Carotid Endarterectomy

- Landmarks
- Layers
Carotid sheath

IJV
Carotid a.
Vagus n.
Carotid sheath
IJV
Carotid a.
Vagus n.
Carotid Endarterectomy

- Landmarks
- Layers
- Complications
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?
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
  - Anhydrosis

- 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° F
  - Amoeba must get up the nose
Cranial Nerve Review

Neurologic Exam