



# Nerve supply of the Face

ملاحظة:

هذا الملف للمراجعة وترتيب المعلومات فقط وليس مرجع للمذاكرة لانه ليست كل المعلومات متضمنة



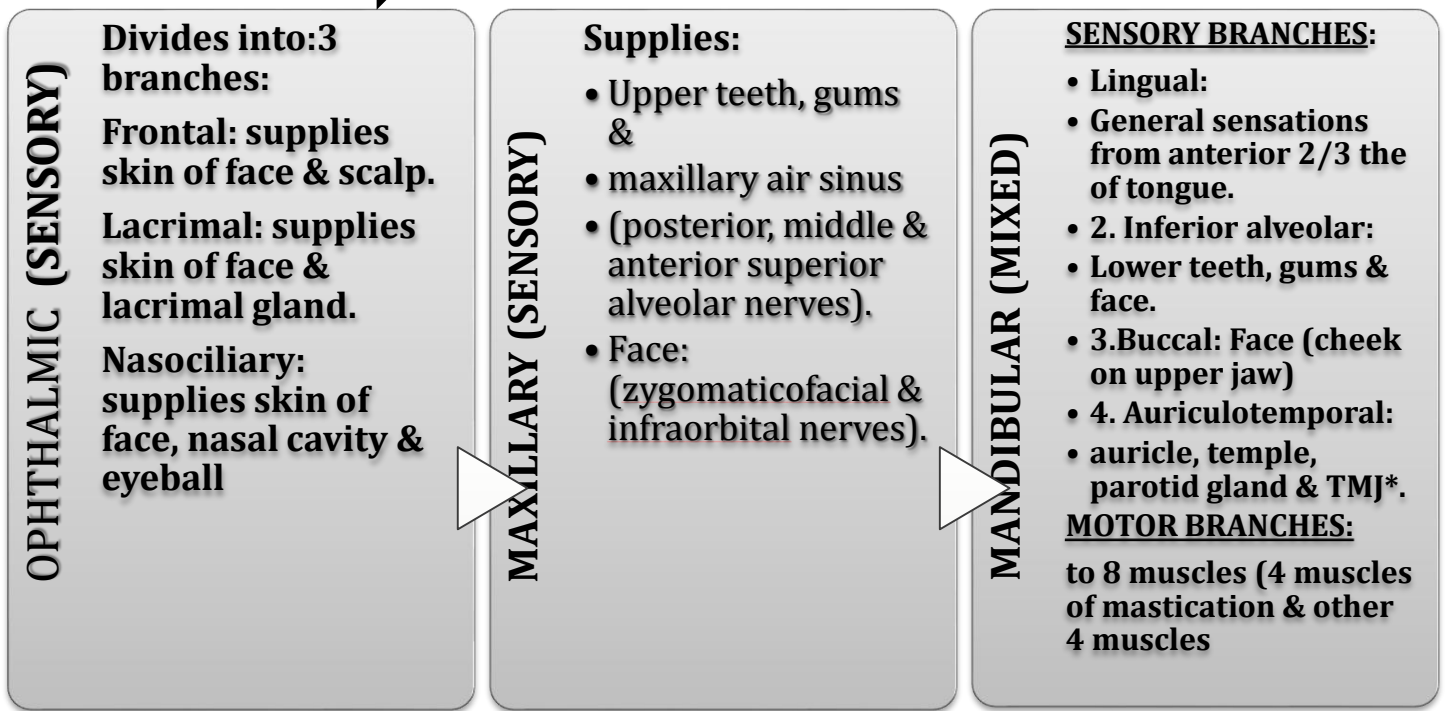
Done by:

رند الحميضي

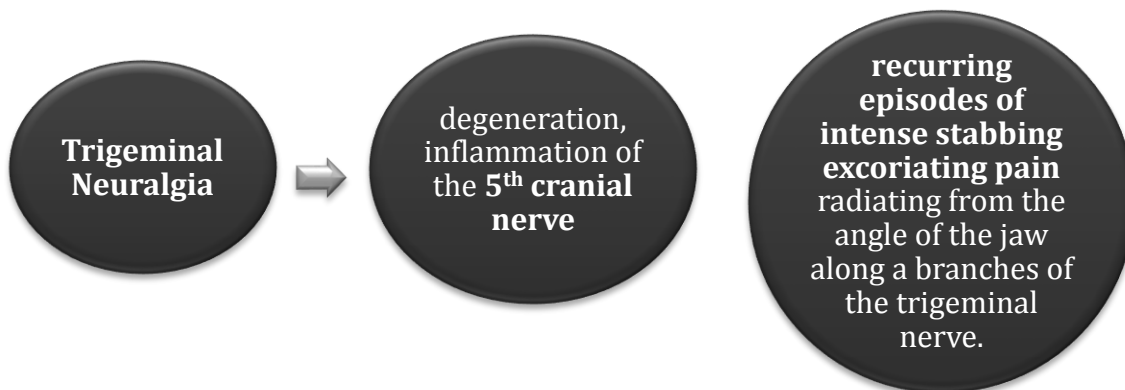
# 1-TRIGEMINAL NERVE “5<sup>TH</sup> cranial nerve-MIXED”:

<b>Fibers</b>	<b>General somatic afferent :</b> <b>“3 sensory nuclei”</b> Carrying <u>general sensations from face.</u>			<b>Special visceral efferent :</b> <b>“only one motor Nuclei “</b>
<b>Type of Nucleus</b>	<b>MESENCEPHALIC</b>	<b>PRINCIPAL SENSORY</b>	<b>SPINAL</b>	<b>Motor nucleus</b>
<b>Location of the nucleus :</b>	midbrain & pons	pons	pons, medulla & upper 2\3cervical segments of spinal cord.	Pons
<b>Function:</b>	Receives <u>proprioceptive</u> from muscles of mastication.	receives touch from face & scalp	Receives pain & temperature sensations from face & scalp.	<u>Supply muscles</u> developed from the <b>1<sup>st</sup> pharyngeal arch</b> “ 8 muscle “
<b>TRIGEMINAL GANGLION: Occupies a depression in the middle cranial fossa</b>	Contains <b>cell bodies</b> Whose: <b>dendrites</b> ➡ <u>sensations</u> from the face . <b>axons</b> ➡ form the <u>sensory root</u> of trigeminal nerve.			
<b>Course</b>	<i>Emerges</i> from the middle of the ventral surface of the pons by 2 roots : <b>1-Large Lateral sensory. 2- small medial motor</b>			

Division :



- **TMG** : Temporomandibular joint .



For better understanding :

- 1- <https://www.youtube.com/watch?v=UDEXvBbUOck>
- 2- <https://www.youtube.com/watch?v=iJnYA20ntXE>

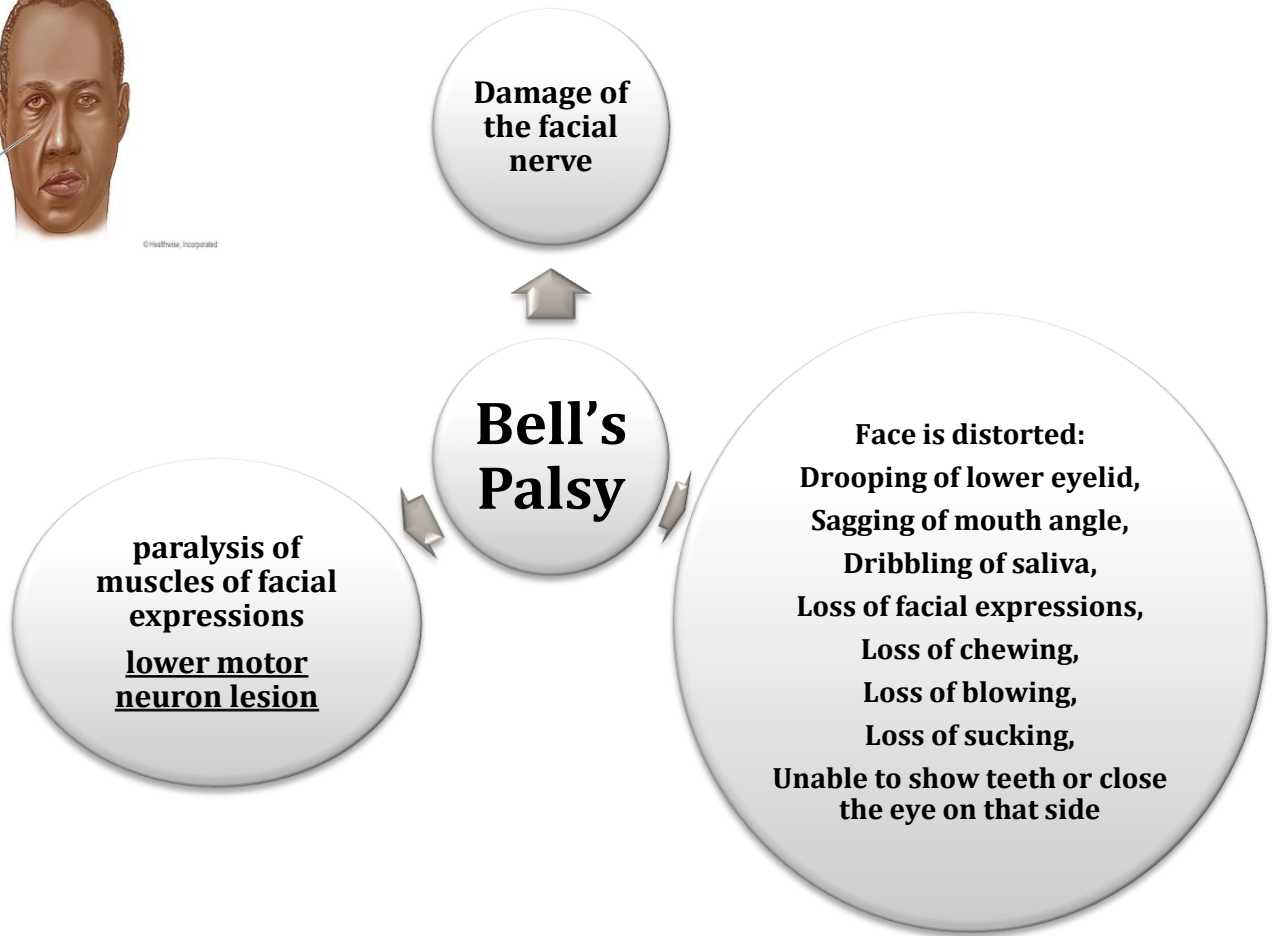
• **FACIAL NERVE “ MIXED 7th- ( Motor, special sensory, parasympathetic).”**

Fibers:	Special visceral <u>afferent</u>	Special visceral <u>efferent</u>	General visceral <u>efferent</u>
<b>Type of Nucleus:</b>	nucleus solitaries “medulla”	Motor nucleus for facial nerve “ pons”	superior salivatory nucleus. “pons”
<b>Function:</b>	receives taste from the anterior 2/3 of tongue.	Supplies muscles of face, from the 2 <sup>nd</sup> pharyngeal arch: posterior belly of digastric-stylohyoid-platysma- stapedius-occipitofrontalis.	send preganglionic parasympathetic secretory fibers to : -sublingual -submandibular -lacrimal -nasal & palatine glands.

**Course** Emerges from the cerebellopontine angle by 2 roots:  
 1-Medial motor root: contains motor fibers.  
 2-Lateral root : contains parasympathetic & taste fibers  
 Then ➡ Passes through internal auditory meatus to inner ear where it runs in facial canal.  
 Then ➡ Emerges from the stylomastoid foramen & enters the parotid gland where it ends.

BRANCHES	<u>In facial canal:</u>	<u>In stylomastoid foramen :</u>	<u>in parotid gland:</u>
	1-Greater petrosal nerve. 2-Chorda tympani. 3- Nerve to stapedius.	1-Posterior auricular. 2-Muscular branches to posterior belly of digastric & stylohyoid.	1- <i>Temporal,</i> 2- <i>Zygomatic,</i> 3- <i>Buccal,</i> 4- <i>Mandibular&amp;Cervical.</i> <i>To the muscle of face.</i> <i>“ terminal branches “</i>

**Geniculate ganglion:** contains cell bodies of neurones ; its fibers carrying taste sensations from anterior 2/3 of tongue; ending in solitary nucleus in M.O .  
Lies in internal acoustic meatus.



Note:

lower motor neuron lesion: whole face affected

upper motor neuron lesion: upper face only is intact .

- For better understanding “ 4 min vedio “ :

<https://www.youtube.com/watch?v=zGFyMspW8W4>

ربي يوفقكم.