<table>
<thead>
<tr>
<th>CN</th>
<th>Examples of Injury</th>
<th>Clinical Features</th>
</tr>
</thead>
</table>
| I  | ▪ Shearing of olfactory nerve filaments  
▪ Fracture of cribriform plate  
▪ Frontal lobe lesion causing compression of olfactory bulb/tract  
▪ Possible SARS-CoV-2 infection | Anosmia or altered sense of smell and taste |
| II | Direct nerve trauma | → Immediate visual loss |
|    | Ischemia, edema, compression of the nerve | → Delayed visual loss |
|    | Optic chiasm insults | → Bitemporal hemianopsia |
| III | ▪ Basilar skull fracture  
▪ Uncal herniation or compression  
▪ Posterior communicating artery aneurysm | ▪ Binocular diplopia  
▪ Ptosis  
▪ Mydriasis (with involvement of parasympathetic fibers)  
▪ Upward and downward gaze palsy |
| IV | Fracture of the sphenoid wing Trochlear schwannoma | ▪ Patients report seeing double images that are vertically or obliquely oriented to each other  
▪ Improved diplopia with head tilted to contralateral side |
| V  | Cavernous sinus | ▪ Asymmetry of jaw on opening  
▪ Weakness with mastication |
| VI | Cavernous sinus or skull base injury | ▪ Extraocular palsy resulting by medial deviation of ipsilateral eye  
▪ Improved diplopia when the contralateral eye is abducted |
| VII | Temporal bone fracture  
Direct intra-temporal trauma from gunshot wounds  
Pregnancy  
HSV | ▪ Paralysis of facial expression  
▪ **Peripheral lesion** involves muscles of both the upper and lower face and can involve loss of taste from the anterior 2/3 of the tongue.  
▪ **Central lesion** results in sparing of upper and frontal orbicularis oculi due to crossed innervation.  
Note: Spared ability to raise eyebrows, wrinkle forehead helps differentiate a peripheral palsy from a central process |
| VIII | Temporal bone fracture | Hearing loss, vertigo and nystagmus |
| IX | Posterior fossa or jugular foramen | ▪ Numbness of ipsilateral pharynx  
▪ Dysphagia with absent gag reflex |
| X  | Skull base injury | ▪ Ipsilateral drooping of soft-palate with uvular deviation towards the affected side  
▪ Dysphagia, dysphonia, epiglottic paralysis and decreased gag reflex |
| XI | Skull base injury | Ipsilateral paralysis of sternocleidomastoid and trapezius |
| XII | Skull base injury  
Nasopharyngeal neoplasms  
Carotid endarterectomy | Tongue protrusion AWAY from side of lesion |