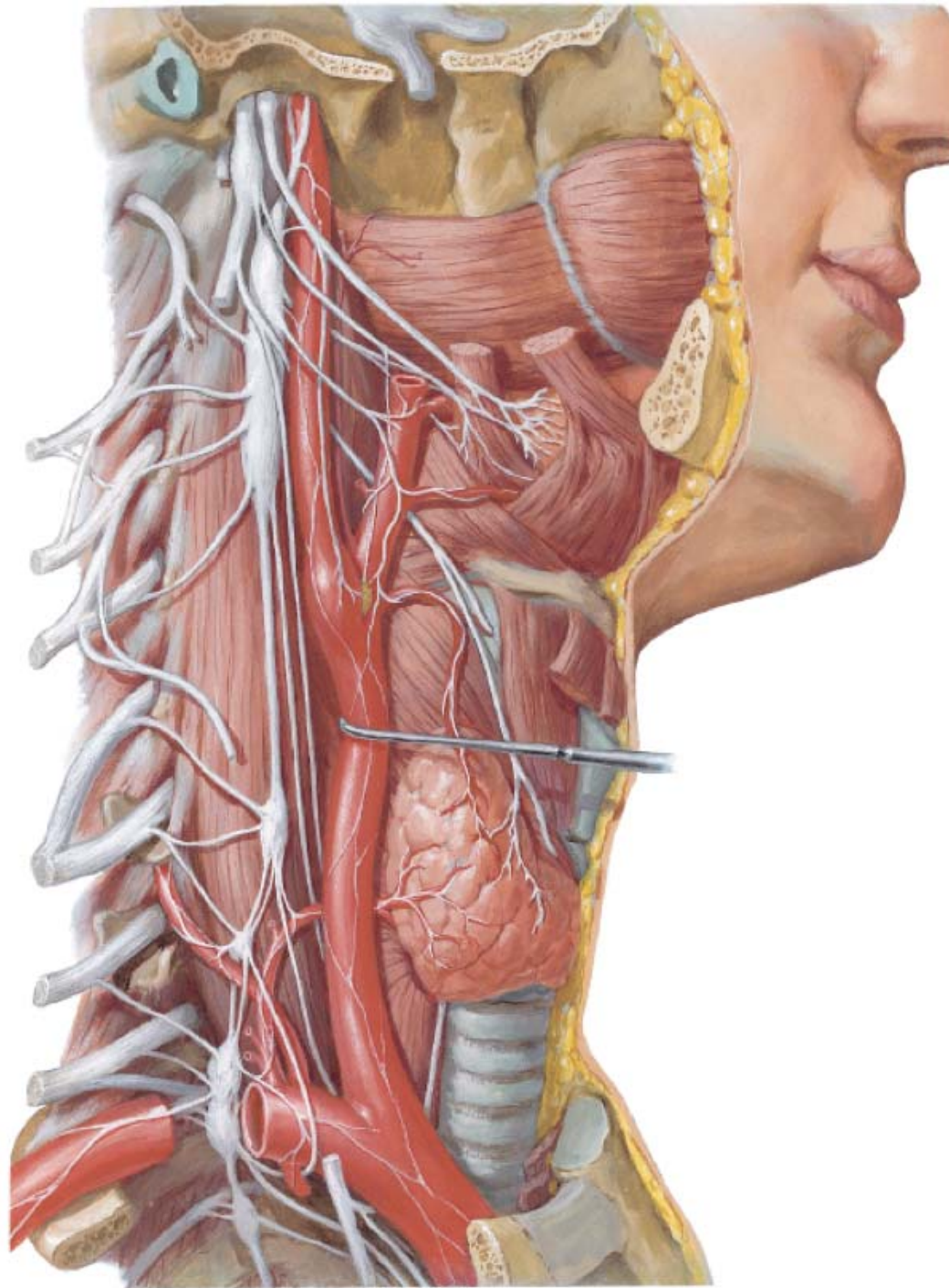
Carotid a.

Vagus n.





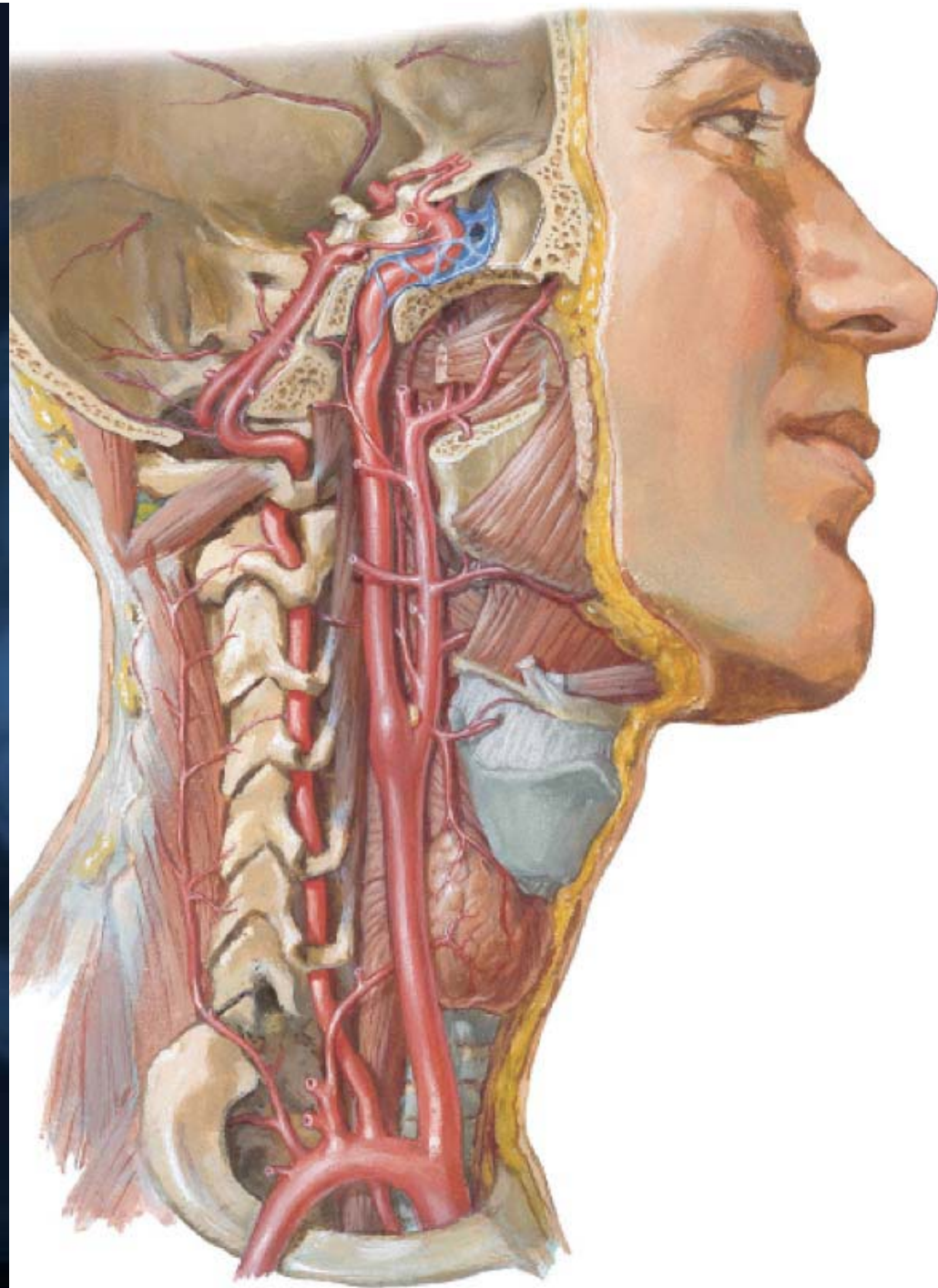




Carotid Endarterectomy

- Landmarks
- Layers
- Complications

S
A
L
F
O
P
S
Max



Superior thyroid

Ascending pharyngeal

Lingual

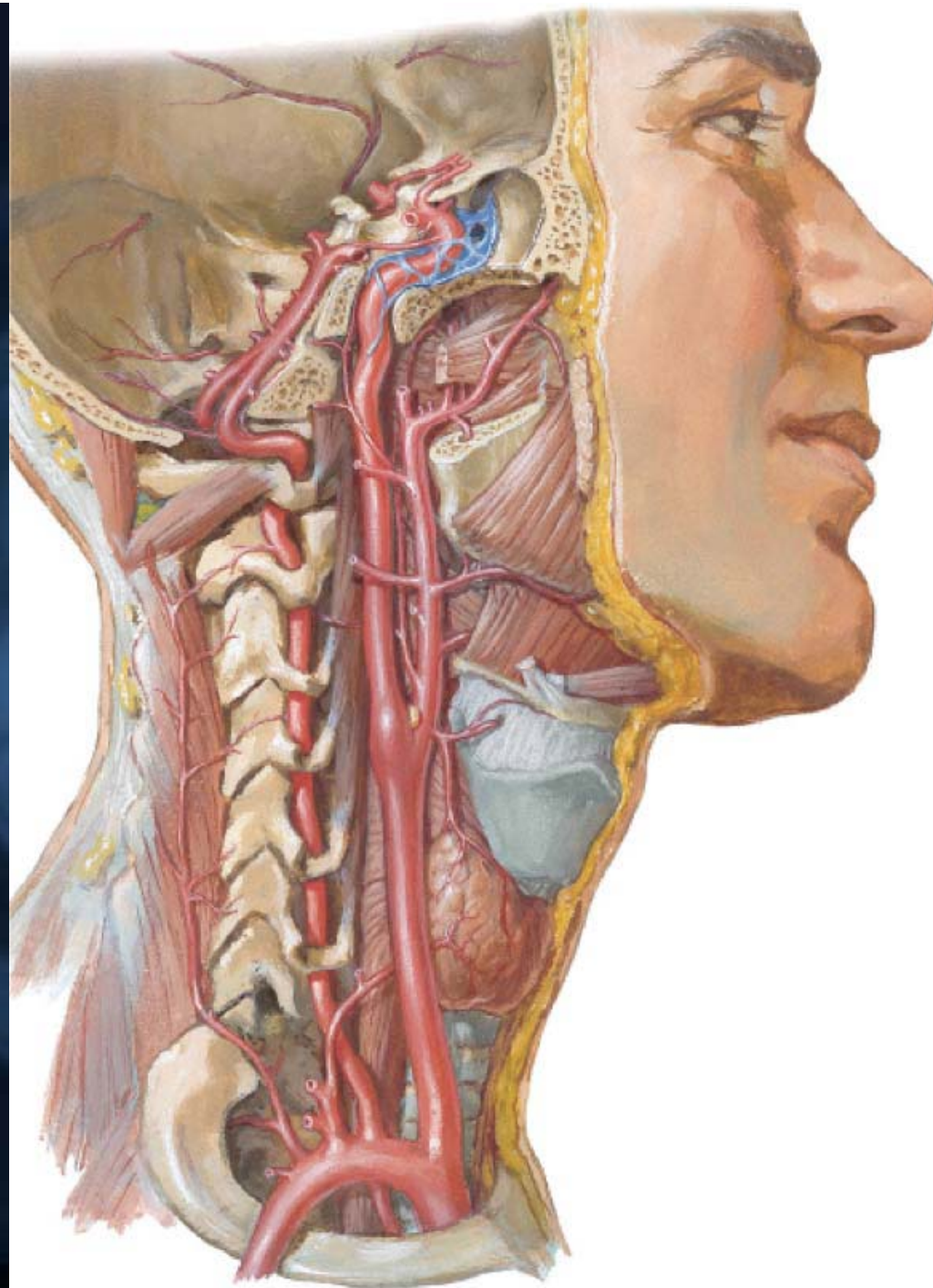
Facial

Occipital

Posterior auricular

Superficial temporal

Maxillary



Thyroidectomy

- Landmarks
- Complications

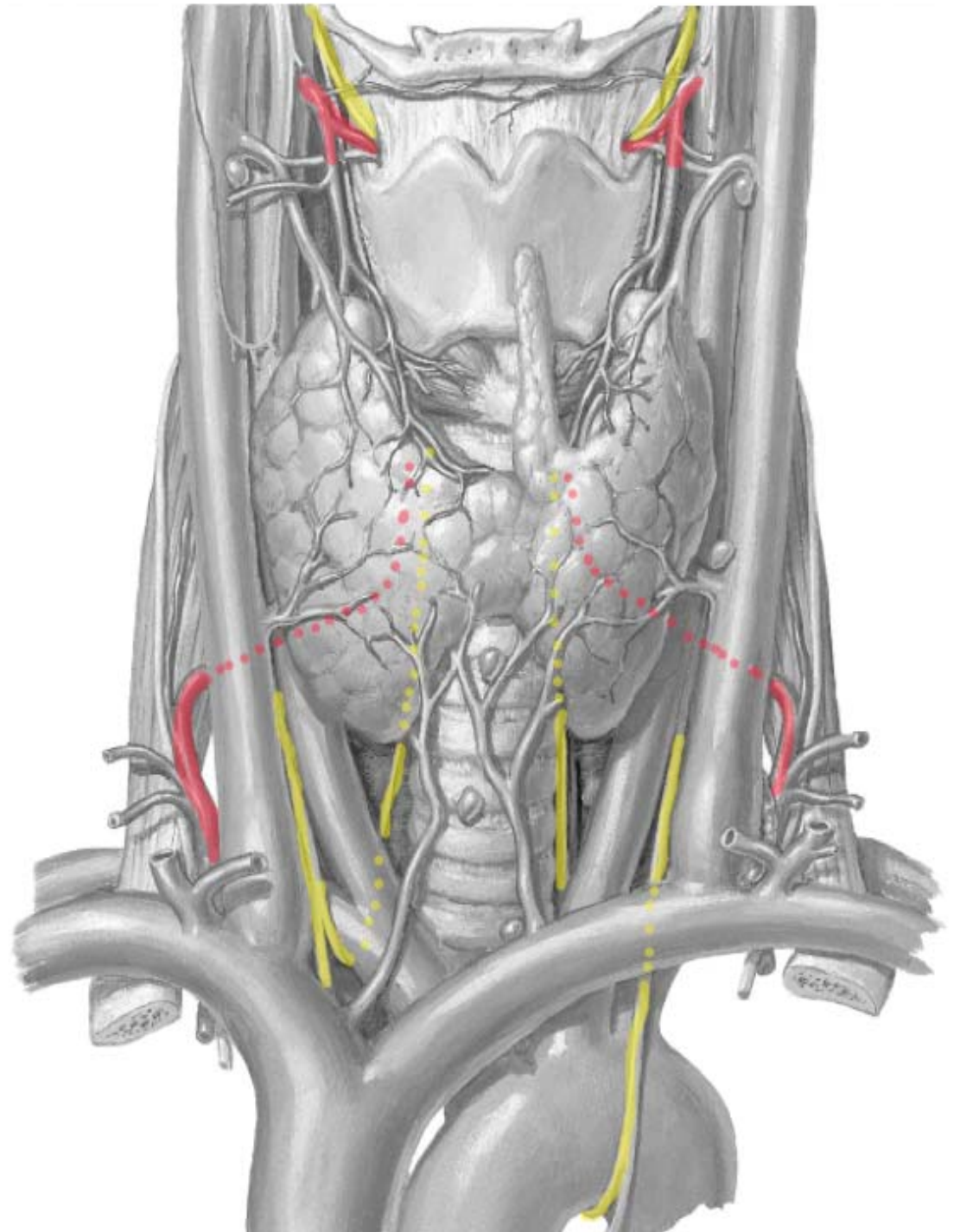
Internal laryngeal n.

Superior laryngeal a.

Inferior thyroid a.

Inferior (recurrent)

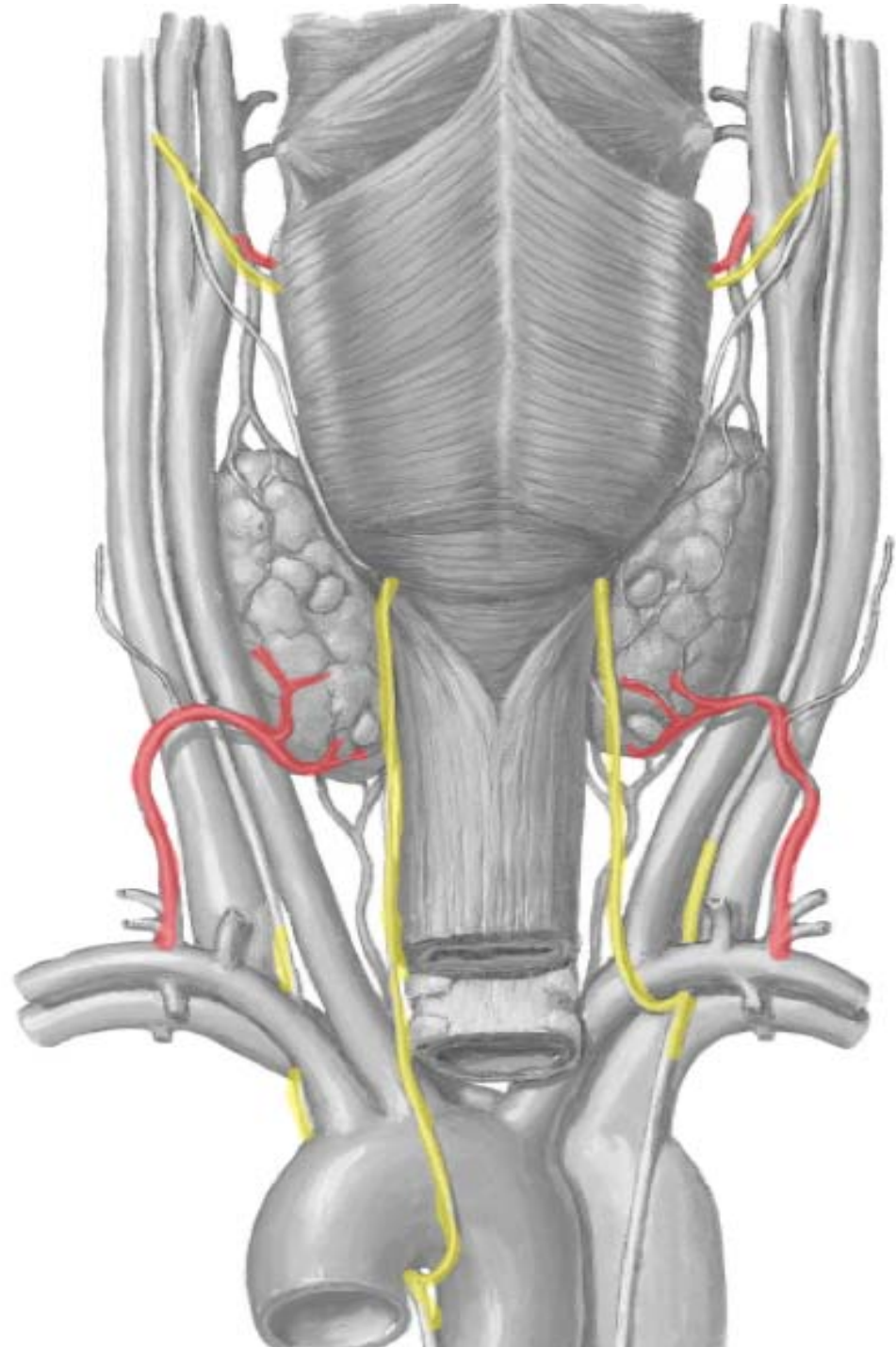
laryngeal n.



Internal laryngeal n .
Superior laryngeal a.

Inferior thyroid a.

Inferior (recurrent)
laryngeal n.

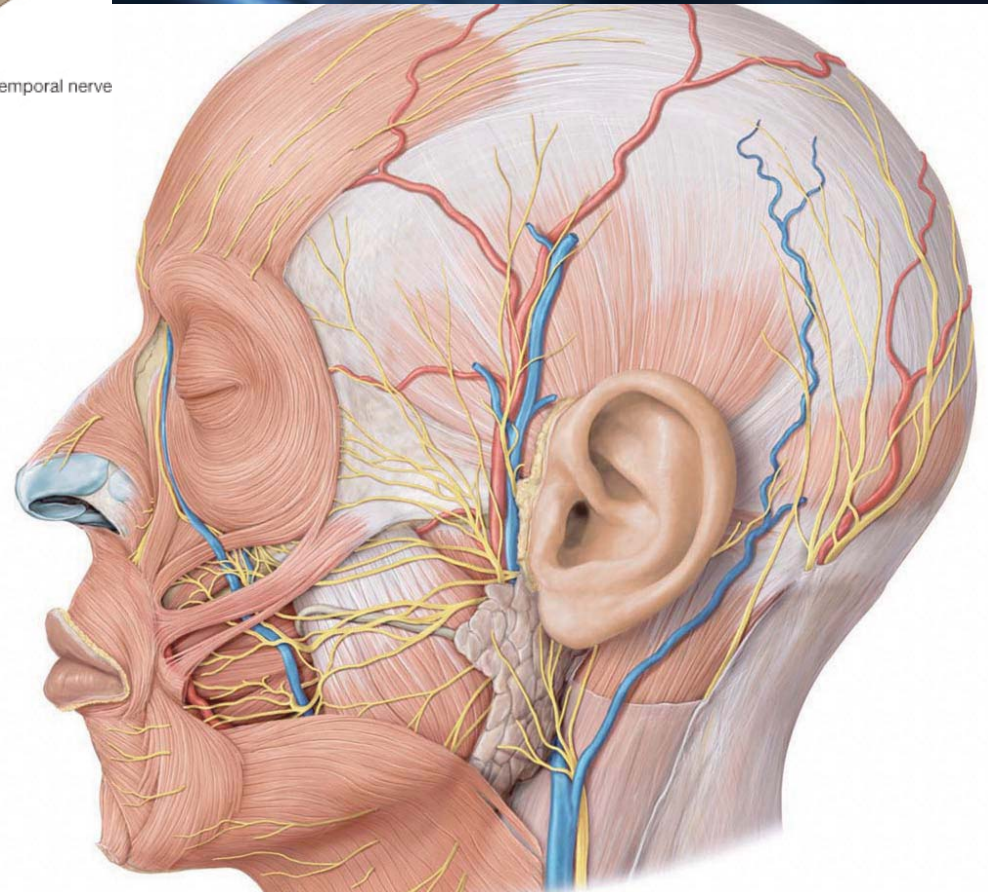
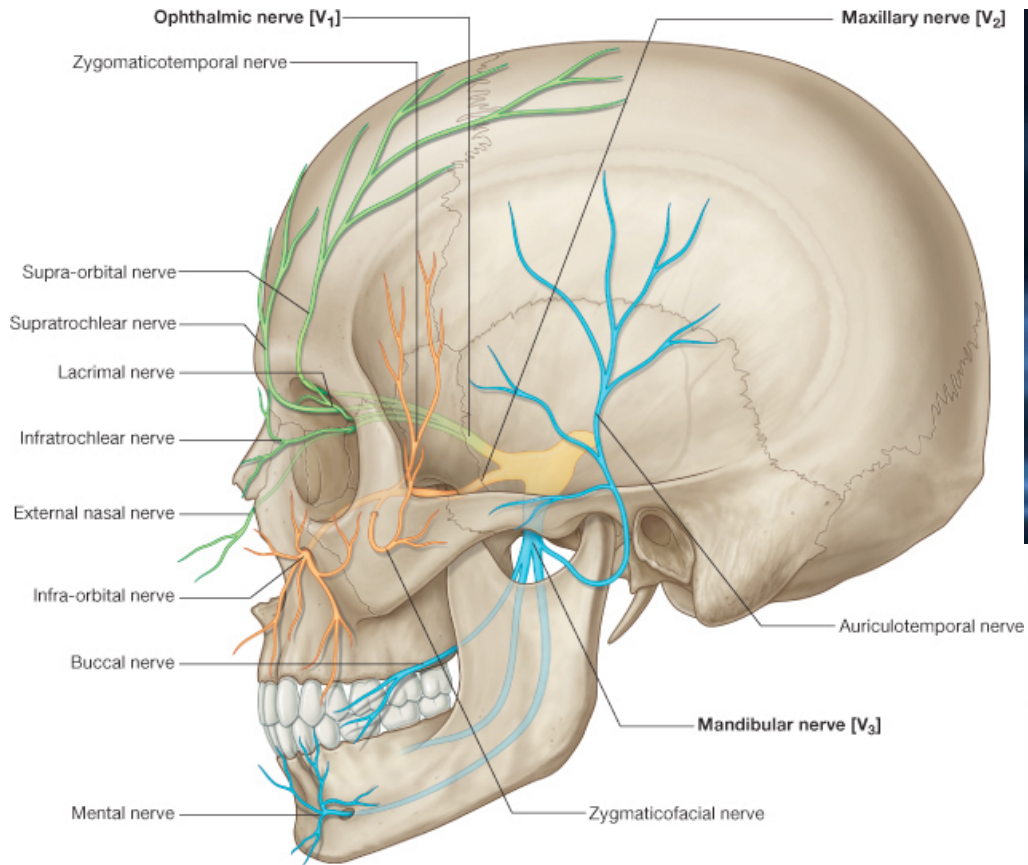


Thyroidectomy

- Landmarks
 - Thyroid cartilage, cricothyroid membrane
- Complications
 - Recurrent laryngeal nerve injury
 - Superior laryngeal nerve injury
 - Hypoparathyroidism
 - Thyrotoxic storm

Scalp Incisions

- Layers-SCALP
 - Aponeurosis (Galea) is the strength layer
- What do we worry about?

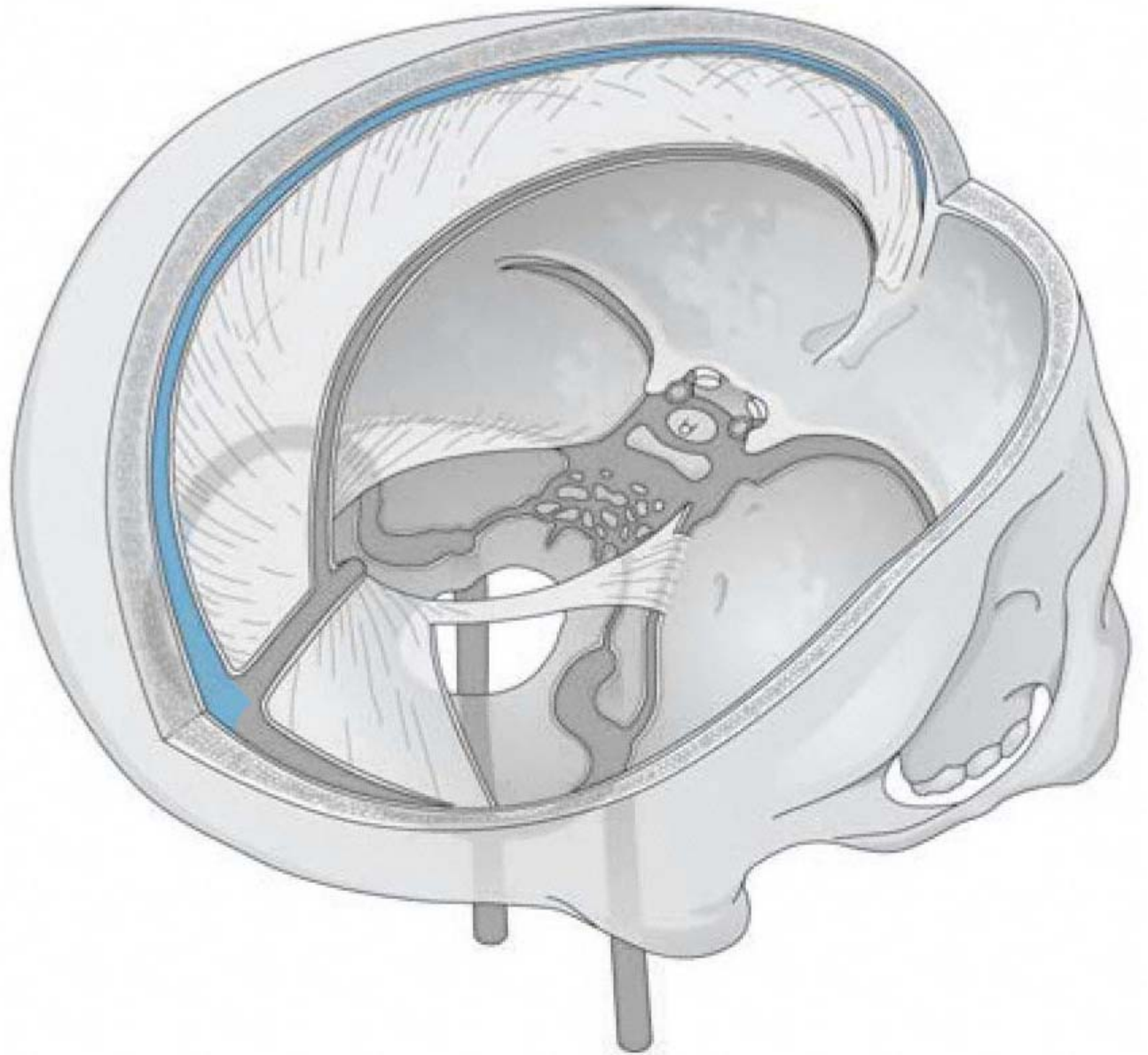


Dural Venous Sinuses

Superior Sagittal Sinus

- Where is it?
- Problems
 - Thrombosis
 - Surgery

Superior sagittal sinus

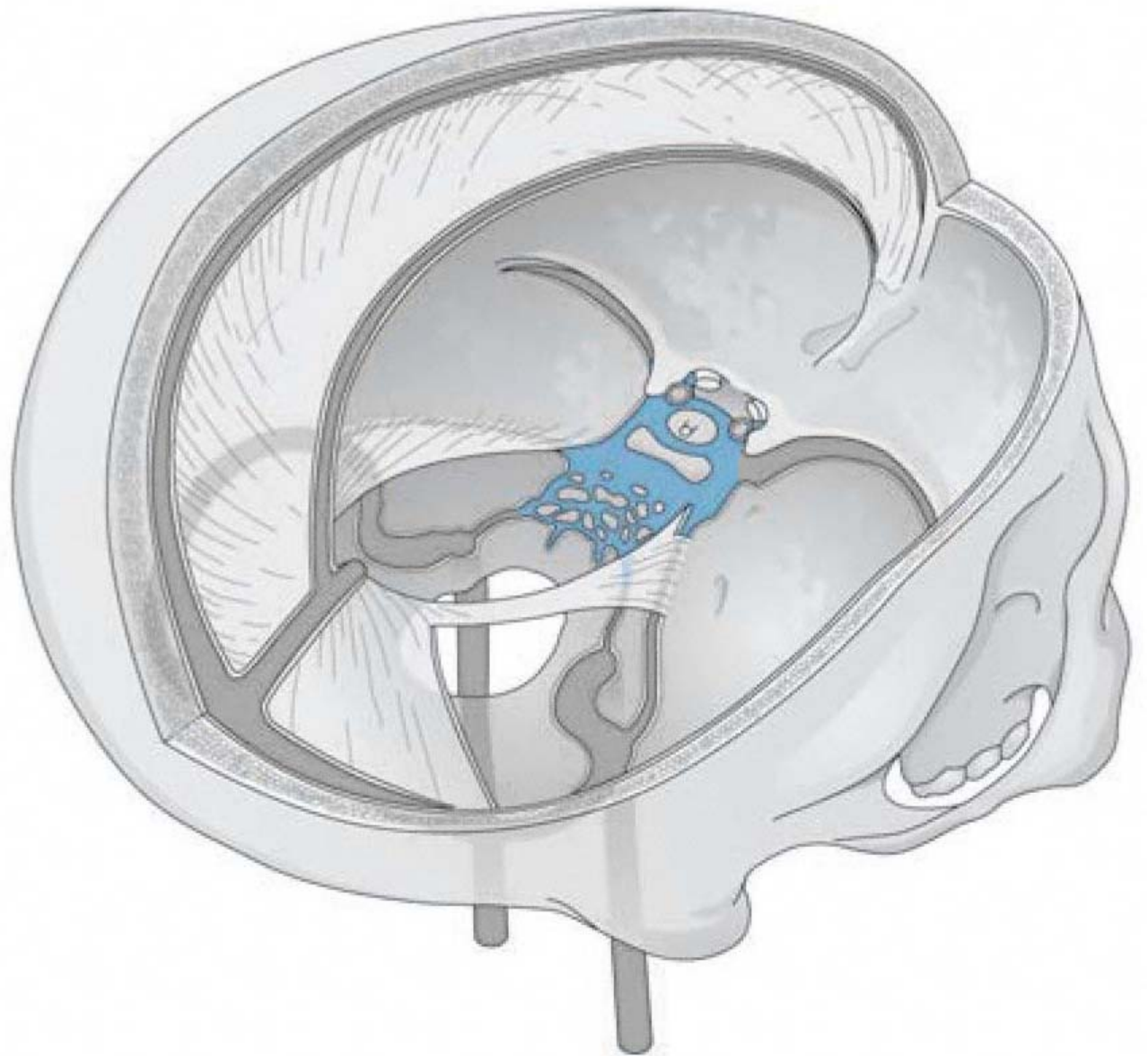


Dural Venous Sinuses

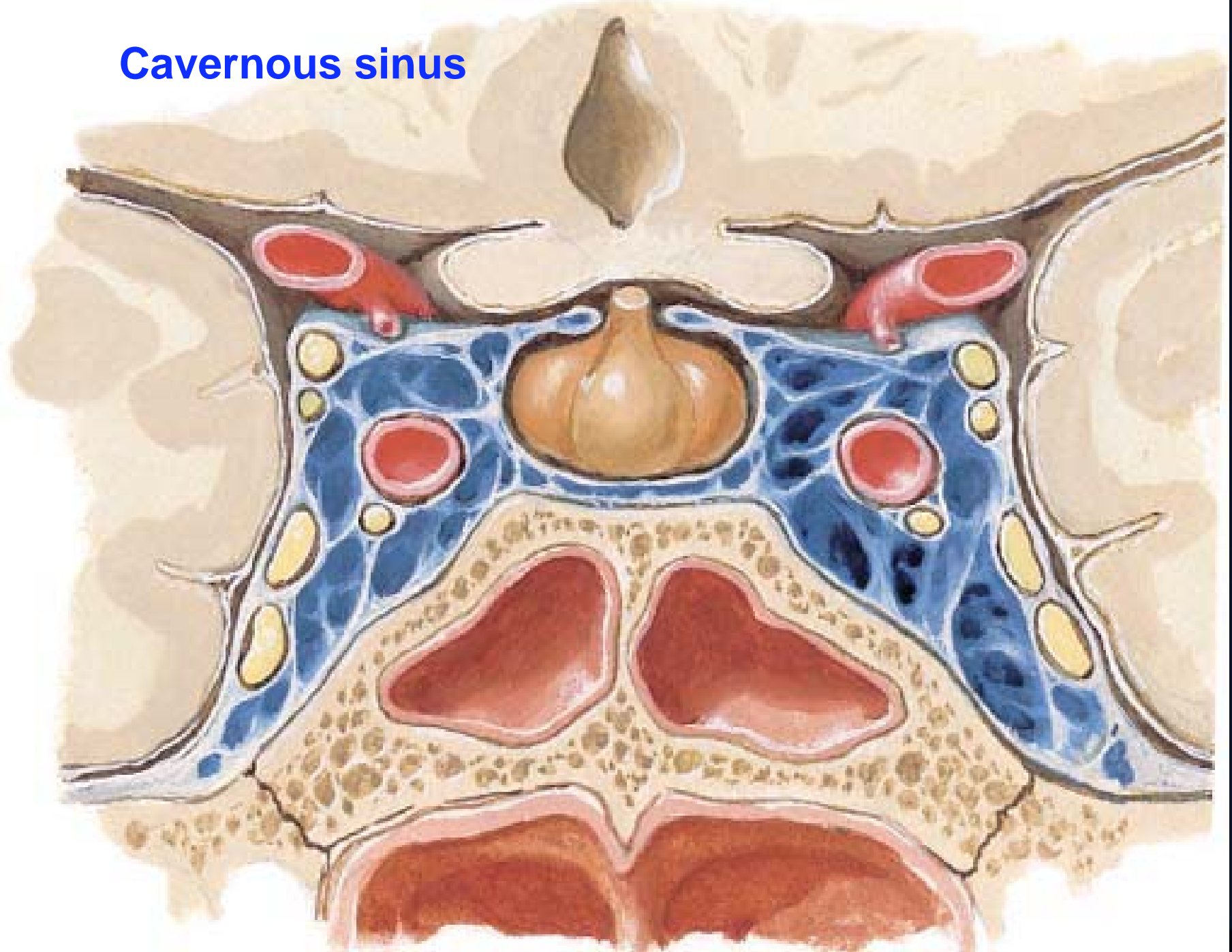
Cavernous Sinus

- Where is it?
- Anatomy
- Cavernous sinus syndrome
 - Causes-aneurism, tumor, inflammation, infection

Cavernous sinus



Cavernous sinus



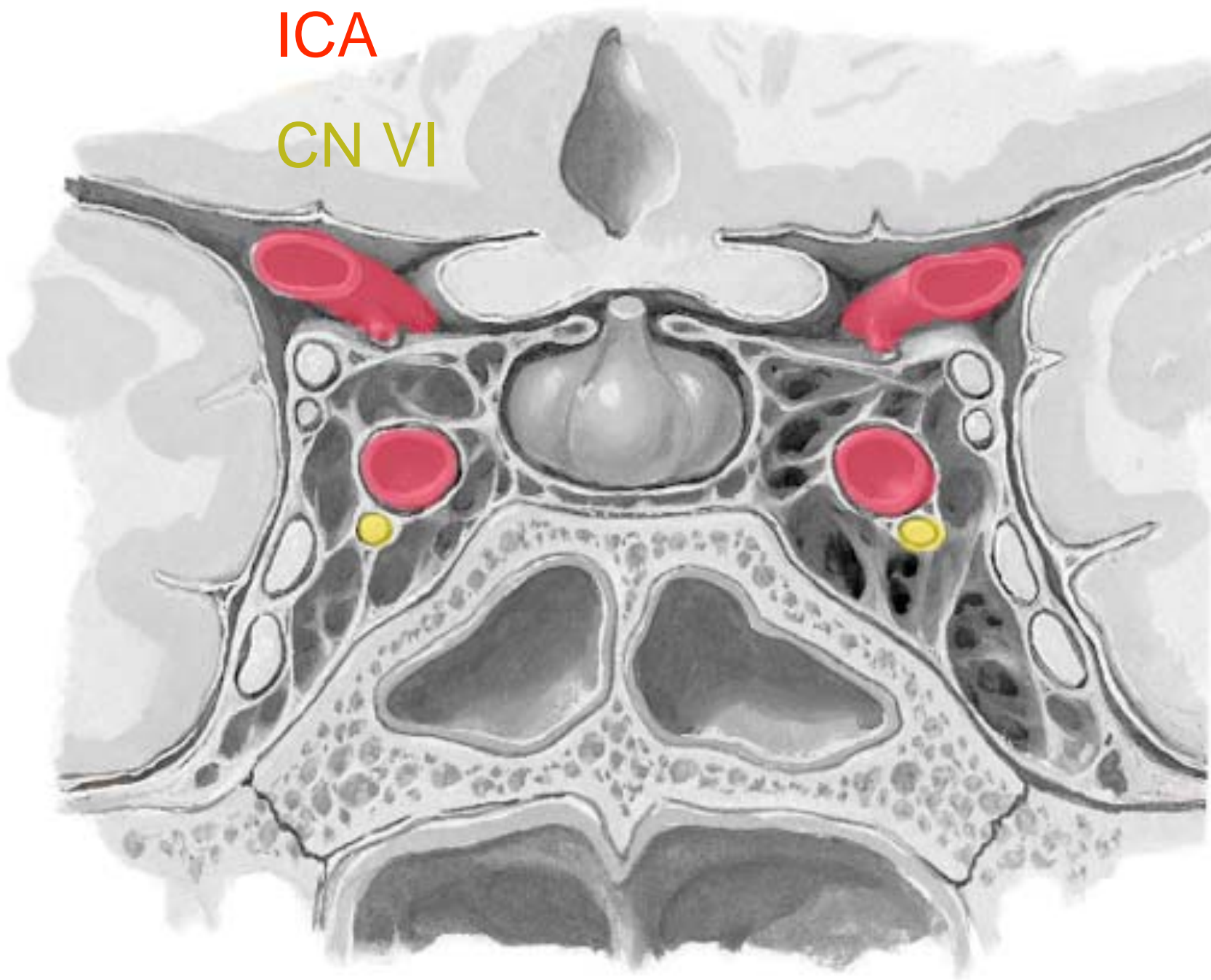
Dural Venous Sinuses

Cavernous Sinus

- Cavernous carotid artery aneurism (CCAA)
- Carotid-cavernous fistula
 - Causes-ruptured CCAA or trauma
 - Presents with HA, cavernous sinus syndrome
 - Pupil?

ICA

CN VI

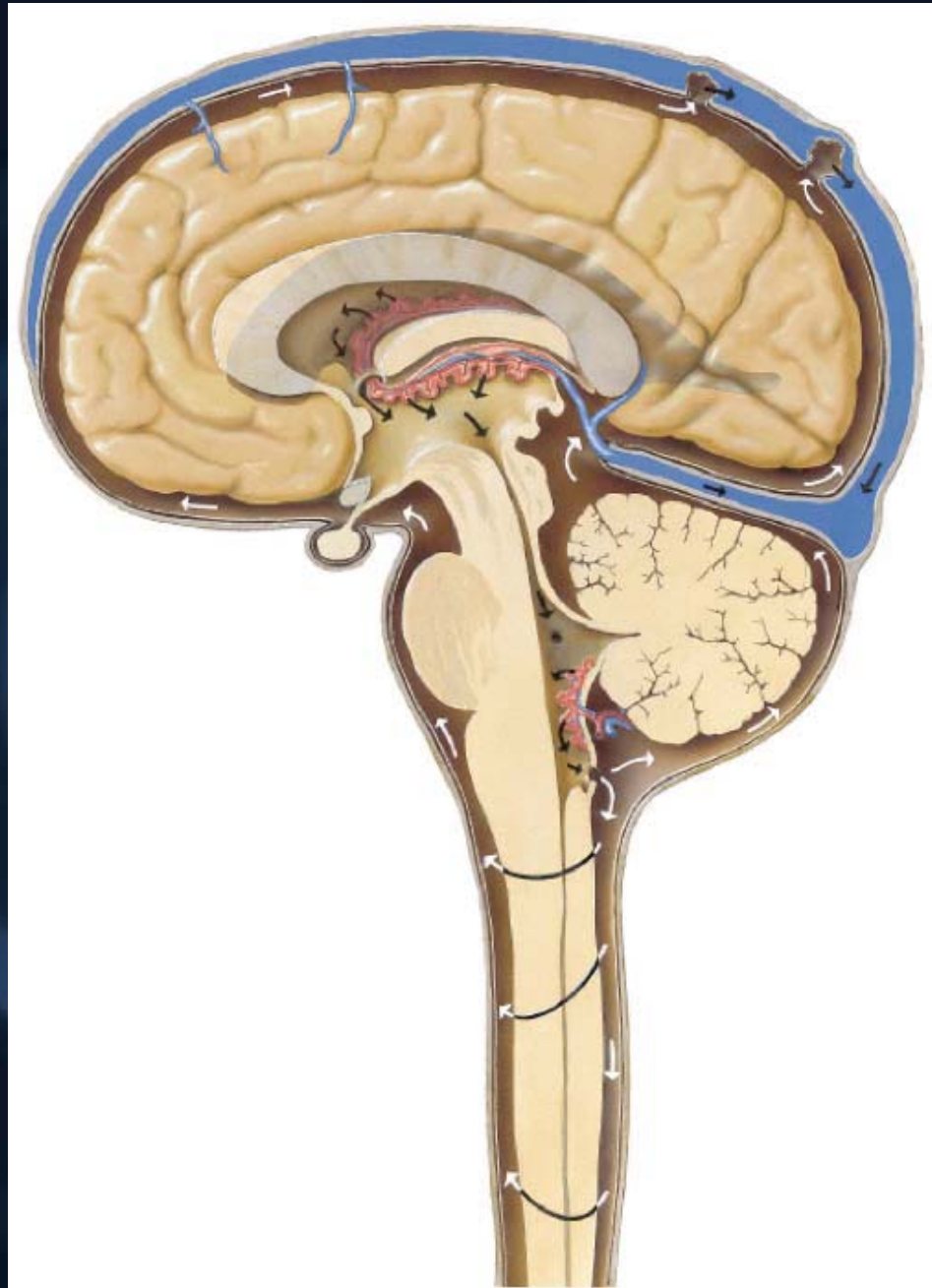


Hydrocephalus

- Two types: communicating and obstructive
 - Communicating-inadequate resorption of CSF, usually at arachnoid villi
 - Causes: subarachnoid hemorrhage, meningitis

Hydrocephalus-obstructive

- As the name implies, this is caused by an obstruction of CSF flow



Hydrocephalus-obstructive

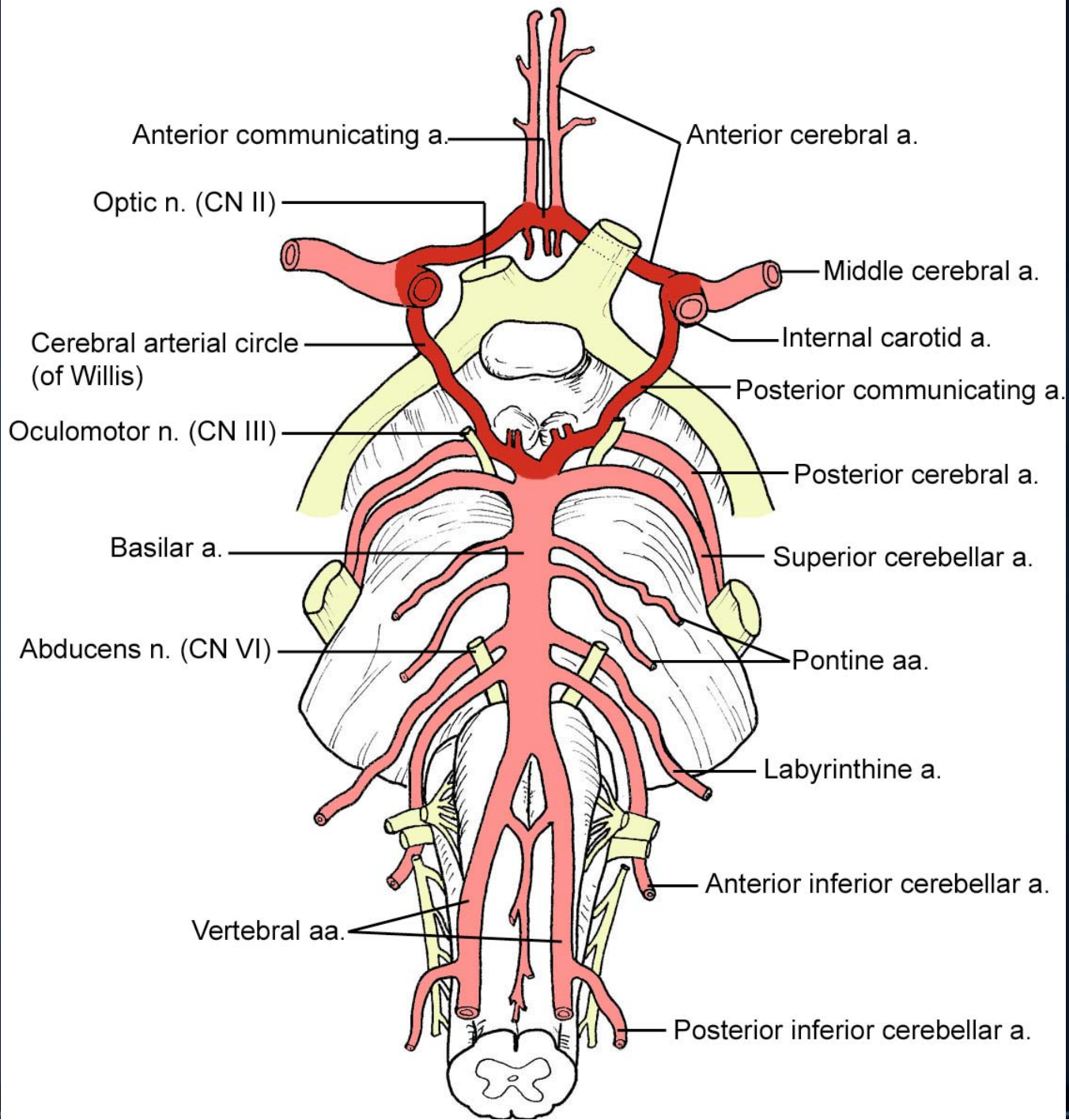
- Sites of obstruction
 - Interventricular foramen
 - The cerebral aqueduct
 - Fourth ventricle obstruction
 - The medial and lateral apertures
- Causes?

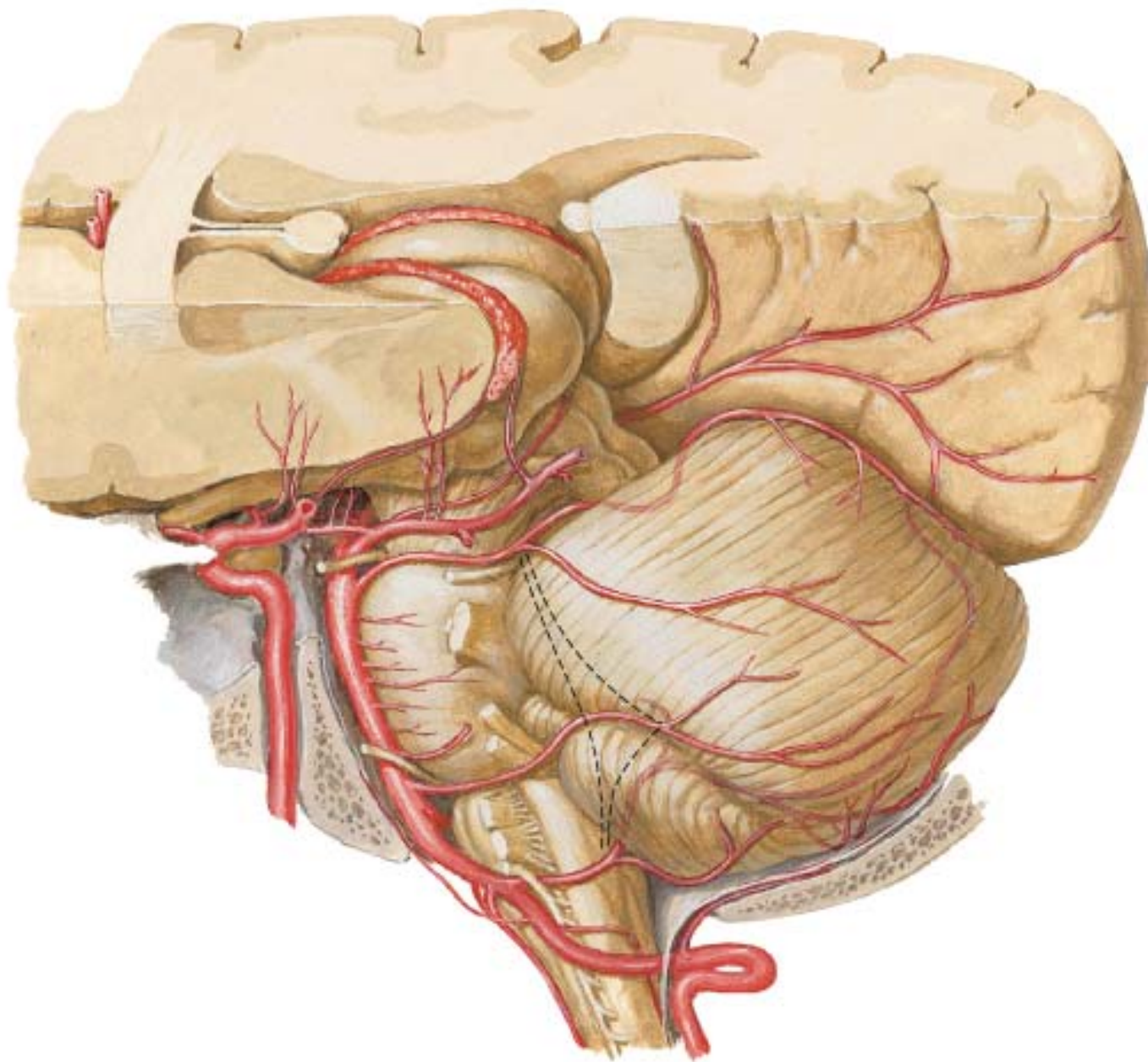
Hemifacial Spasm

- Involuntary facial contractions caused by compression of facial nerve by a vessel
- Which one?

Hemifacial Spasm

- Involuntary facial contractions caused by compression of facial nerve by a vessel
- Which one?
 - Usually AICA





Horner's Syndrome

- Symptoms-know the affected nerves
 - Ptosis
 - Miosis
 - Anhidrosis
- Causes?
 - Pancoast tumor at apex of lung
 - Lateral medullary syndrome
 - Cluster headache

Primary Amoebic Meningoencephalitis

- Caused by *Naegleria fowleri*
- Symptoms: Severe HA, fever, stiff neck, nausea, vomiting, seizures, hallucinations, death
- Very specific conditions required
 - Must be present in water
 - Water must be $>80^{\circ}$ F
 - Amoeba must get up the nose

Cranial Nerve Review

Neurologic Exam