

**Mohannad Sharifi**  
**Group B - 430**  
**CNS-block**

الجدول لا يغنى عن المحاضرة

	Glossopharyngeal (IX)				Vagus (X)			
	GVE	SVE	GVA	SVA	GVE	SVE	GVA	GSA
<b>origin</b>	Inferior salivatory nucleus	Nucleus ambiguus	----	Inferior ganglion	Dorsal nucleus of vagus	Nucleus ambiguus	----	Spinal tract of trigeminal
<b>supply</b>	Parotid salivary grand	Stylopharygeus	<ul style="list-style-type: none"> <li>• Pharynx &amp; posterior third of tongue (<b>mucosa</b>)</li> <li>• Auditory tube</li> <li>• Tympanic cavity</li> <li>• Carotid sinus</li> </ul>	Pharynx & posterior third of tongue ( <b>taste buds</b> )	<ul style="list-style-type: none"> <li>• Cardiac muscles</li> <li>• Smooth muscles</li> <li>• Visceral glands</li> </ul>	<ul style="list-style-type: none"> <li>• Pharynx</li> <li>• Larynx</li> </ul>	<ul style="list-style-type: none"> <li>• Neck</li> <li>• Thoracic</li> <li>• Abdominal cavity</li> </ul>	<ul style="list-style-type: none"> <li>• Auricle</li> <li>• External acoustic meatus</li> <li>• Cerebral dura mater</li> </ul>
<b>ending</b>	----	----	Nucleus solitarius		----	----	nucleus solitarius	----
<b>Branches</b>	<ul style="list-style-type: none"> <li>• <b>Tympanic:</b> gives secretomotor to the <b>parotid gland</b></li> <li>• <b>Nerve to Stylopharyngeus muscle</b></li> <li>• <b>Pharyngeal:</b> mucosa of <b>pharynx</b></li> <li>• <b>Tonsillar</b></li> <li>• <b>Lingual:</b> carries <b>GVA</b> &amp; <b>SVA</b> from the <b>posterior third of the tongue</b></li> <li>• <b>Sensory branches</b> from the <b>carotid sinus</b> (<b>baroreceptors</b> &amp; <b>chemoreceptors</b>)</li> </ul>				<ul style="list-style-type: none"> <li>• <b>Meningeal:</b> to <b>dura mater</b></li> <li>• <b>Auricular nerve:</b> to <b>external acoustic meatus</b> &amp; <b>tympanic membrane</b></li> <li>• <b>Pharyngeal:</b> <b>muscles and mucous of pharynx</b></li> <li>• <b>Nerve to carotid body</b></li> <li>• <b>Cardiac</b></li> <li>• <b>Superior Laryngeal:</b> divides into:               <ol style="list-style-type: none"> <li>1. <b>Internal Laryngeal:</b> <b>mucous of larynx</b> &amp; <b>vocal folds</b>.</li> <li>2. <b>External Laryngeal:</b> <b>Cricothyroid muscle</b>, <b>Recurrent Laryngeal</b>, <b>Mucous below vocal folds</b>, <b>Mucous of upper part of trachea</b></li> </ol> </li> </ul>			
<b>N.B.</b>	<ul style="list-style-type: none"> <li>• Connected to <b>Facial nerve (VII)</b></li> <li>• Has two ganglia:               <ul style="list-style-type: none"> <li>✓ Superior ganglion: <b>Small, no branches, connected with sympathetic ganglion</b> (notice that: <b>carries</b> parasympathetic &amp; <b>connected</b> with sympathetic)</li> <li>✓ Inferior ganglion: <b>Large, carries sensations from pharynx &amp; soft palate</b> (<b>revise SVA above</b>), connected with <b>Auricular Branch of Vagus</b></li> </ul> </li> </ul>				Has two ganglia: <ul style="list-style-type: none"> <li>✓ Superior ganglion: <b>in the jugular foramen, connected with sympathetic ganglion, Facial &amp; part of Glossopharyngeal</b></li> <li>✓ Inferior ganglion: <b>below the jugular foramen, connected with sympathetic ganglion, Hypoglossal, C1 &amp; part of Accessory</b></li> </ul>			
<b>Symptoms</b> (when injured)	<ul style="list-style-type: none"> <li>• Dysphonia</li> <li>• Dysphagia</li> <li>• Absence of <b>gag reflex</b></li> </ul>				<ul style="list-style-type: none"> <li>• <b>Hoarseness</b> or loss of voice</li> <li>• Dysphagia</li> <li>• GI dysfunction</li> <li>• Blood pressure anomalies (<b>due to defection in carotid body, which controls BP</b>)</li> </ul>			

# \*Notice:

- **GVE:** General **V**isceral **E**fferent.                      **SVE:** Special **V**isceral **E**fferent.                      **GSE:** General **S**omatic **E**fferent.
- **GVA:** General **V**isceral **A**fferent.                      **SVA:** Special **V**isceral **A**fferent.                      **GSA:** General **S**omatic **A**fferent.
- Both CNs arise from rostral medulla between olive & inferior cerebellar peduncle, & leave the skull via jugular foramen
- **GVE** always about parasympathetic activities (think about the organs that maybe affected by ANS)
- **SVE** origins are always Nucleus ambiguus, & supplies almost all muscles in oral cavity & neck
- ..VA endings are always Nucleus solitarius