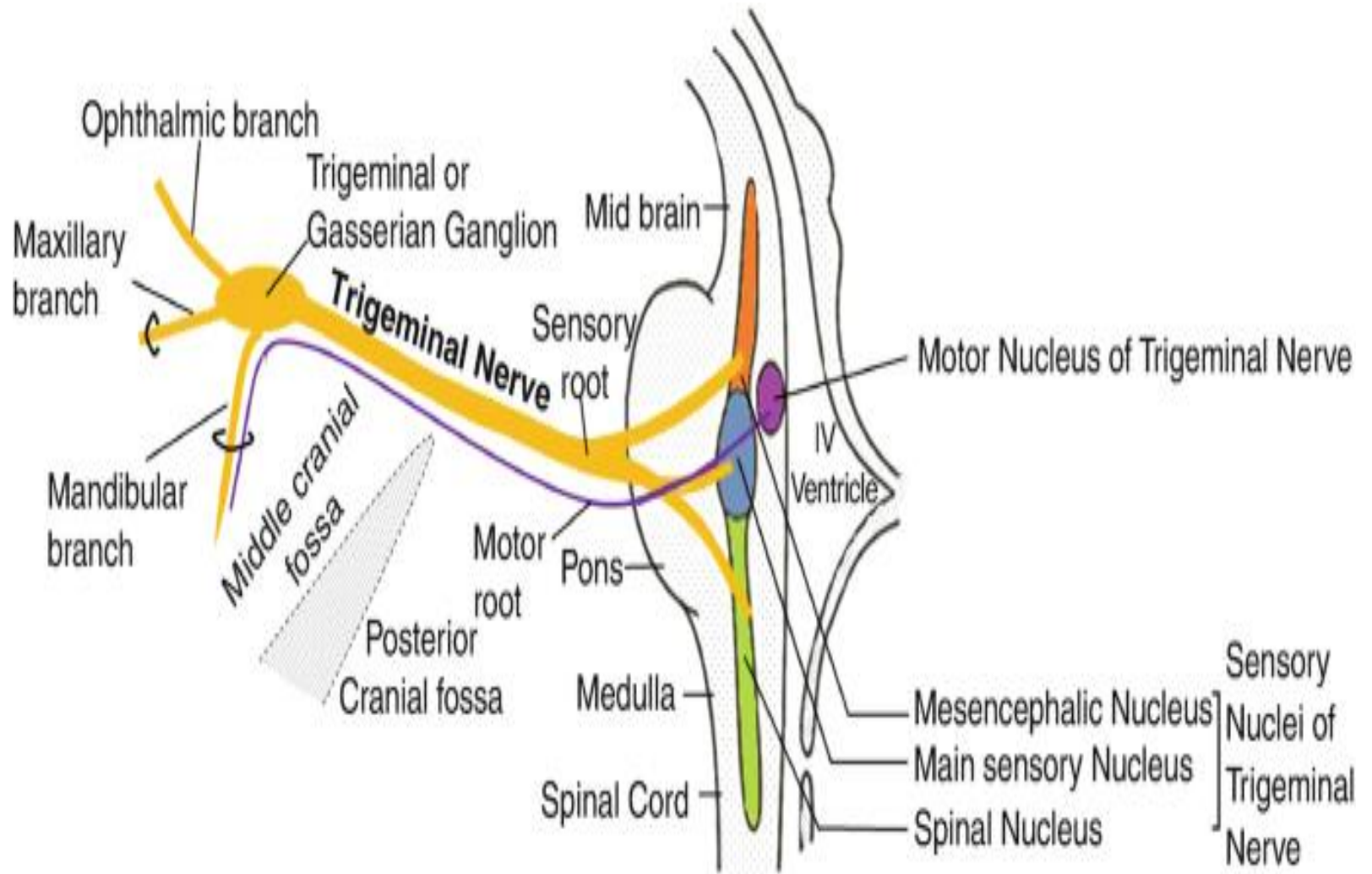


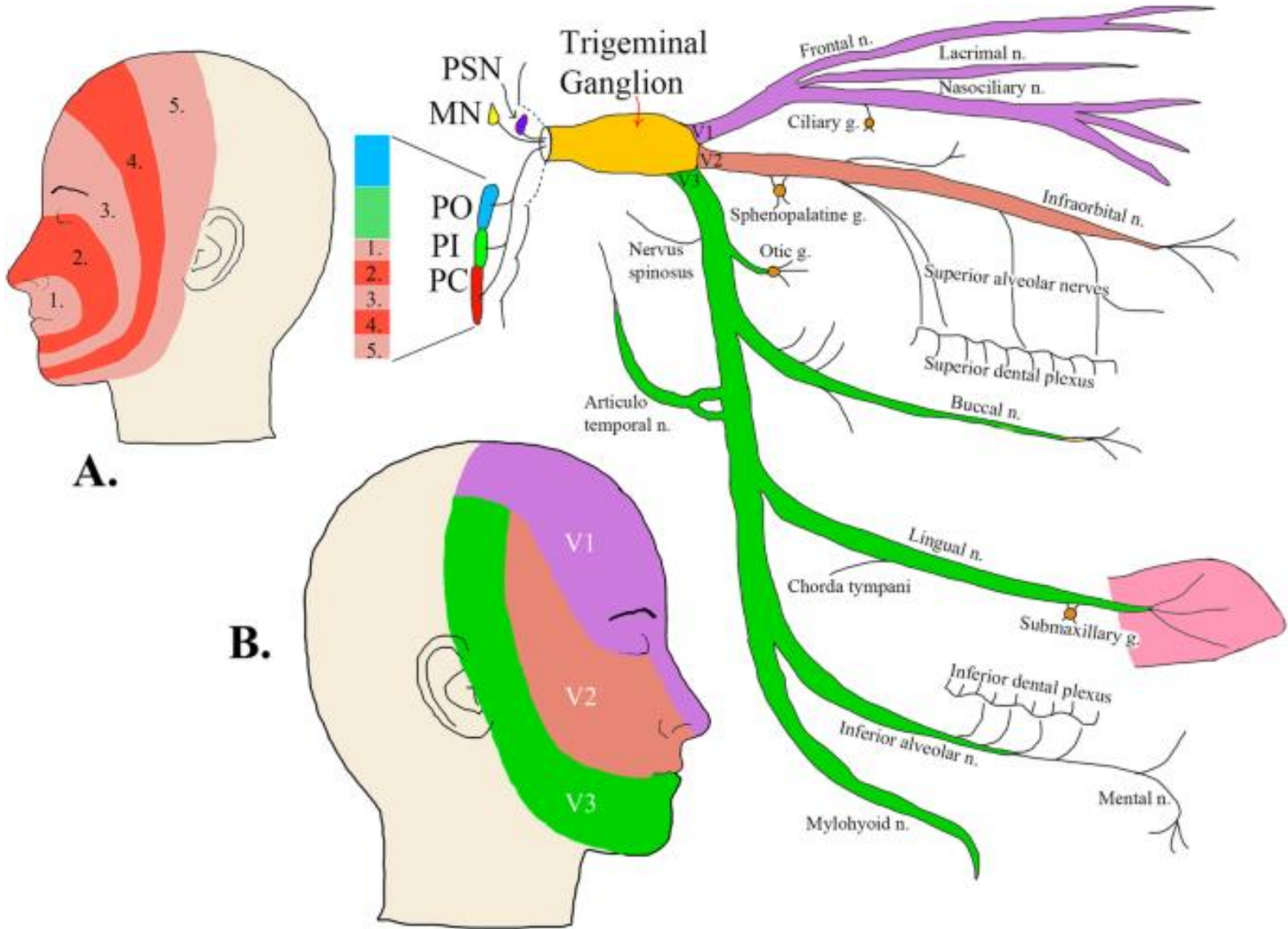
Mandibular nerve

L9

mandibular nerve

- (CN V3) is the inferior and largest division of the trigeminal nerve
- It is formed by the union of sensory fibers from the sensory ganglion and the motor root of CN V in the foramen ovale in the greater wing of the sphenoid, emerges from the cranium to enter the infratemporal fossa

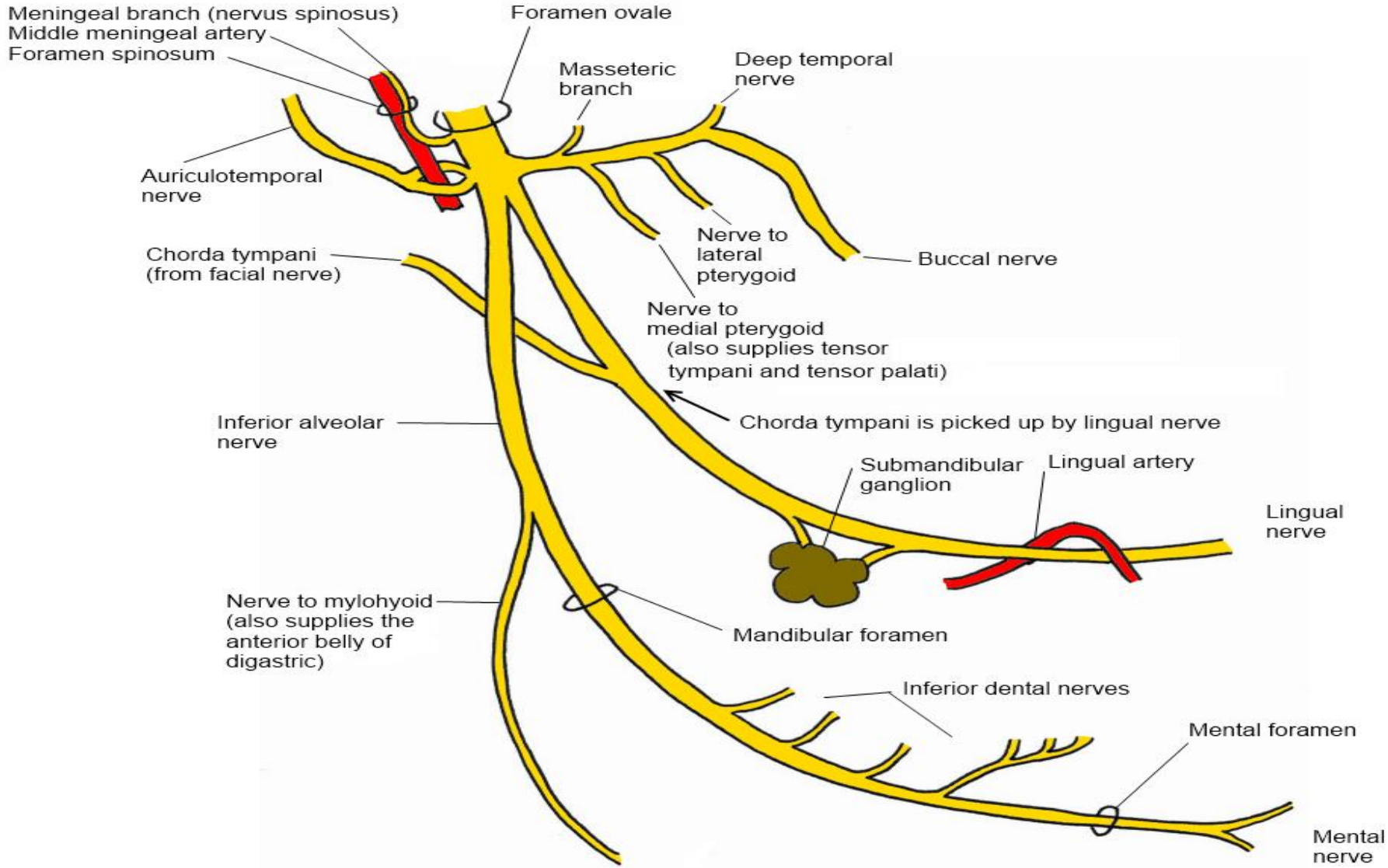




mandibular nerve

- It then divides into a small anterior and a large posterior division. The mandibular nerve has **three major cutaneous** branches(auriculotemporal, buccal, and mental nerves);
- it also supplies **motor fibers** to the muscles of mastication.
- It is the only division of CN V that carries motor fibers

MANDIBULAR NERVE



Branches of the Mandibular Nerve

- **The Main Trunk**

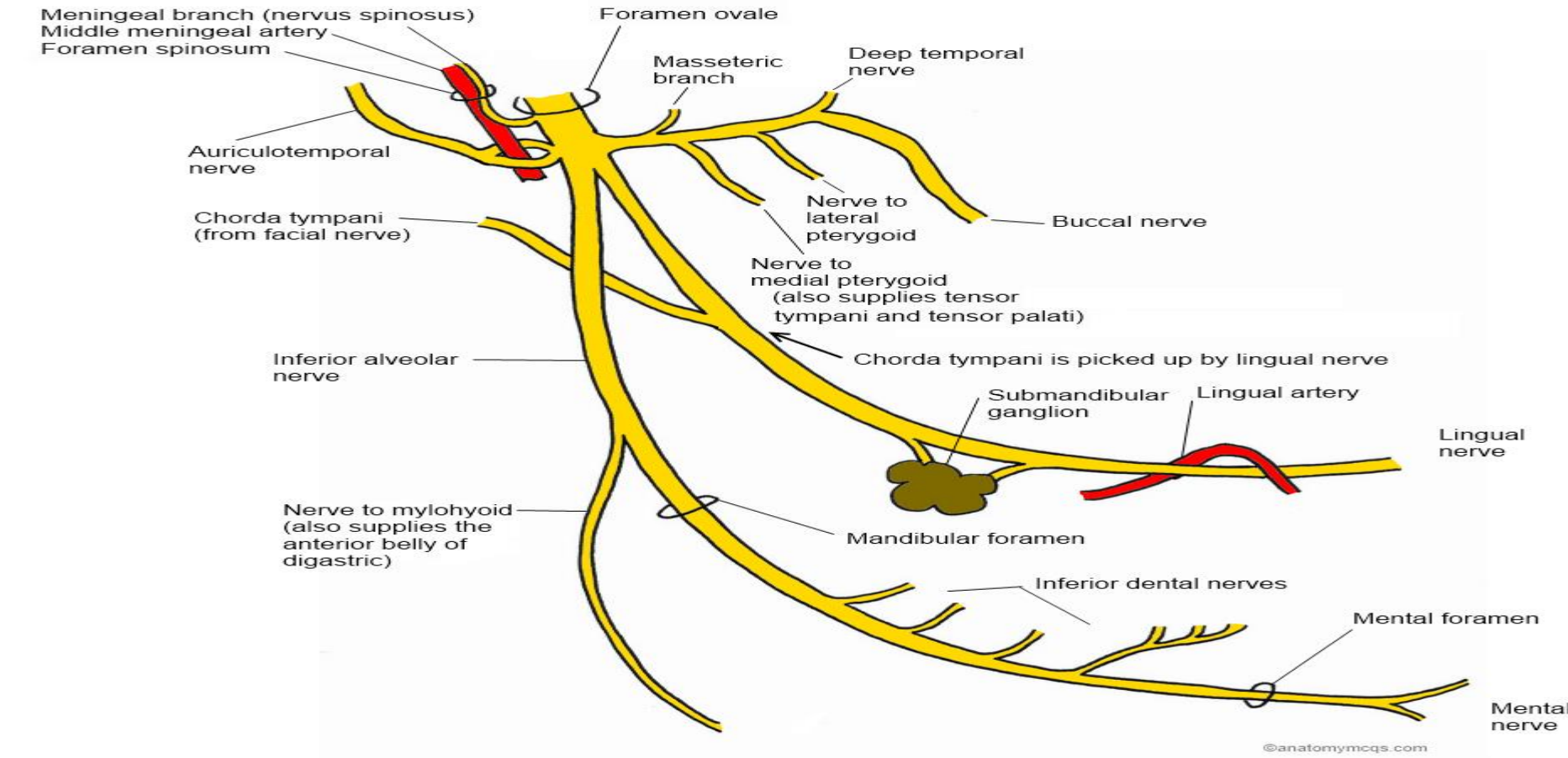
1. Meningeal branch (recurrent branch, nervus spinosus), it runs back into the middle cranial fossa through the foramen spinosum. It supplies the dura mater and the mucous lining of the mastoid air cells.
2. Nerve to the medial pterygoid muscle, which supplies not only the medial pterygoid, but also the tensor tympani and tensor veli palatini muscles.

Branches of the Mandibular Nerve

• The Anterior Division

1. Masseteric nerve to the masseter muscle and TMJ.
2. Deep temporal nerves to the temporalis muscle and TMJ.
3. Nerve to the lateral pterygoid muscle
4. Buccal nerve to the skin and the mucous membrane of the cheek
5. The buccal nerve **does not** supply the buccinator muscle (which is supplied by the facial nerve), and it is the only sensory branch of the anterior division of the mandibular nerve.

MANDIBULAR NERVE



Branches of the Mandibular Nerve

• The Posterior Division

1. **Auriculotemporal nerve**, which supplies the skin of the auricle, the external auditory meatus, the temporomandibular joint, and the scalp nerve also conveys postganglionic parasympathetic secretomotor fibers from the **otic ganglion** to the parotid salivary gland.
1. **Lingual nerve**, which descends in front of and medial to the inferior alveolar nerve and enters the mouth. It then runs forward on the side of the tongue and crosses the submandibular duct. In its course, it is joined by the chorda tympani nerve and it supplies the mucous membrane of the anterior two thirds of the tongue and the floor of the mouth.

It also gives off preganglionic parasympathetic secretomotor fibers to the **submandibular ganglion**.

Branches of the Mandibular Nerve

- The branches of the posterior division of the mandibular nerve are sensory except the nerve to the mylohyoid muscle.

Otic Ganglion

- The otic ganglion is a parasympathetic ganglion that is located medial to the mandibular nerve just below the skull, and it is adherent to the nerve to the medial pterygoid muscle.
- The preganglionic fibers originate in the **glossopharyngeal nerve**, and they reach the ganglion via the **lesser petrosal nerve**.
- The postganglionic secretomotor fibers reach the parotid salivary gland via the auriculotemporal nerve.