**\*ANATOMY \* MANDIBULAR NERVE \* LEC.12**

* **Introduction:**- Mr. trigeminal nerve divides into 3 branches: 1. Ophthalmic
 2. Maxillary
 3. **Mandibular**
- Mandibular nerve :
 🡪 the largest branch of trigeminal
 🡪 passes through foramen ovale
 🡪 gives motor and sensory branches “mixed”
 🡪 it’s sensory branches “from anterior toposterior” : 1. Buccal
 2. Lingual
 3. Inferior alveolar
 4. Auriculotemporal
 🡪 buccal nerve of mandibular passes medial to ramus of mandible, **opposite** to the buccal branch of facial “motor”.
 🡪 lingual nerve: crosses the submandibular duct, then it will go to the tongue.

* **Story of chorda tympani: page #6**- notice the: - trigeminal nerve “stem”
 - trigeminal ganglion
 - it’s 3 branches

- notice the : - mandibular nerve
 - foramen ovale
 - lingual nerve : - it’s joined with the chorda tympani “befor passing between lateral and medial pterygoid muscles
 - chorda tympani originates from facial nerve “tha leaves the skull through “**stylomastoid foramen**”

- **Facial nerve**: - leaves the skull through stylomastoid foramen
 - before entering it’s related foramen, it will give branch that will go to the lateral wall of the ear “middle ear”, known as chorda tympani
 - **otitis media** may affect the chorda tympani, because it exists within **thin** canal that can be eroded by otitis, therefore affecting the tympani
 - chorda tympani joins with lingual nerve with it’s sleeve

- **lingual nerve** : - after joining the tympani, it became in mixture:

 1. Lingual “itself”🡪 for general sensation
 2. Chorda tympani:
 🡪 for special sensation
 🡪 synapses with submandibular ganglion “relay”
 🡪 all the part of chorda tympani before synapsis called “preganglionic parasympathetic”
 🡪 this synapse gives postganglionic fibers : **1. Secretomotor fibers to submandibular gland
 2. Secretomotor fibers to the sublingual gland
 3. Special sensation secretomotor for anterior to two third of tongue “ taste buds: sour/bitter/sweat/salty”**
- dental carries may affect the inferior alveolar nerve
- mental nerve may be visible through oral mucosa in old age people.
- neck of the mandible is so important for us as dentists
- auriculotemporal nerve doesn’t supply the skin of the pinna
- **auriculotemporal nerve isn’t sensory only “it’s sleeve is mixed” ???** ie: 🡪 glossopharyngeal nerve gives branch called “tympanic nerve
 🡪 tympanic nerve is close to “(tympanic membrane/middle ear)” forming tympanic plexus within
 🡪 tympanic plexus gives the “lesser petrosal nerve”
 🡪 lesser petrosal will pass the foramen ovale with mandibular nerve
 🡪note: foramen ovale transmitting : 1. Mandibular nerve
 2. Lesser petrosal nerve
 3. Accessory middle meningeal artery “if present”

 🡪 as the lesser petrosal descends downward, it faces the “otic ganglion” where it will synapse
 🡪 so all the part of lesser petrosal before synapsing is the preganglionic parasympathetic part
 🡪 from this ganglion, it will give postganglionic secretomotor fibers to the parotid gland “through the auriculo temporal nerve within it’s sleeve”
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* + **Salivary glands:**- we have 3 pairs of salivary glands : 1. Parotids 🡪 supplied by glossopharyngeal nerve “lesser petrosal” through auriculotemporal nerve
	 2. Submandibulars
	 3. sublinguals **🡪 note:
	 - otic ganglion : - located within the infratemporal fossa below foramen ovale
	 - it’s a relay station of lesser petrosal nerve “from IX”**

**By facial nerve “chorda tympani through lingual nerve**

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 # Hope everything is clear ☺
 # fight for the top ☺

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