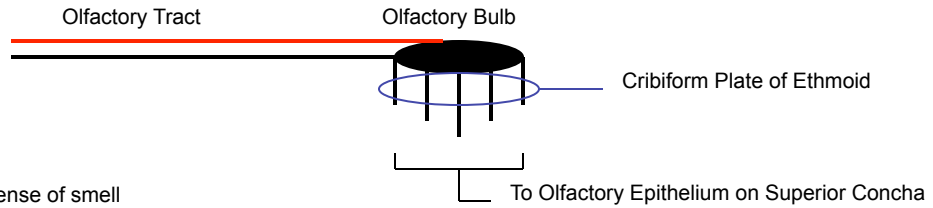


CN I Olfactory

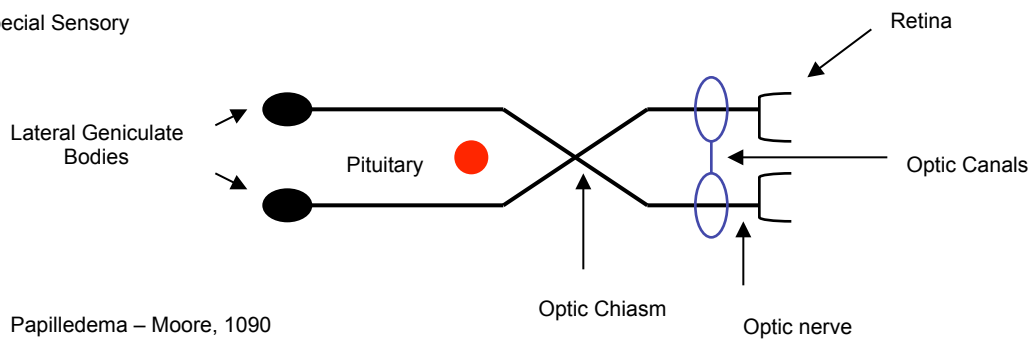
- Special Sensory
- Efferent fibers to Olfactory Bulb



Anosmia – Loss of sense of smell
 Uncinate Fits – olfactory hallucinations

CN II Optic

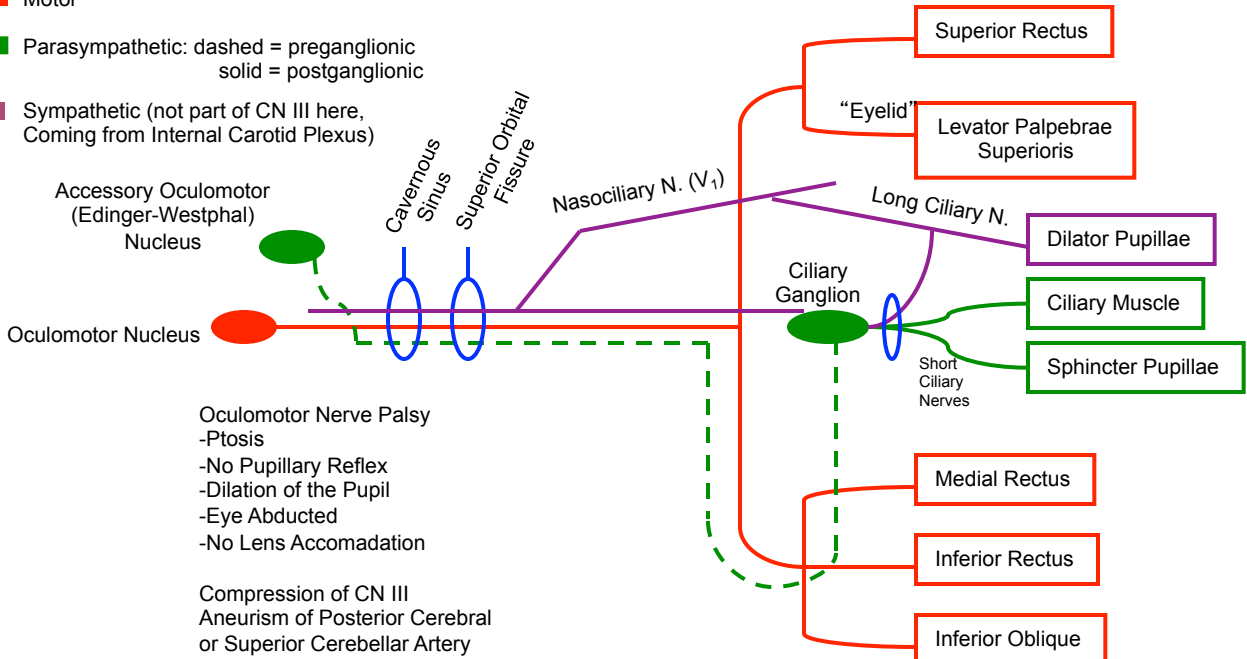
- Special Sensory



Papilledema – Moore, 1090
 Optic Neuritis – Moore, 1090
 Visual Field Defects – Moore, 1090

CN III Oculomotor

- Motor
- Parasympathetic: dashed = preganglionic, solid = postganglionic
- Sympathetic (not part of CN III here, Coming from Internal Carotid Plexus)

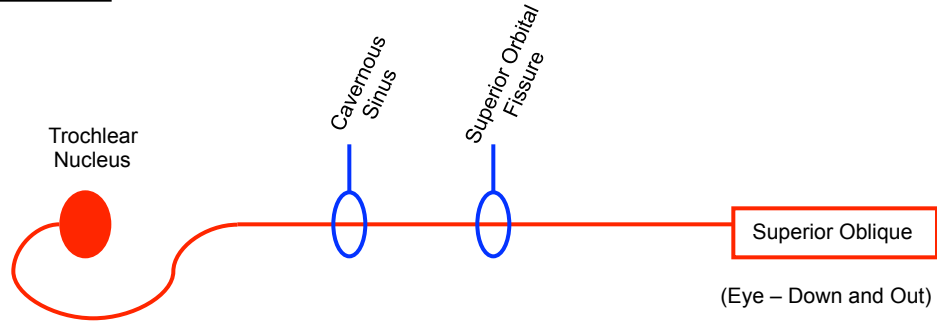


Oculomotor Nerve Palsy
 -Ptosis
 -No Pupillary Reflex
 -Dilation of the Pupil
 -Eye Abducted
 -No Lens Accommodation

Compression of CN III
 Aneurism of Posterior Cerebral
 or Superior Cerebellar Artery

CN IV Trochlear

■ Motor

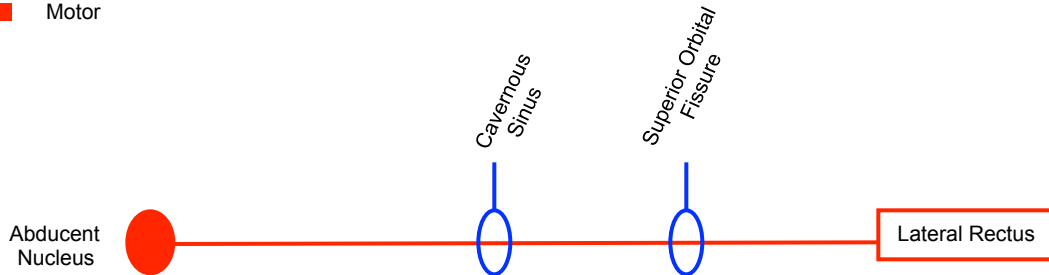


Trochlear Nerve Injury (Rarely alone)
- Diplopia

LR₆SO₄

CN VI Abducent

■ Motor

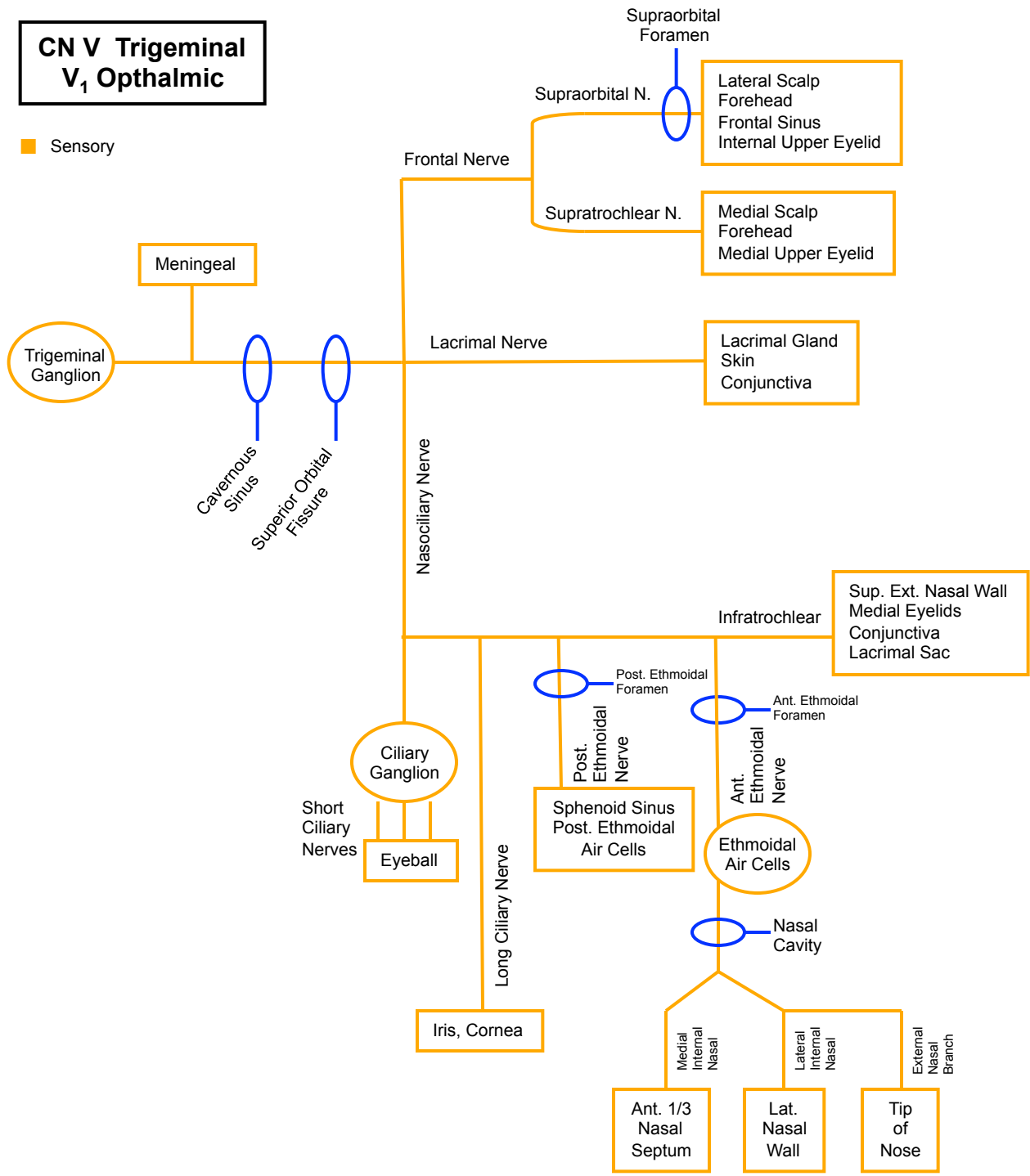


Abducent Nerve Injury

- Long intercranial course
- Stretched due to fluid pressure
- Paralysis
- Diplopia – except opposite side of lesion
- or
- Aneurism of “Willis”
- or
- Septic Thrombosis of Cavernous Sinus

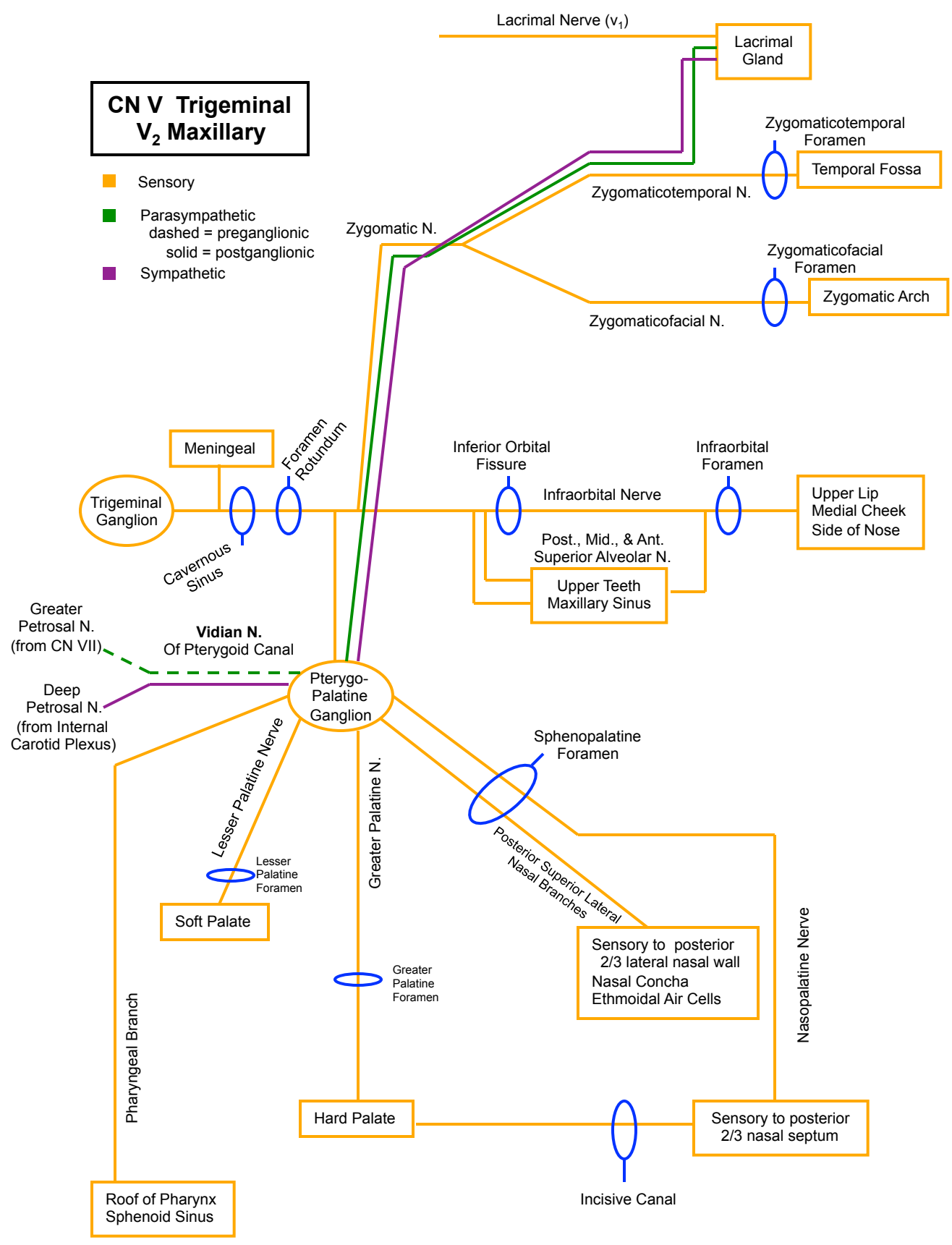
CN V Trigeminal V₁ Ophthalmic

■ Sensory



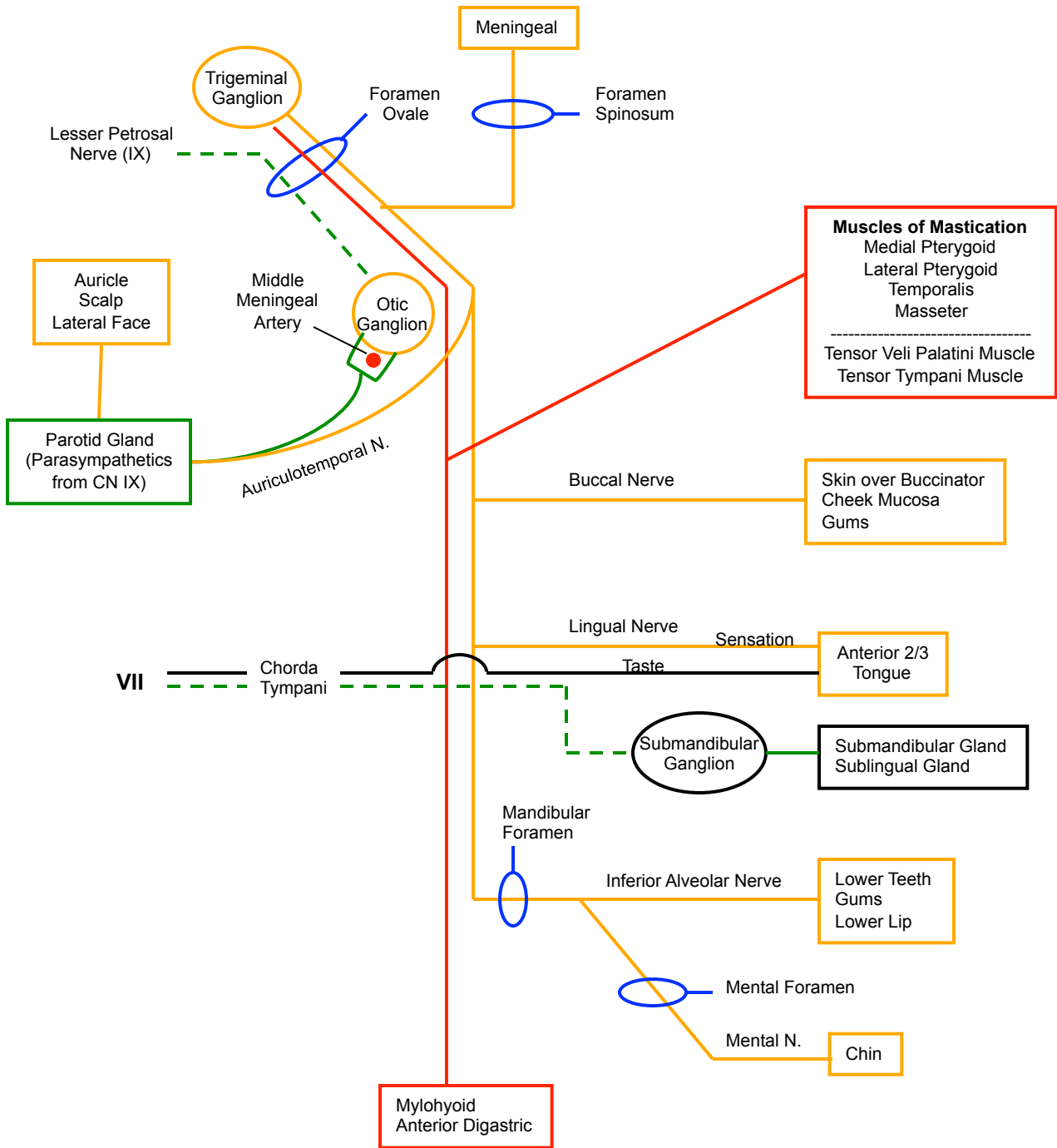
**CN V Trigeminal
V₂ Maxillary**

- Sensory
- Parasympathetic
dashed = preganglionic
solid = postganglionic
- Sympathetic



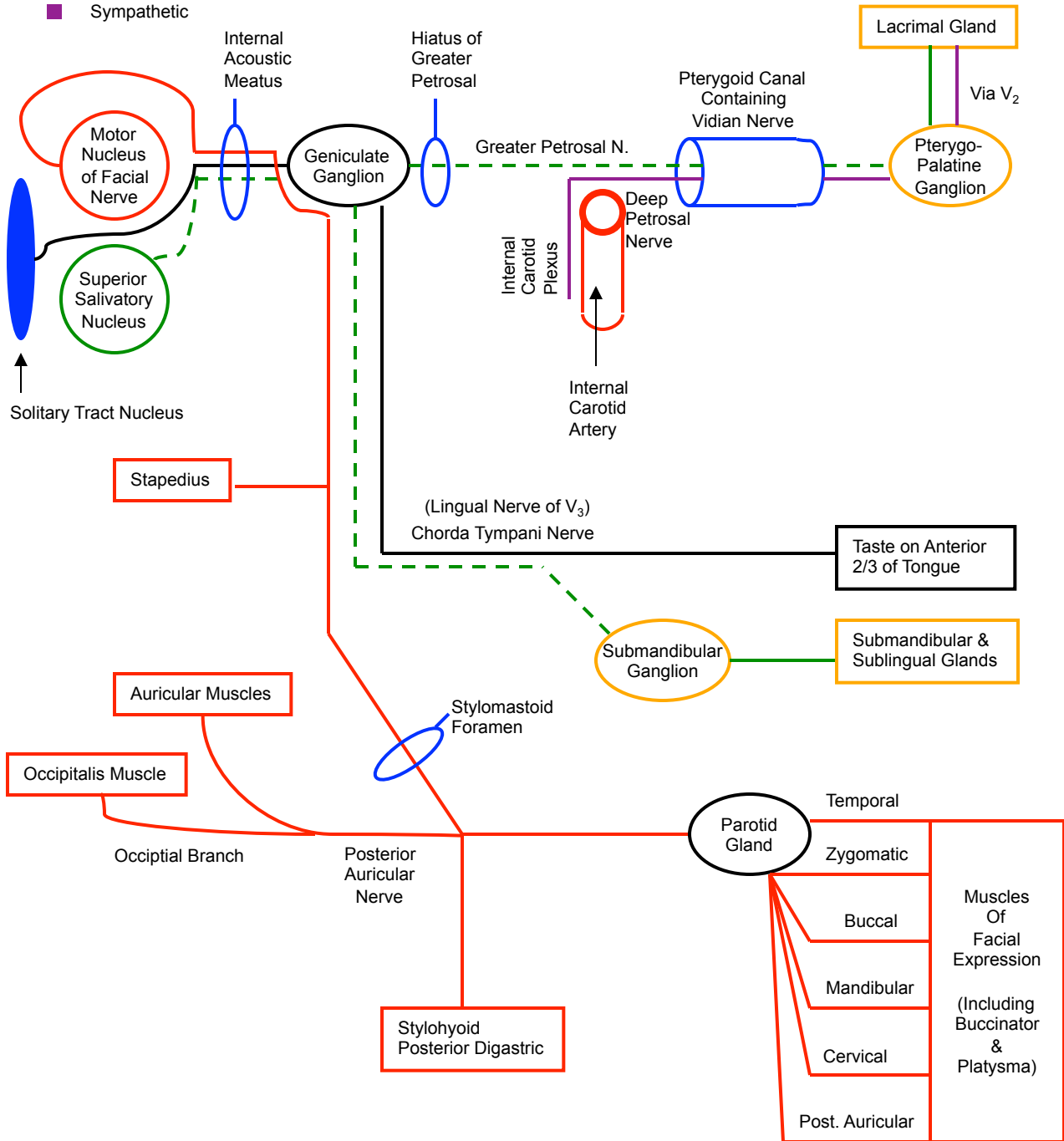
CN V Trigeminal V₃ Mandibular

- Sensory
- Special Sensory
- Parasympathetic: dashed = preganglionic
 solid = postganglionic
- Motor



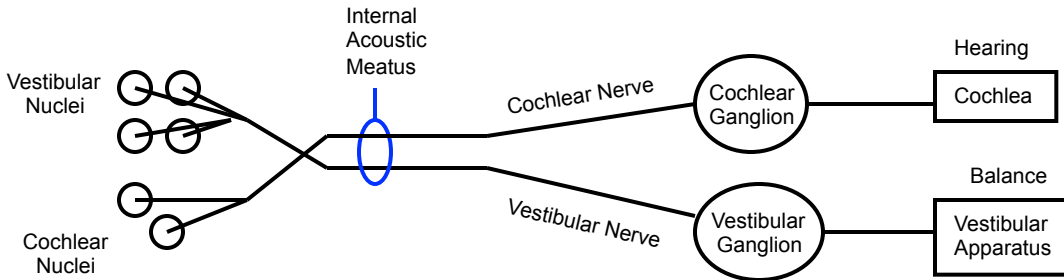
CN VII Facial

- Special Sensory
- Parasympathetic: dashed = preganglionic, solid = postganglionic
- Motor
- Sympathetic



CN VIII Vestibulocochlear

■ Special Sensory

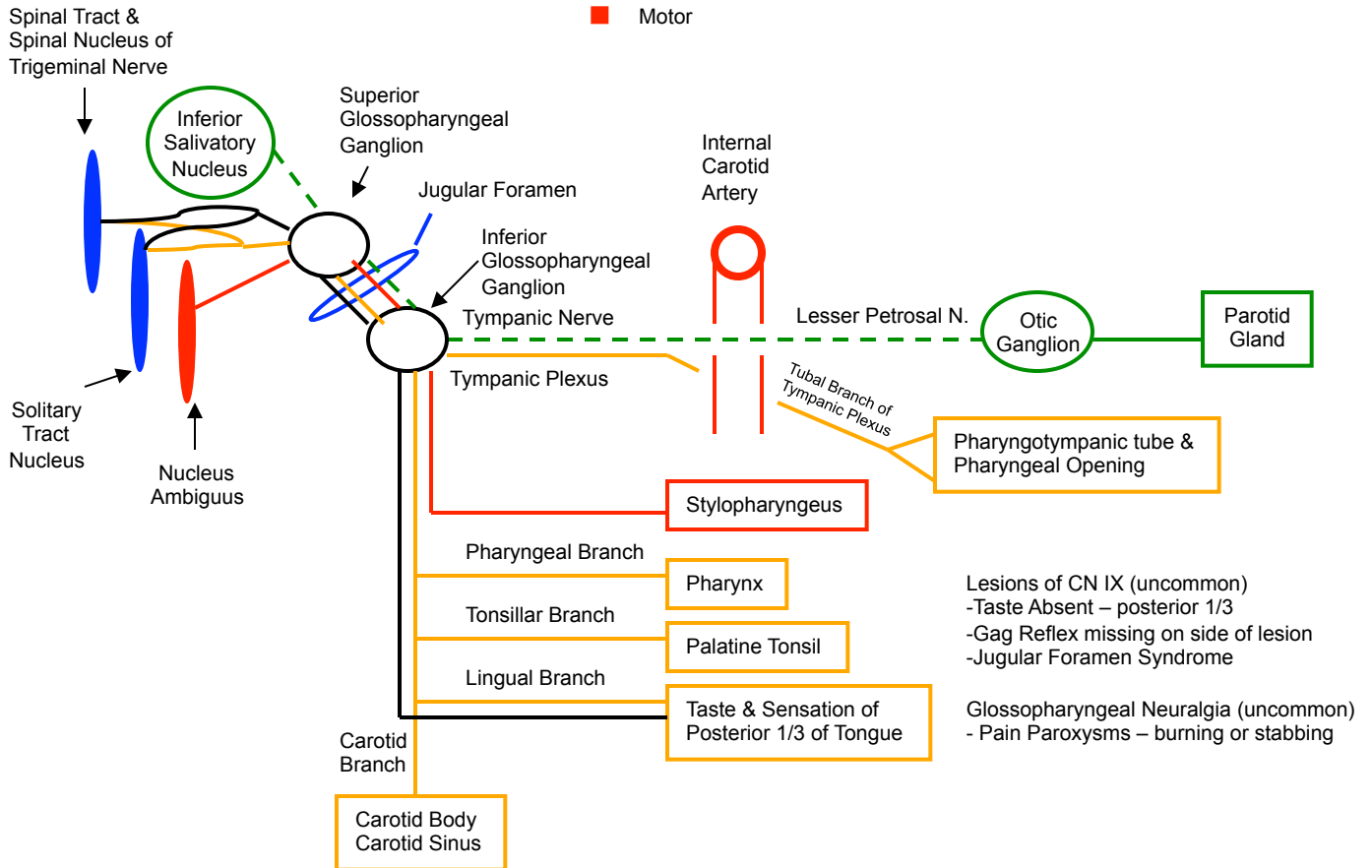


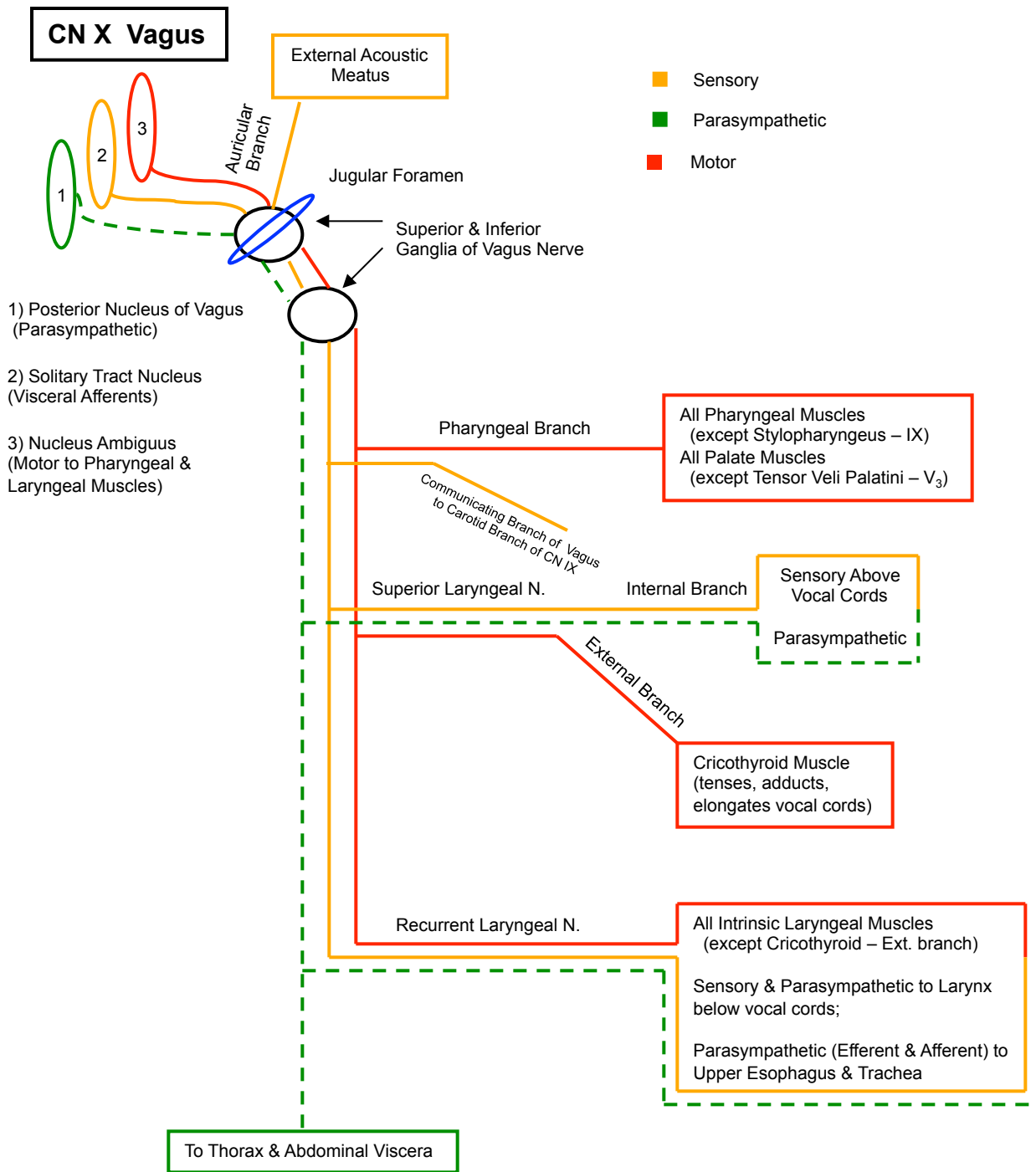
Vestibulocochlear Nerve Injuries

- Tinnitus, vertigo, loss of Hearing
- Deafness (conductive & sensorineural)
- Acoustic Neuroma
- Trauma & Vertigo
- Ménière Syndrome – endolymphatic hydrops, tinnitus, vertigo, nausea
- Vestibular Disease – TIA – transient ischemic attack

CN IX Glossopharyngeal

- Sensory
- Special Sensory
- Parasympathetic
- Motor





Lesions of Vagus Nerve

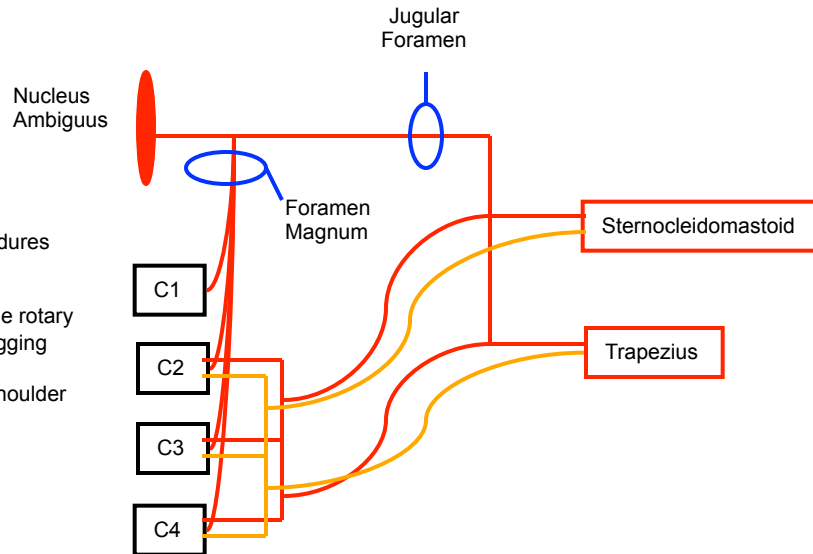
- Injury to pharyngeal branch
 - Dysphagia (difficulty swallowing)
- Lesion of superior laryngeal nerve
 - Anesthesia in upper larynx & paralysis of cricothyroid muscle
 - Voice is weak & tires easily
- Injury to Recurrent Laryngeal
 - Caused by aortic aneurysm or neck operations
 - Hoarseness, dysphonia (↓ voice quality)
 - If both sides, aphonia (no voice) & inspiratory stridor (crowing sound during inspiratory phase)

CN XI Spinal Accessory

- Motor
- Sensory (Proprioceptive)

Injury During Special Procedures Lesions

- Weakness and atrophy
- Impairment of opposite side rotary movements (SCM) & shrugging movements
- Scapular winging during shoulder abduction



CN XII Hypoglossal

- Motor

