Head and Neck Anatomy Review

Parotid Gland and Facial Nerve

Muscles of Mastication and TMJ

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Temporal Fossa

Boundaries

Anterior  Zygoma & Zygomatic Process of Frontal Bone
Superior  Temporal Line
Posterior  Temporal Line
Inferior  Zygomatic Arch, Infratemporal Crest of the Greater Wing of the Sphenoid
Lateral  Zygomatic Arch
Medial  Bone Structure of Skull
Pterygomaxillary fissure and pterygopalatine fossa
Infratemporal Fossa

Contents: Muscles of mastication and their vascular and nerve supply

Boundaries:

Anterior  Infratemporal Surface of Maxilla and Deep Surface of Zygomatic Bone

Medial  Lateral Surface of Lateral Pterygoid Plate of sphenoid and Pterygomaxillary Fissure

Superior  Infratemporal Crest of Sphenoid and Infratemporal Surface of the Greater Wing of the Sphenoid
Continued:

**Posterior**  Anterior Limits of the Mandibular Fossa (glenoid fossa)

**Inferior**  Open

**Lateral**  Ramus of Mandible
Fig. 611
Articular disc of temporomandibular joint

Articular tubercle

Lateral pterygoid muscle

Sphenomandibular ligament

Medial pterygoid muscle

Parotid duct

Buccinator muscle

Pterygomandibular raphé

Superior pharyngeal constrictor muscle
Jaw opening muscles
the collateral process of the anterior ramus below.

2) that the articular capsule is a loose sac which is fused anteriorly and laterally with the lateral (temporomandibular) ligament. Note also the stylomandibular ligament extending from the tip of the styloid process to the angle and posterior border of the mandible.

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**Fig. 614: The Medial and Lateral Pterygoid Muscles (Lateral View)**

NOTE: 1) the zygomatic arch has been removed. Posteriorly, the bone has been cut through the temporomandibular joint, revealing the articular disc. The location of the medial pterygoid muscle and part of the lateral pterygoid muscle on the inner aspect of the ramus of the mandible is represented as though the bone were transparent.

2) the lateral pterygoid muscle arises by two heads, a superior from the great wing of the sphenoid bone and an inferior from the lateral surface of the lateral pterygoid plate of the sphenoid. The two heads insert posteriorly on the neck of the condyle of the mandible. The lateral pterygoid muscle opens and protracts the mandible and also moves it from side to side.

3) the medial pterygoid muscle arises from the medial surface of the lateral pterygoid plate of the sphenoid as well as from the palatine bone, and inserts on the medial surface of the ramus and angle of the mandible. It assists the masseter and temporals in

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**Fig. 613: The Right Temporomandibular Region (Medial View)**

NOTE that medial to the temporomandibular joint the pterygospinous ligament extends from the sphenoidal spine to the posterior margin of the lateral pterygoid plate, while the sphenomandibular ligament descends from the sphenoidal spine to the lingula of the mandible.
Head

Coronoid process

To catch on lingula
Postglenoid tubercle
Articular disc
Articular tubercle
Lateral pterygoid
External ear canal
Neck of mandible
Styloid process
Figure 7.67.  

A. External surface of mandible.  
B. Internal aspect of mandible.