

| Muscles                      | Origin   | Insertion  | Nerve supply  | Action  |
|------------------------------|--|--|---|---|
| Temporalis muscle            | from the bony surfaces of the temporal fossa   | coronoid process<br>And anterior border of the ramus of the mandible                               | deep temporal nerves from the mandibular nerve [V3]     | Temporalis is a powerful elevator of the mandible, closing jaws<br>Retraction of the mandible |
| Masseter muscle              | the zygomatic arch, maxillary process of zygomatic bone.   | into the lateral surface of the ramus of the mandible  | masseteric nerve from the mandibular nerve [V3]         | elevation of the mandible, closing jaws   |
| Medial pterygoid             | medial surface of the lateral pterygoid plate  | medial surface of the ramus of mandible near the angle   | medial pterygoid from the mandibular nerve [V3].        | The medial pterygoid mainly elevates the mandible, closing jaws                               |
| Lateral pterygoid            | The upper head originates from the roof of the infratemporal fossa (inferior surface of the greater wing of the sphenoid and the infratemporal crest)<br>The lower head is larger and originates from the lateral surface of the lateral pterygoid plate | into the neck of mandible (pterygoid fovea), into the capsule of the Temporomandibular joint (TMJ) | lateral pterygoid from the mandibular nerve [V3].       | The lateral pterygoid is the major protruder of the lower jaw                                 |
| Geniohyoid                   | Inferior mental spine of mandible  | Body of hyoid bone   | First cervical nerve (cervical plexus)                  | Elevates hyoid bone or depresses mandible   |
| Mylohyoid                    | Mylohyoid line of mandible   | Body of hyoid bone and fibrous raphe   | Nerve to mylohyoid (from inf. alveolar n/ mandibular n) | Elevates floor of mouth and hyoid bone or depresses mandible                                  |
| Anterior belly of digastric  | Digastric fossa of the mandible  | Intermediate tendon is held to hyoid by fascial sling  | Nerve to mylohyoid (mandibular nerve)                   | Depresses mandible or elevates hyoid bone   |
| Posterior belly of digastric | Mastoid notch  | Intermediate tendon is held to hyoid by fascial sling  | Facial nerve  | Depresses mandible or elevates hyoid bone   |

| Muscles             | Origin   | Insertion  | Nerve supply                                | Action  |
|---------------------|--|--|---|---|
| Stylohyoid          | Styloid process  | Body of hyoid bone   | Facial nerve                                | Elevates hyoid bone   |
| Sternothyroid       | Manubrium sterni (dorsal surface)  | Thyroid cartilage  | Ansa cervicalis (C1, 2, and 3)              | Depresses larynx  |
| Thyrohyoid          | Thyroid cartilage  | Body of hyoid bone   | First cervical nerve                        | Depresses hyoid bone or elevates larynx   |
| Omohyoid            | Superior belly Omohyoid —<br>>Body of hyoid bone.<br>Inferior belly of Omohyoid—<br>>Upper margin of scapula | Intermediate tendon is held to clavicle and first rib by fascial sling | Ansa cervicalis (C1, 2, and 3)              | Depresses hyoid bone  |
| Sternohyoid         | Manubrium sterni (dorsal surface) and sternoclavicular joint   | Body of hyoid bone   | Ansa cervicalis (C1, 2, and 3)              | Depresses hyoid bone  |
| Scalenus anterior   | Transverse processes of C3-C6  | First rib  | Anterior rami of cervical nerves            | Elevates first rib; laterally flexes the cervical spine   |
| Scalenus medius     | Transverse processes of C2-C7  | First rib (dorsal to scalene anterior)                                 | Anterior rami of cervical nerves            | Elevates first rib; laterally flexes the cervical spine   |
| Scalenus posterior  | Transverse processes of C4-C6  | Second rib   | Anterior rami of cervical nerves            | Elevates second rib; laterally flexes the cervical spine  |
| Sternocleidomastoid | Manubrium sterni and medial third of clavicle (two heads)  | Mastoid process and superior nuchal line                               | Spinal part of accessory nerve and C2 and 3 | Two muscles acting together extend head and flex neck; one muscle rotates head to opposite side |

