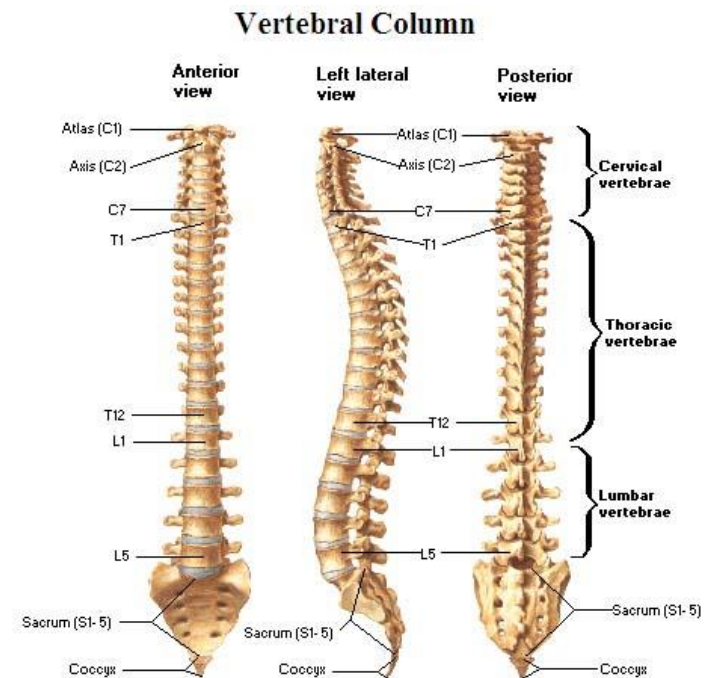


Anatomy and Physiology II

Review Spine and Neck

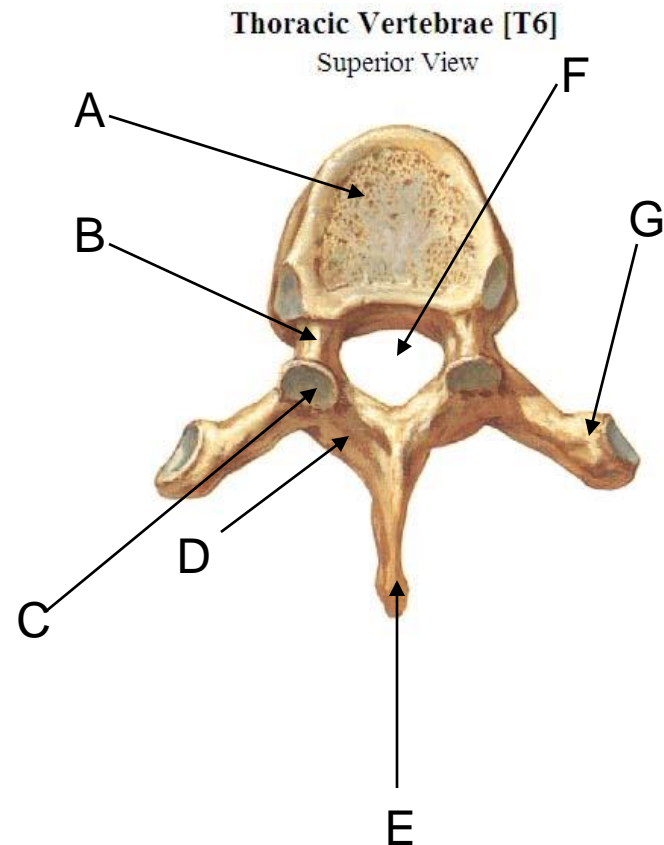
Review

- Spine regions
 - How many cervical vertebrae are there?
 - 7
 - The curvature is the cervical region posterior?
 - Concave posterior
 - How many thoracic? And curvature?
 - 12
 - Convex posterior
 - How many lumbar? And curvature?
 - 5
 - Concave posterior



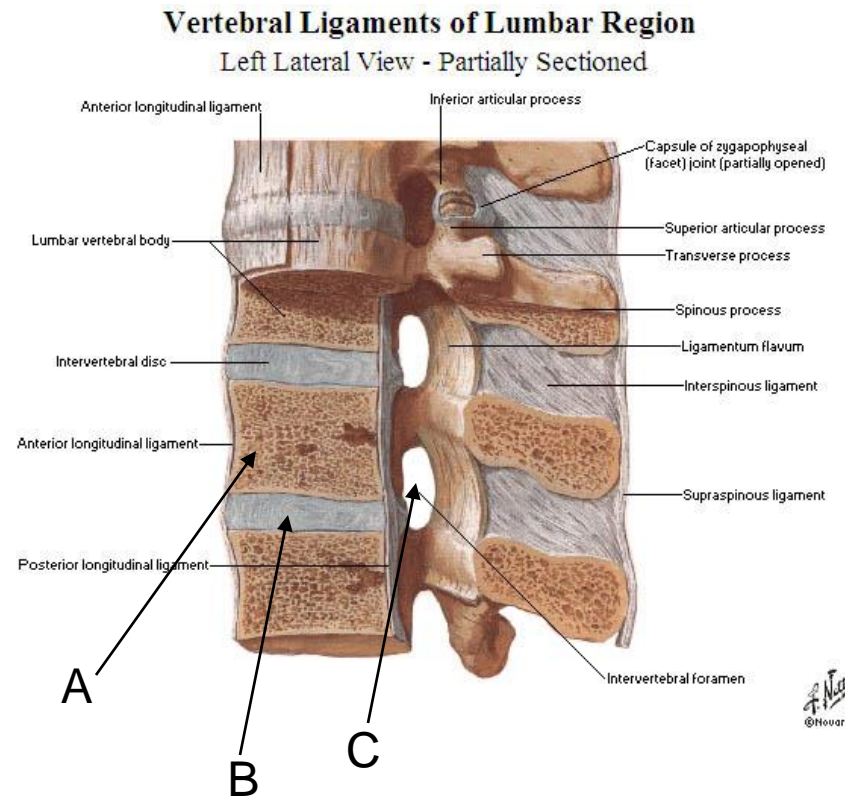
Review

- Name the following parts associated with the spine and vertebral column



Review

- Name the following parts associated with the spine and vertebral column



Review

- Which cervical vertebrae has the most prominent spinous process?
 - C7 aka vertebra prominens
- Which has the most prominent transverse process?
 - C1 aka Atlas

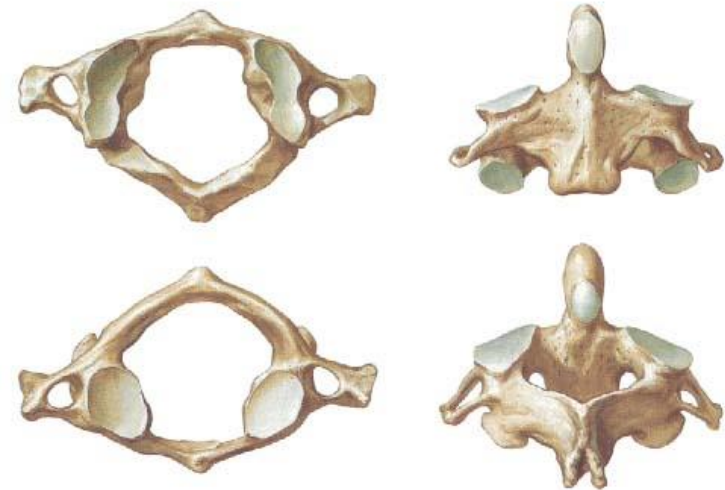
Cervical Vertebrae [C2-T1], Assembled
Right Lateral View



Review

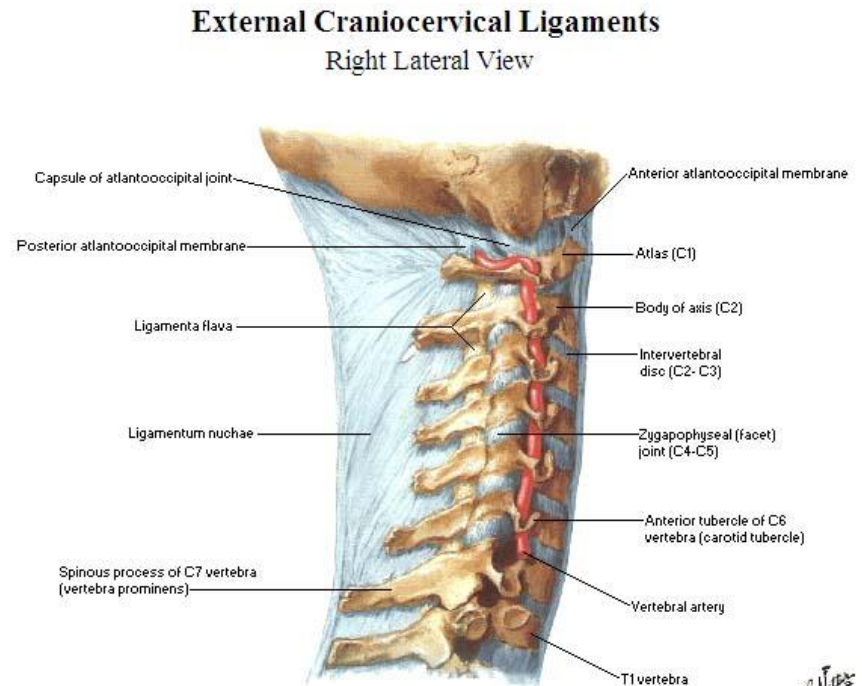
- Which cervical vertebra has no body?
 - C1 aka Atlas
- Which cervical vertebra has no spinous process?
 - C1 aka Atlas
- Which contains the dens?
 - C2 aka Axis
- What movement occurs at the atlanto occipital joint?
 - Flexion and extension – nodding yes
- What movement occurs at the atlantoaxial joint?
 - Rotations – nodding no

Cervical Vertebrae
Atlas and Axis



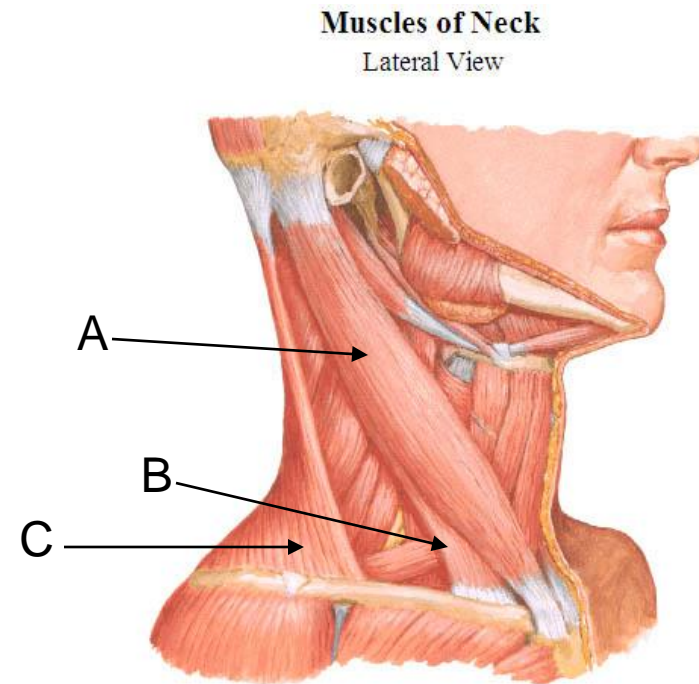
Review

- What ligament extends posterior from the cervical vertebrae? It spans from the EOP to C7.
 - Ligamentum nuchae (Nuchal ligament)



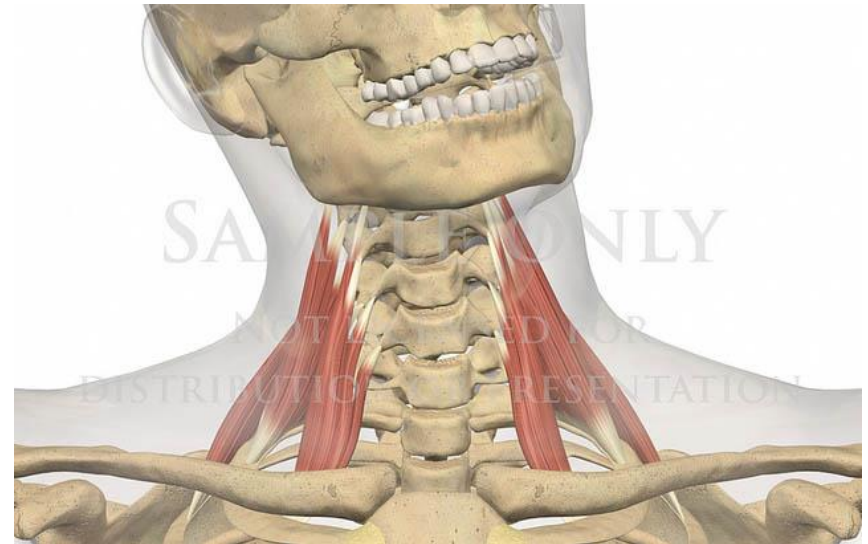
Review

- What are the attachments of the SCM
 - Sternum and clavicle
 - Mastoid process of temporal bone
- What muscle and head is indicated by A?
 - Sternal head of the SCM
- B?
 - Clavicular head of the SCM
- Which muscle is indicated by C?
 - Trapezius



Review

- What muscles are shown? They attach from the ribs to transverse processes of the cervical vertebrae
 - Scalenes
- What are its attachments
 - Ribs to Cervical TPs
 - *Anterior scalene* – First rib to TPs (anterior tubercles) of C3-C6
 - *Middle scalene* – First rib to TPs (posterior tubercles) of C2-C7
 - *Posterior scalene* – Second rib to TPs (posterior tubercles) of C5-C7
- What is significant about these in relation to breathing?
 - They are accessory breathing muscles
- What is significant about these in relationship to the brachial plexus?
 - The brachial plexus passes between the anterior and medial scalenes



Review

- What muscles are these?
 - Suboccipital muscles



Review

- Review and recognize muscles of the shoulder girdle that relate to the neck
 - Trapezius
 - Upper trapezius attachments
 - EOP and superior nuchal line of occiput, nuchal ligament and C7 *to the* Lateral 3rd of clavicle and acromion process of scapula
 - Levator scapula
 - TPs of C1-C4 *to the* medial border of scapula from root of spine to superior angle

Anatomy and Physiology II

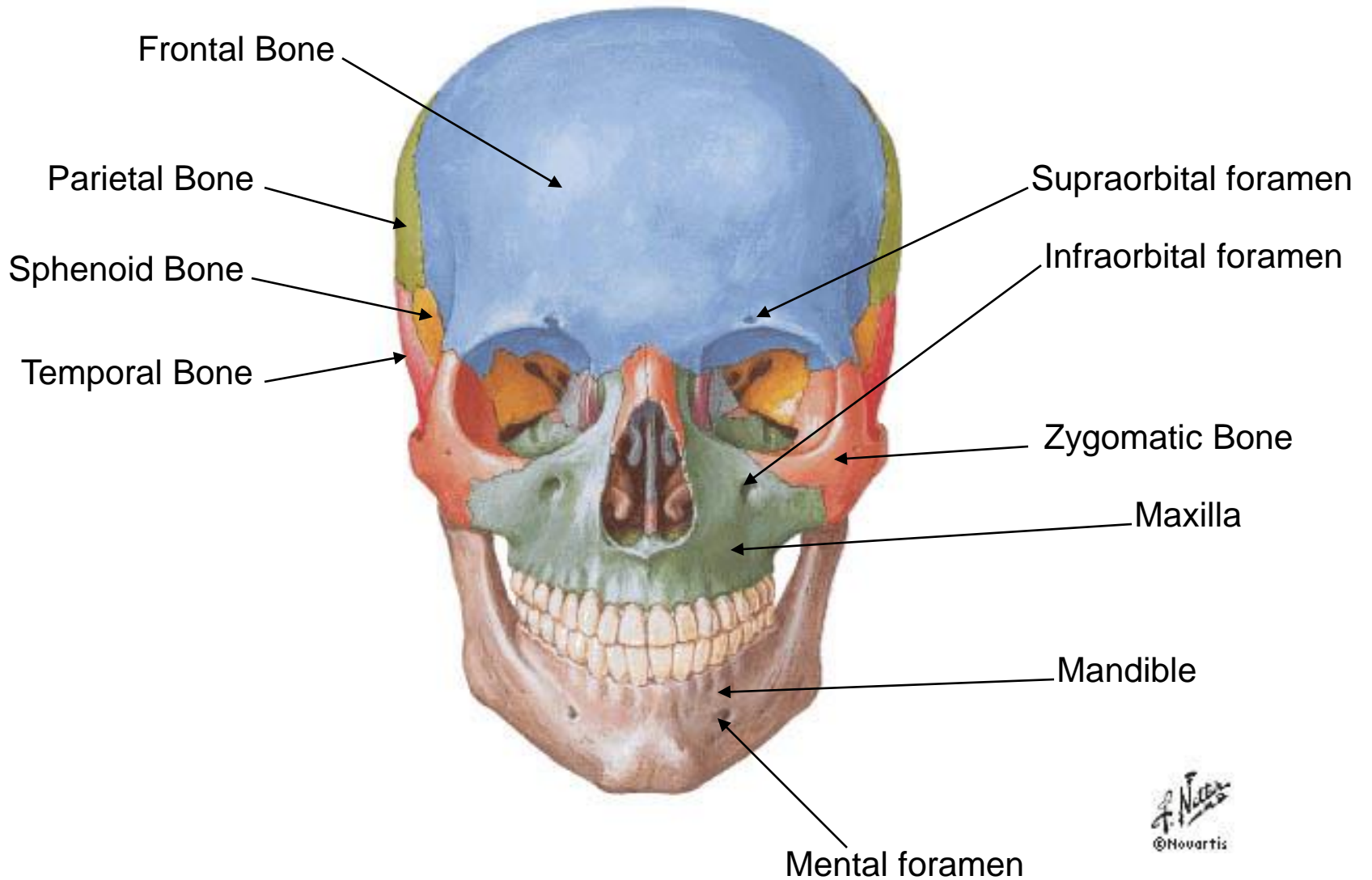
Face and Head

Bones

- Cranial Bones
 - Frontal Bone
 - Parietal Bone
 - Temporal Bone
 - Occipital Bone
 - Sphenoid Bone
- Facial Bones
 - Maxilla
 - Mandible
 - Zygomatic Bone
 - Nasal Bone
- Bony Landmarks of Cranial Bones
 - Mastoid process of Temporal Bone
 - Styloid process of Temporal bone
 - External Occipital Protuberance (EOP) of Occipital Bone
 - Foramen Magnum
 - Temporal Fossa
 - Supraorbital foramen (of the frontal bone)
- Bony Landmarks of Facial Bones
 - Zygomatic arch
 - Body, Angle, Ramus of Mandible
 - Condyle, Coronoid process of Mandible
 - Infraorbital foramen (of the maxilla)
 - Mental foramen (of the mandible)

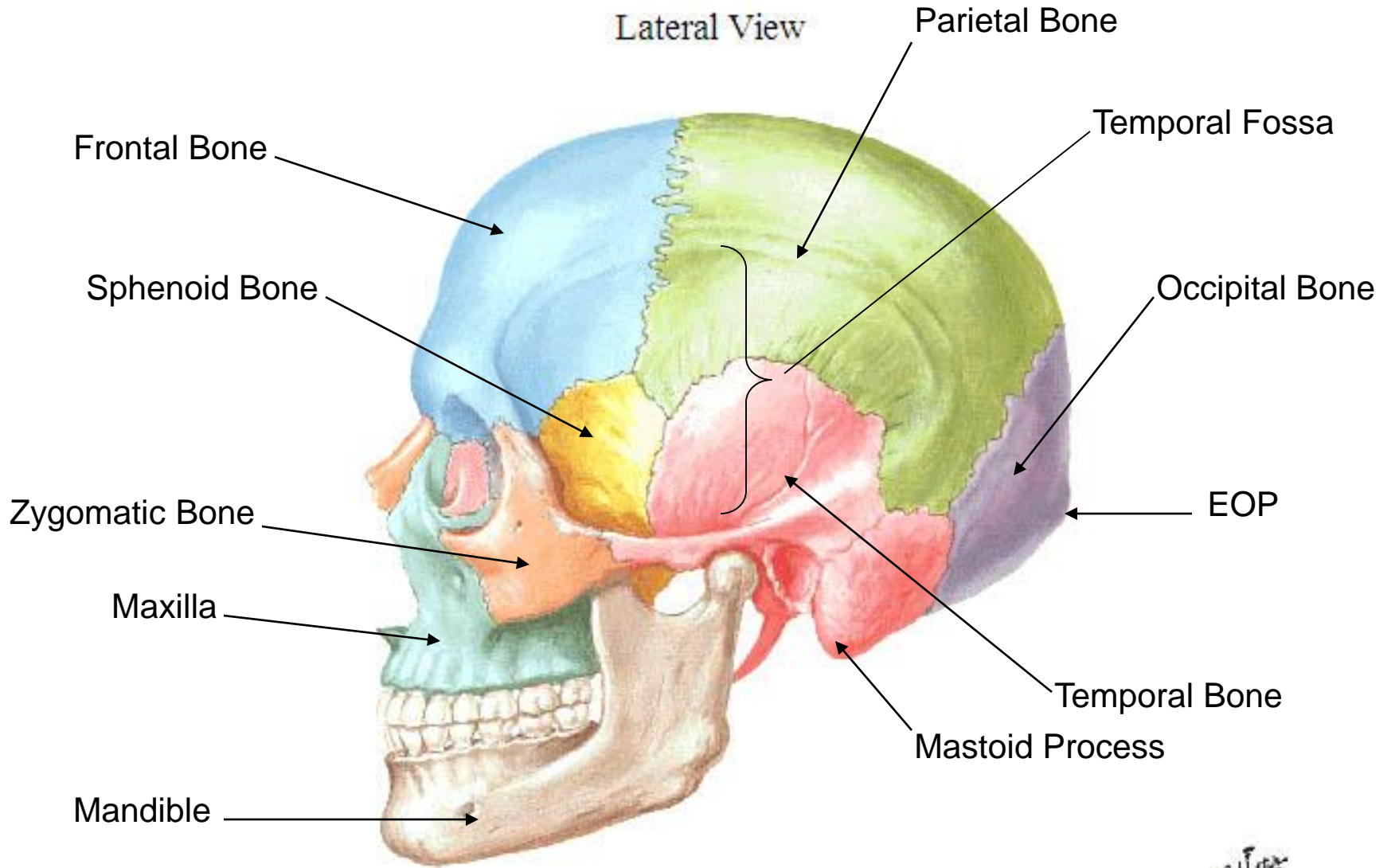
Skull

Anterior View



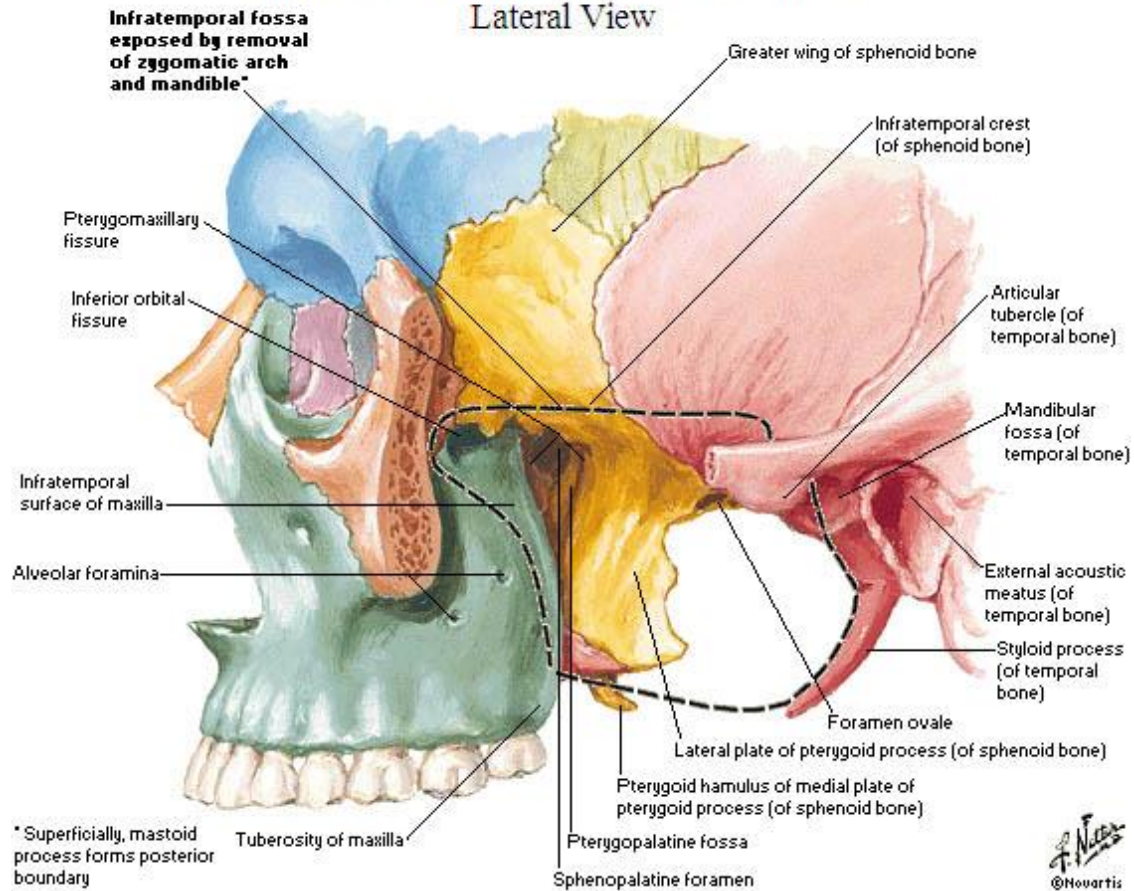
Skull

Lateral View



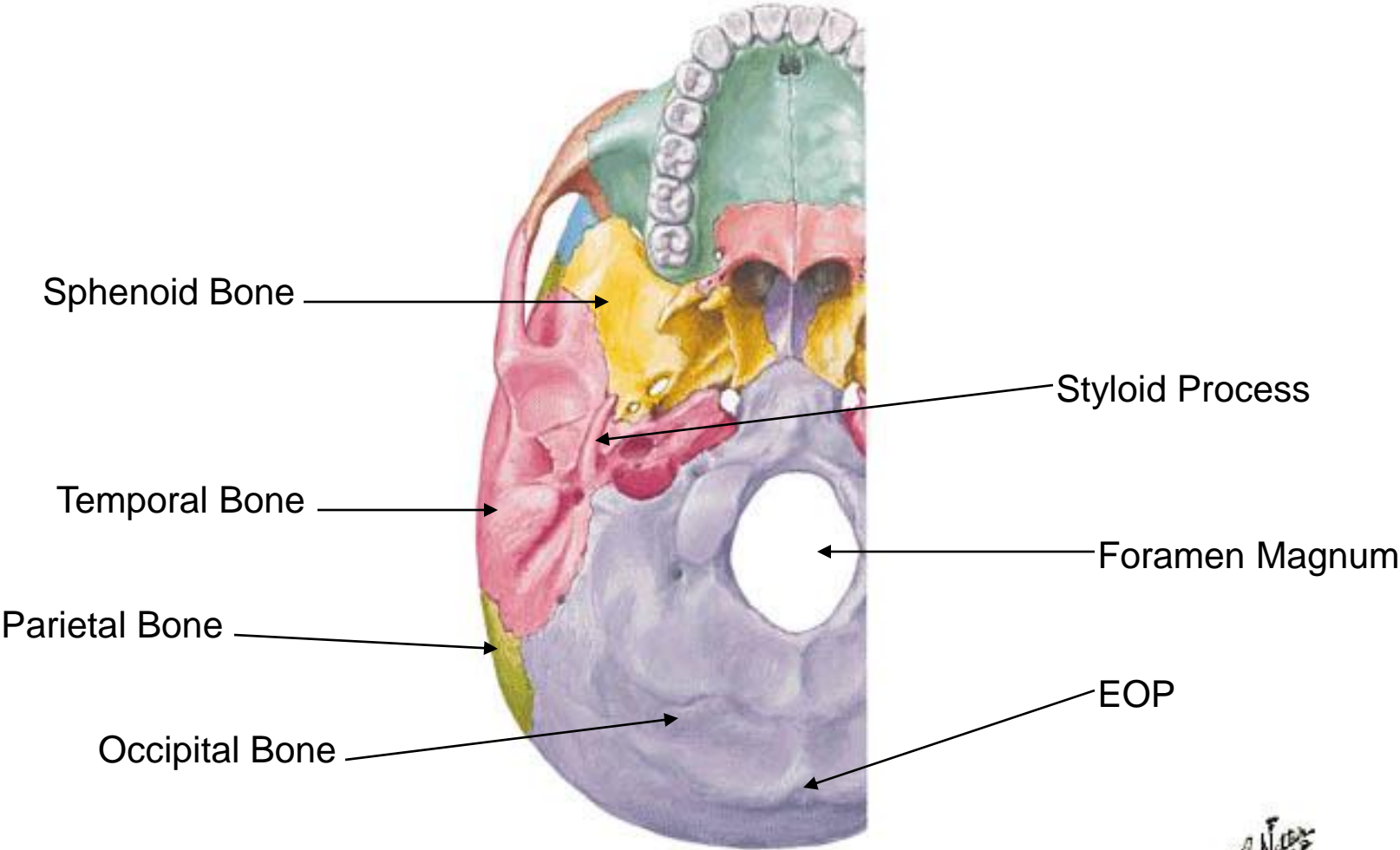
Skull - Infratemporal Fossa Exposed

Lateral View

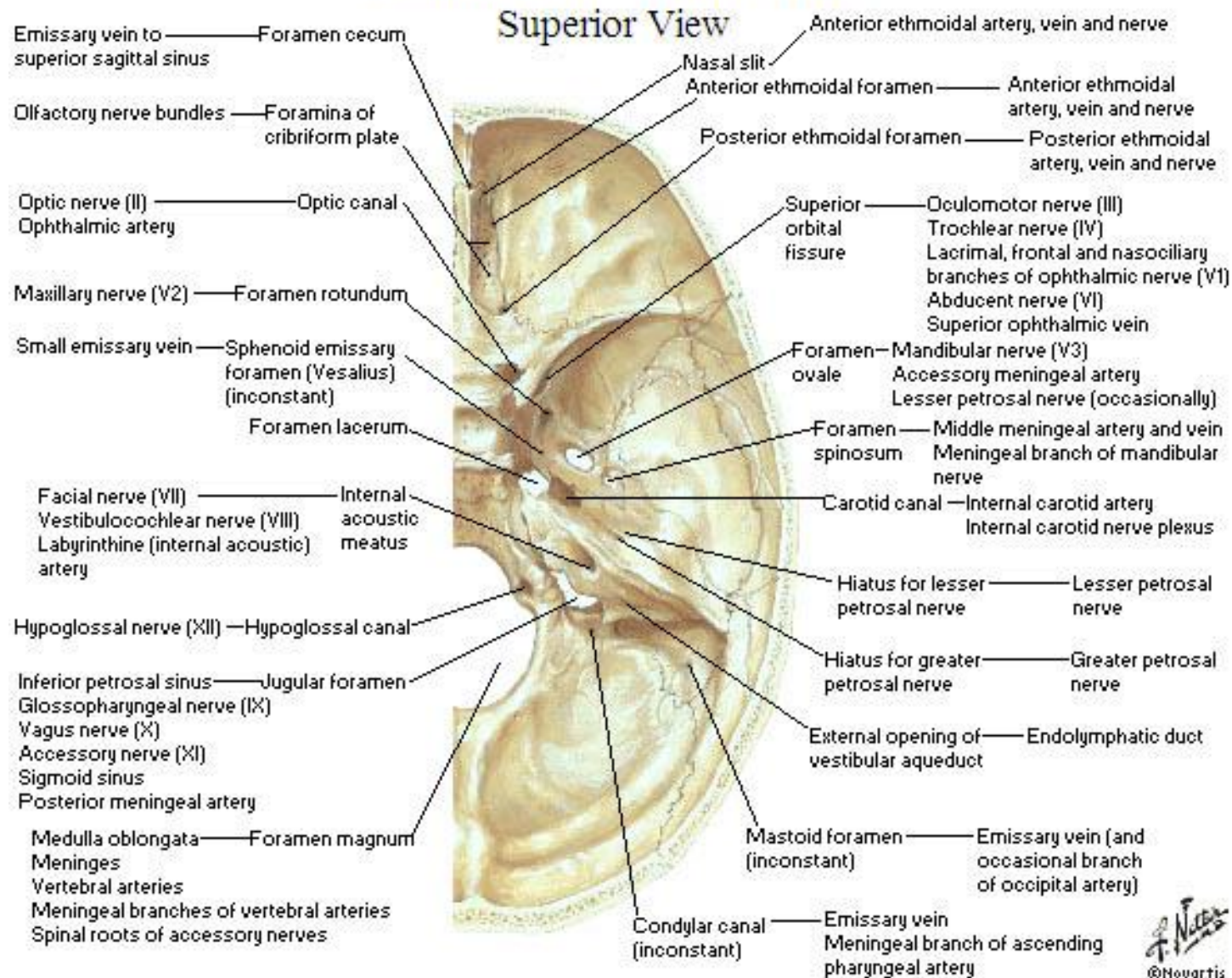


Cranial Base

Inferior View



Foramina of Cranial Base



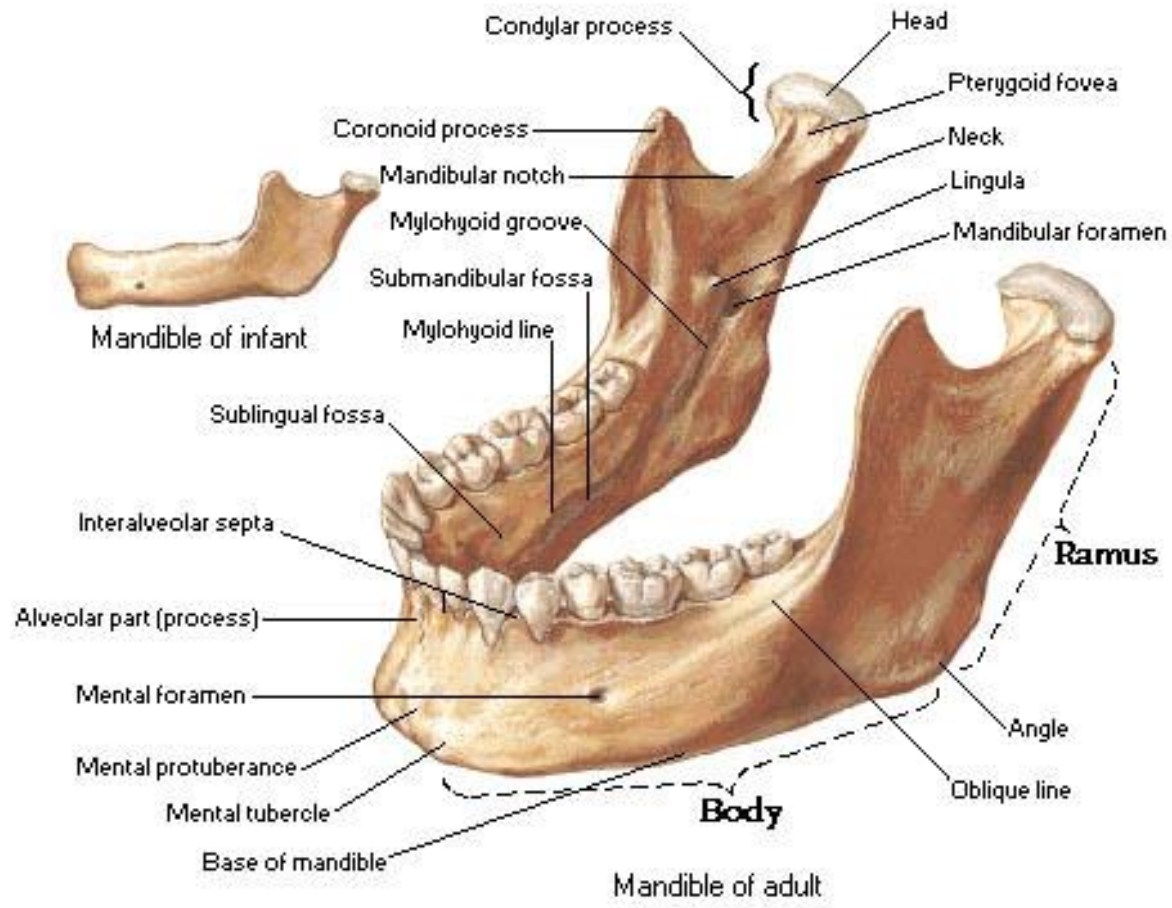
Bony Framework of Head - Mandible Removed

Lateral View



Mandible

Anterolateral Superior View

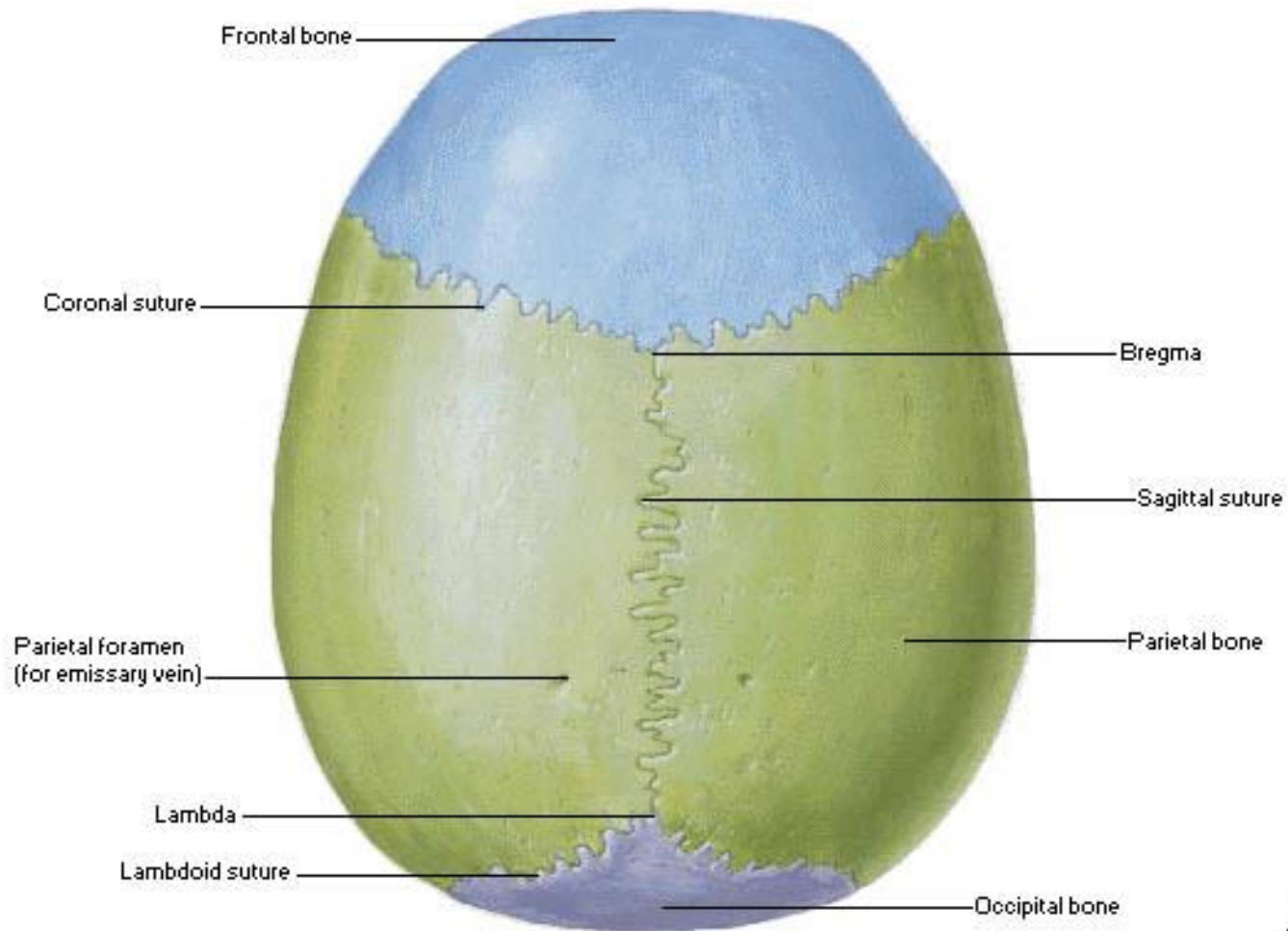


Joints

- Sutures
- Temporomandibular Joint (TMJ)

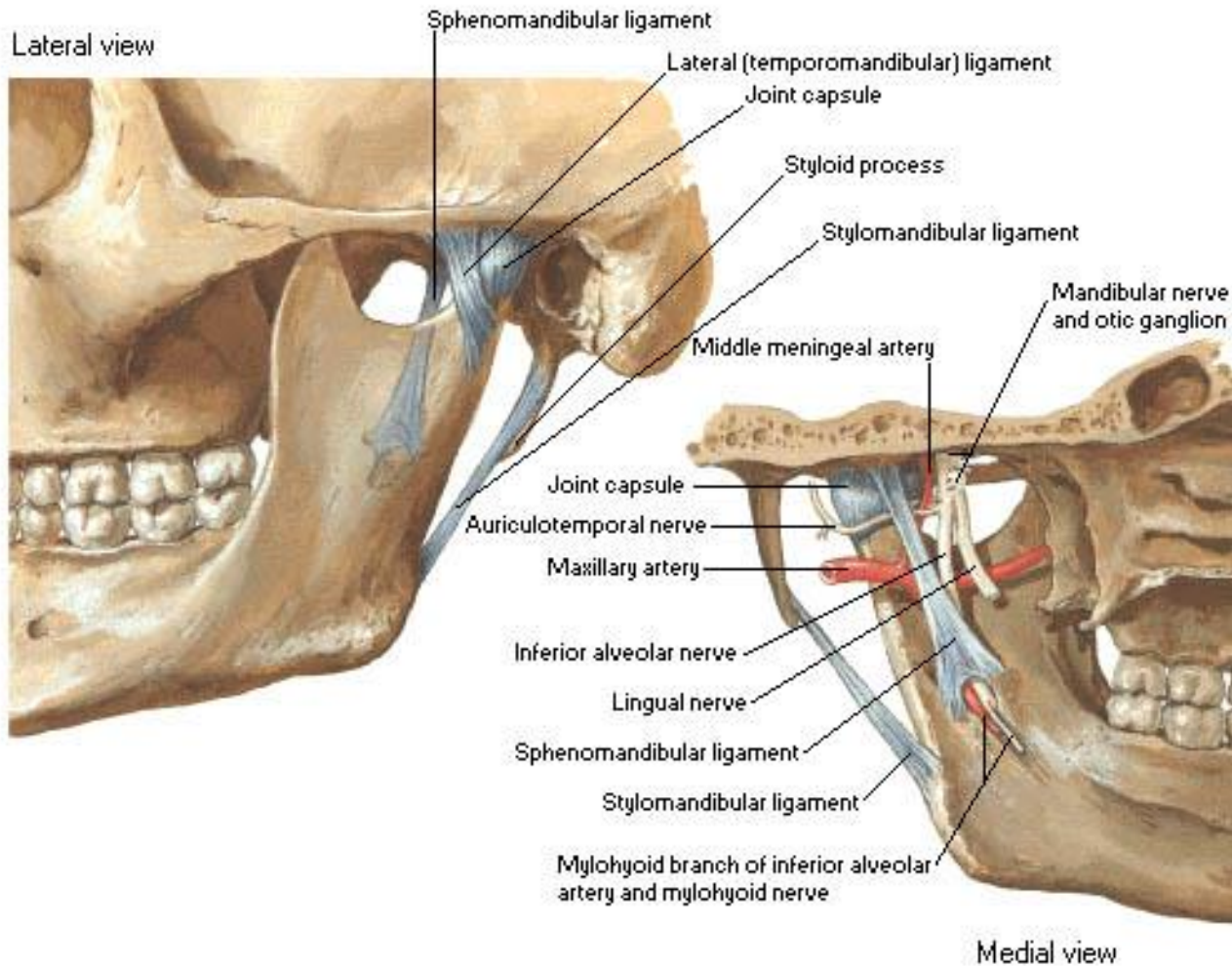
Calvaria

Superior View



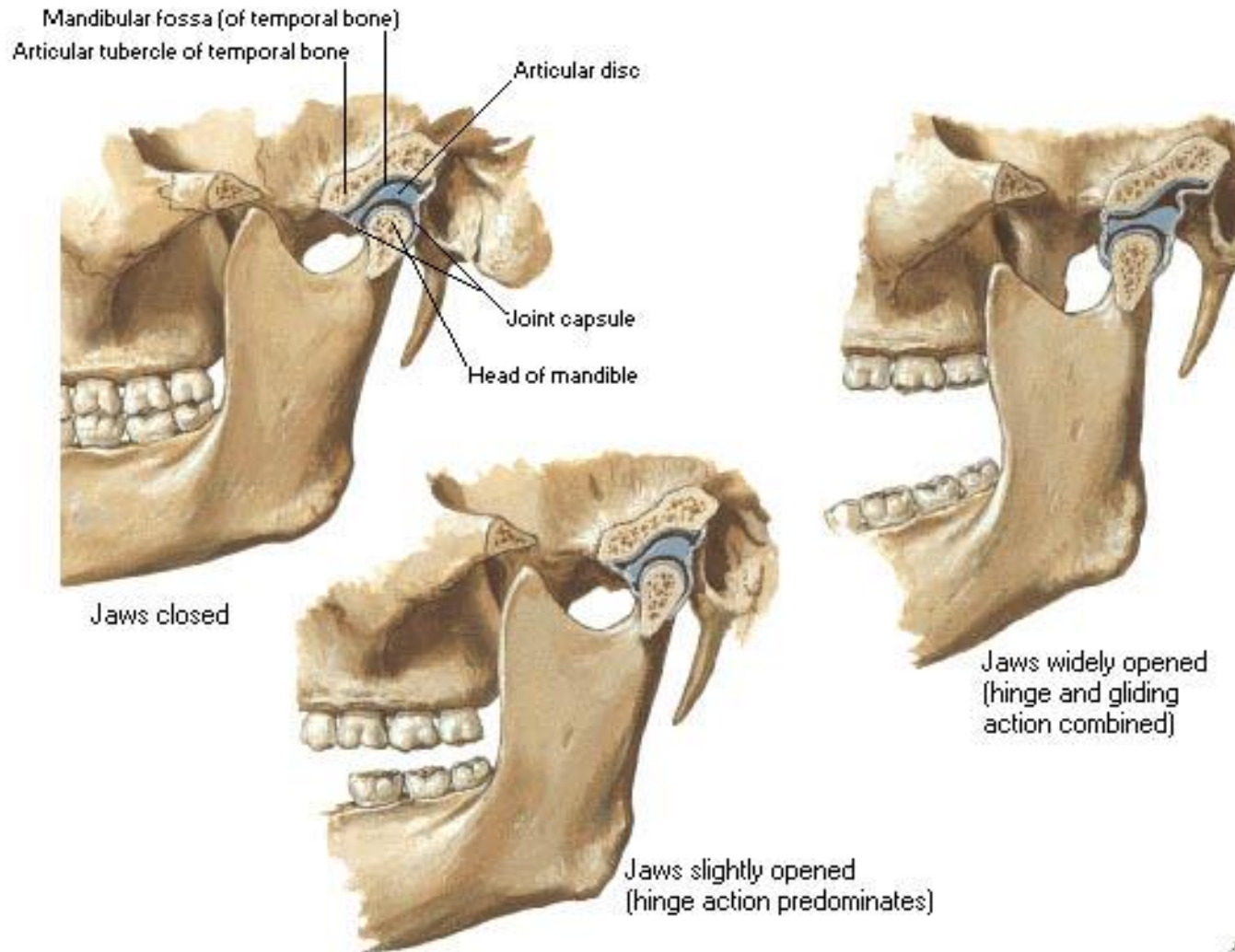
Temporomandibular Joint

Lateral and Medial Views



Temporomandibular Joint

Joint Action

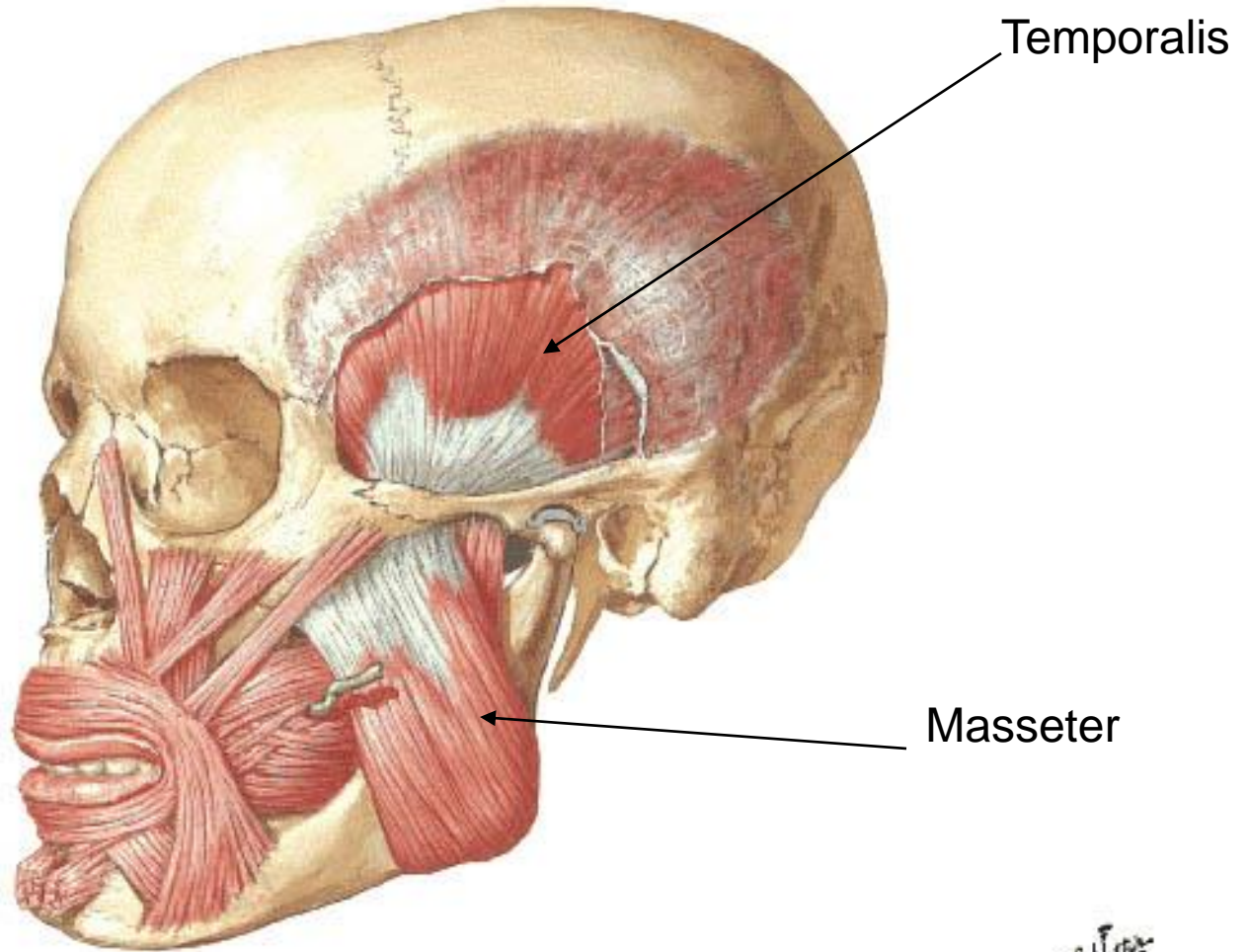


Muscles

- Muscle of Mastication
 - Masseter
 - Temporalis
 - Pterygoids
 - Medial
 - Lateral
- Other Muscles
 - Occipitofrontalis

Muscles Involved in Mastication

Lateral View

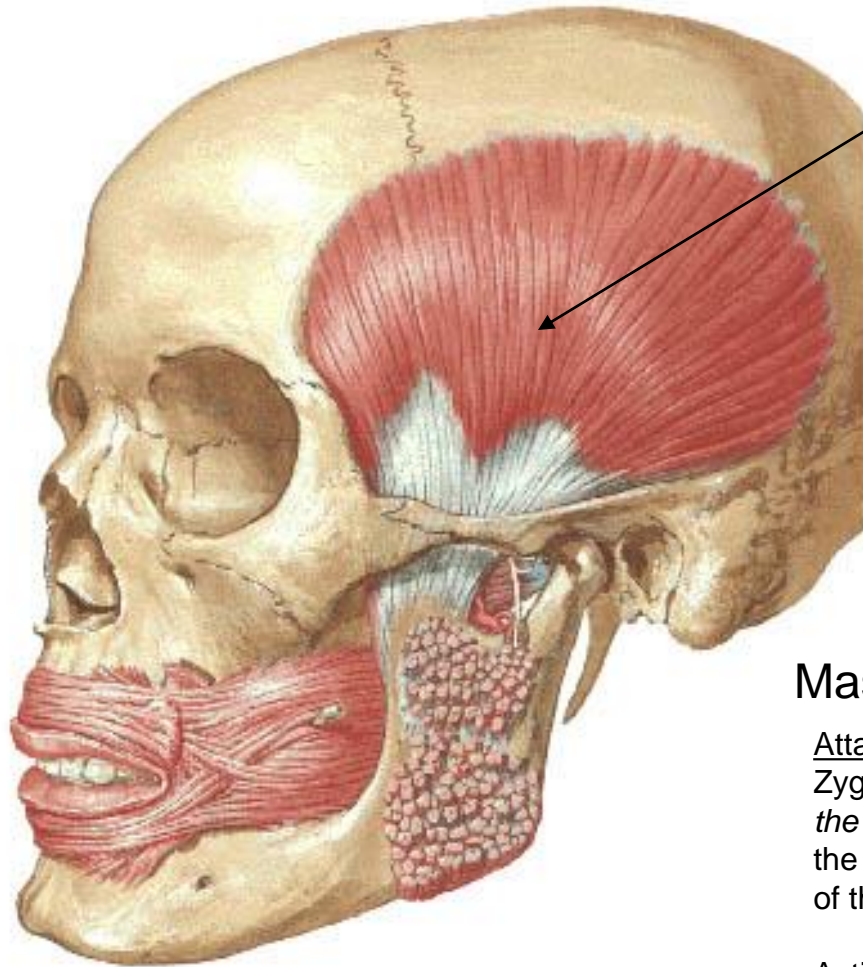


Temporalis

Masseter

Muscles Involved in Mastication - Masseter Removed

Lateral View



Temporalis

Attachments:

Temporal fossa and temporal fascia to the coronoid process of the mandible

Action:

Elevates and retracts the mandible

Masseter

Attachments:

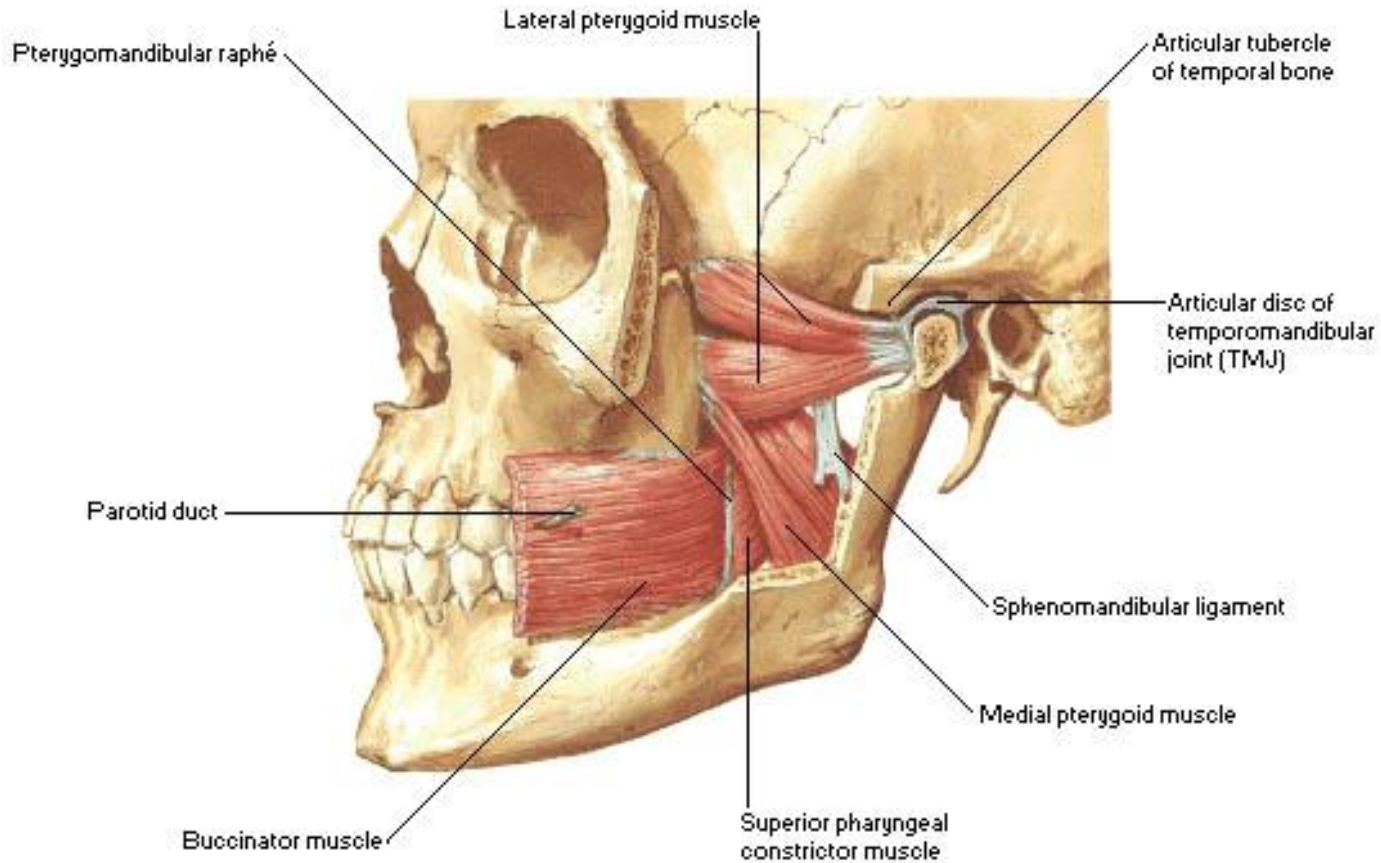
Zygomatic arch to the lateral surface of the angle and ramus of the mandible

Action:

Elevates and protracts the mandible

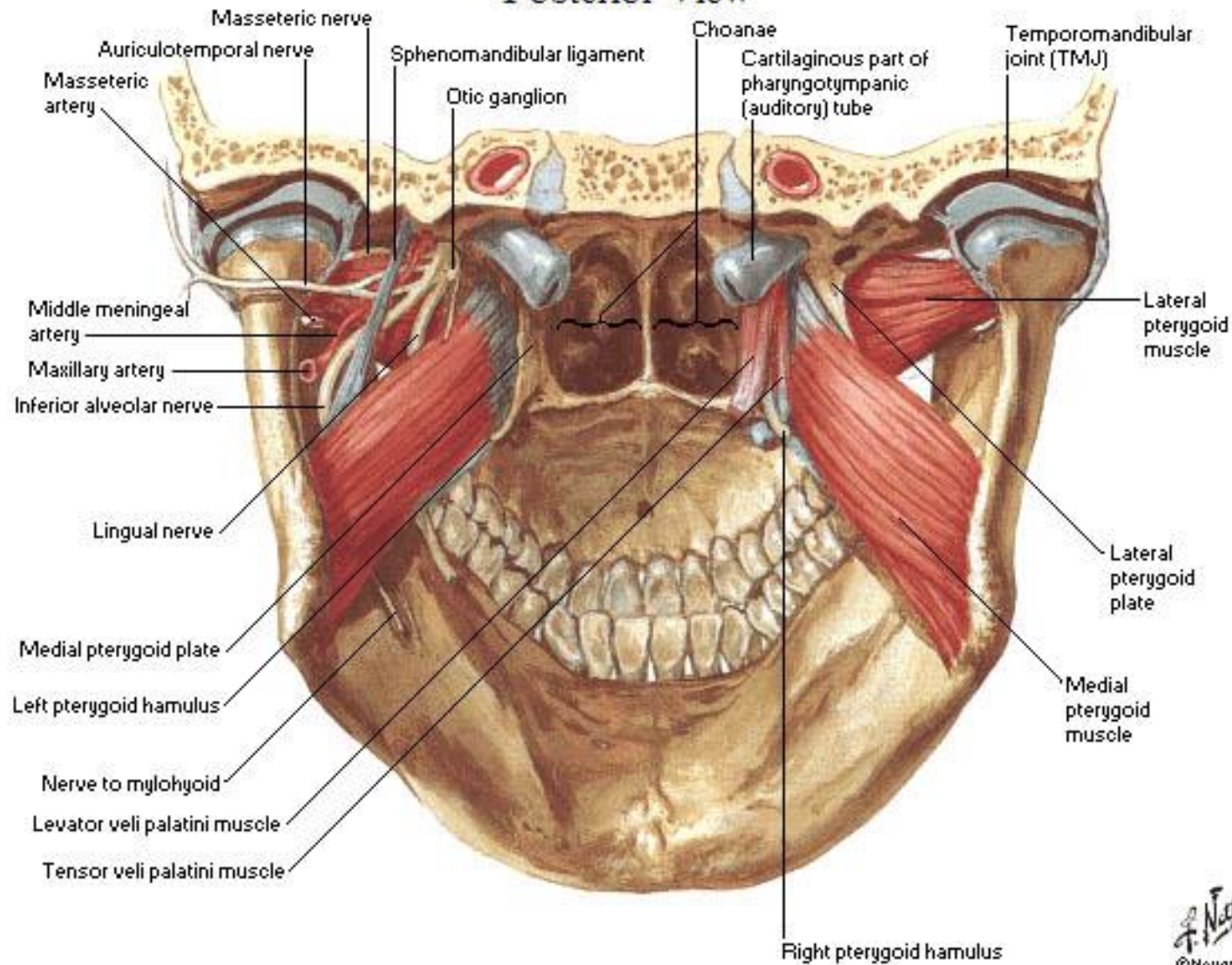
Muscles Involved in Mastication [Deep]

Lateral View

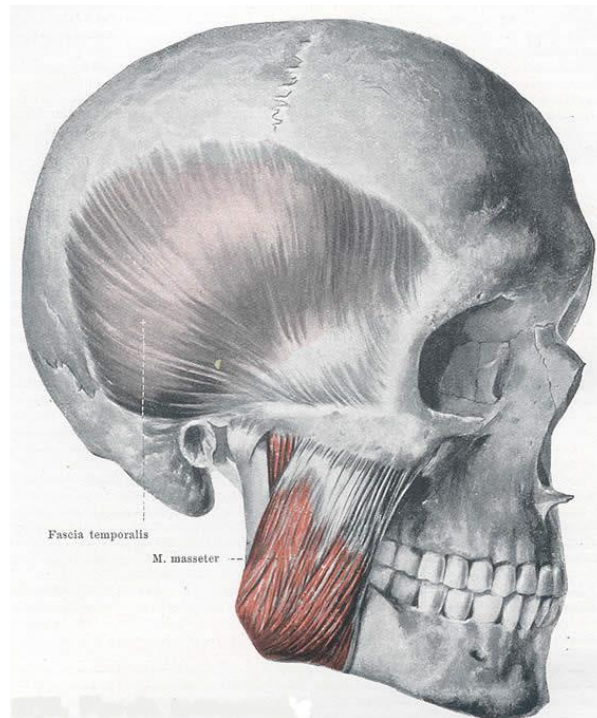


Muscles Involved in Mastication [Deep]

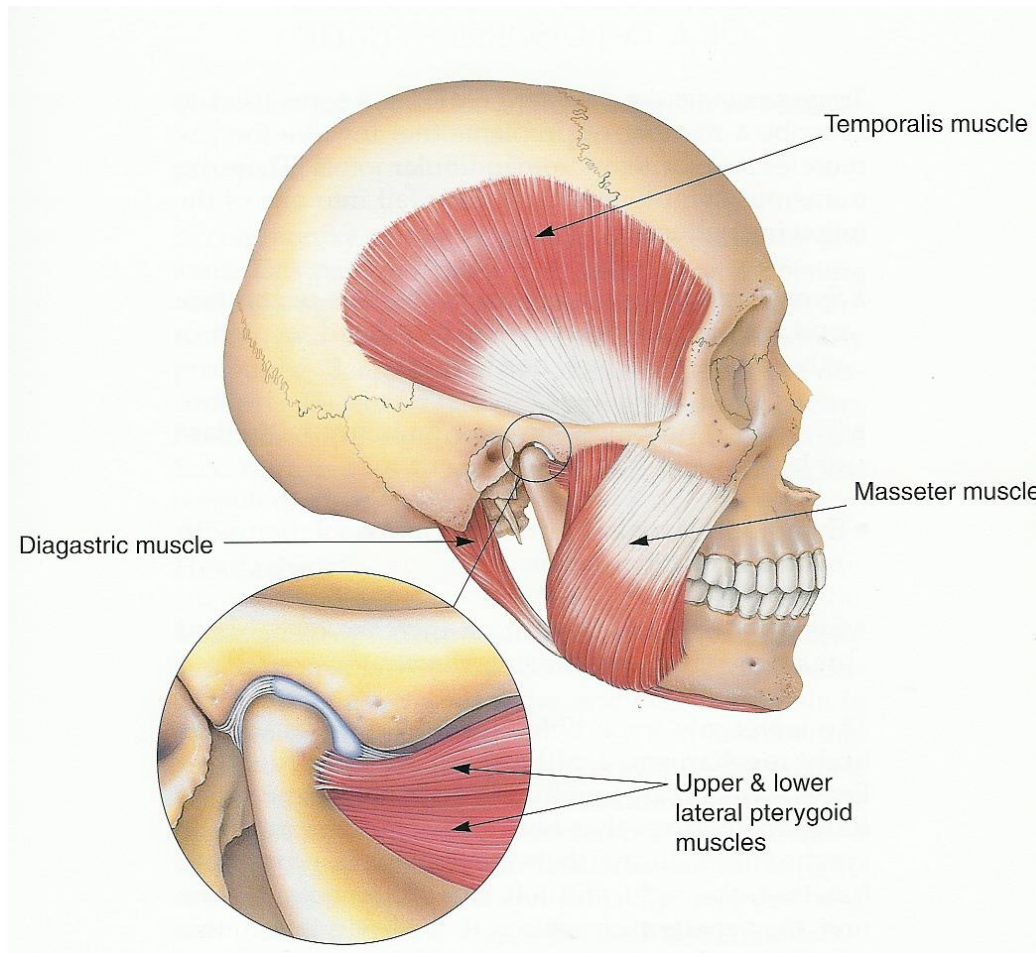
Posterior View



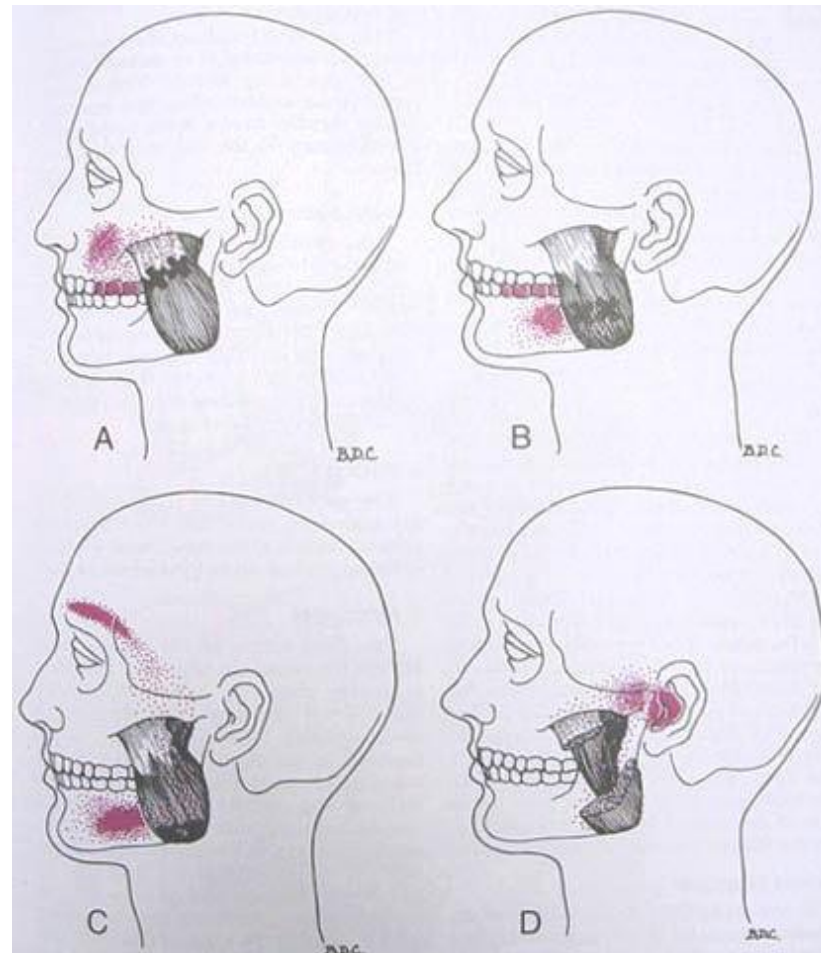
Muscles of Mastication



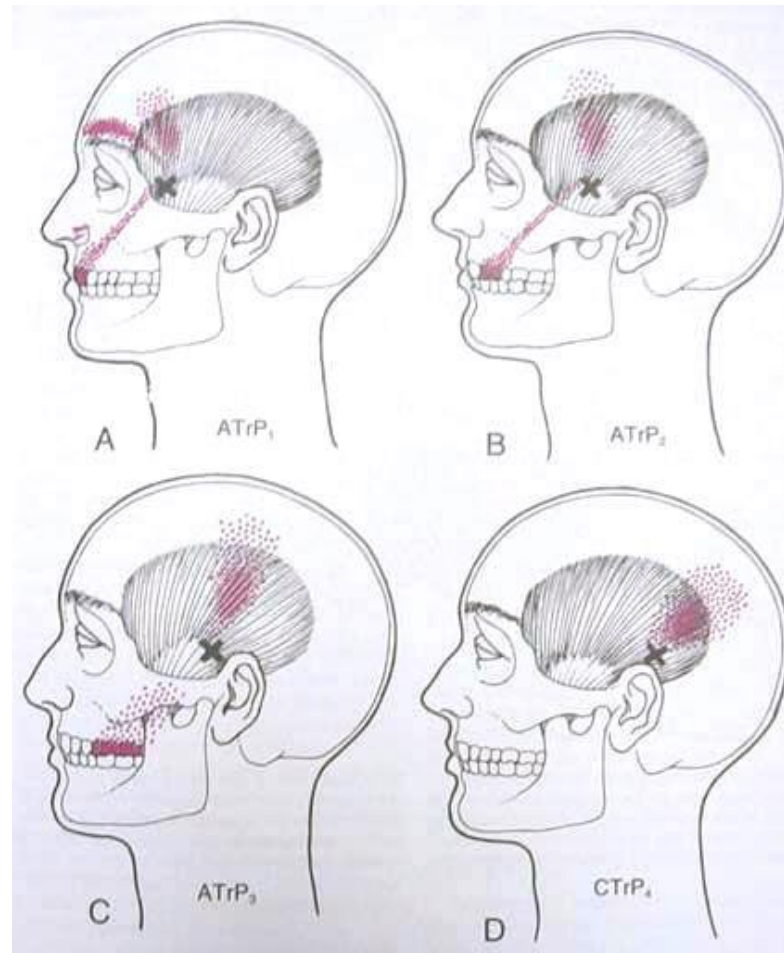
Muscles of Mastication



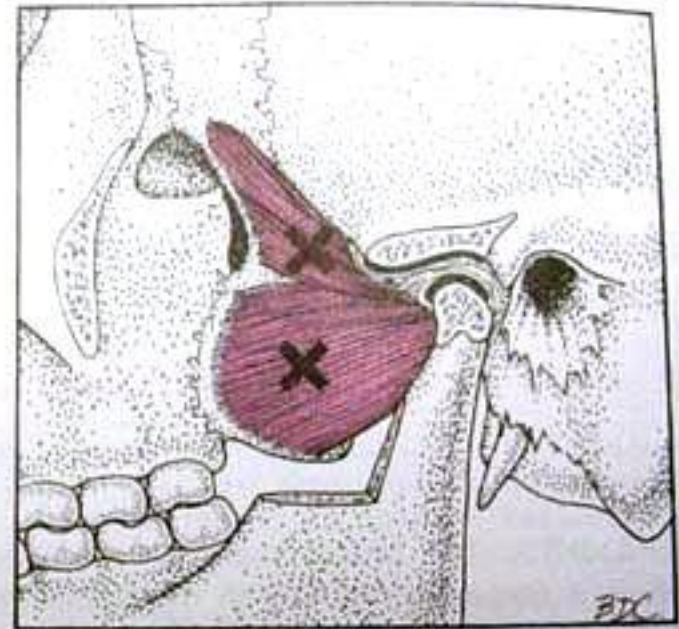
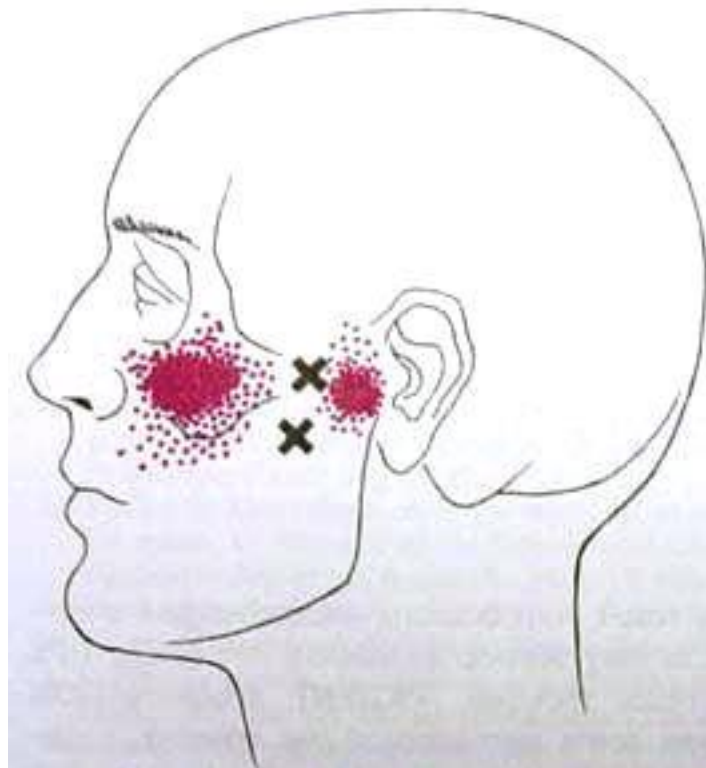
Muscles of Mastication



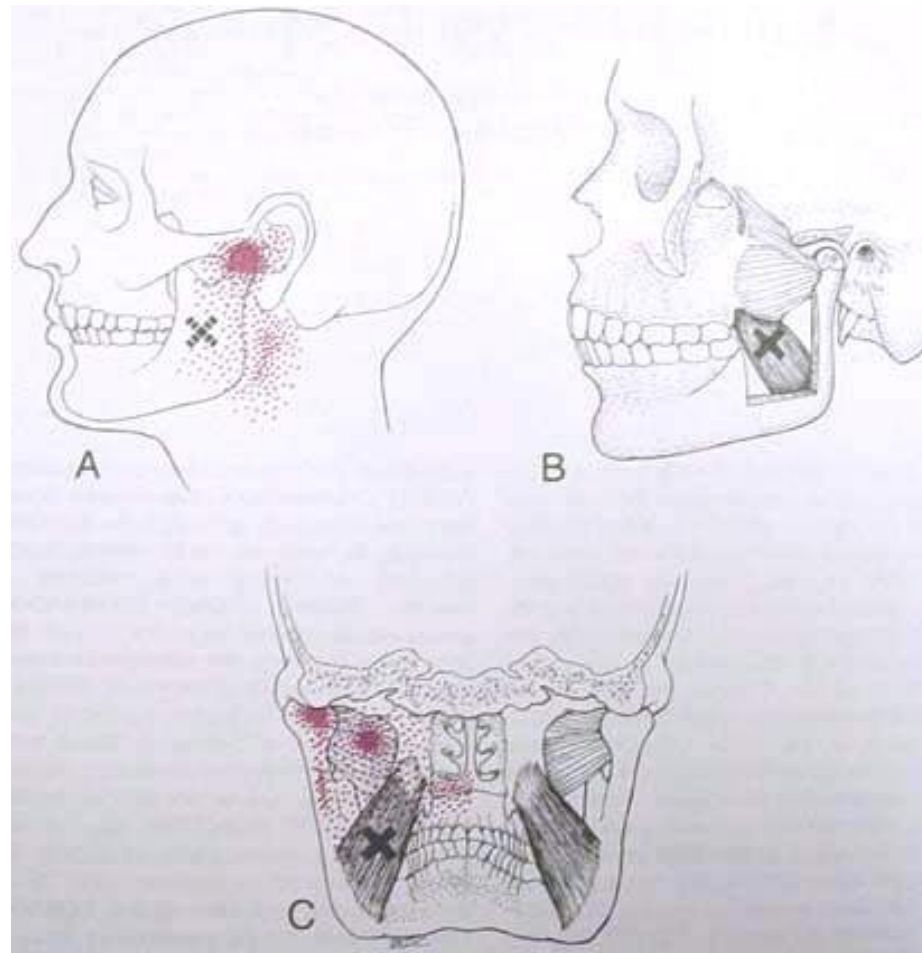
Muscles of Mastication



Muscles of Mastication

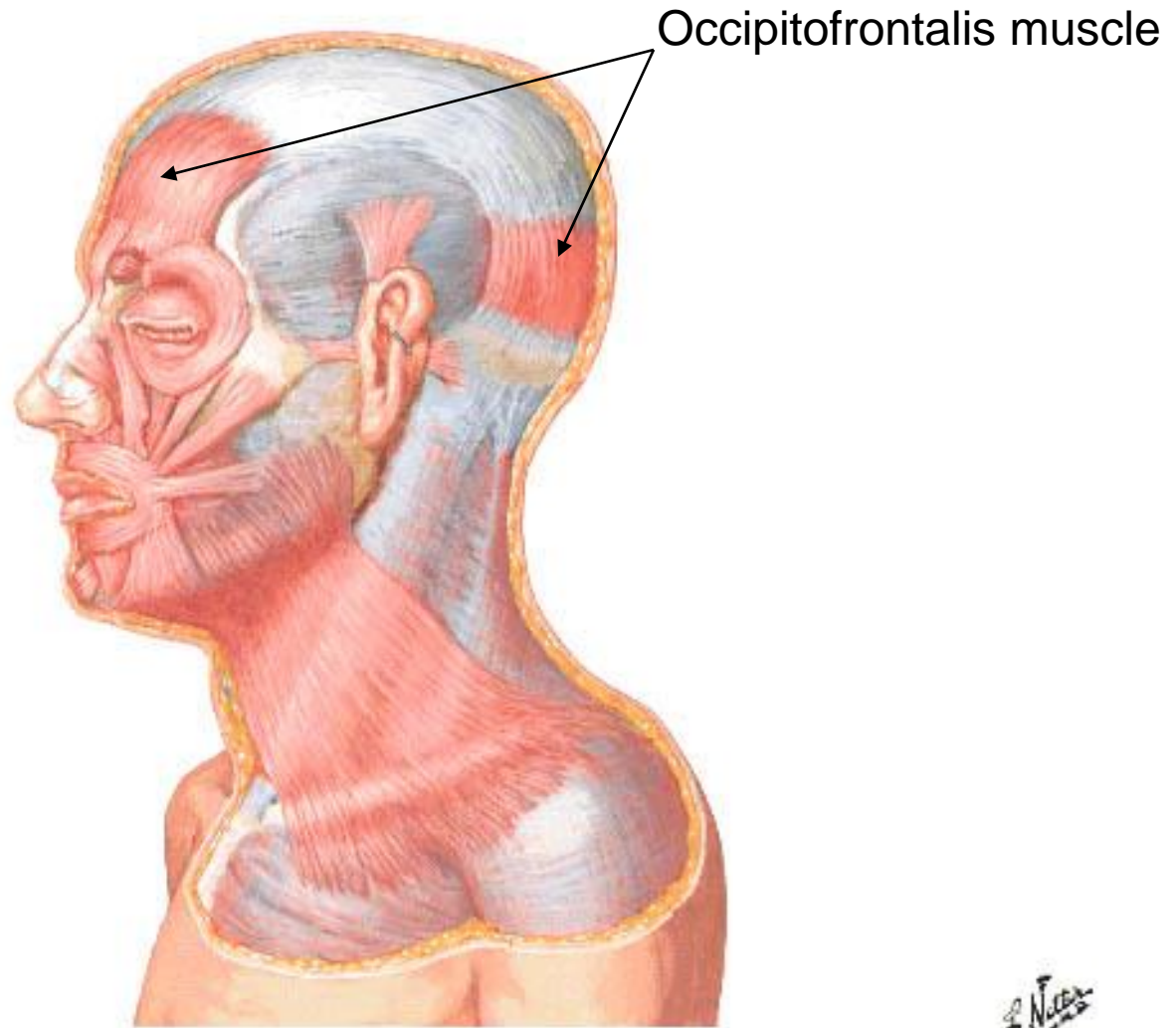


Muscles of Mastication



Muscles of Facial Expression

Lateral View



Other Muscles

Floor of Mouth - Musculature

Lateral, Slightly Inferior View

