# Anatomy

Lec. 14

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## The trigeminal nerve:

The trigeminal nerve is the 5<sup>th</sup> cranial nerve which is a mixed nerve both sensory and motor fibers but the sensory nerve more important than the motor nerve.

The trigeminal nerve divided into three main divisions called ophthalmic nerve, maxillary nerve and mandibular nerve:

#### The mandibular nerve:

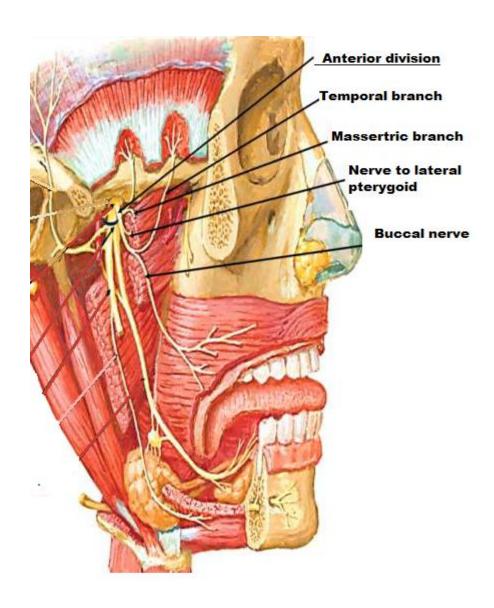
It is the **third** division of the trigeminal nerve it is mixed **sensory** and **motor** and leaves the cranial cavity through foramen **ovale** and divided into:

- Anterior division.
- Posterior division.
- Nerve to medial pterygoid muscle.

#### 1. Anterior division of mandibular division of the trigeminal nerve:

it gives 3 motor branches and 1 sensory branch:

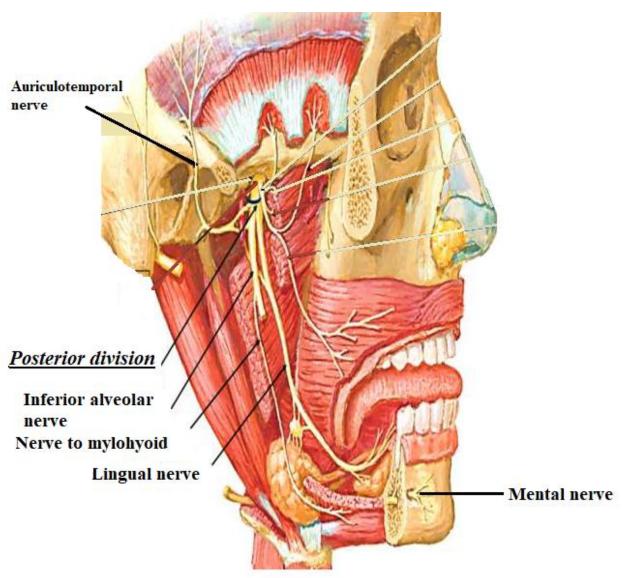
- **1. The masseteric nerve:** it supplies the masseter muscle.
- 2. The two deep temporal nerves: it supplies the temporalis muscle.
- 3. The nerve to lateral pterygoid muscle.
- **4. The buccal nerve:** it is sensory nerve that supplies the skin over the cheek and mucous membrane lining the cheek.



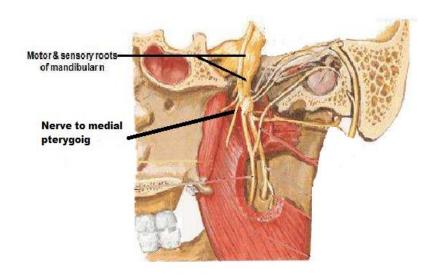
2. Posterior division of mandibular division of the trigeminal nerve:

It gives 2 sensory branch and 1 motor branches:

- **1.The auriculotemporal nerve:** it supplies the skin of the auricle, external auditory meatus and the skin of the scalp above the auricle.
- **2. The lingual nerve:** it supplies the mucous membrane of the anterior 2/3 of the tongue, floor of the mouth, and the lingual surface of the gums.
- **3.** The inferior alveolar nerve: it made of motor and sensory fibers. The motor fiber supplies the mylohyoid muscle. The sensory fiber enters the mandibular foramen and run forward below the teeth so it supplies the lower teeth. It emerges through the *mental foramen* of the mandible to become **the mental nerve** that supplies the skin of the lower lip and the chin.



3. Nerve to medial pterygoid muscle.



### The skin of the face supplies by:

The mandibular nerve supplies the skin of the lower lip, lower part of the face, the temporal region, the auricle and upward to the side of the scalp. There are 3 branches:

- 1. The mental nerve.
- 2. The buccal nerve.
- 3. The auriculotemporal nerve.

