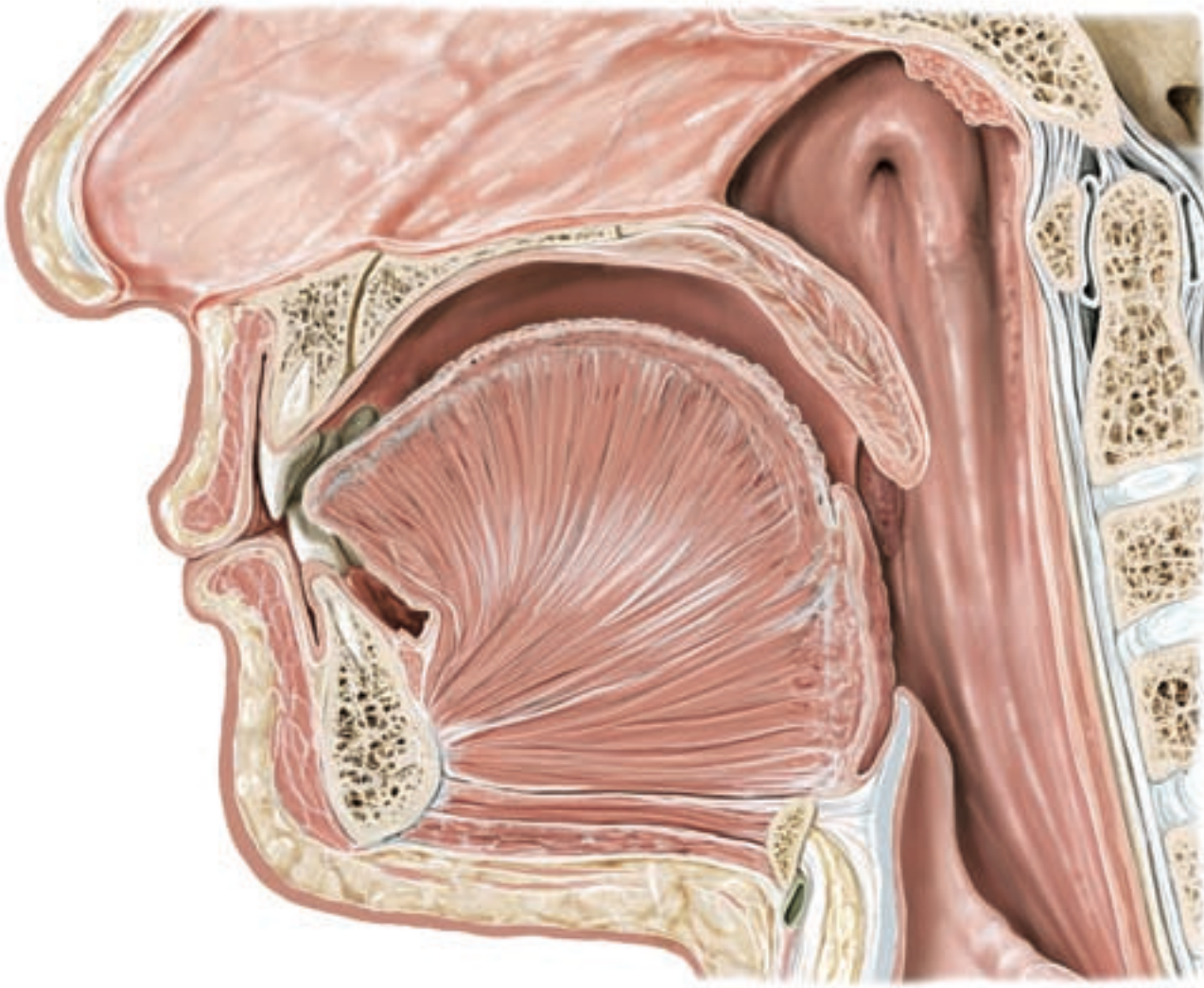




Thieme Atlas of Anatomy

- **Labium superius – upper lip**
- **Labium inferius – lower -lip**
- **Rima oris**
- **Philtrum**
- **Sulcus nasolabialis – nasolabial groove**
- **Processus mentalis – mental process**
- **Nares - nostrils**
- **Alae nasi – nasal wings**

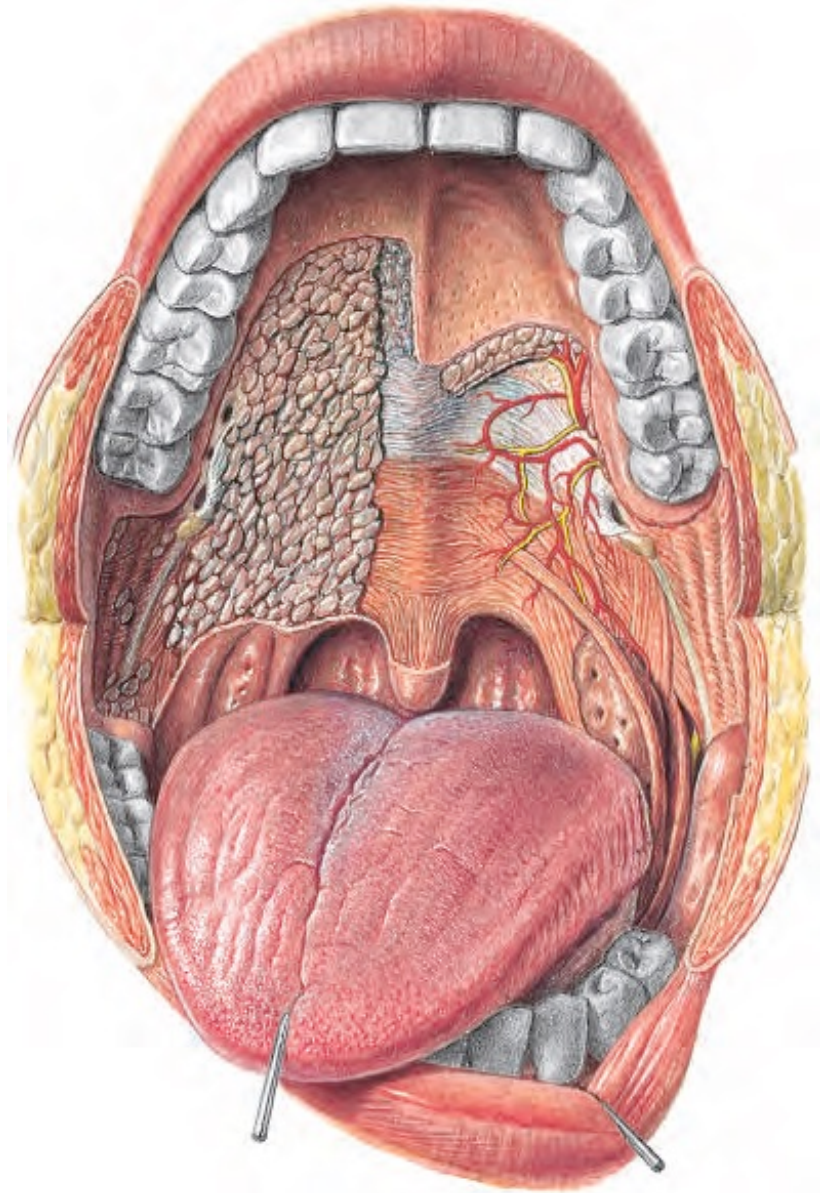
RIMA ORIS - ORAL FISSURE



Thieme Atlas of Anatomy

- ♦ **Labium superius – upper lip**
- ♦ **Labium inferius – lower lip**
- ♦ **Vestibulum oris – mouth vestibulum**
- ♦ **Cavitas oris propria – the own cavity**
- ♦ **Palatum durum – hard palate**
- ♦ **Palatum molle – soft palate**
- ♦ **Dentes - teeth**
- ♦ **Gingiva - gum**
- ♦ **Basis oris – mouth floor**

CAVITAS ORIS – ORAL CAVITY

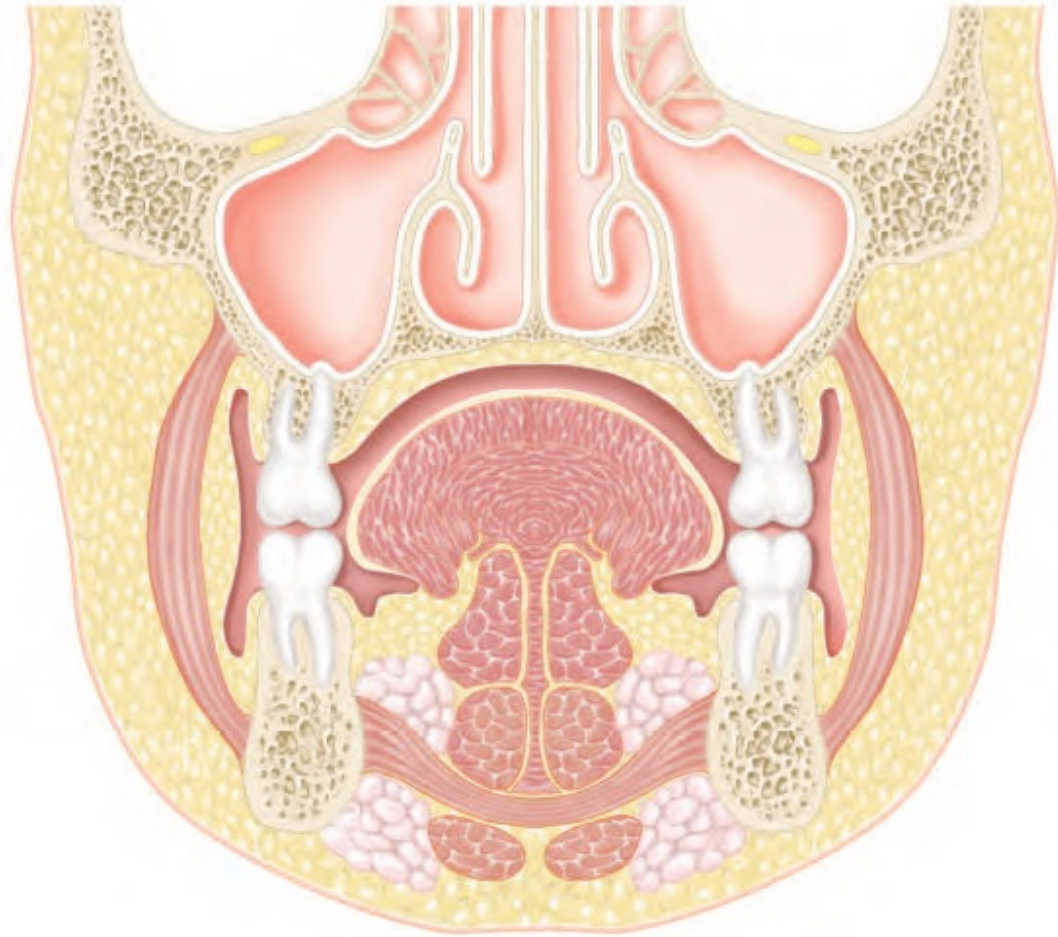


Grey's Anatomy, Elsevier

- **Labium superius**
- **Labium inferius**
- **Vestibulum oris**
- **Frenulum labii superioris**
- **Frenulum labii inferioris**
- **Bucca**
- **Cavitas oris propria**

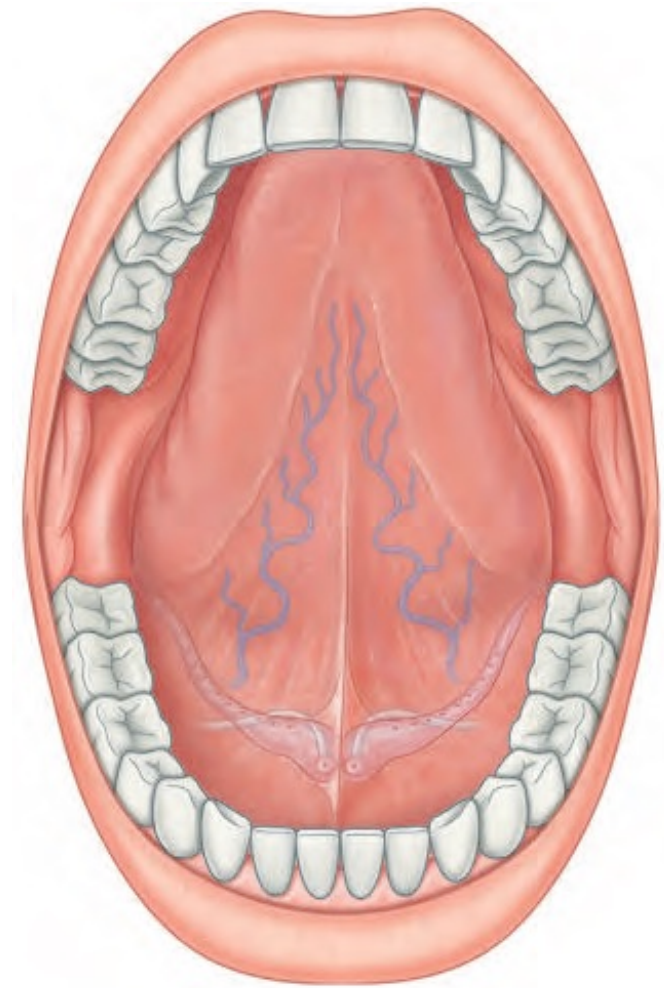


CAVITAS ORIS – ORAL CAVITY



Grey's Anatomy, Elsevier

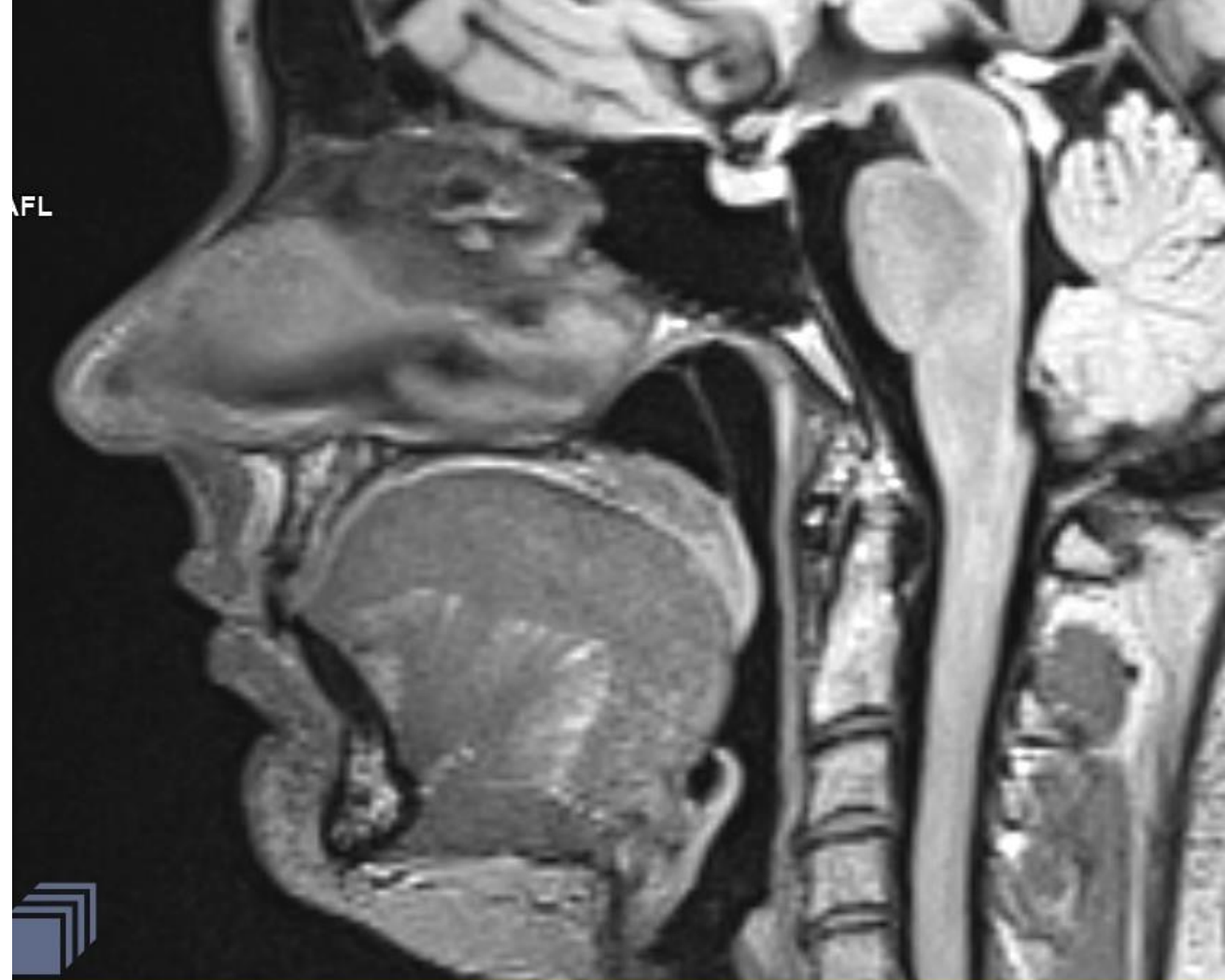
- **Plica fimbriata**
- **Plica sublingualis**
- **Frenulum linguae**
- **Carruncula sublingualis**
- **Ostia ductus sublinguales**



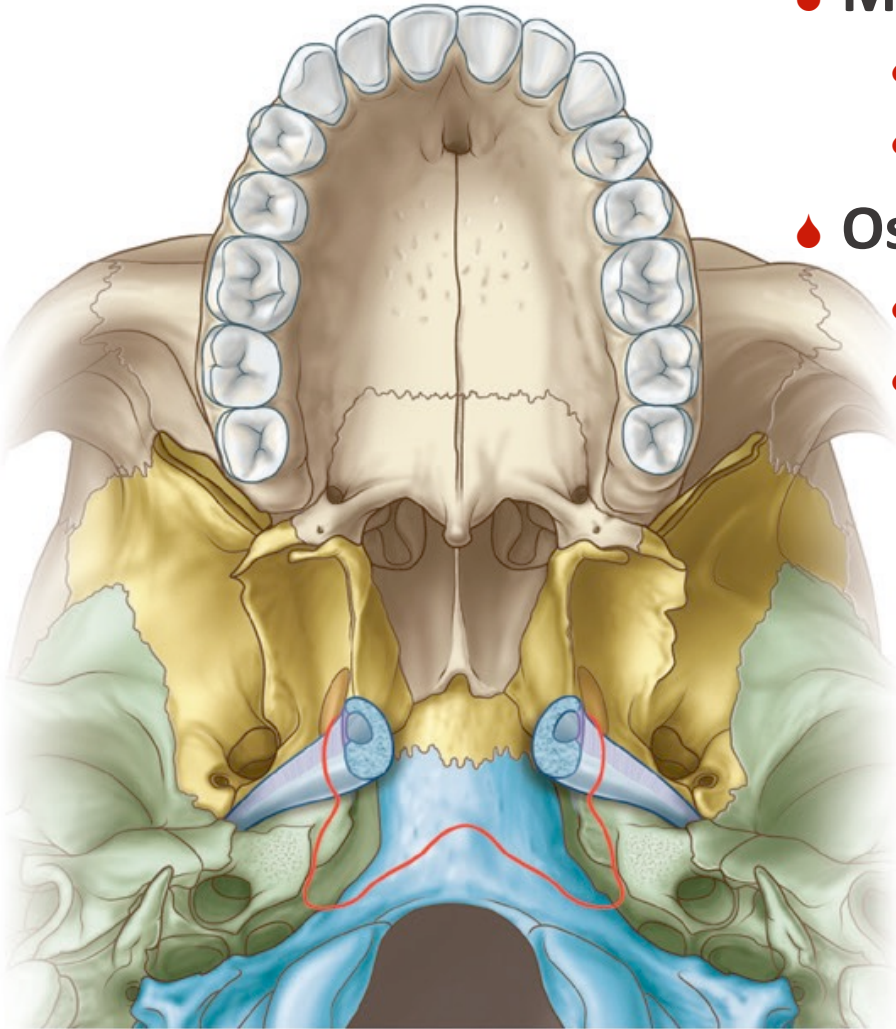
THE OWN ORAL CAVITY



- ♦ Palatum durum
- ♦ Rugae palatinae
- ♦ Papilla incisiva
- ♦ Raphe palatinum
- ♦ Palatum molle
- ♦ Uvula



PALATUM PALATE

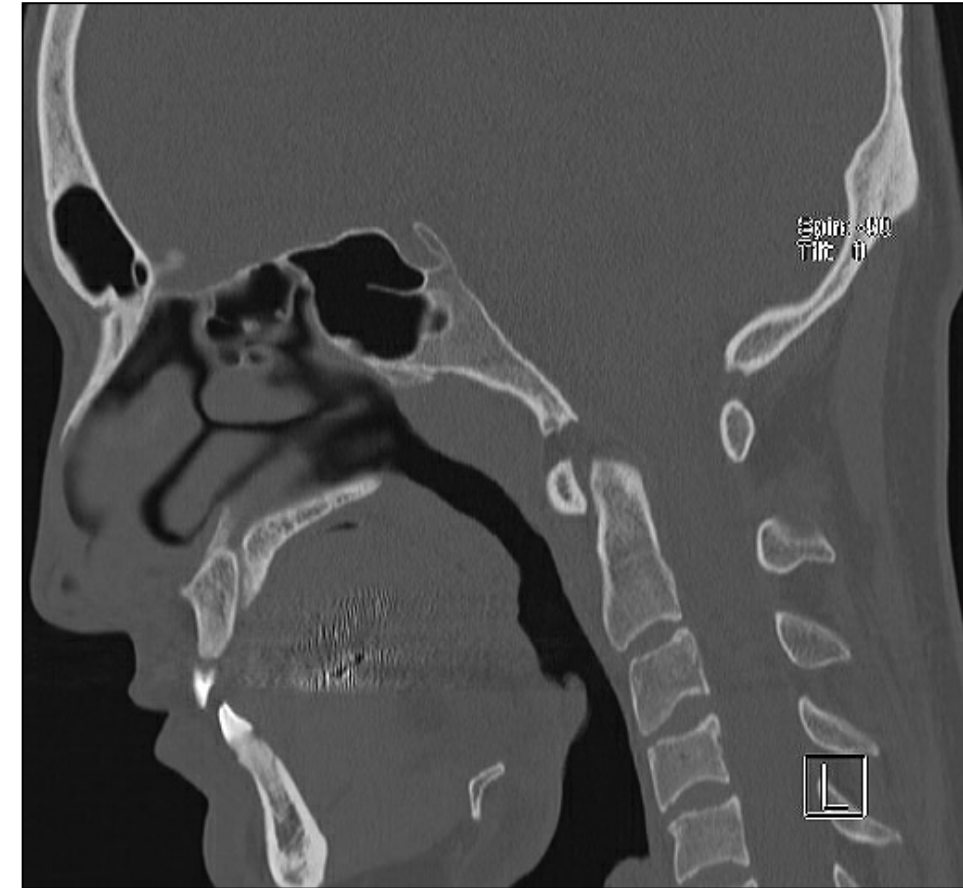
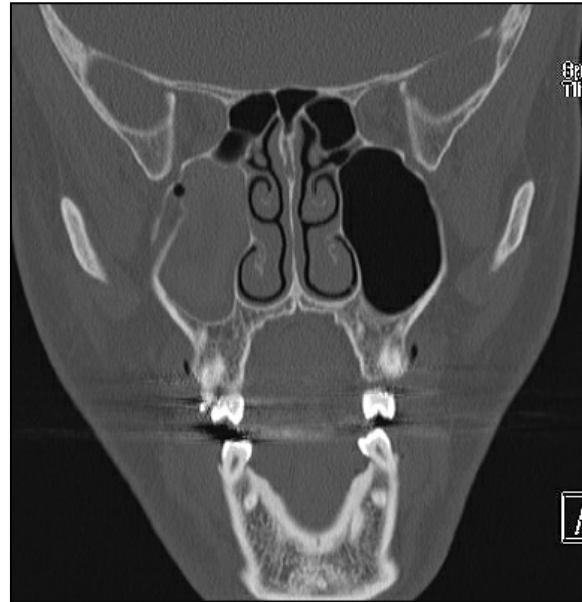


♦ Maxilla

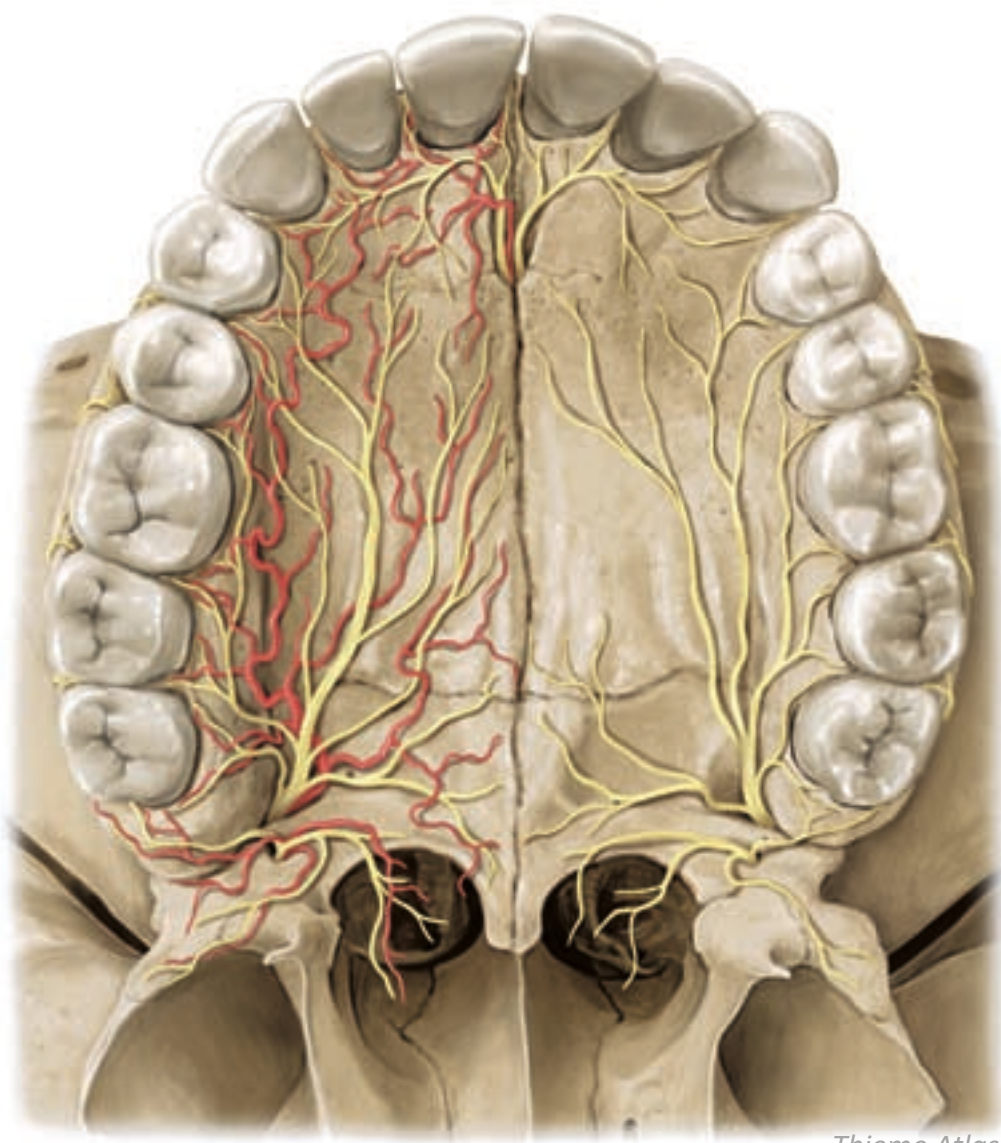
- ♦ *Os incisivum - canalis incisivus*
- ♦ *Processus palatinus*

♦ Os palatinum

- ♦ *Foramen palatinum majus*
- ♦ *Foramen palatinum minus*



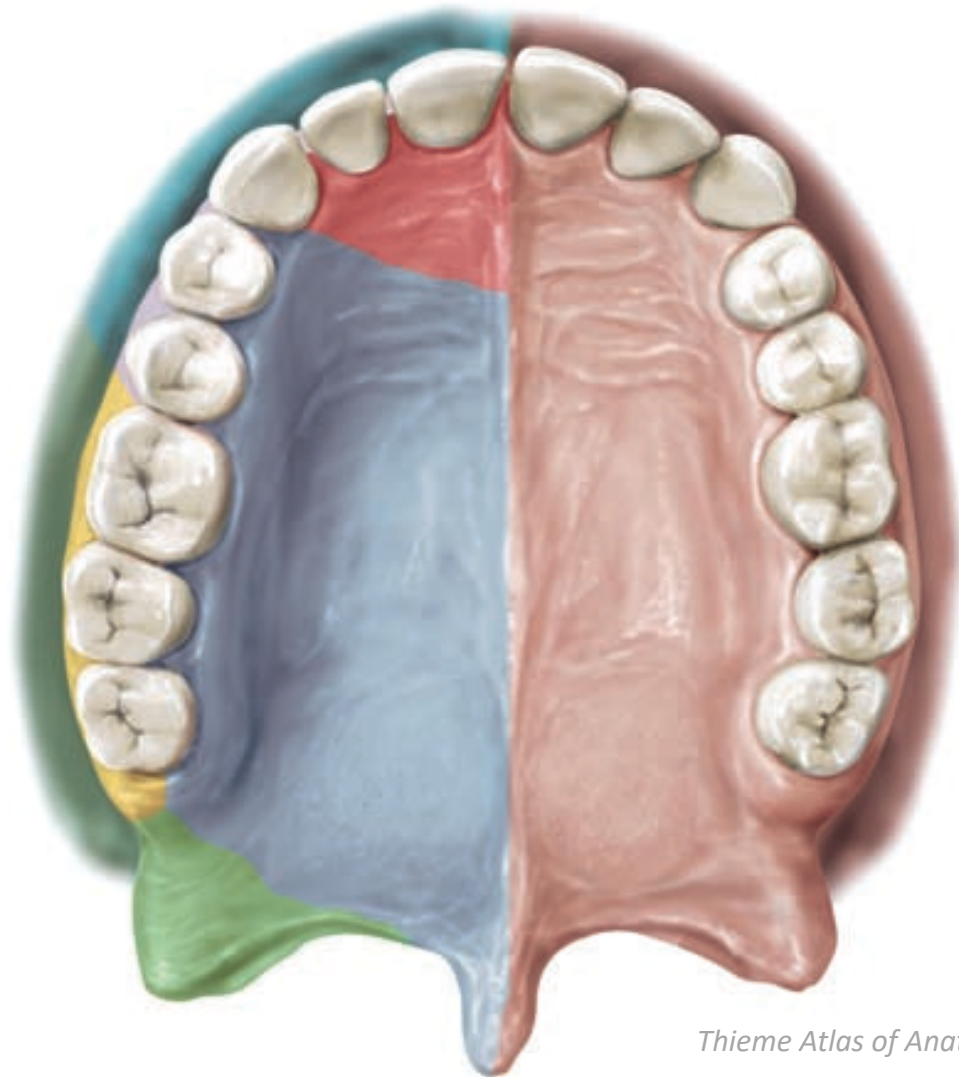
PALATUM DURUM – HARD PALATE



Thieme Atlas of Anatomy

- ♦ **Foramen incisivum**
- ♦ *N. nasopalatinus*
- ♦ *A. nasopalatina*
- ♦ **Foramen palatinum majus**
- ♦ *N. palatinus major*
- ♦ *A. palatina major*
- ♦ **Foramen palatinum minus**
- ♦ *N. palatinus minor*
- ♦ *A. palatina minor*

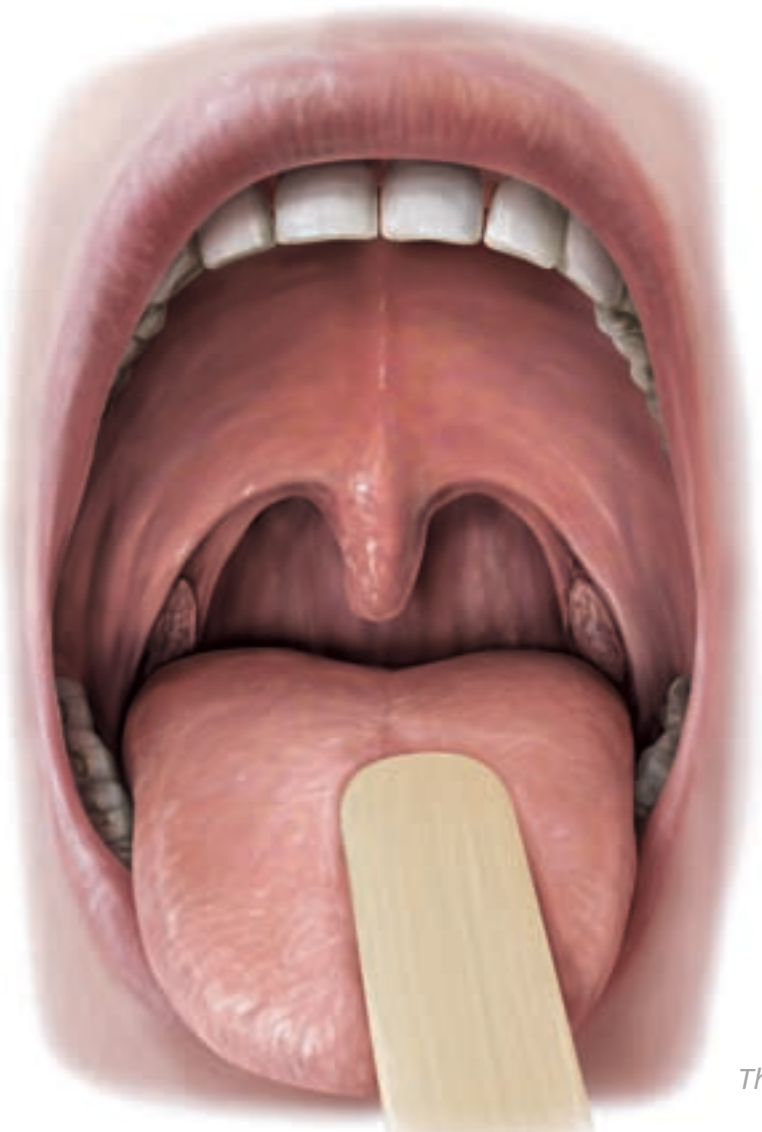
PALATUM DURUM – HARD PALATE



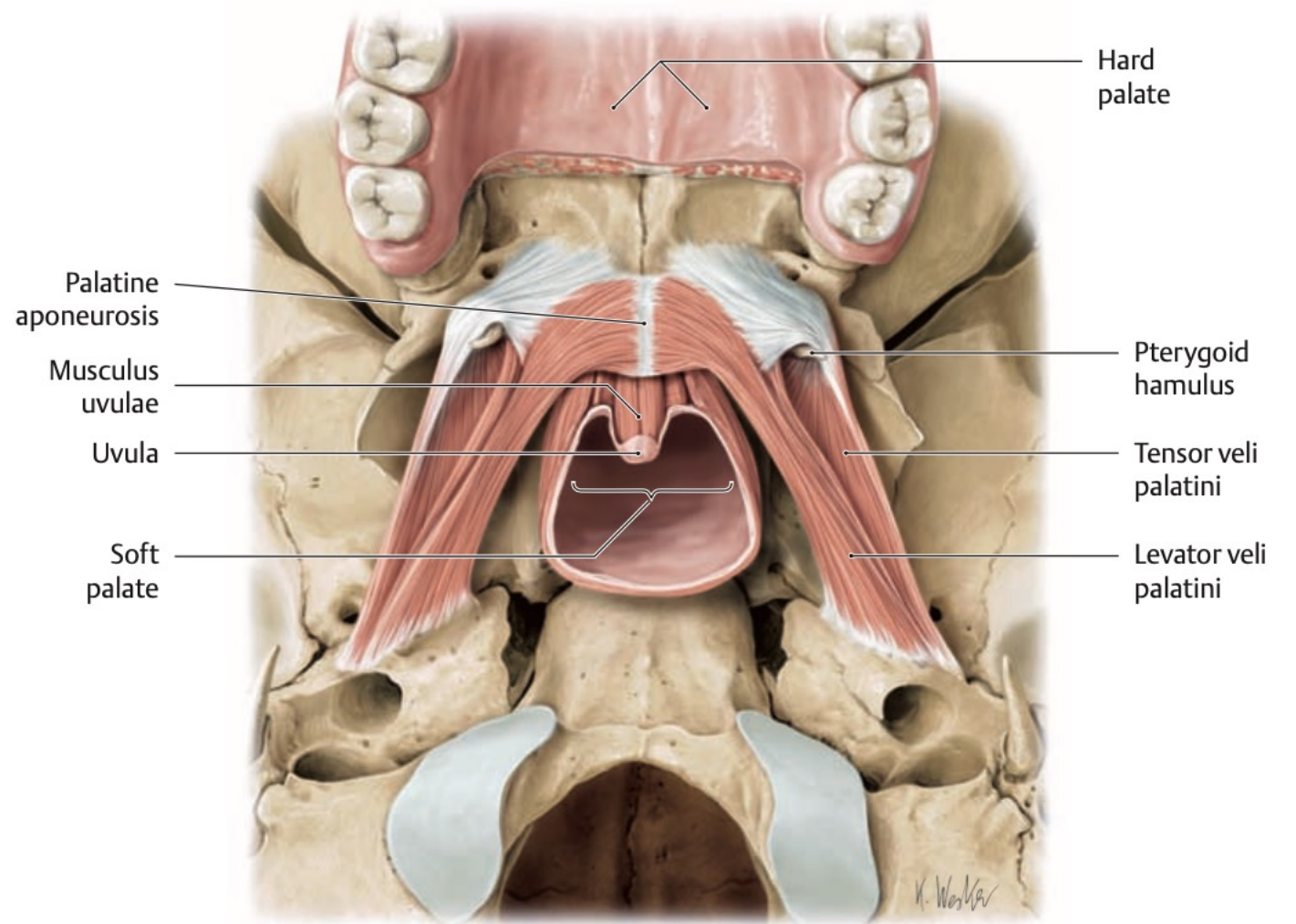
Thieme Atlas of Anatomy

- ♦ **N. nasopalatinus**
- ♦ **N. palatinus major**
- ♦ **N. palatinus minor**
- ♦ **N. infraorbitalis**
 - ♦ Rami alveolares superiores posteriores
 - ♦ Rami alveolares superiores medii
 - ♦ Rami alveolares superiores anteriores
 - ♦ Rami labii superiores
- ♦ **N. buccalis**

PALATUM DURUM – NERVI (V2)

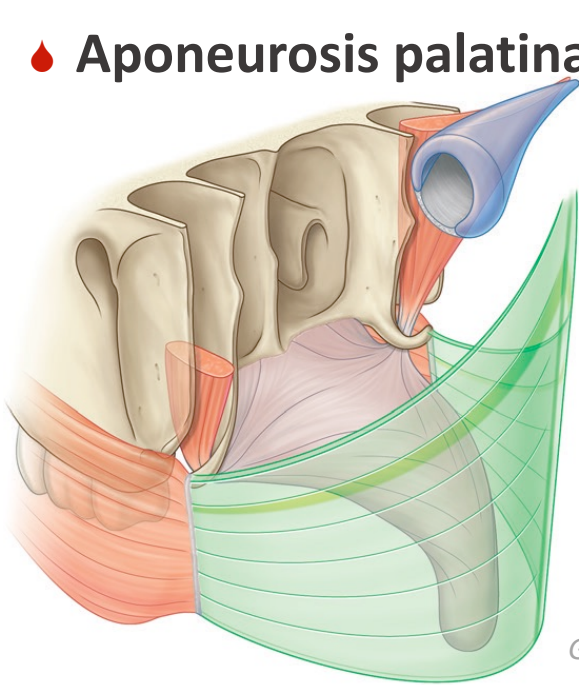


Thieme Atlas of Anatomy

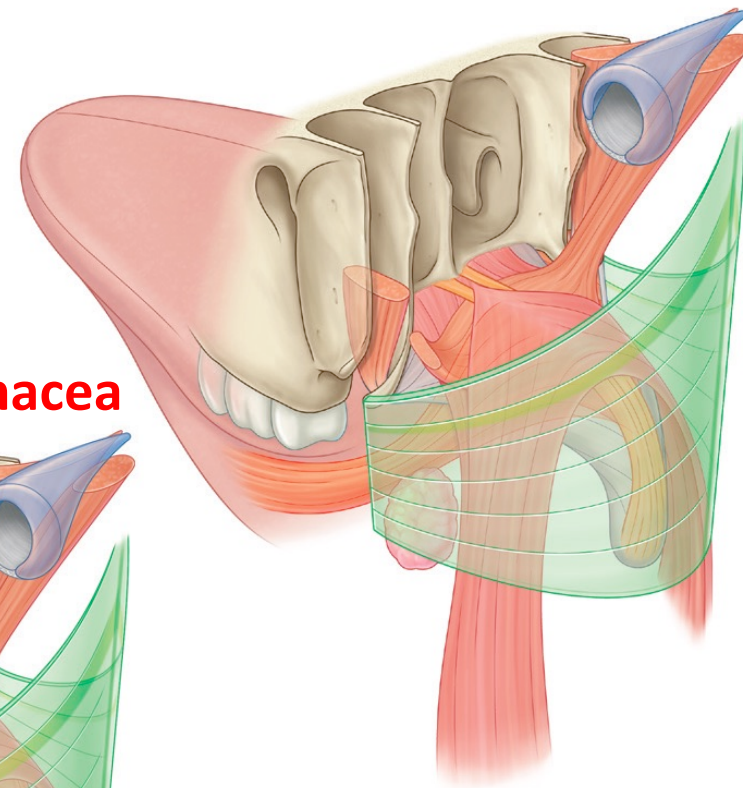
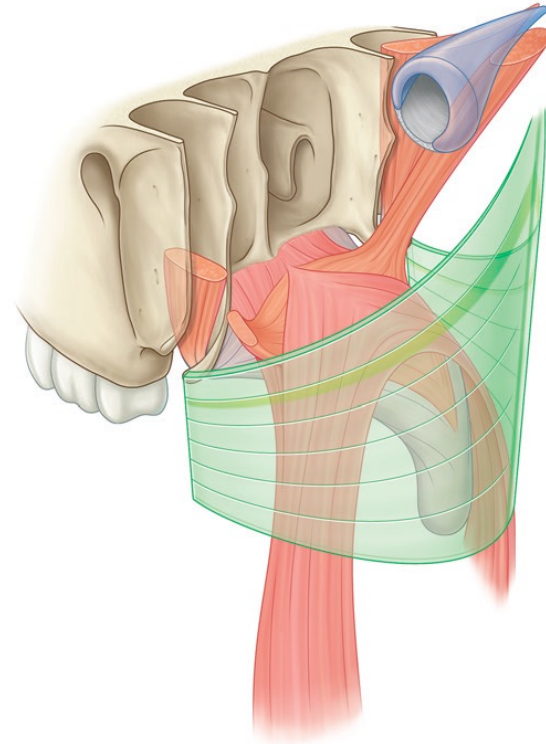
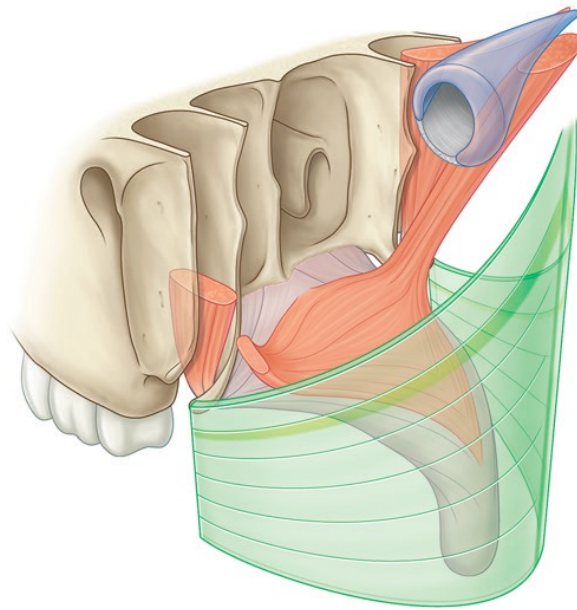


PALATUM MOLLE – SOFT PALATE

- ♦ **M. uvulae (n. X) - spina nasalis posterior**
- ♦ **M. palatoglossus (n. X) – lower surface of aponeurose**
- ♦ **M. palatopharyngeus (n. X) - upper surface of aponeurose**
- ♦ **M. levator veli palatini (n. X) - os temporale**
- ♦ **M. tensor veli palatini (n. V3) - os sphenoidale, tuba - pars membranacea**
 - ♦ *belowhamulus pt.*
- ♦ **Aponeurosis palatina**

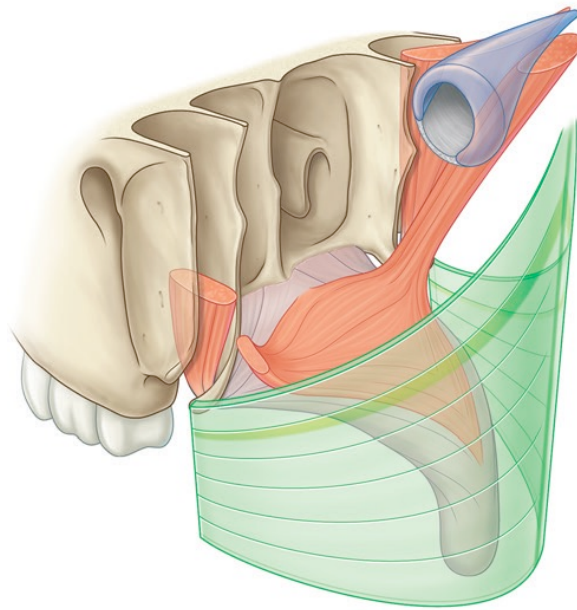
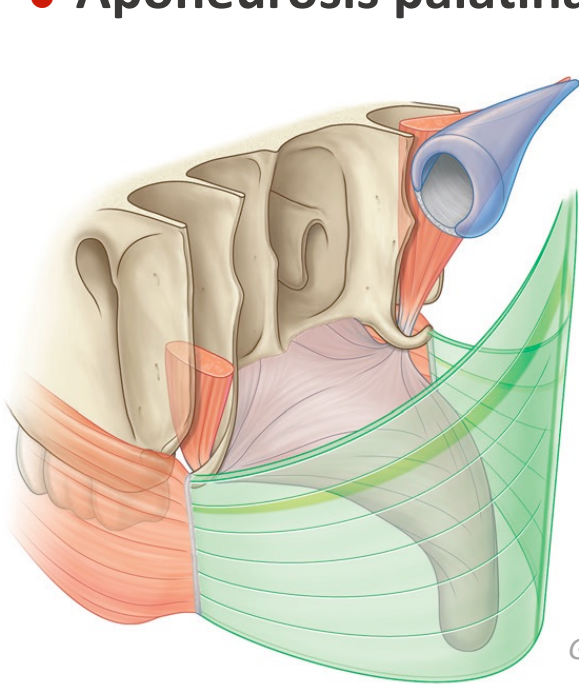


Grey's Anatomy, Elsevier

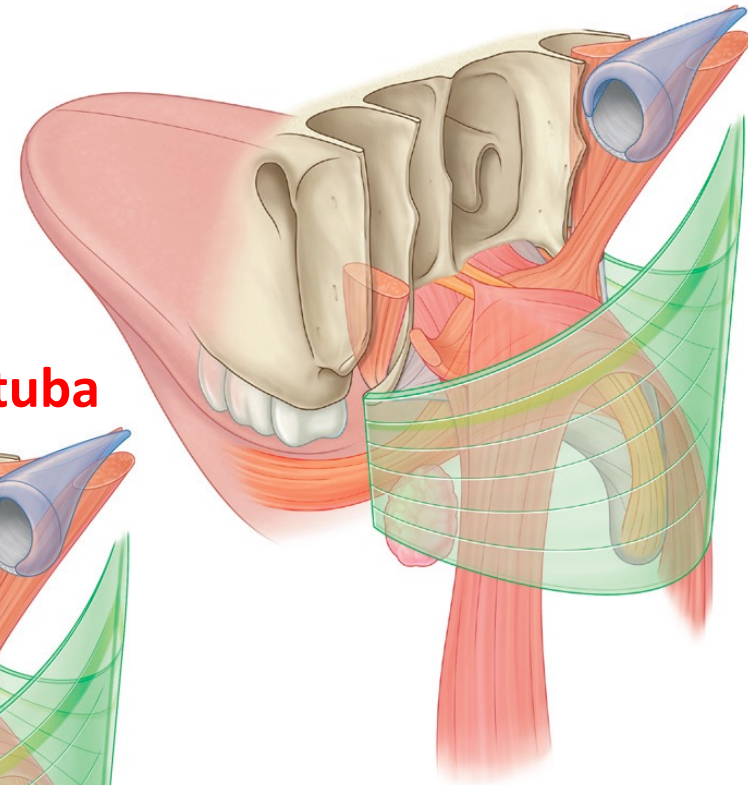
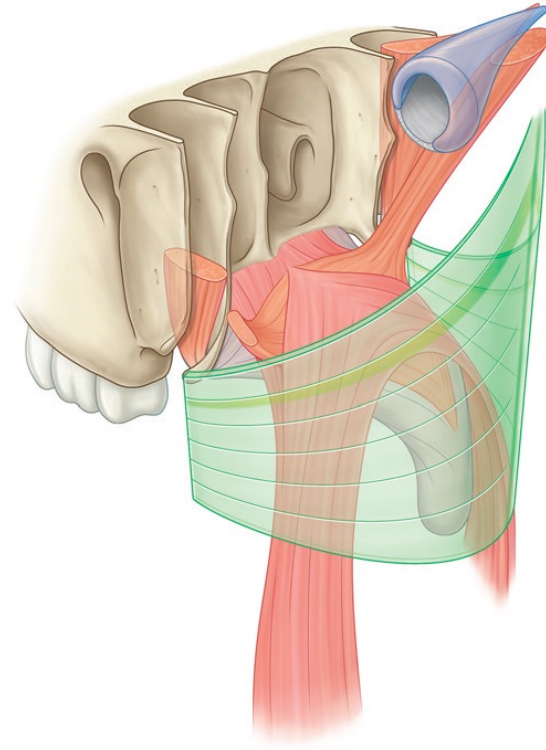


PALATUM MOLLE – SOFT PALATE

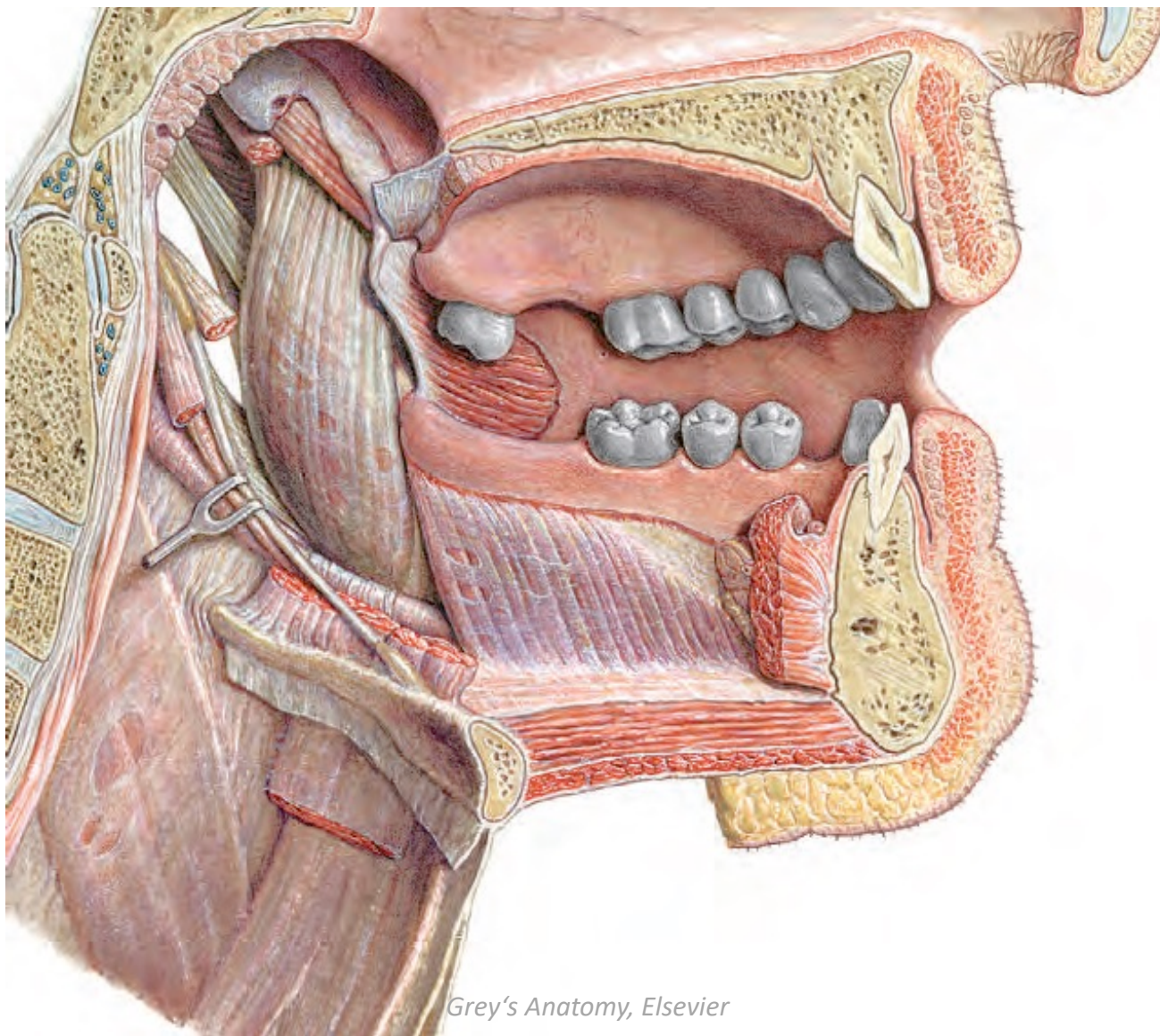
- ♦ **M. uvulae (n. X) – uvula elevation and retraction**
- ♦ **M. palatoglossus (n. X) – soft palate depression**
- ♦ **M. palatopharyngeus (n. X) - soft palate depression**
- ♦ **M. levator veli palatini (n. X) - soft palate elevation**
- ♦ **M. tensor veli palatini (n. V3) - make tension of soft palate, opens a tuba**
- ♦ **Aponeurosis palatina**



Grey's Anatomy, Elsevier

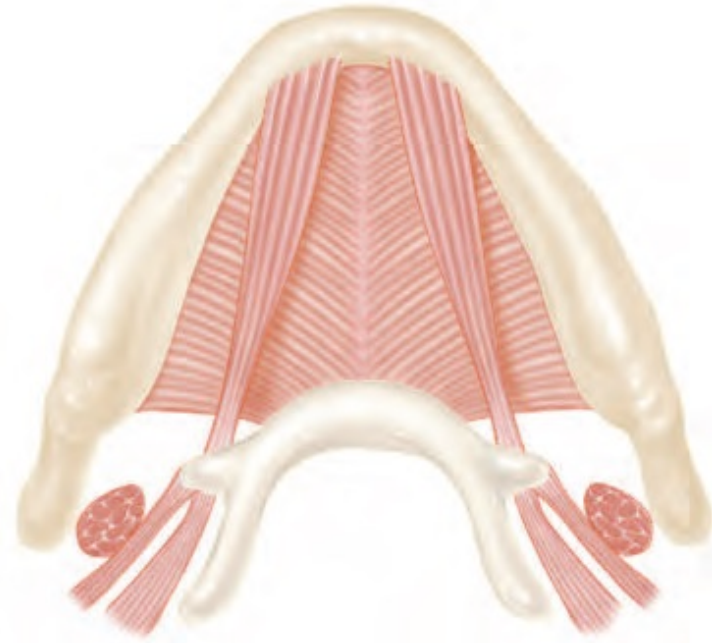


PALATUM MOLLE – SOFT PALATE



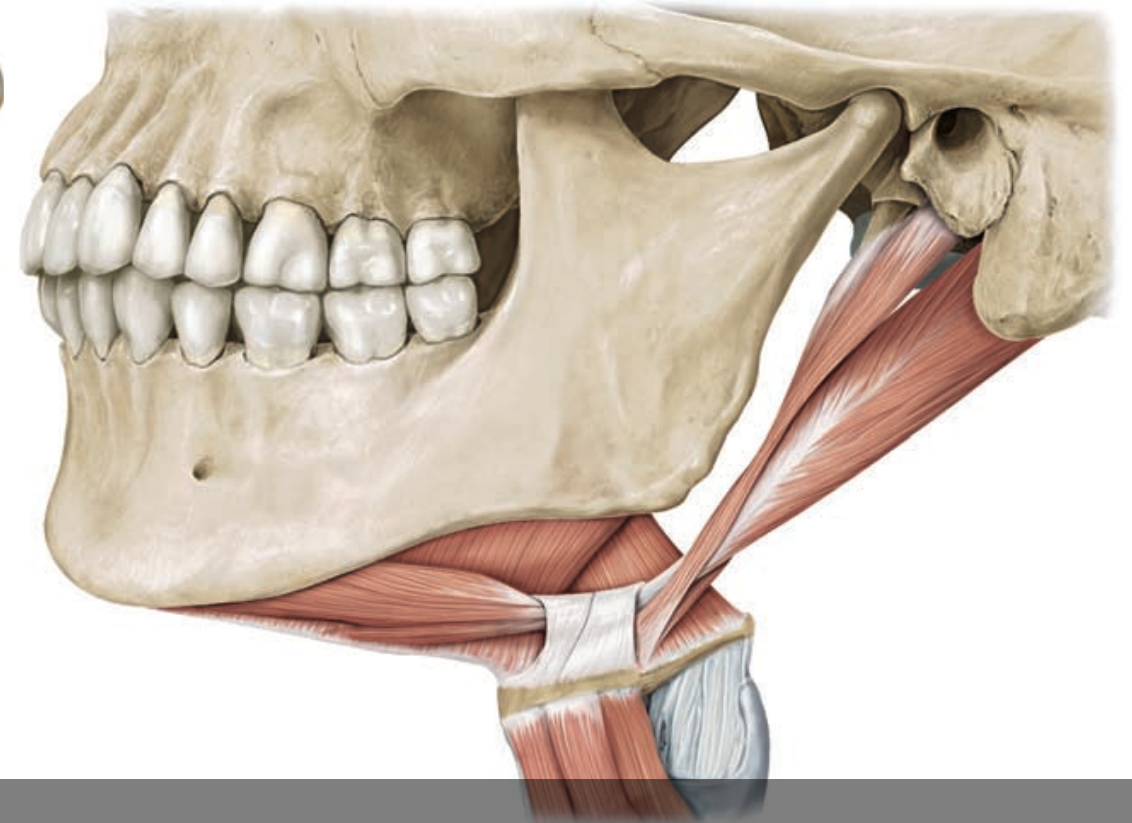
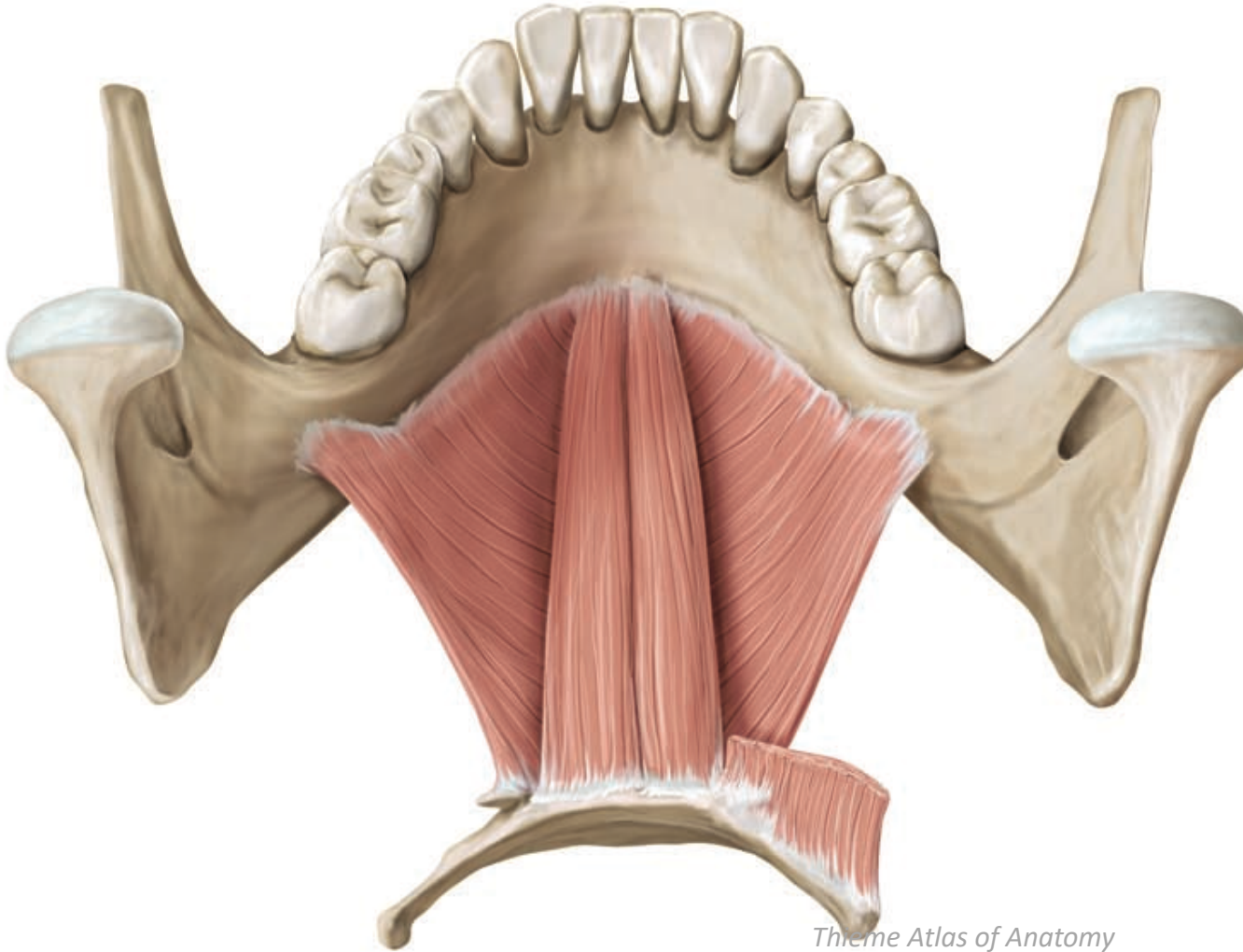
Grey's Anatomy, Elsevier

- ♦ **M. geniohyoideus** - n. C1
- ♦ **M. mylohyoideus** – V3
- ♦ **M. digastricus** - venter anterior – V3
 - ♦ *Venter posterior* n. VII
- ♦ **Gl. submandibularis**



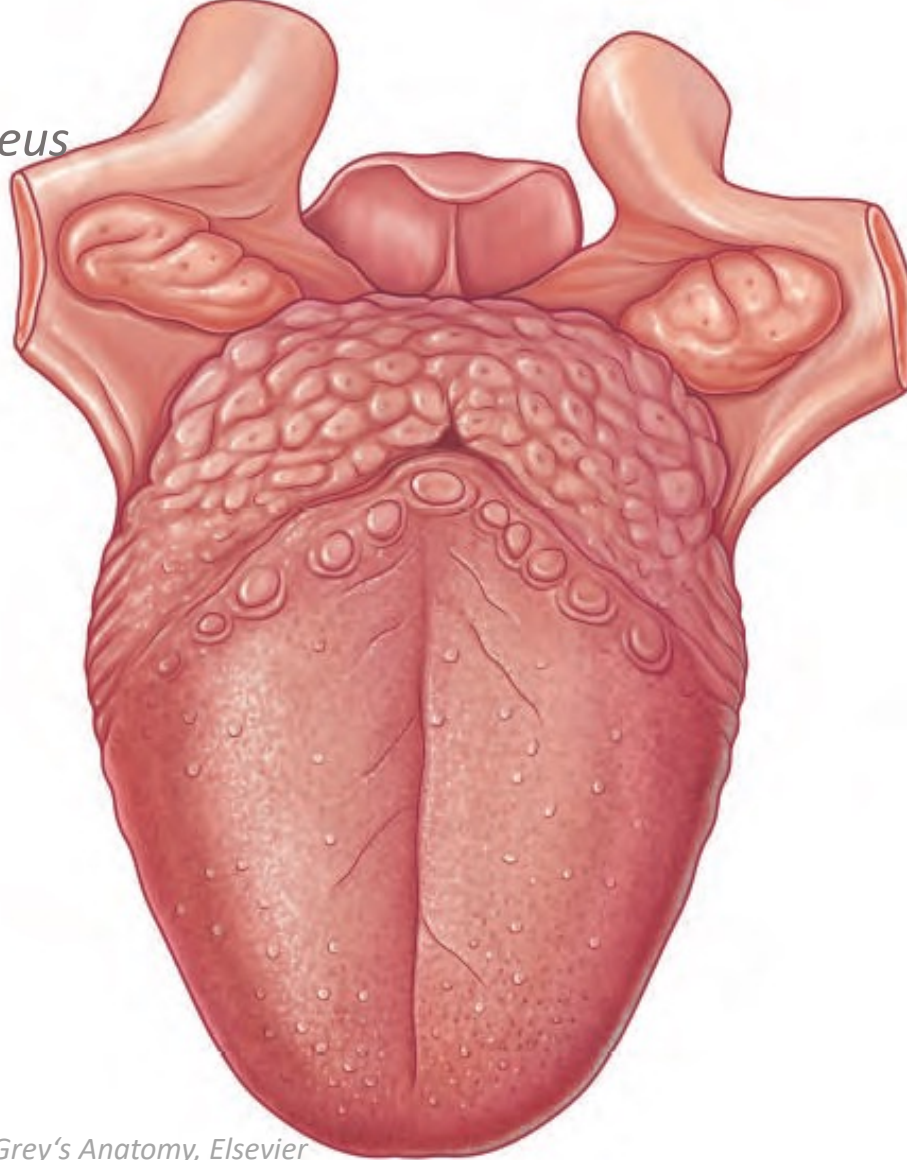
MOUTH FLOOR

- **M. geniohyoideus** - n. C1
- **M. mylohyoideus** – V3
- **M. digastricus - venter anterior** – V3
 - *Venter posterior n. VII*



MOUTH FLOOR MUSCLES

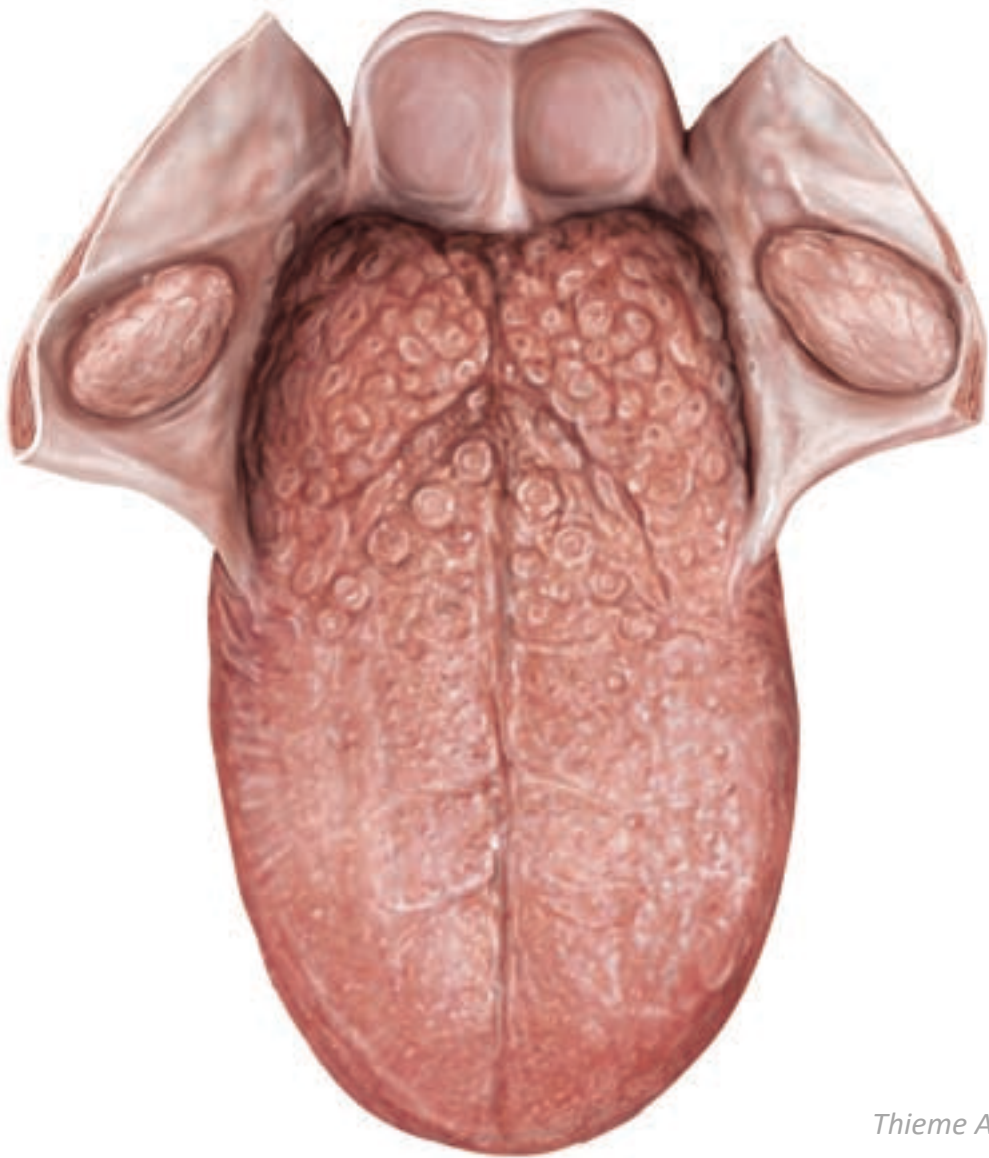
- *Arcus palatoglossus*
- *Arcus palatopharyngeus*
- *Tonsilla palatina*
- *Epiglottis*



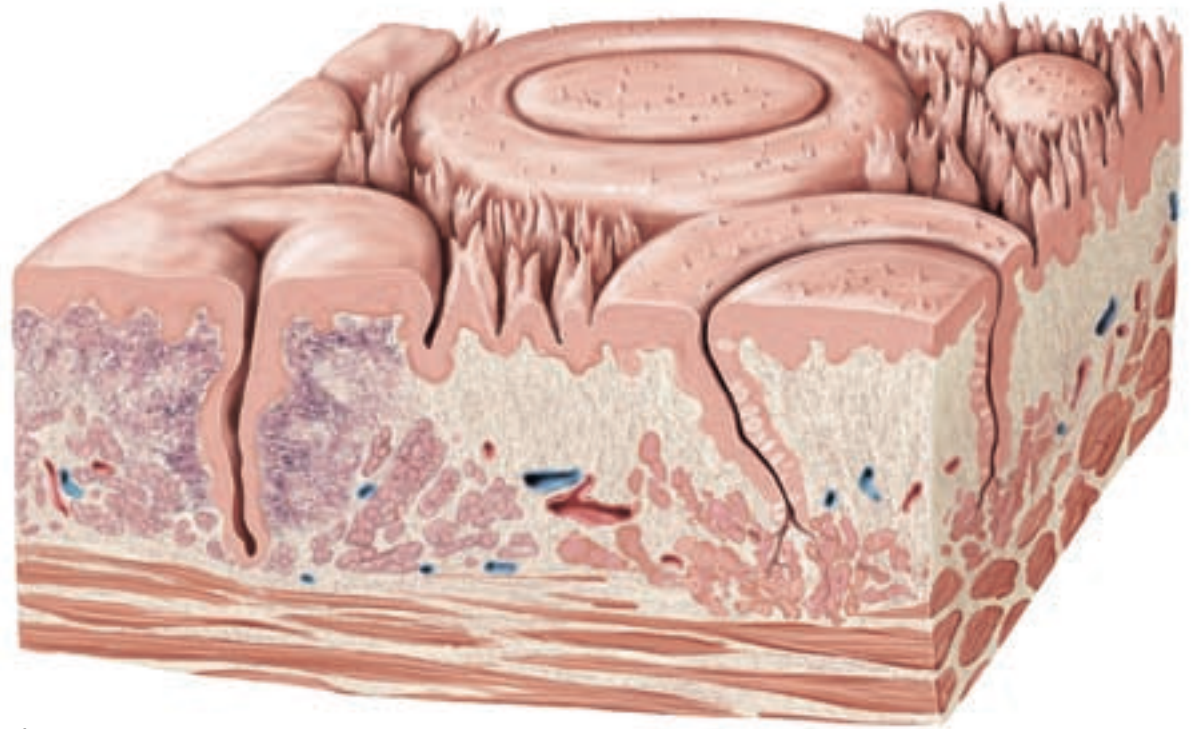
- **Pars oralis (praesulcalis)**
- *Apex*
- *Papillae filiformes*
- *Papillae fungiformes*
- *Papillae circumvallatae*
- *Papillae foliatae*
- **Sulcus terminalis**
- **Foramen caecum**
- **Pars pharyngea**
- *Tonsilla lingualis*
- *Plica glossoepiglottica medialis*

Grey's Anatomy, Elsevier

LINGUA - TONGUE

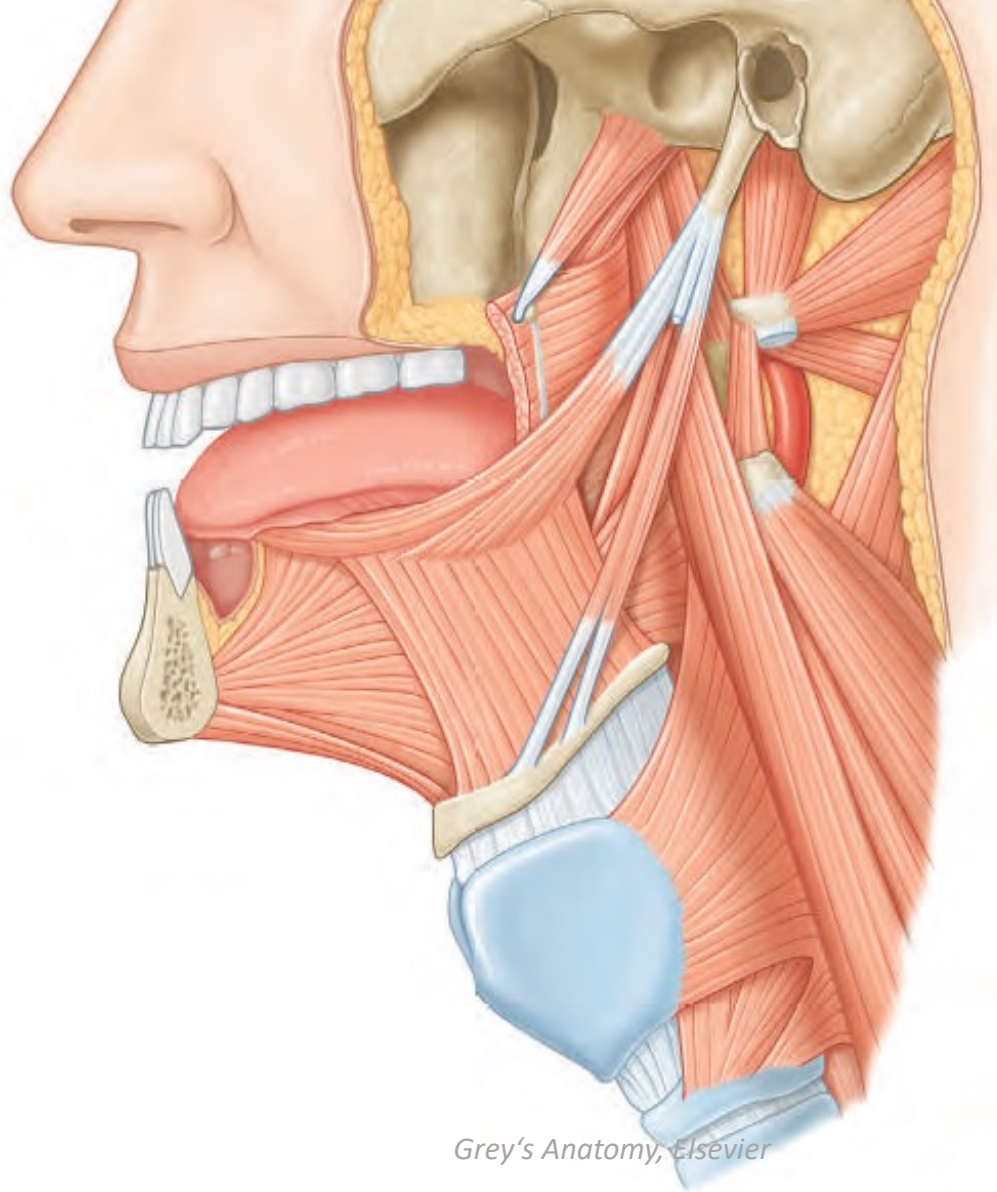


- **Papillae filiformes**
- **Papillae fungiformes**
- **Papillae circumvallatae**
- **Papillae foliatae**



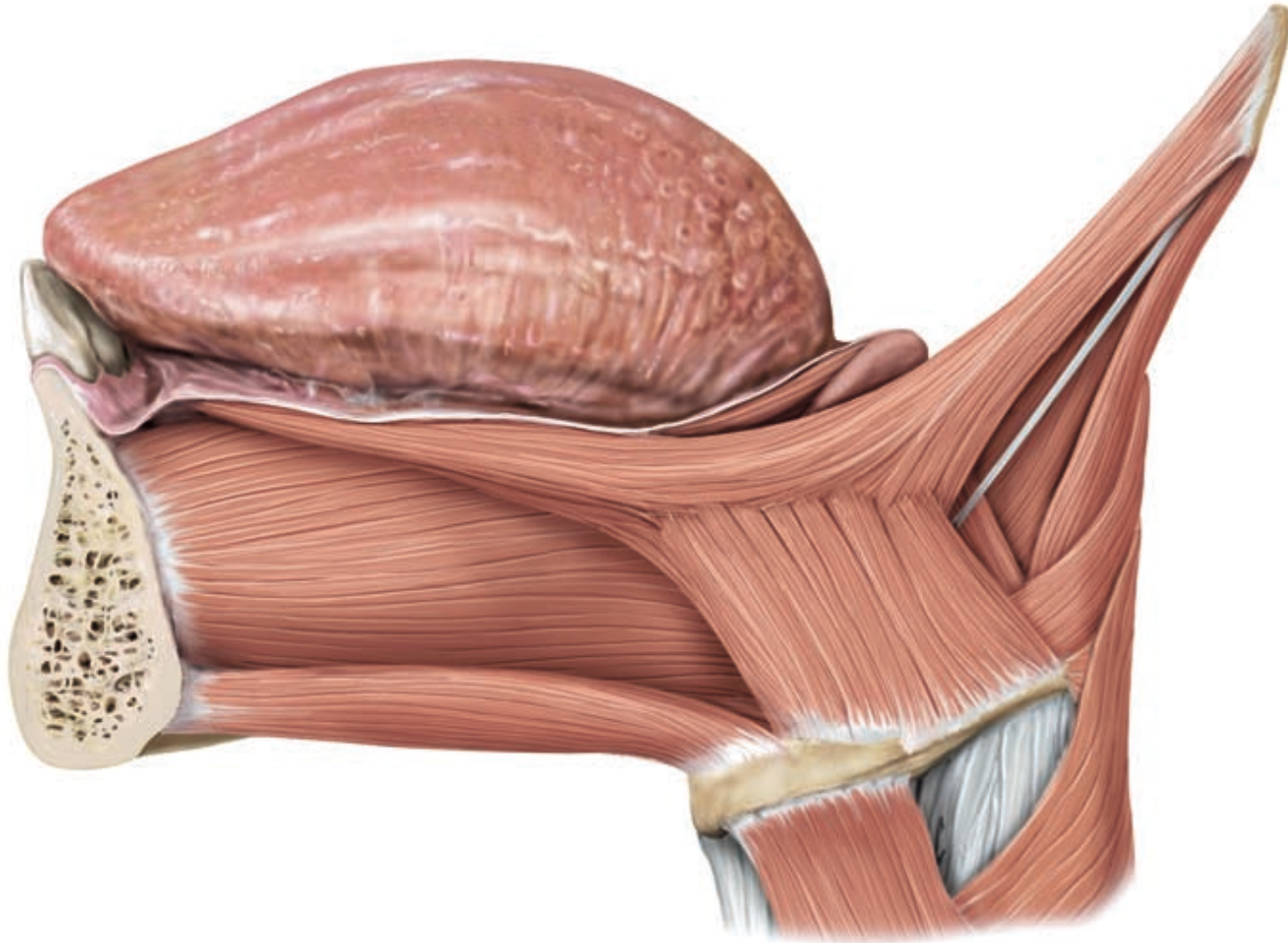
Thieme Atlas of Anatomy

PAPILLAE LINGUAE

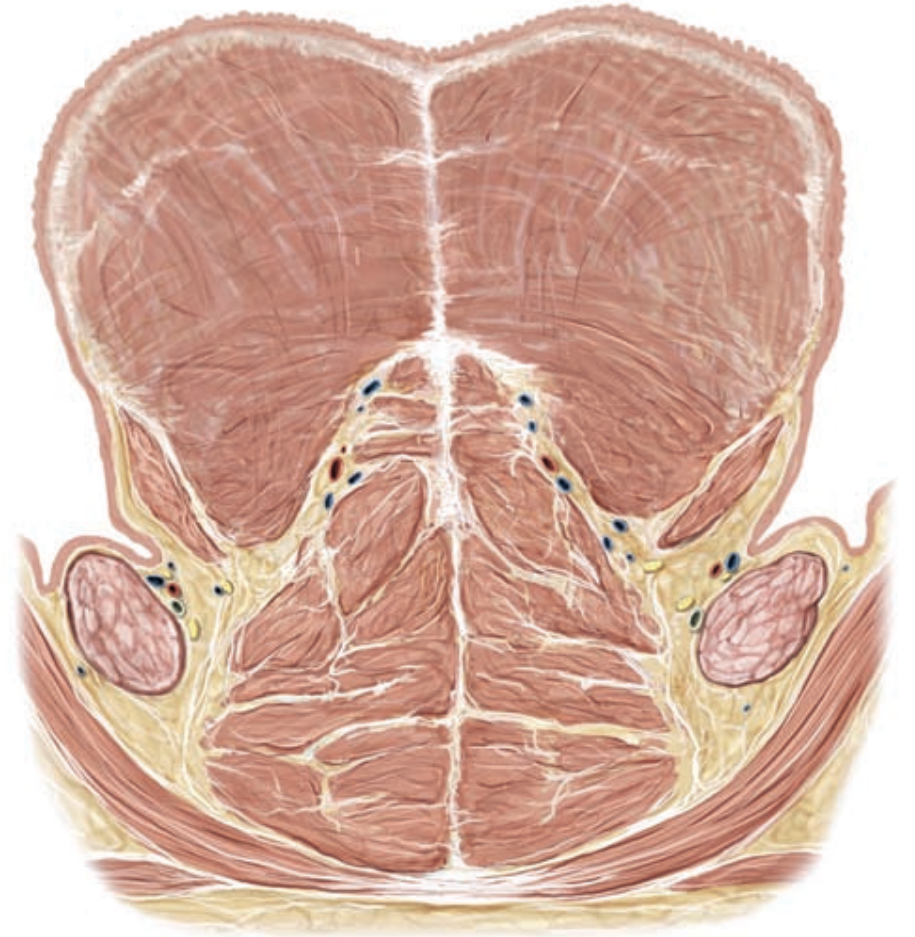


- ♦ **M. linguae externi - 4 páry**
- ♦ **M. genioglossus – n. XII**
 - ♦ Tuberculum genium superior
 - ♦ Triangular parallel with midline
 - ♦ protrusion
- ♦ **M. hyoglossus – n. XII**
 - ♦ os hyoideum – cornu majus
 - ♦ quadrangular
 - ♦ Lowering of tongue
- ♦ **M. styloglossus – n. XII**
 - ♦ From medial side of processus styloideus
 - ♦ Elevates and makes retraction
 - ♦ Ligamentum styloglossum – m stylogl+constrictor pharyngis – 2. branchial arch
- ♦ **M. palatoglossus – n. X**
 - ♦ Muscle of soft palate

MUSCULI LINGUAE



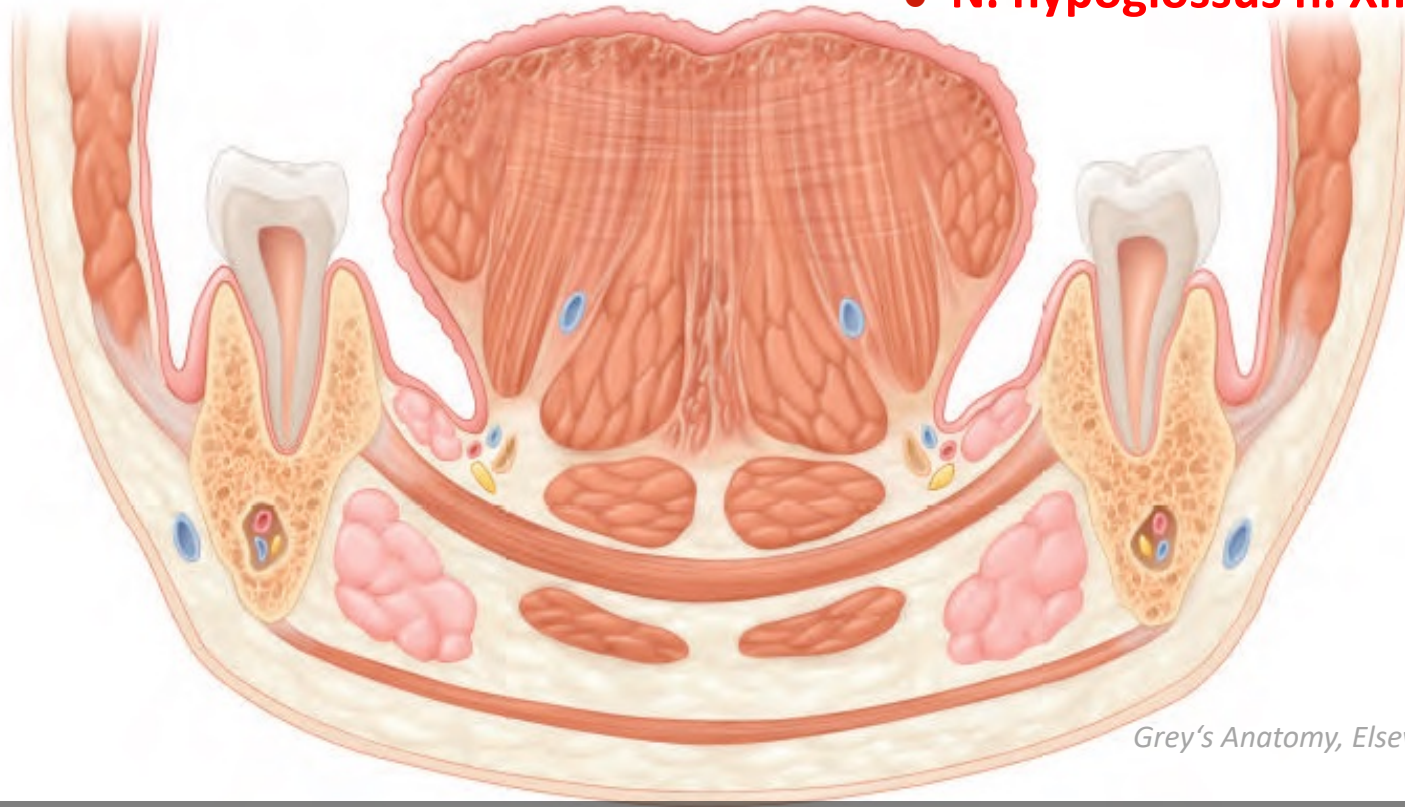
Thieme Atlas of Anatomy



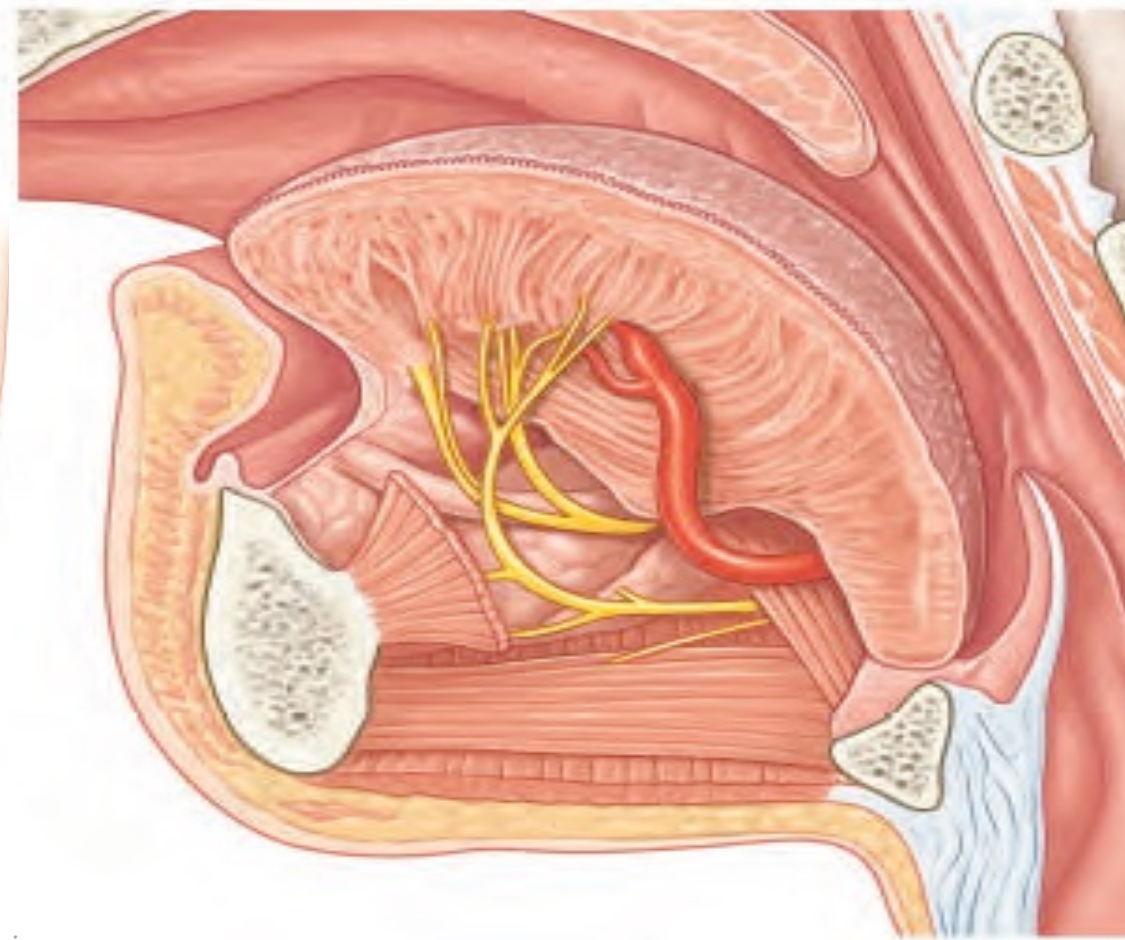
MM. EXTERNI ET INTERNI LINGUAE

- ♦ M. genioglossus - n. XII
- ♦ M. hyoglossus – n. XII
- ♦ M. mylohyoideus – n. V3
- ♦ M. digastricus – venter anterior – n. V3
- ♦ M. platysma – n. VII

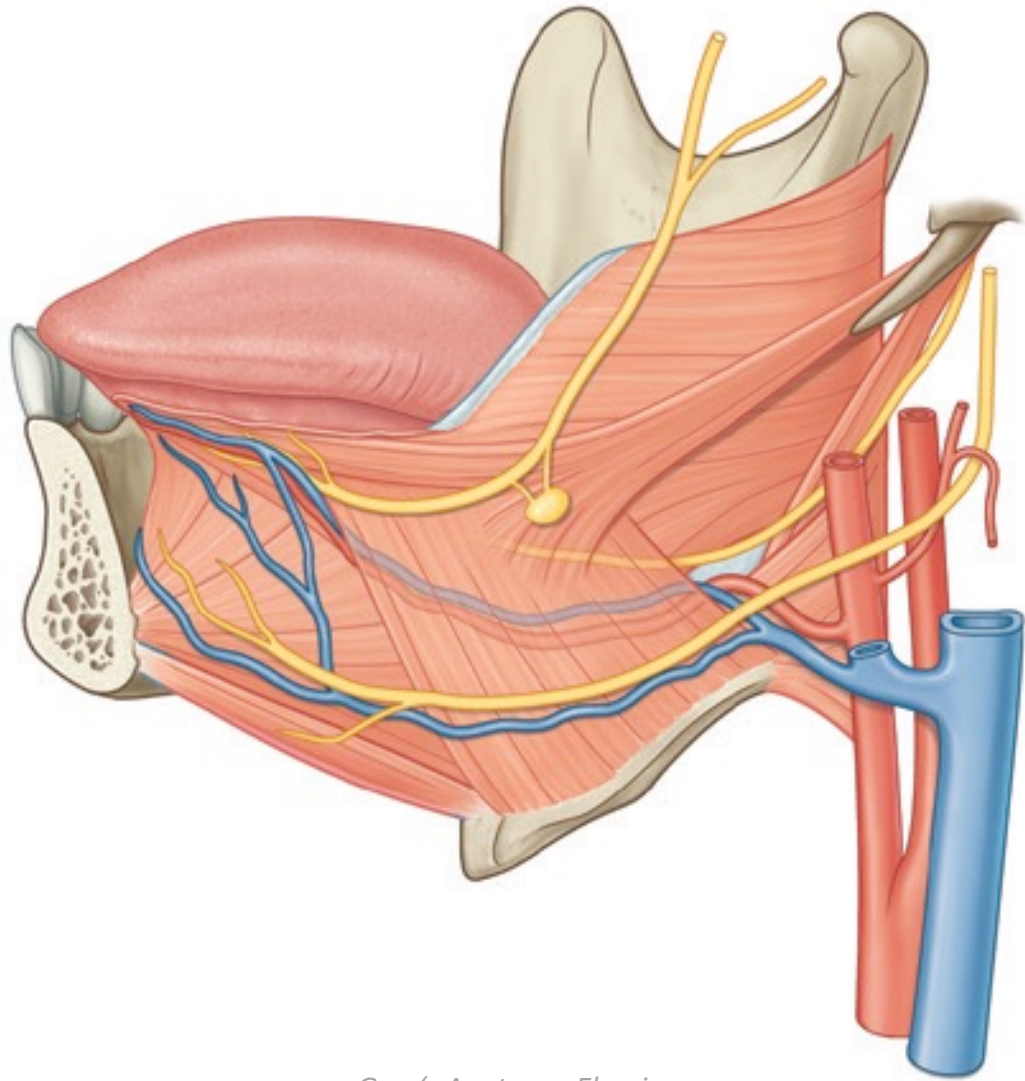
- ♦ M. longitudinalis superior
- ♦ M. longitudinalis inferior
- ♦ M. transversus
- ♦ M. verticalis
- ♦ **N. hypoglossus n. XII**



Grey's Anatomy, Elsevier



INTRINSIC TONGUE MUSCLES



Grey's Anatomy, Elsevier

- ♦ **A. lingualis**
- ♦ **V. lingualis dorsalis**
- ♦ **V. lingualis profunda**
- ♦ **N. lingualis (n. V3)**
 - ♦ sensoric
- ♦ **N. facialis (n. VII) - chorda tympani**
 - ♦ *fossa infratemporalis*
 - ♦ A part of n. lingualis, special sense -gustus
 - ♦ Parasympathetic - ggl. submandibulare
- ♦ **N. glossopharyngeus (n. IX)**
 - ♦ Pars pharyngealis - gustus
- ♦ **N. hypoglossus (n. XII)**
 - ♦ Lingual muscles

VASA ET NERVI

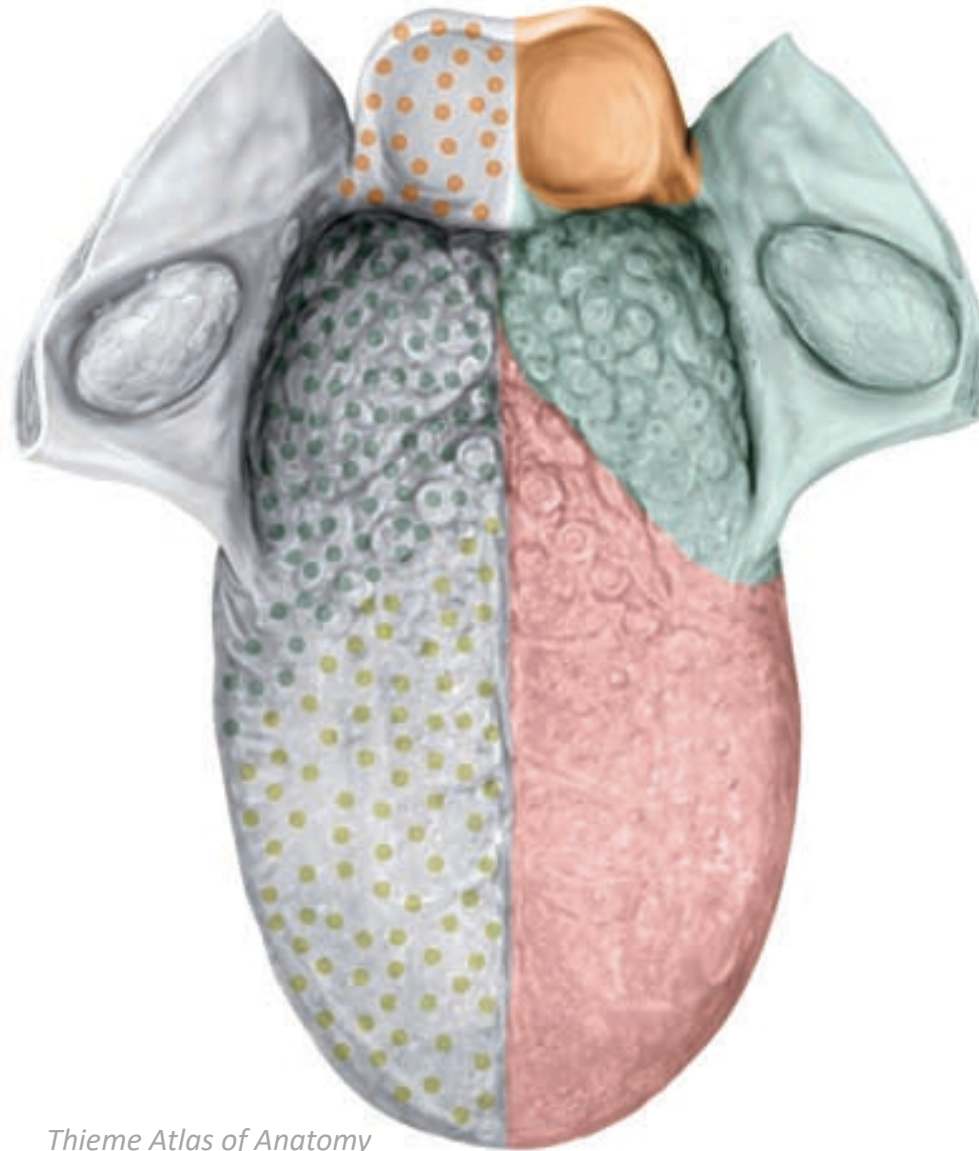
💧 **gustus**

💧 **N. VII**

💧 **chorda tympani**

💧 **N. IX**

💧 **N. X**



💧 **sensoric**

💧 **N. V**

💧 **N. IX**

💧 **N. X**

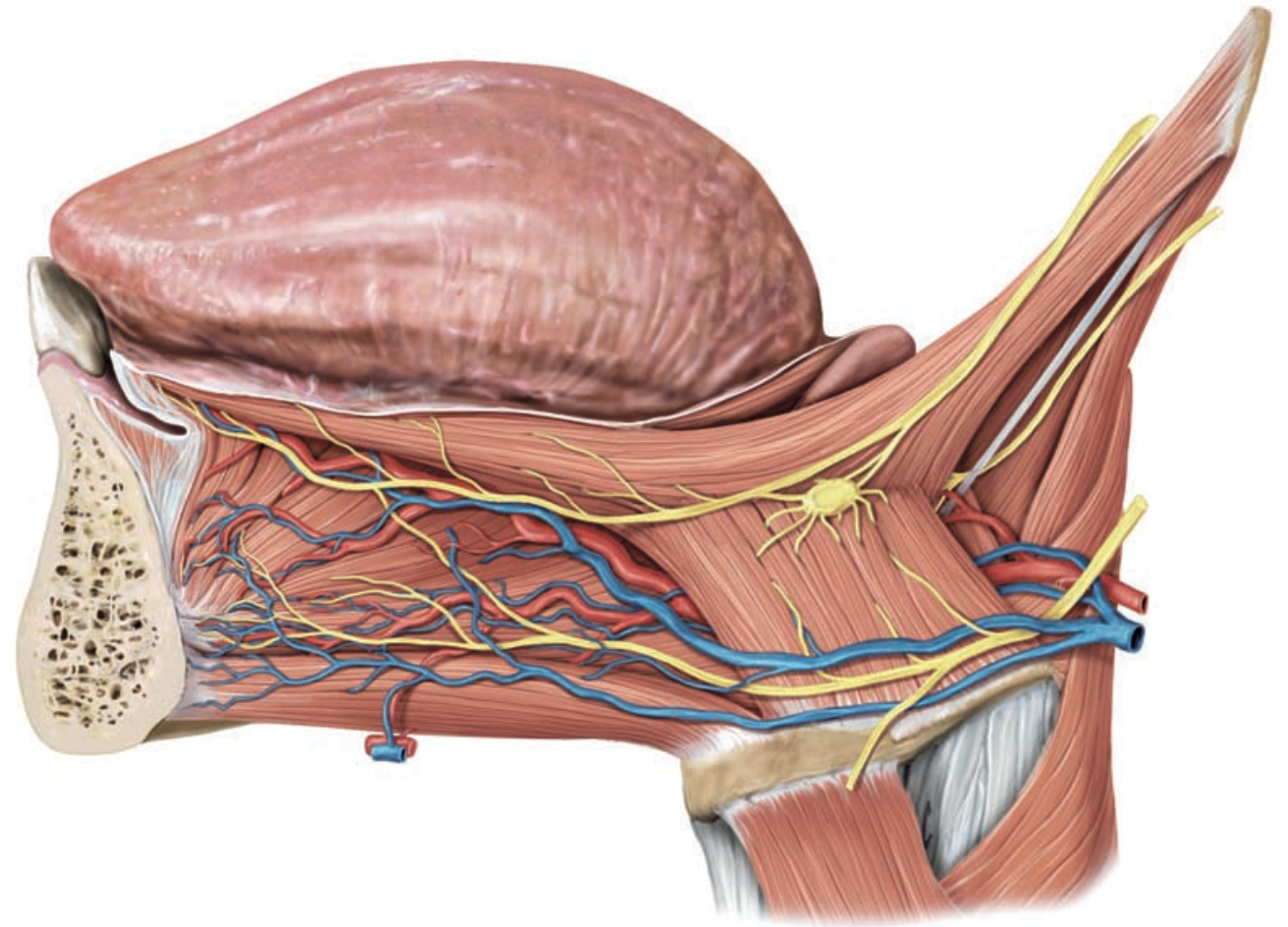
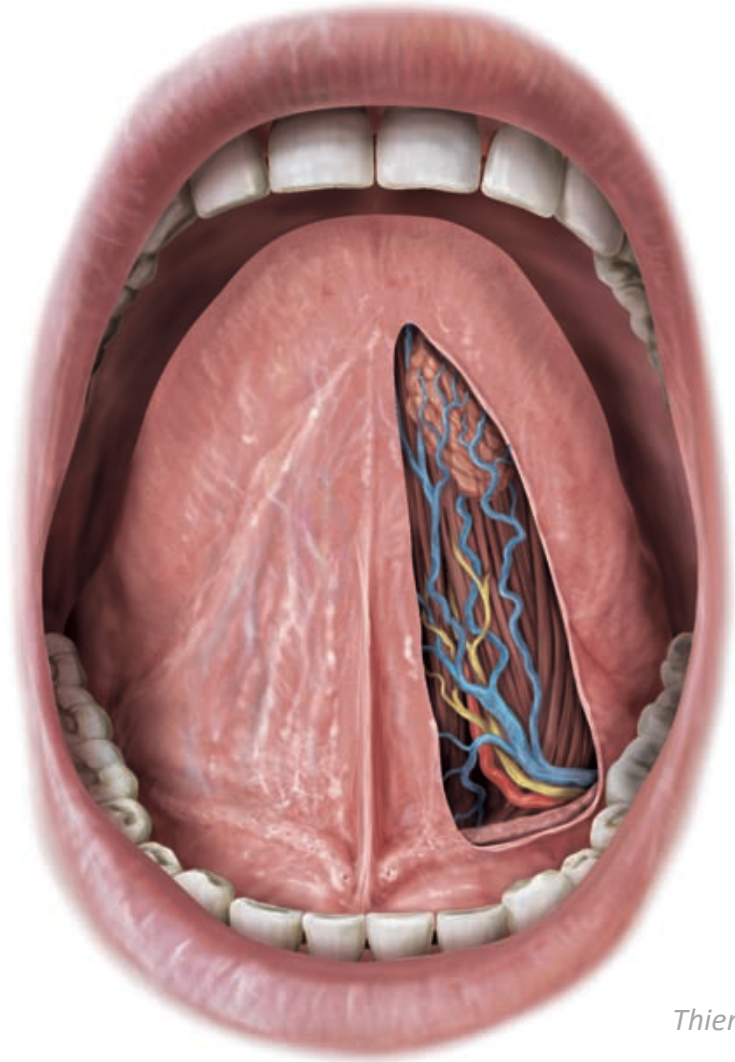
💧 **motor**

💧 **N. X (m. palatoglossus)**

💧 **N. XII**

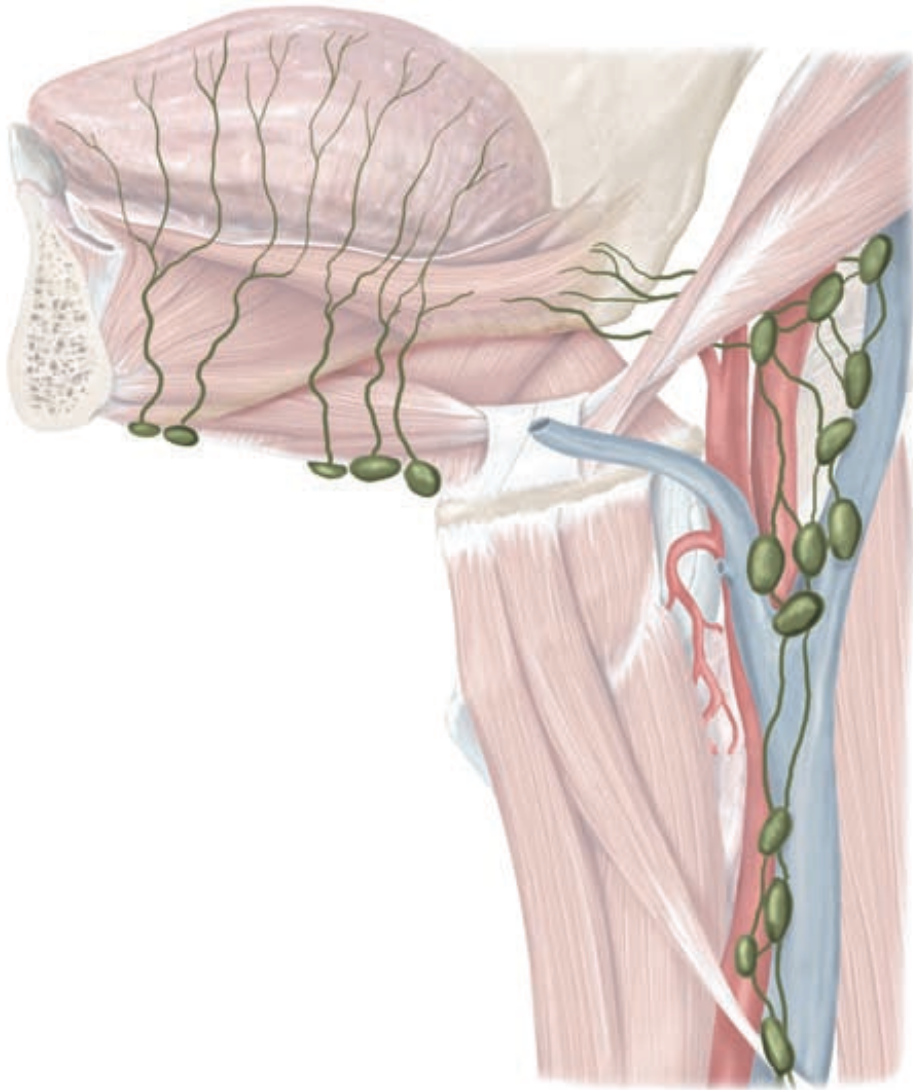
Thieme Atlas of Anatomy

NERVI LINGUAE

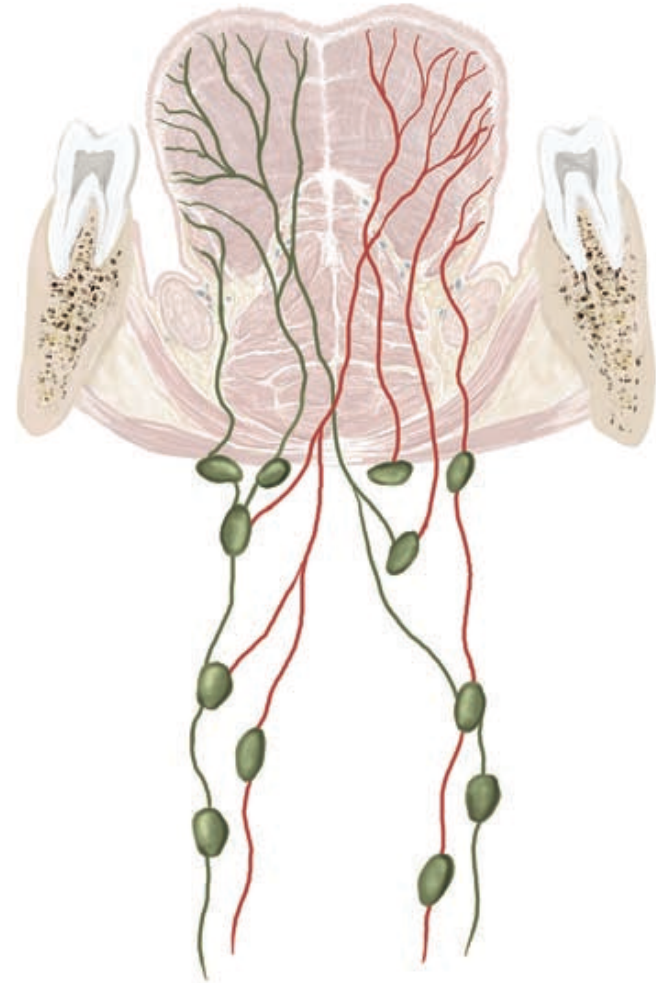


Thieme Atlas of Anatomy

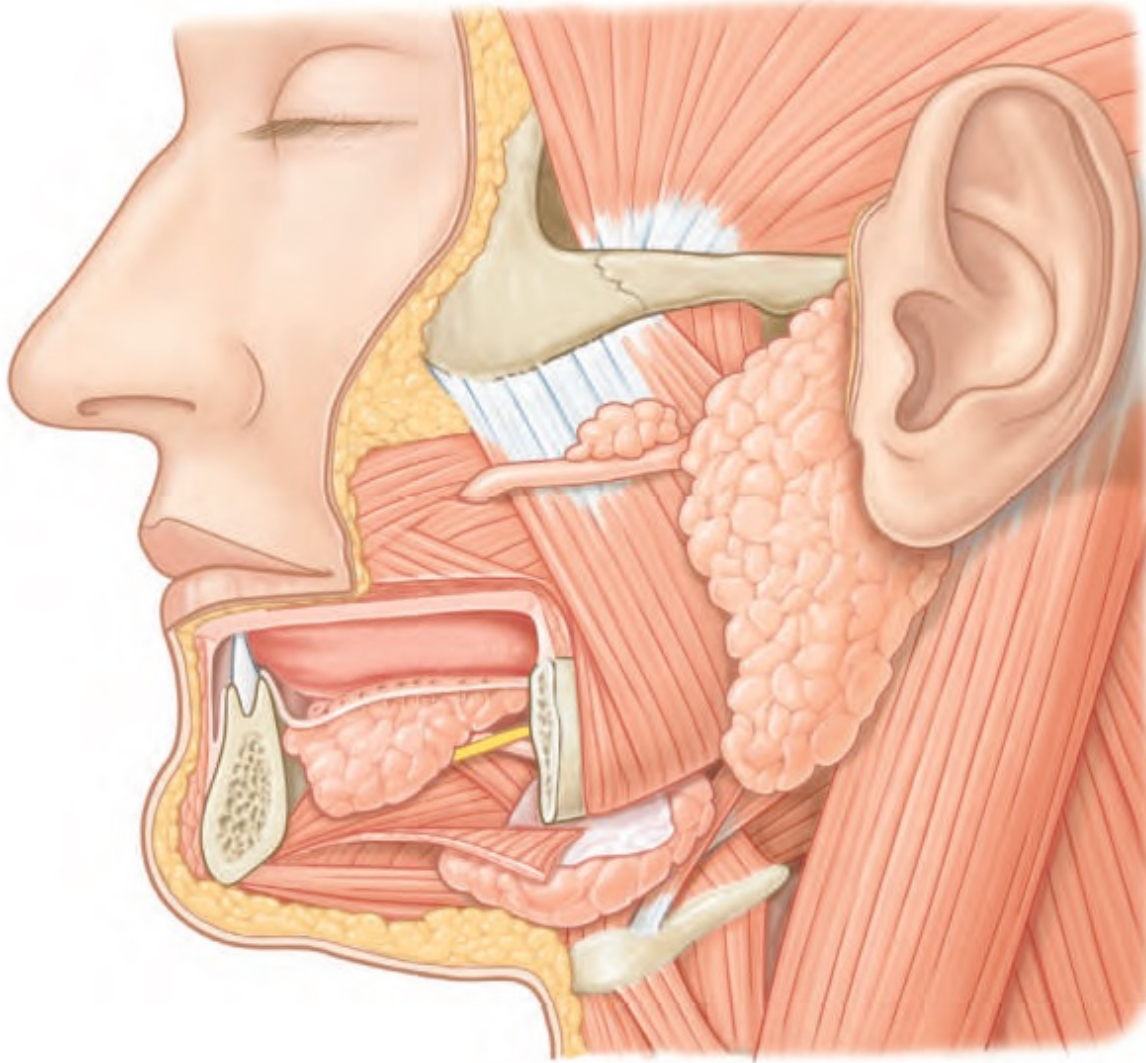
NERVI LINGUAE



Thieme Atlas of Anatomy



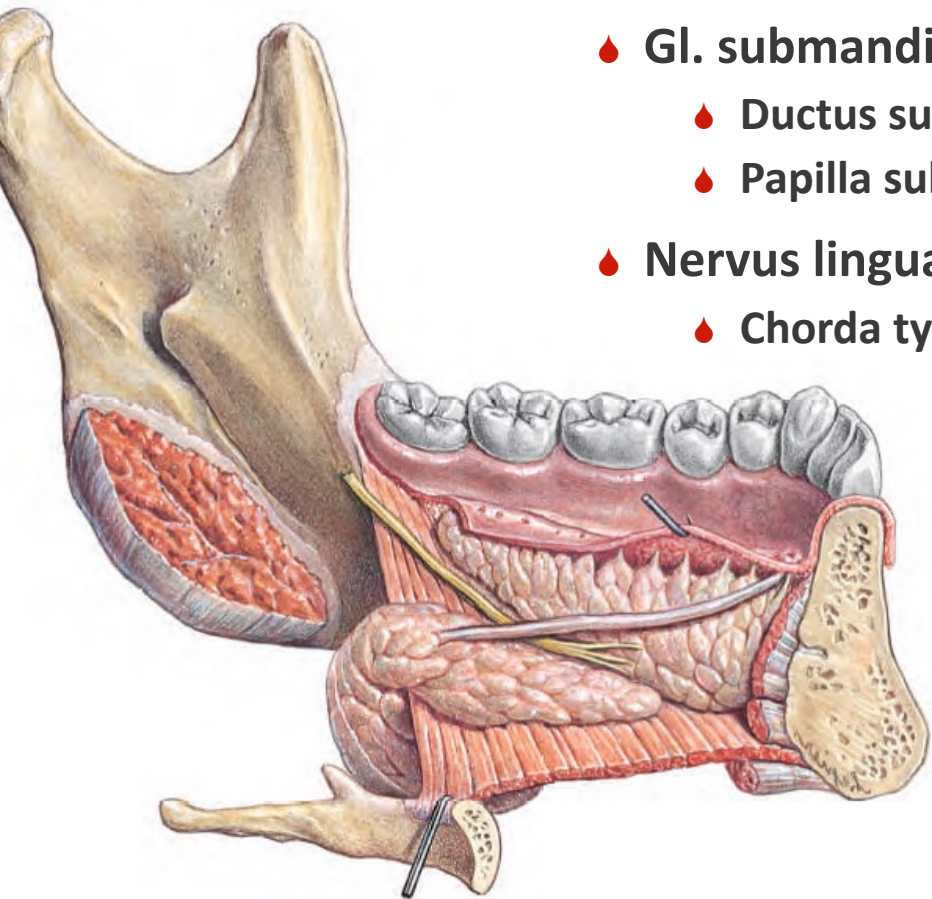
VASA ET NODI LYPHATICI LINGUAE



- ♦ **Glandula parotis**
 - ♦ Glandula parotis accesoria
- ♦ **Glandula submandibularis**
- ♦ **Glandula sublingualis**
- ♦ **Glandulae palatinales**
- ♦ **Glandulae labiales**
- ♦ **Glandulae linguales**

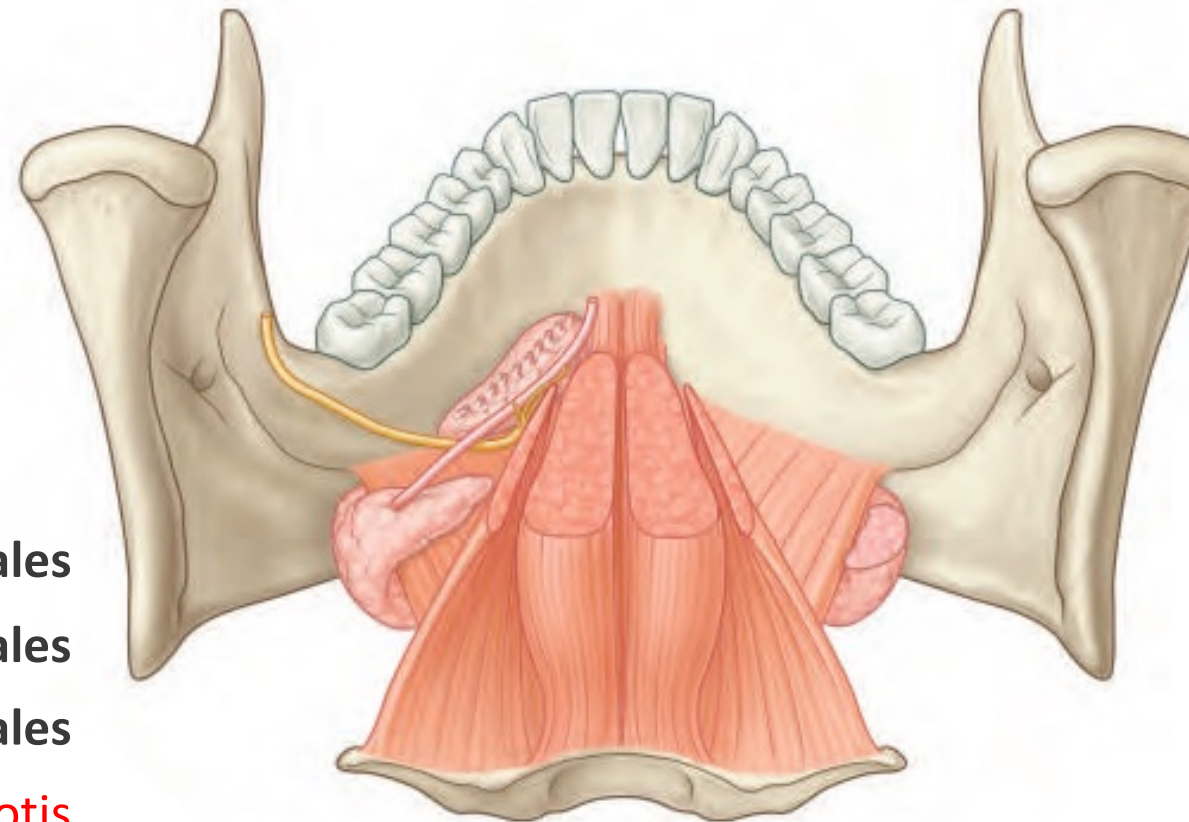
Grey's Anatomy, Elsevier

GLL. SALIVARIAE



- ♦ Gl. sublingualis - mucinous
- ♦ Gl. submandibularis - serous
 - ♦ Ductus submandibularis
 - ♦ Papilla sublingualis
- ♦ Nervus lingualis (n. V3)
 - ♦ Chorda tympani (n. VII)

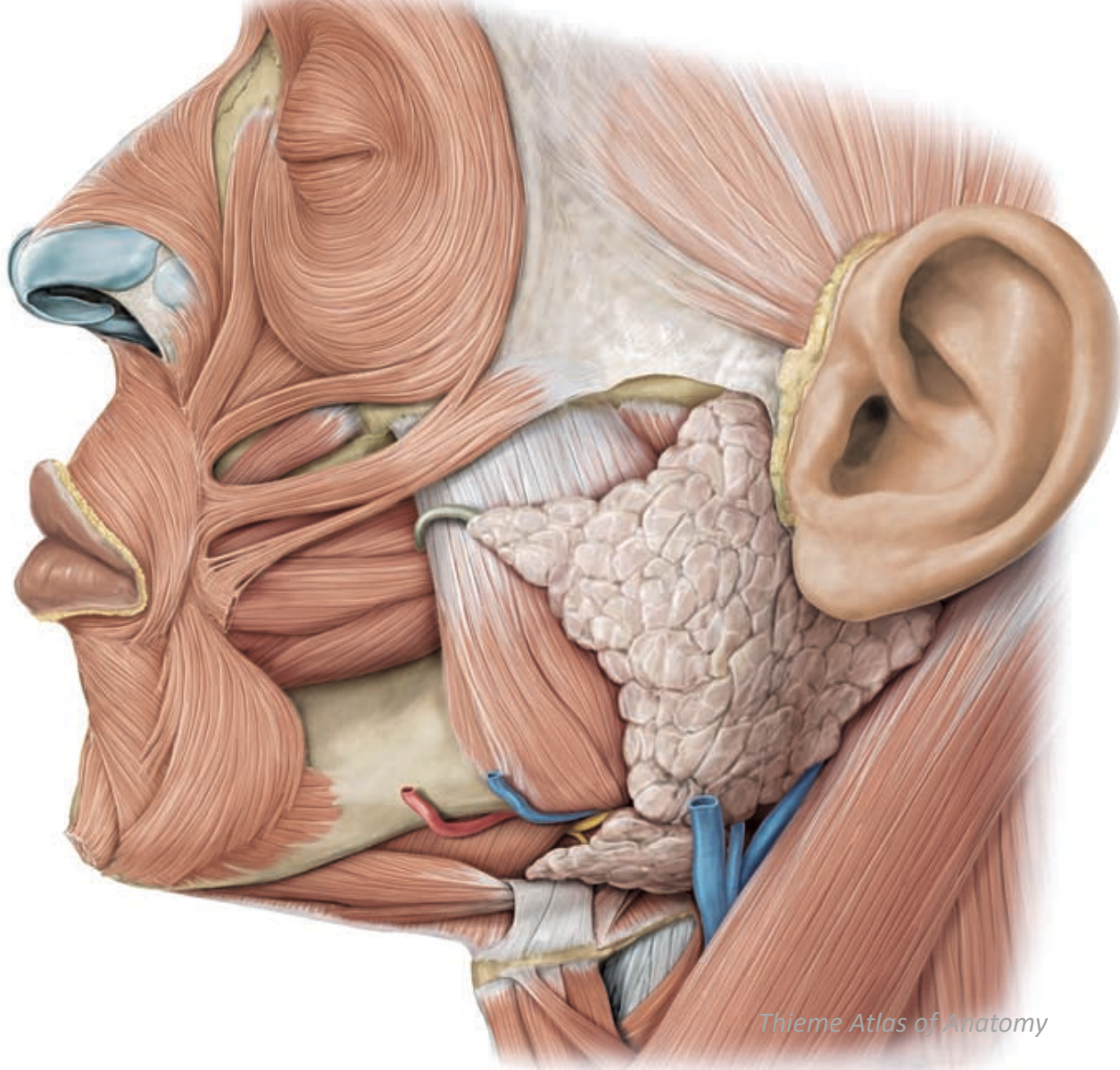
Grey's Anatomy, Elsevier



- ♦ Gll. linguales
- ♦ Gll. palatinales
- ♦ Gll. labiales
- ♦ Gl. parotis

Grey's Anatomy, Elsevier

GL. SALIVARIAE

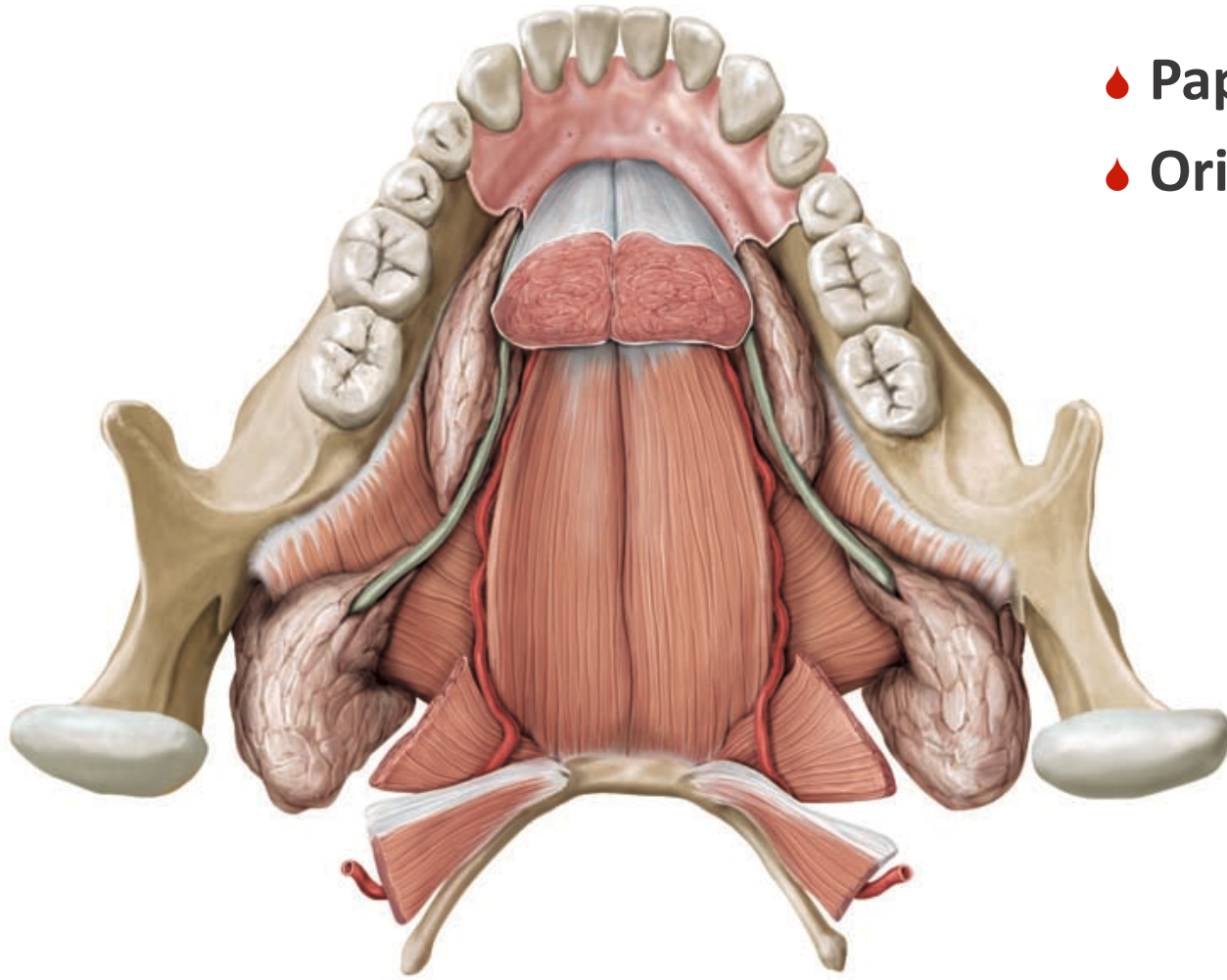


Thieme Atlas of Anatomy

- Lobus profundus
- Lobus superficialis
- N. facialis (n. VII)
- Ductus gl. parotis
- Buccinator

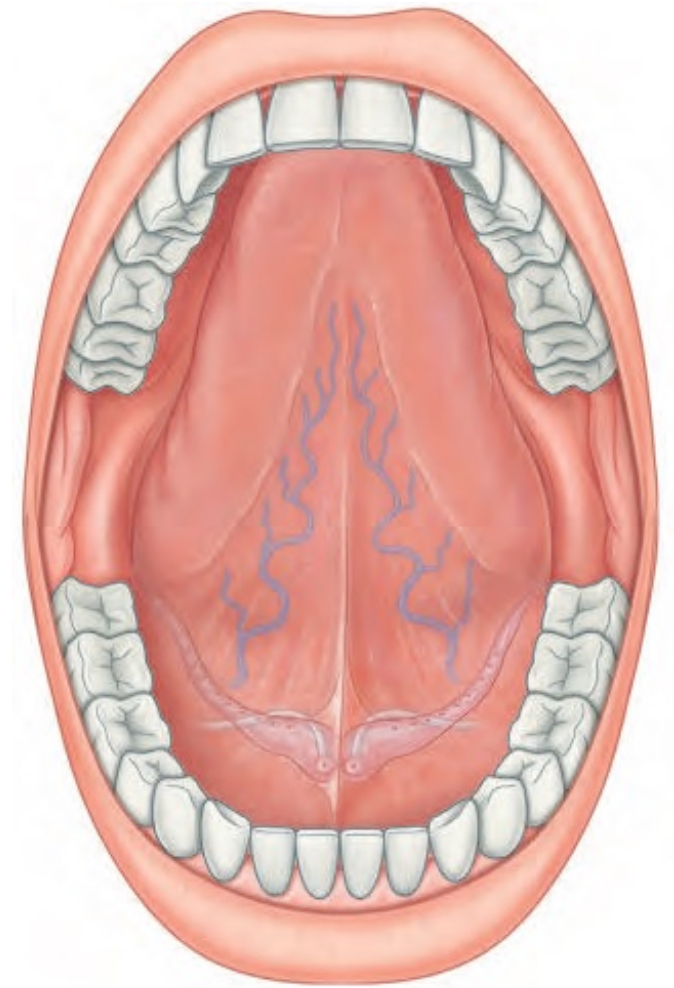
- Gl. parotis accesoria
 - M2

GL. PAROTIS



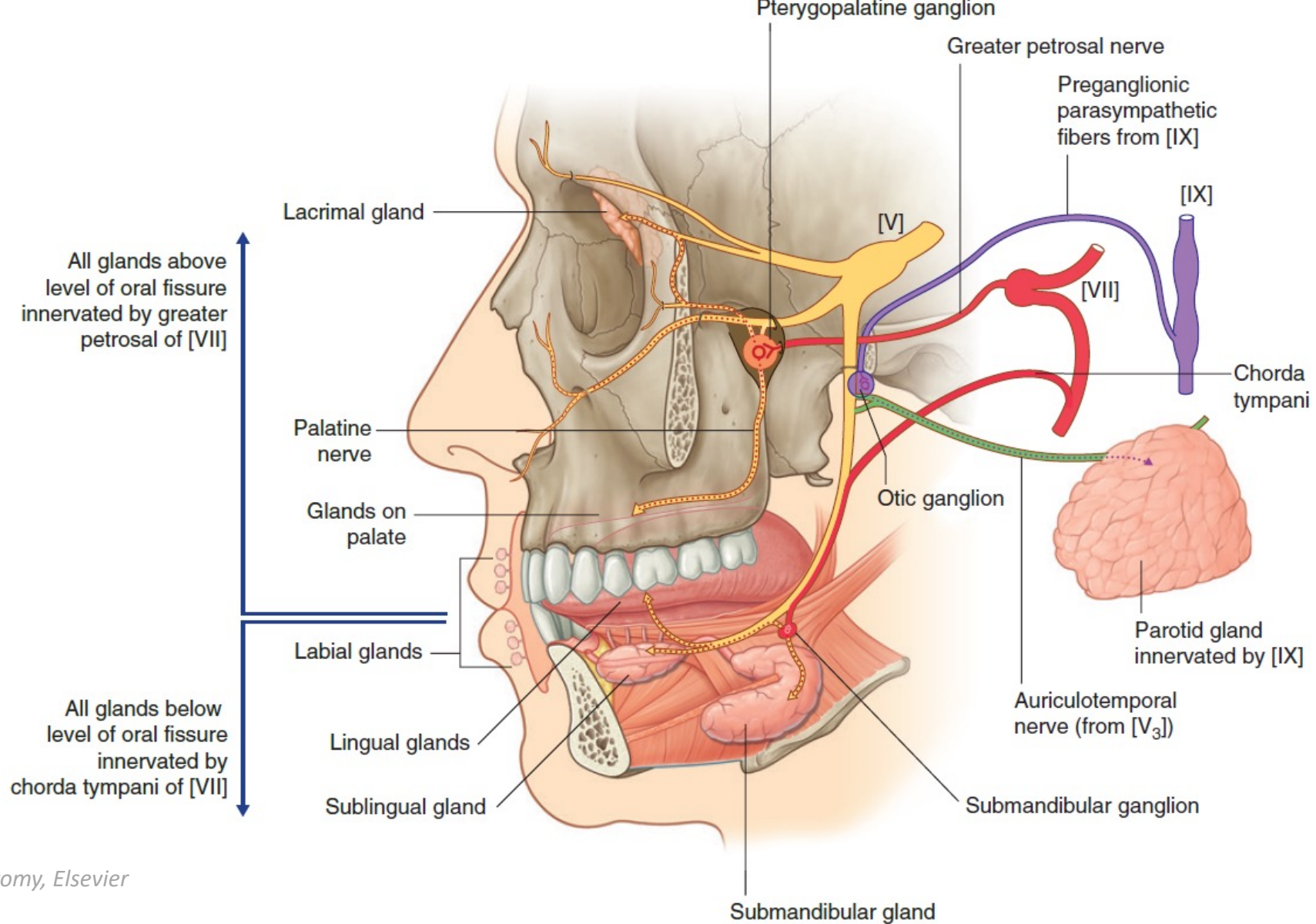
Thieme Atlas of Anatomy

- **Papilla sublingualis**
- **Orificia ductuli**



Grey's Anatomy, Elsevier

GLL. SUBMANDIBULARIS ET SUBLINGUALIS



Grey's Anatomy, Elsevier

GLL. SALIVARIAE - PARASYMPATICUS

🔥 Sympaticus

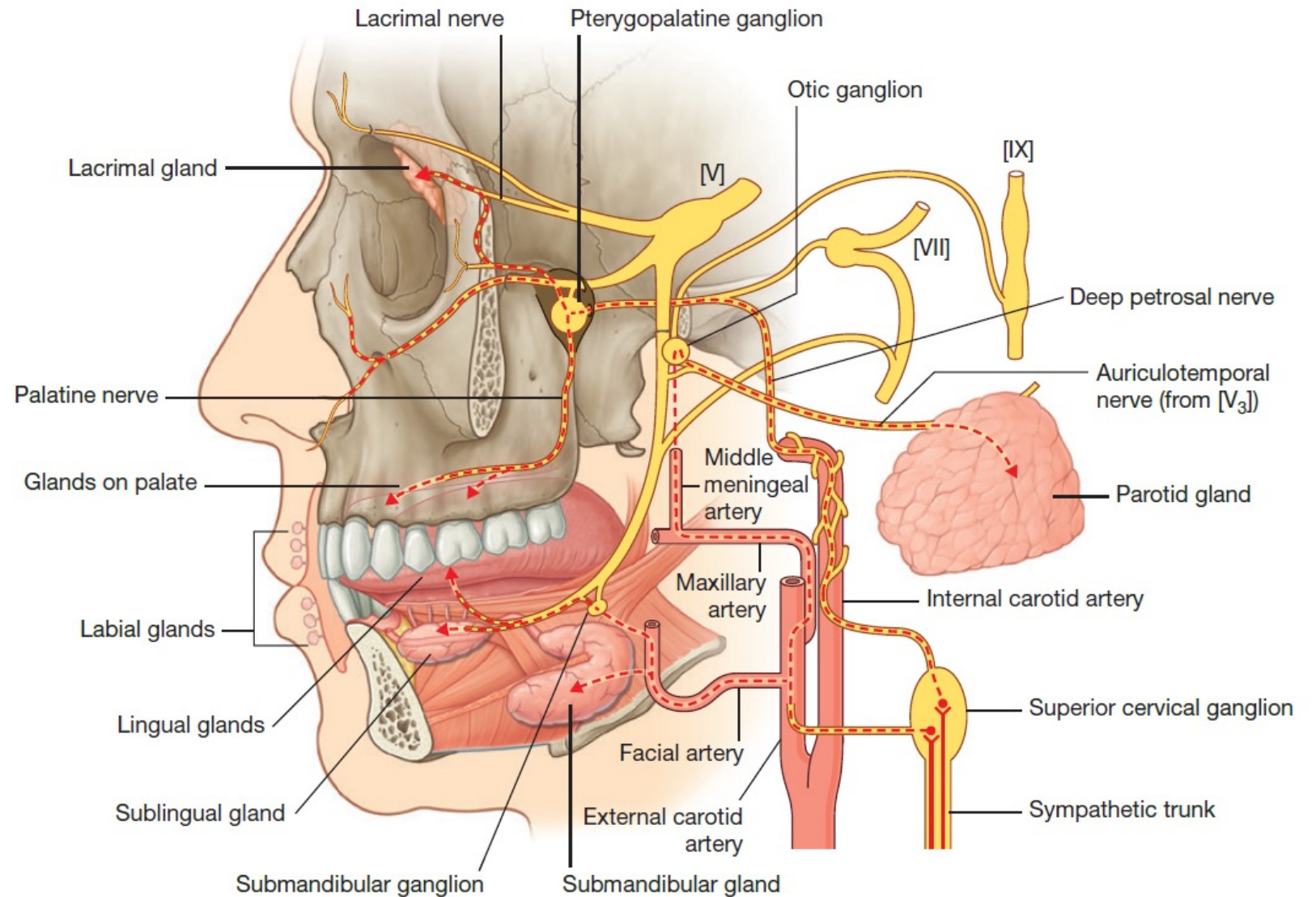
🔥 **A, carotis interna**

🔥 *Ggl. pterygopalatinum*

🔥 **A. carotis externa**

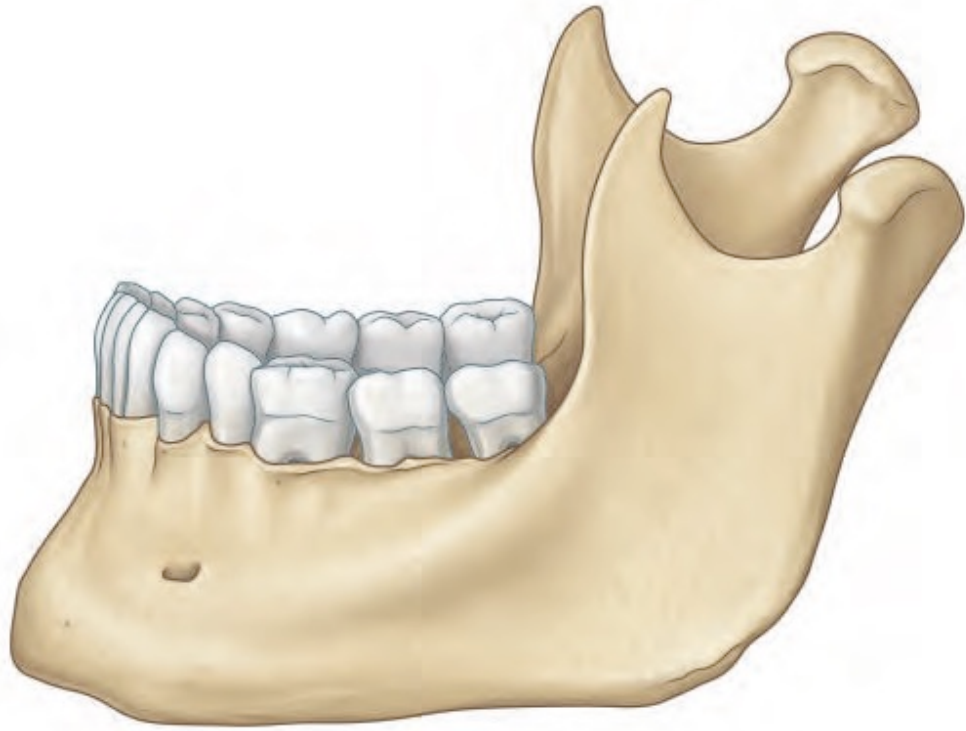
🔥 *Ggl. oticum*

🔥 *Ggl. submandibulare*

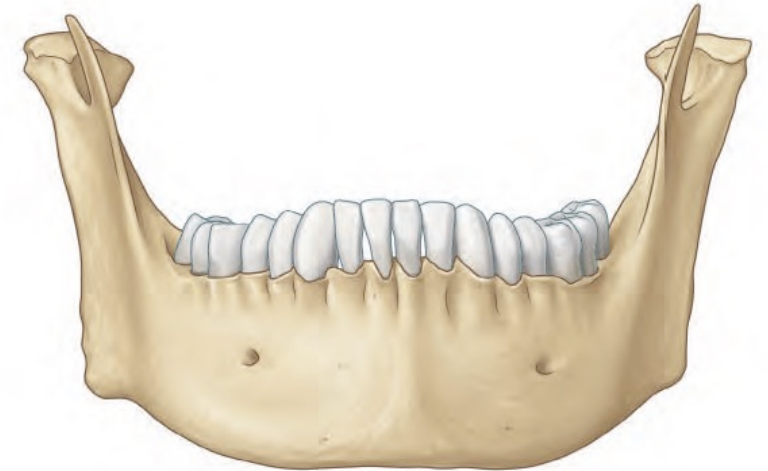


Grey's Anatomy, Elsevier

GLL. SALIVARIAE - SYMPATICUS



- ♦ **Processus condylaris**
- ♦ **Collum**
- ♦ **Angulus mandibulae**
- ♦ **Ramus mandibulae**
- ♦ **Rocessus coeonoideus**
- ♦ **Corpus mandibulae**
 - ♦ **Foramen mandibulare**
 - ♦ **Canalis mandibularis**
 - ♦ **Foramen mentale**
- ♦ **Processus alveolaris**
- ♦ **Protuberantia mentalis**



Grey's Anatomy, Elsevier

MANDIBULA



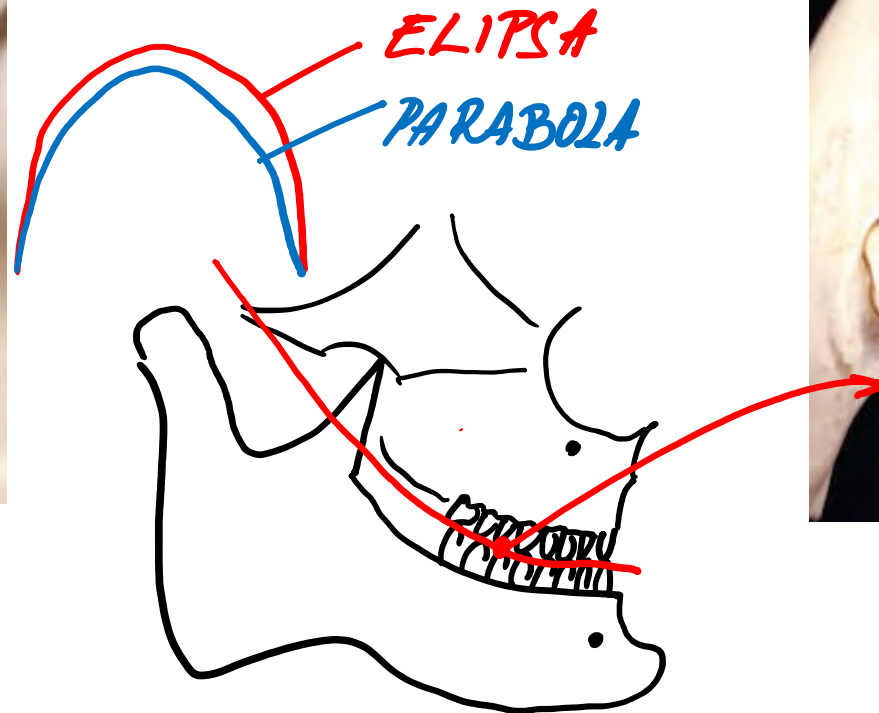
- Spina nasalis anterior
- Fossa canina
- Foramen infraorbitale
- Margo infraorbitalis
- Margo lacrimalis
- Processus frontalis
- Processus zygomaticus
- Processus alveolaris
- Foramina alveolaria

Grey's Anatomy, Elsevier

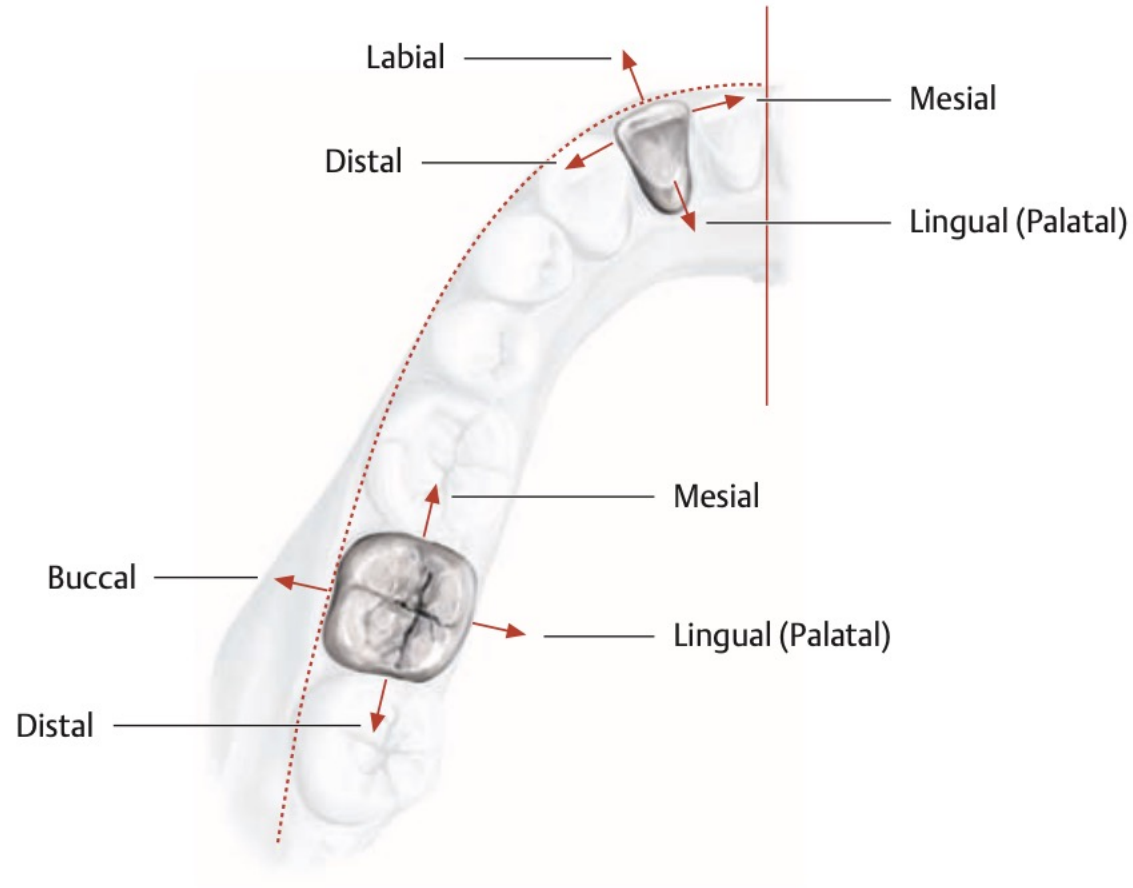
MAXILLA



- ◆ Arcus dentalis superior
- ◆ Arcus dentalis inferior
- ◆ Spee's curve of contact
 - ◆ Peak and highest force M1
- ◆ Main and side antagonist



ARCUS DENTALIS



Thieme Atlas of Anatomy

🔴 crown

🔴 neck

🔴 root

🔴 Incisive edge— margo incisialis

🔴 Incisive plane - facies occlusalis

🔴 Facies oralis (palatinalis /lingualis)

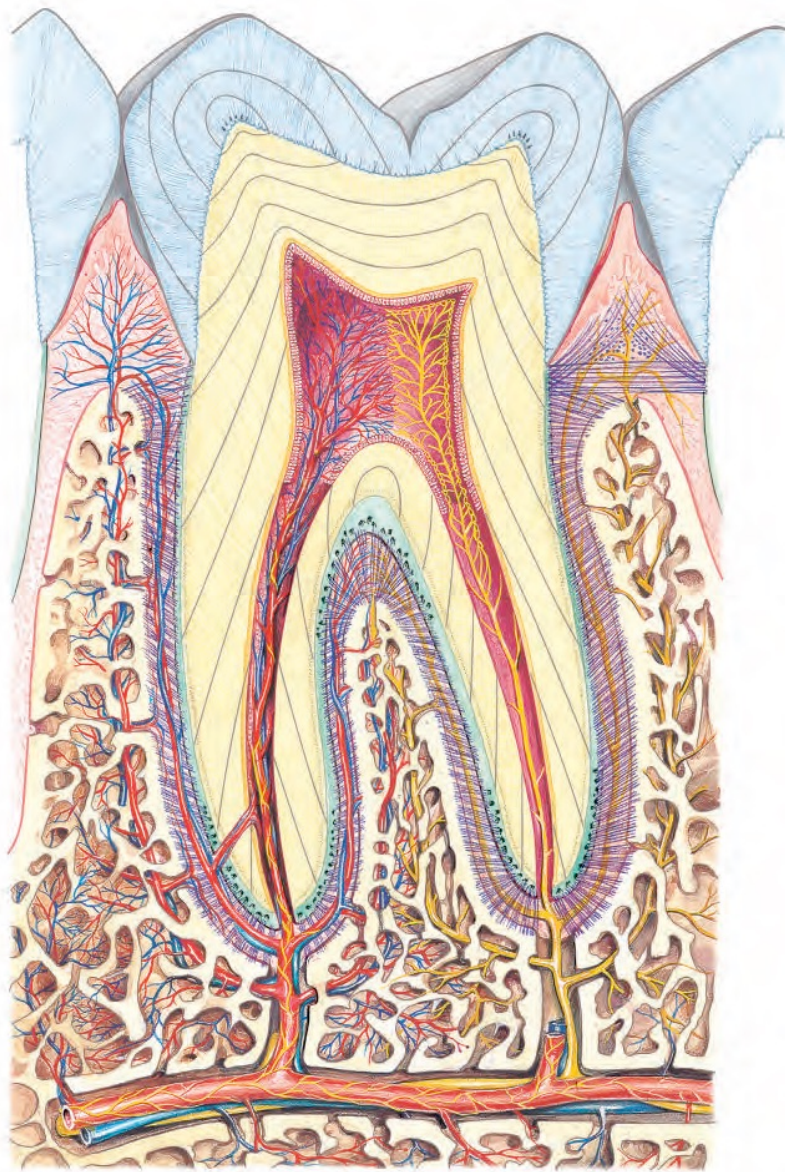
🔴 Facies vestibularis (buccalis/ labialis)

🔴 Facies contactus aproximales

🔴 Mesialis

🔴 Distalis

DENTES

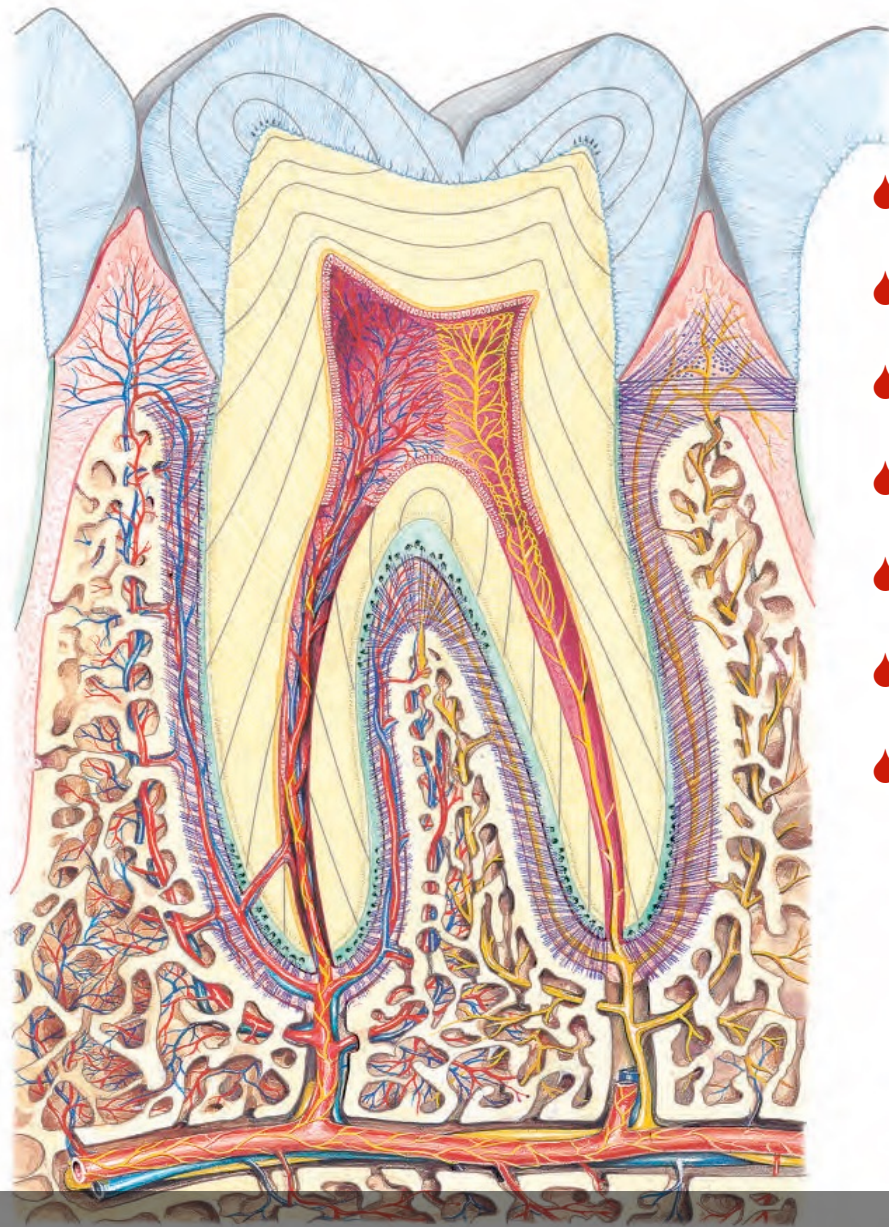


Grey's Anatomy, Elsevier

- Email - enamelum
- Dentin
- Cementum
 - Acellular
 - Cellular – apical
- Canalis radialis dentis
- Pulpa
 - Cornu pulpa
 - Loose emryonic connective tissue
 - Cévy a nervy
- Foramen apicis dentis
- Alevolus
- Septum interradiculare

DENTES - TEETH

- ♦ **Gingiva -gum**
 - ♦ Connective tissue part
 - ♦ Mucosa part
- ♦ **Periodont**
 - ♦ Connective tissue
 - ♦ Tooth-alveolus space
- ♦ **Parodont**
 - ♦ cementum
 - ♦ Periodont
 - ♦ Alveolar compacta
 - ♦ lamina dura
 - ♦ Connective part of gum



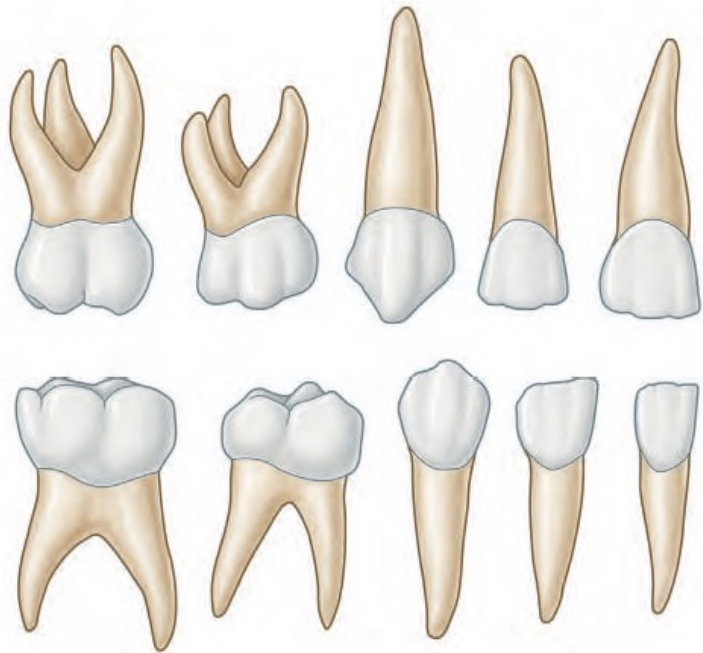
- ♦ **Fibrae gingivodentales**
- ♦ **Fibrae circulares**
- ♦ **Fibrae interdentes**
- ♦ **Fibrae alveolodentales transversales**
- ♦ **Lig. dentale superius**
- ♦ **Lig. dentale inferius**
- ♦ **Fibrae apicales et interstitiales**

Grey's Anatomy, Elsevier

DENTES

55 54 53 52 51 | 61 62 63 64 65

85 84 83 82 81 | 71 72 73 74 75



Grey's Anatomy, Elsevier

♦ Dentes decidui (lactei)

♦ I – II – III – IV – V

♦ i_1 i_2 c m_1 m_2

♦ The first appears i_1

♦ 6. m – smaller fontanel occlusion

♦ The last appears m_2

♦ Up to 2. y – greater fontanel occlusion

♦ I 6 - 10 m

♦ II 7 - 9 m

♦ III 12 - 15 m

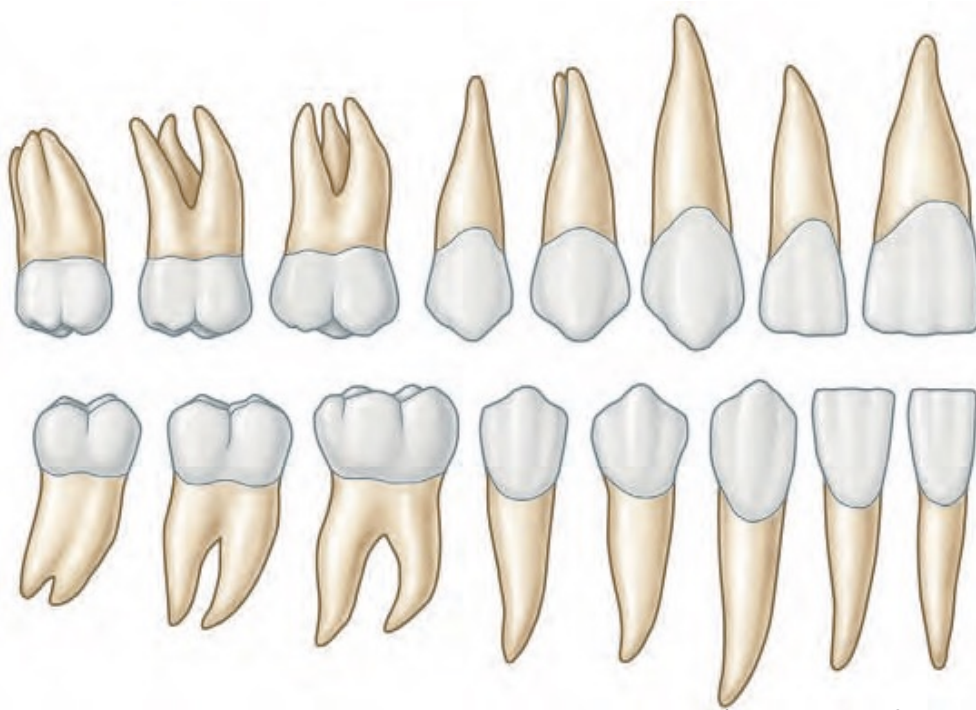
♦ IV 16 – 20 m

♦ V 20 – 24 m

TEMPORAL TEETH

18 17 16 15 14 13 12 11 | 21 22 23 24 25 26 27

48 47 46 45 44 43 42 41 | 31 32 33 34 35 36 37



Grey's Anatomy, Elsevier

🔥 Dentes permanentes

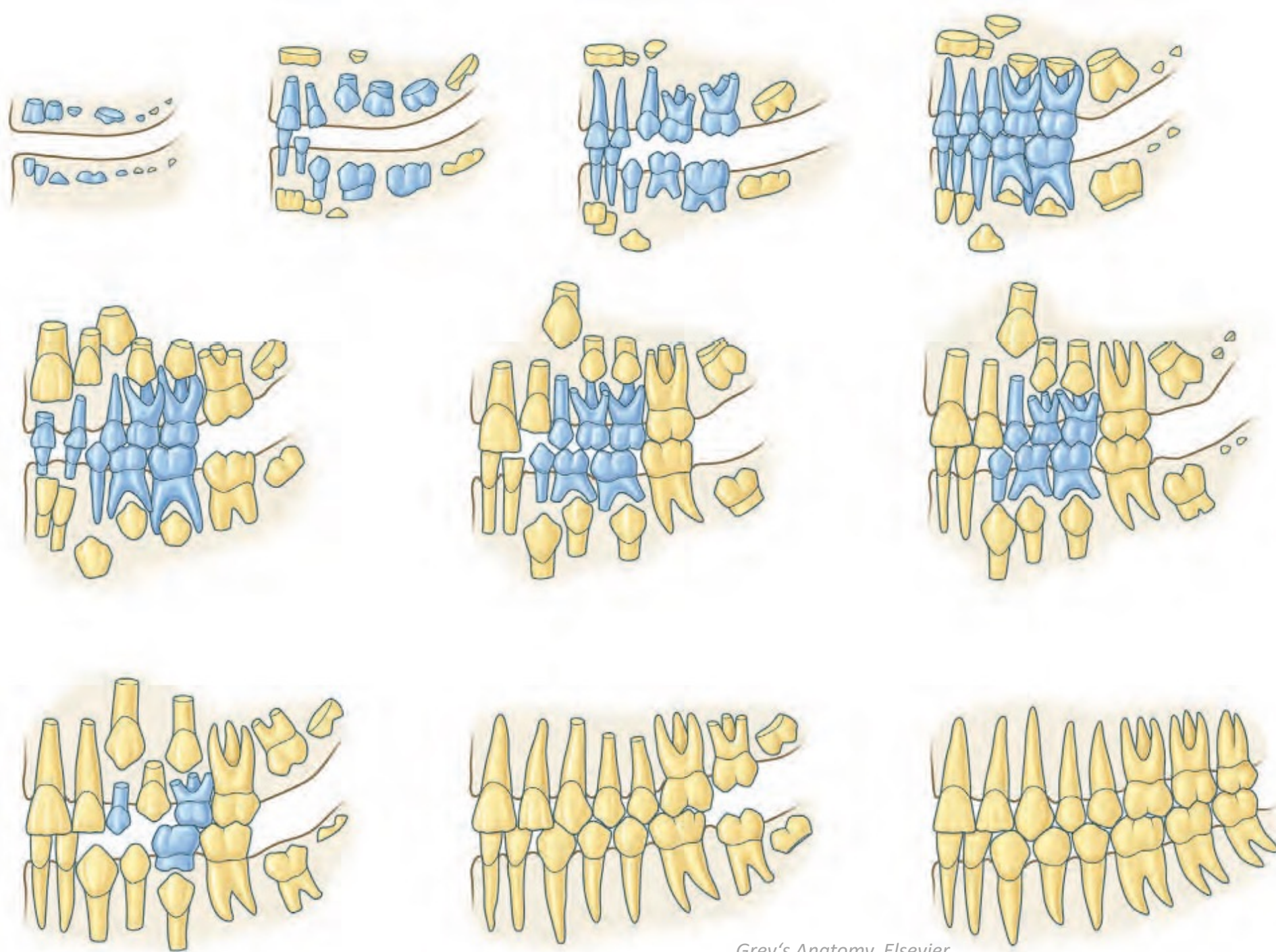
🔥 8 – 7 – 6 – 5 – 4 – 3 – 2 – 1

🔥 I₁ I₂ C P₁ P₂ M₁ M₂ M₃

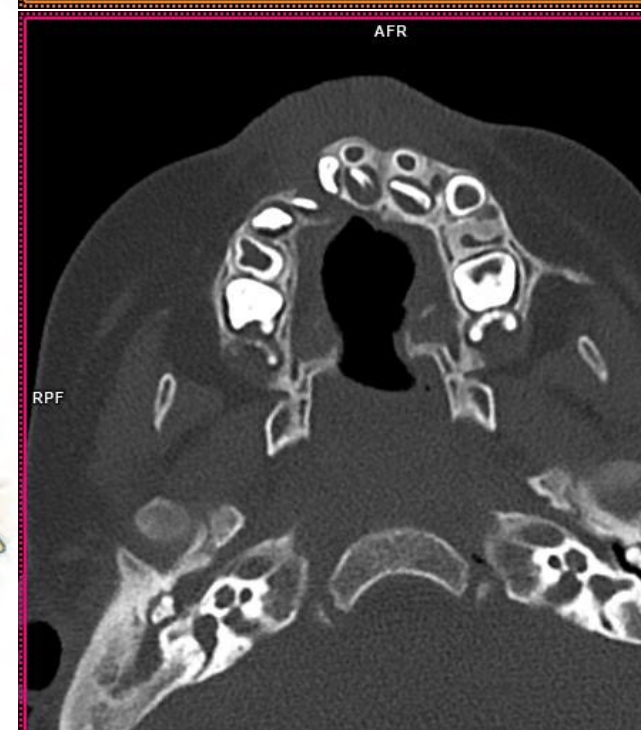
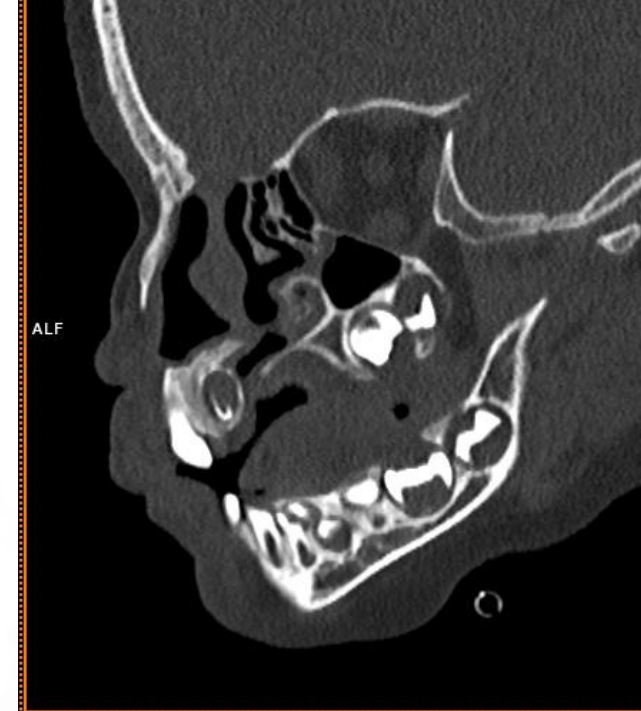
🔥 changes

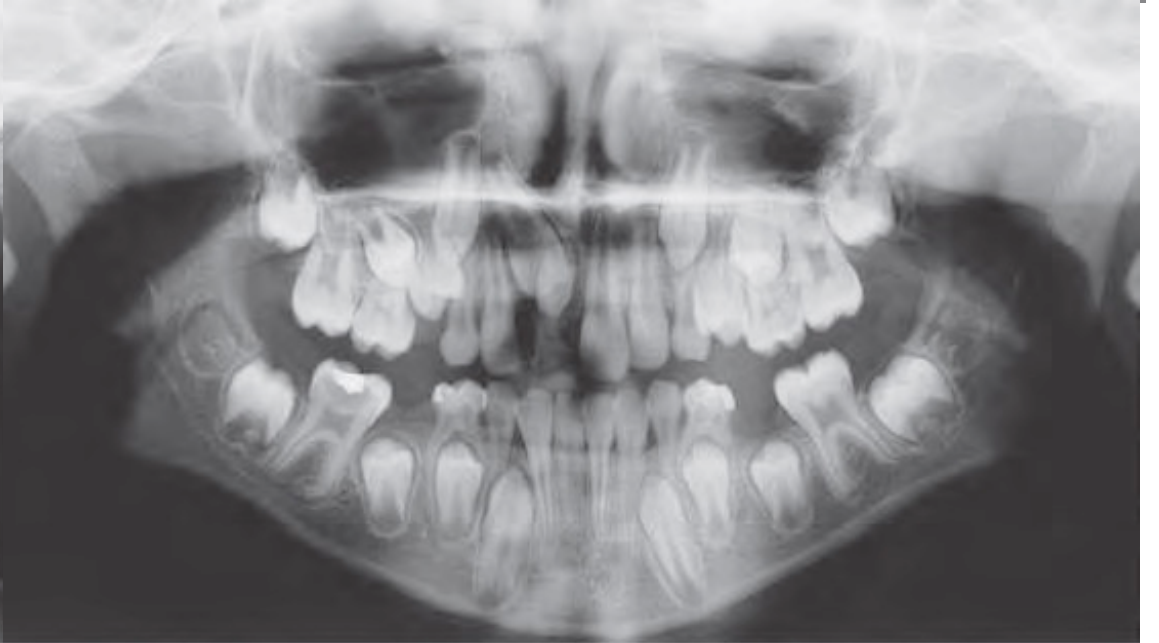
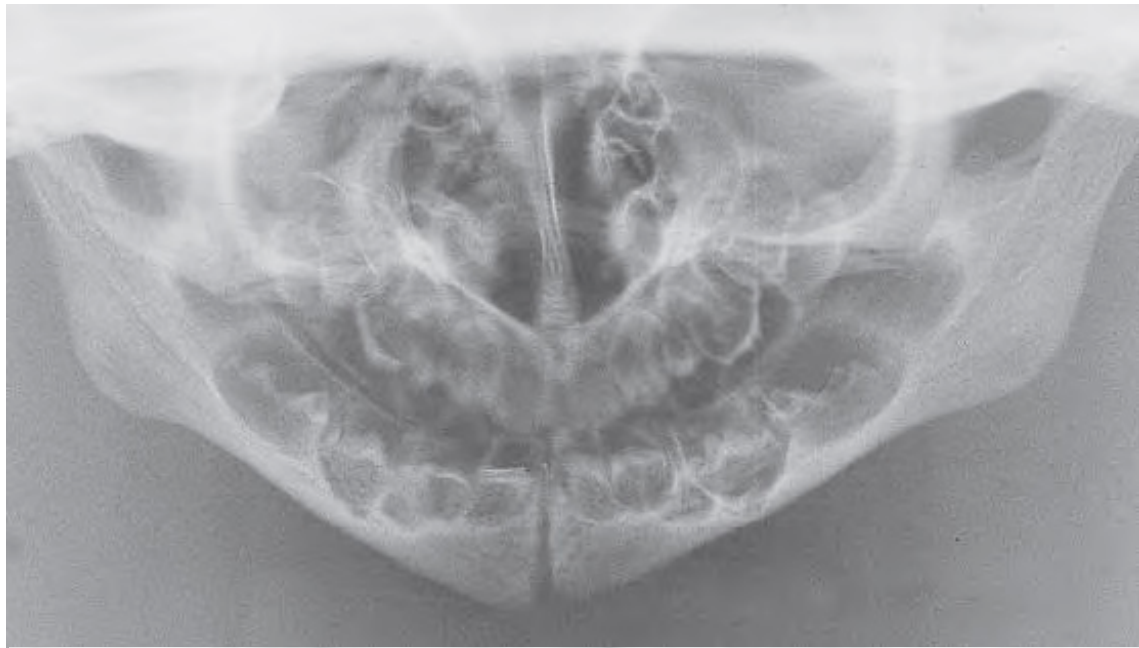
🔥 6	7a
🔥 1	8a
🔥 2	9a
🔥 4	10a
🔥 3	11-13a
🔥 5	11-15a
🔥 7	11-13a
🔥 8	18-30a

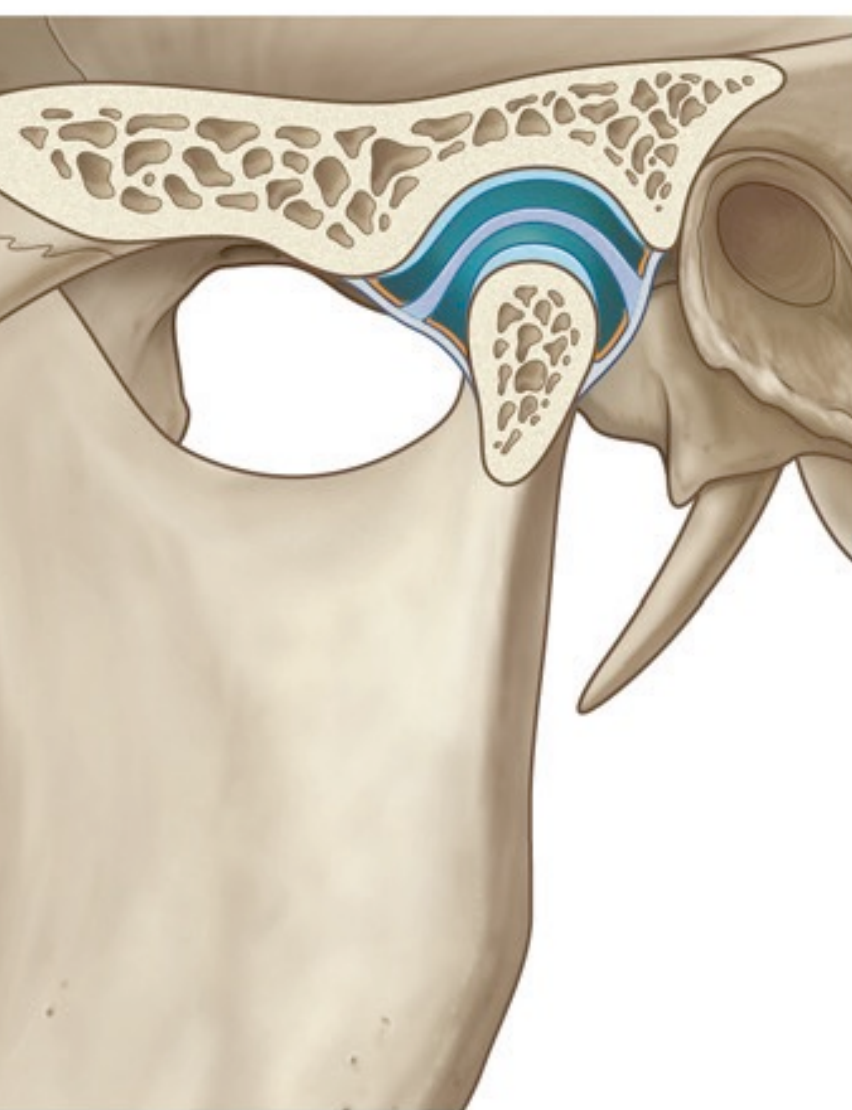
DEFINITIVE TEETH



Grey's Anatomy, Elsevier







♦ Fossa mandibularis + tuberc. articularis

♦ Discus

- ♦ Fixed all around circumference
- ♦ Two spalts
- ♦ discotemporal
- ♦ discomandibular
- ♦ fibrocartilage

♦ Processus condylaris mandibulae

♦ Capsula articularis

♦ Ligamentum sphenomandibulare

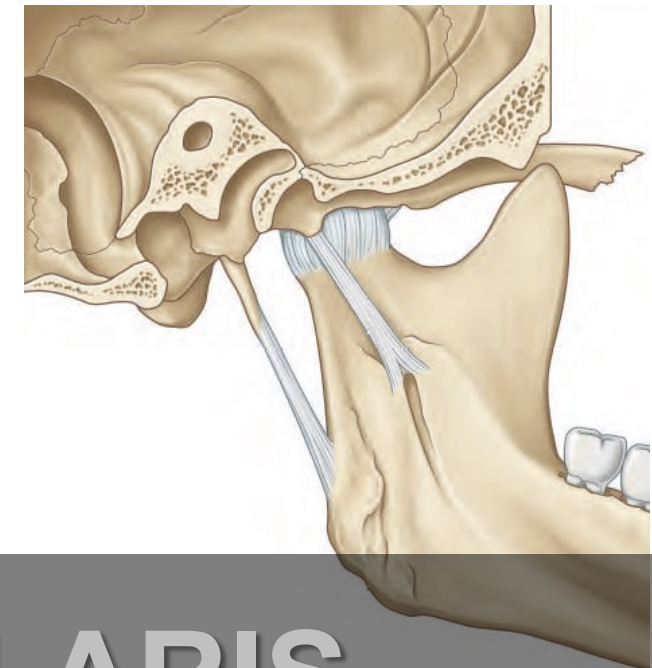
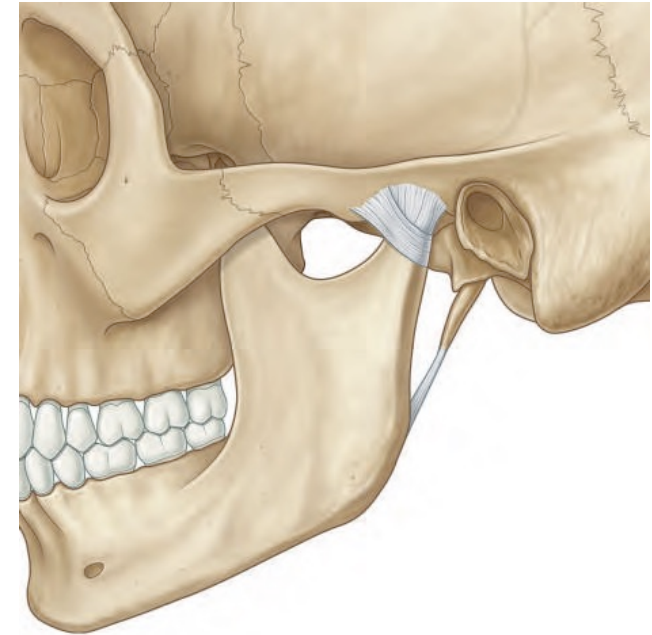
♦ Ligamentum stylomandibulare

Zenker's retroarticular plastic pad

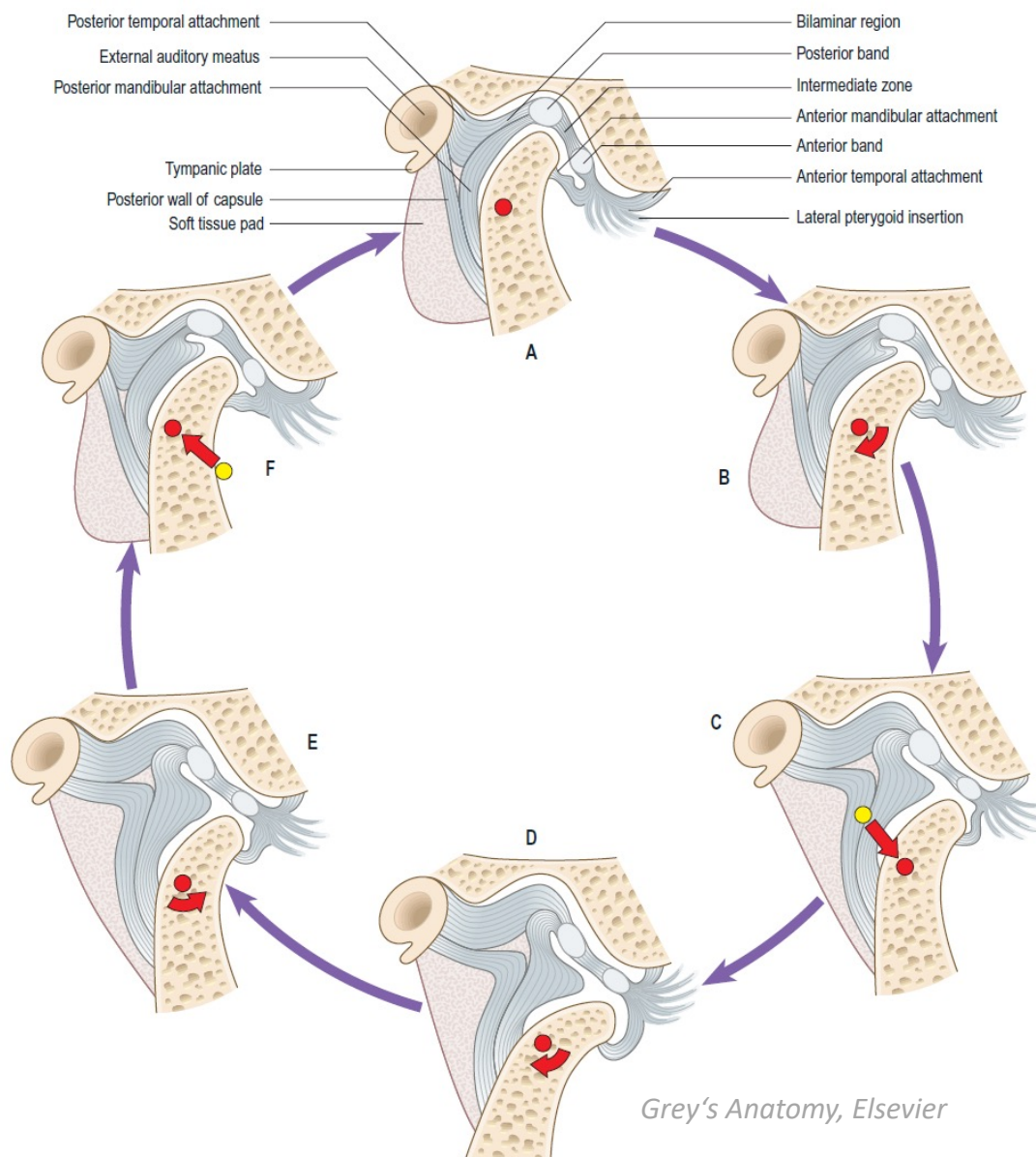
Weins filled with blood (v. retromandibularis)

Filled during opening

Grey's Anatomy, Elsevier

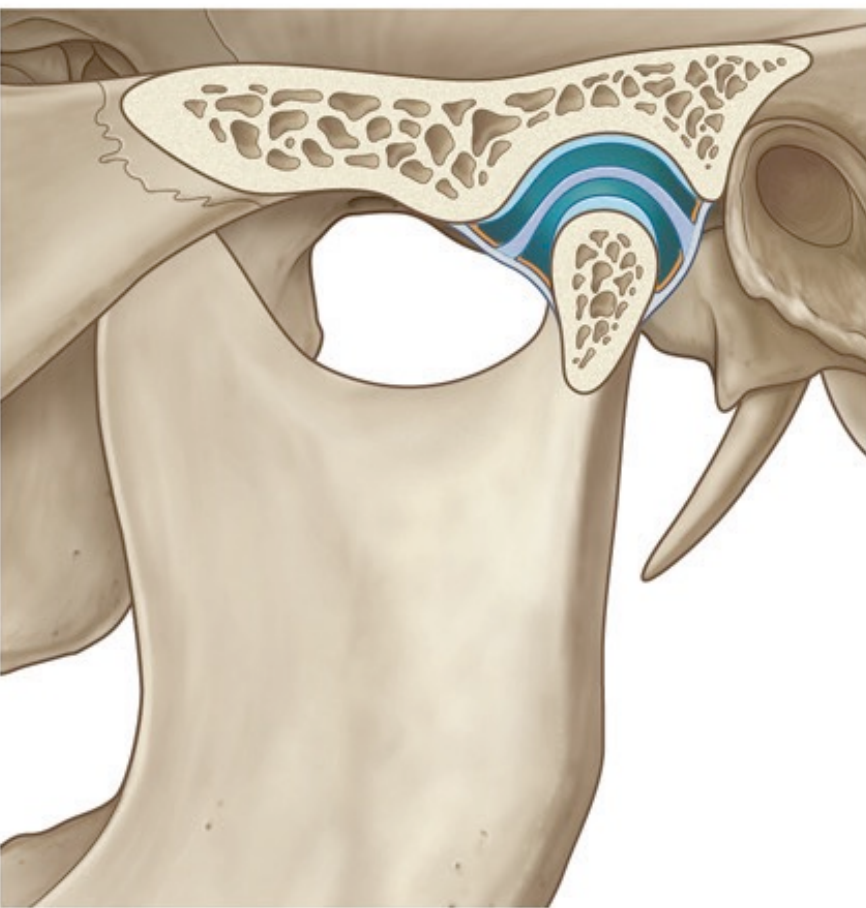


ART. TEMPOROMANDIBULARIS

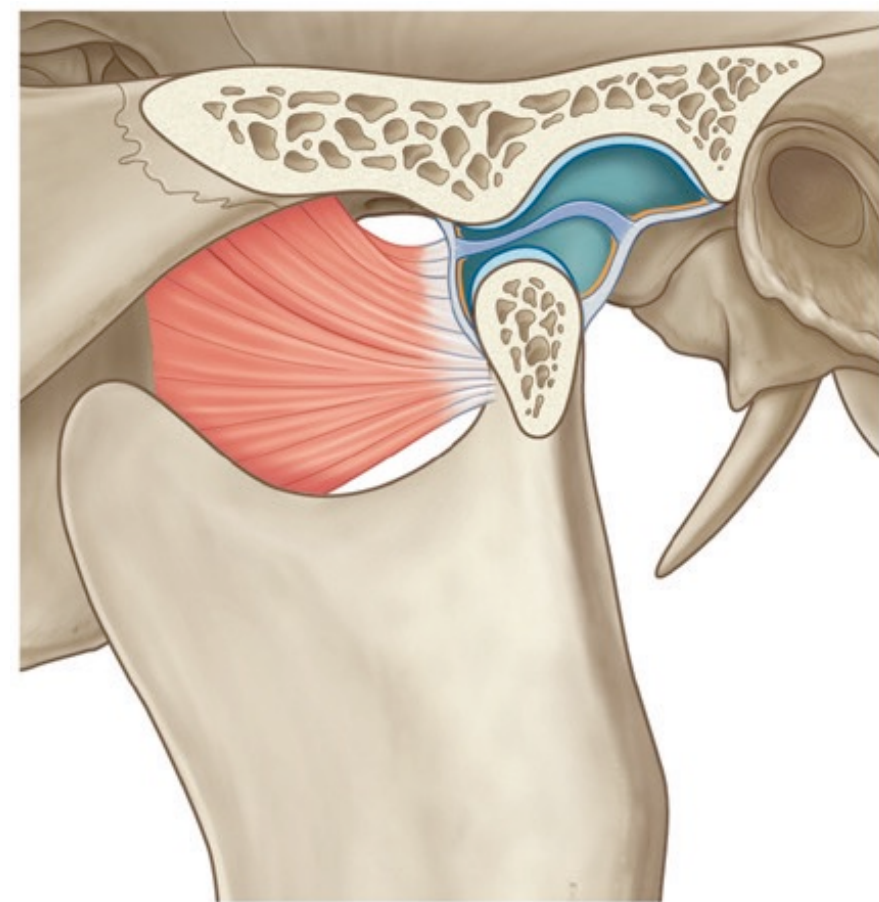


- motions
- Opening – rolling
- Closing
- Basic position
 - occlusion
- Mid position
 - 3-4 mm separation
- Opening

ART. TEMPOROMANDIBULARIS

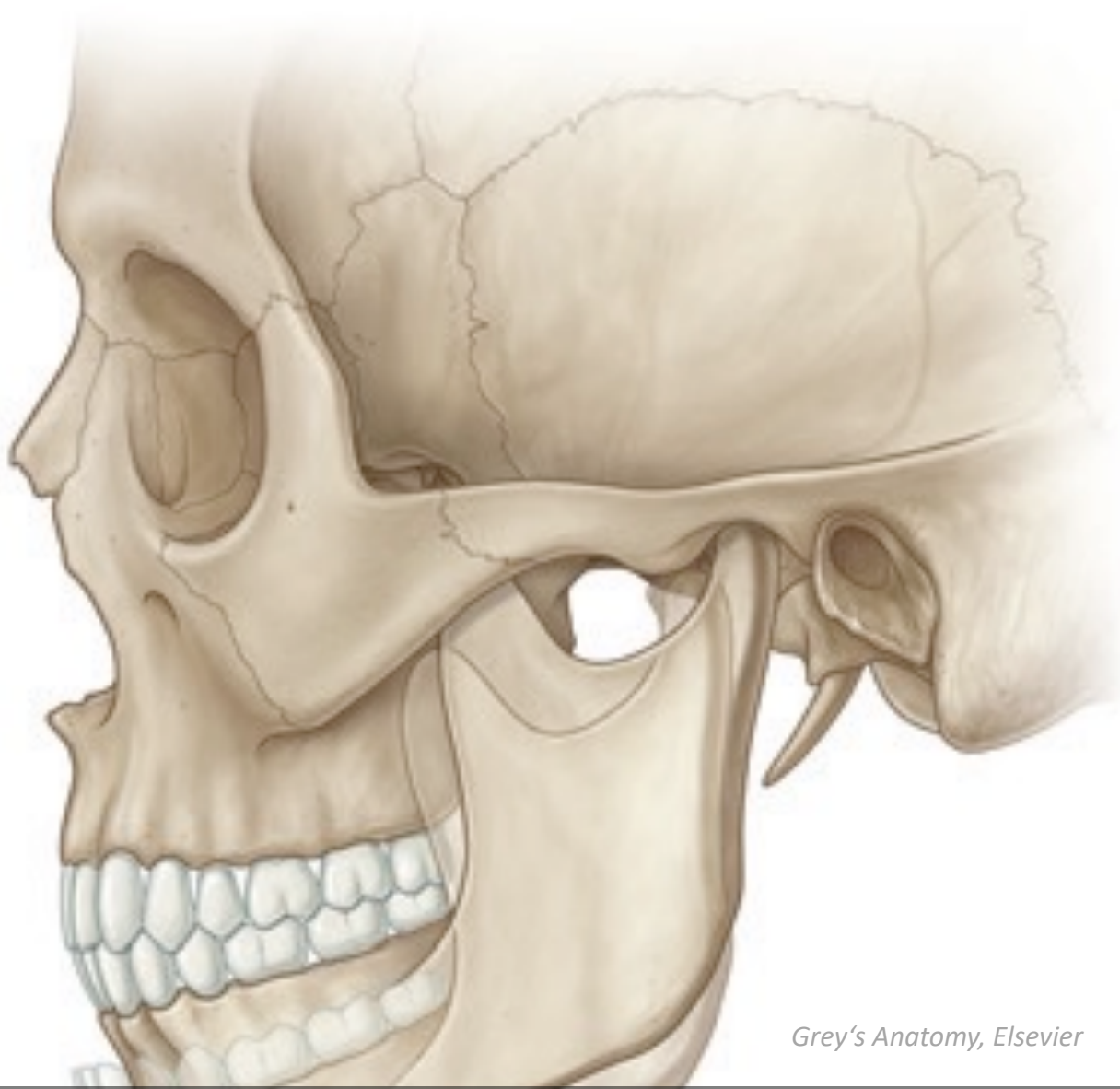


- ♦ **opening**
 - ♦ Abduction – depression
- ♦ **closing**
 - ♦ Adduction - elevation
- ♦ **Moving anteriorly**
 - ♦ propulsion – protraction
- ♦ **Moving dorsally**
 - ♦ retropulsion – retraction
- ♦ **Lateropulsion**
 - ♦ Angle of 150 -160 gr.
- ♦ Unilateral retropulsion
- ♦ Contralateral propulsion

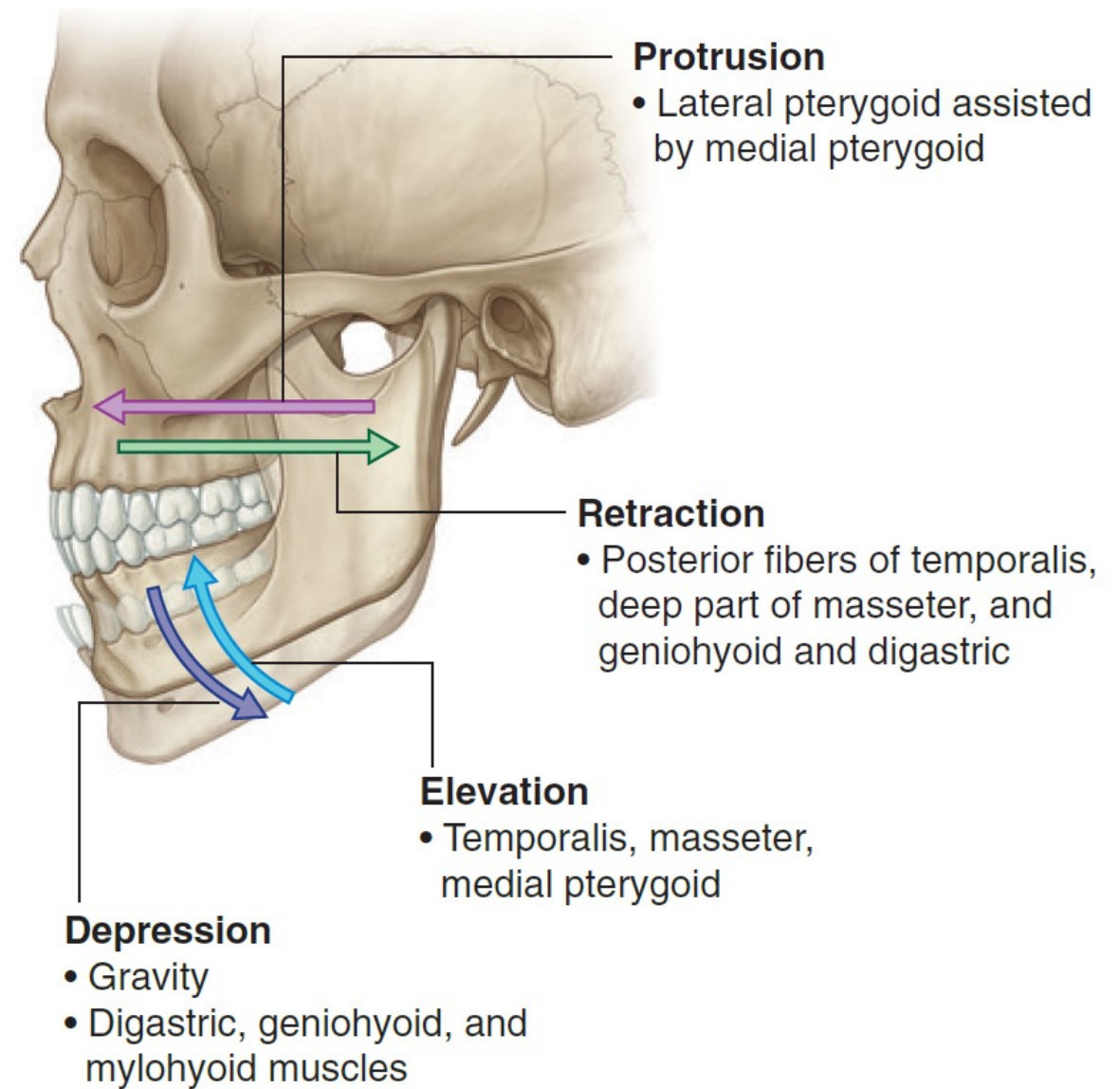


Grey's Anatomy, Elsevier

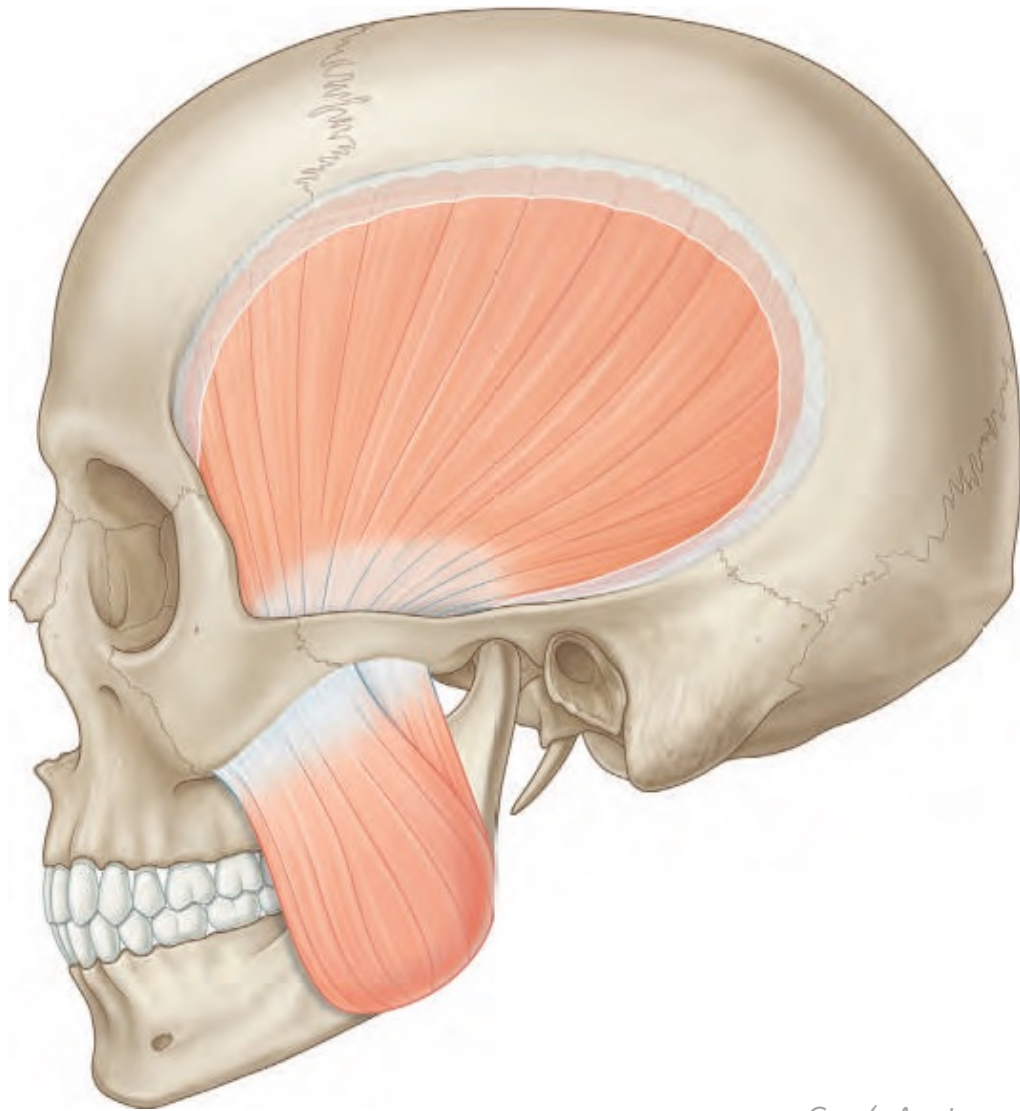
ART. TEMPOROMANDIBULARIS



Grey's Anatomy, Elsevier



ART. TEMPOROMANDIBULARIS



Grey's Anatomy, Elsevier

- ♦
- ♦ **M. temporalis**

- ♦ Linea temporalis superior et inferior
- ♦ Processus coronoideus mandibulae

- ♦ **M. masseter**

- ♦ Proc. maxillaris ossis zyg. – superficial
- ♦ Proc. zygomaticus os. temp. – deep
- ♦ Angulus mandibulae

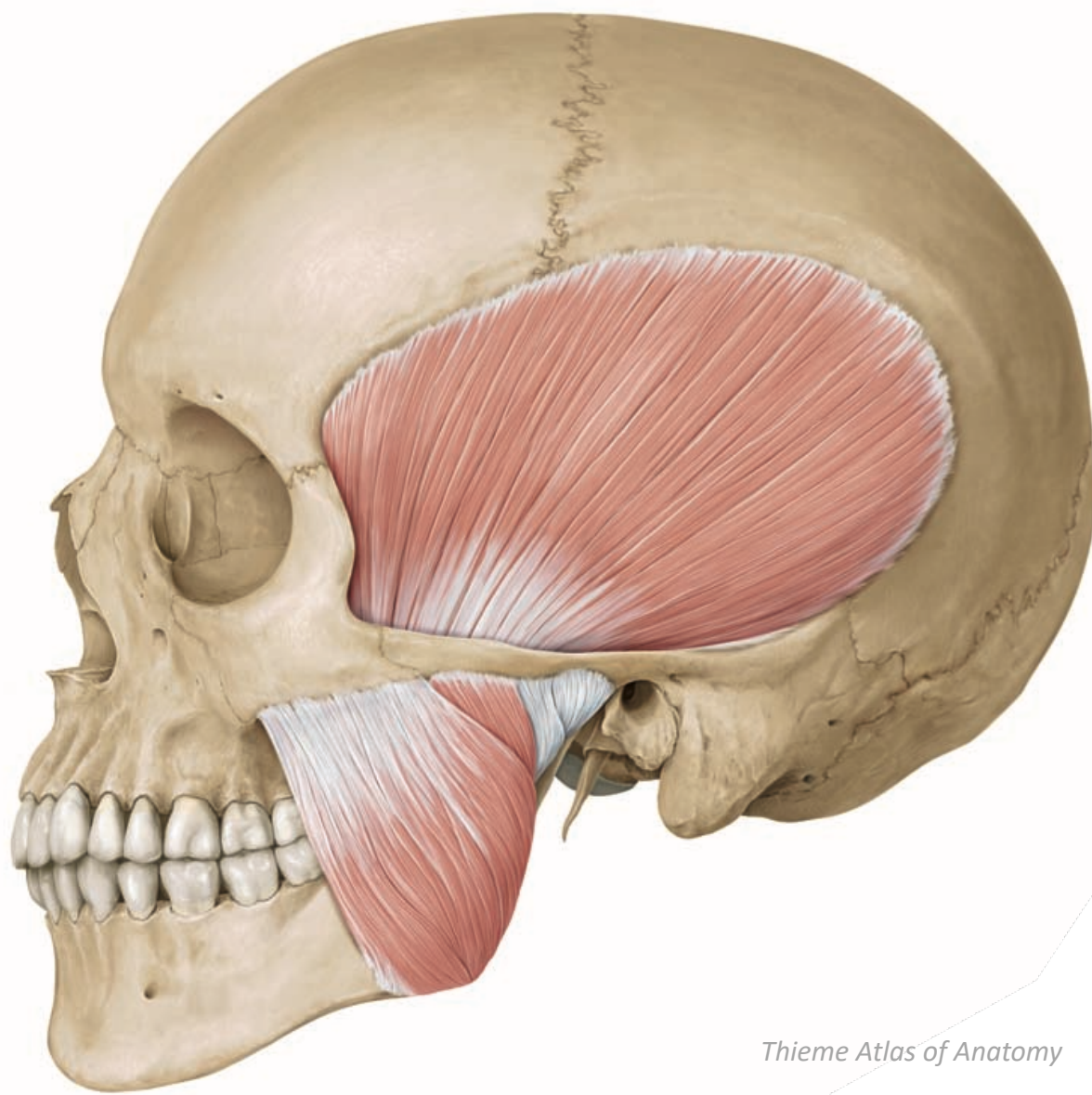
- ♦ **M. pterygoideus medialis**

- ♦ Caput superf. – tuberositas maxillae – mandib.
- ♦ Caput prof. – lamella lateralis proc. pterygoidei – mandibula

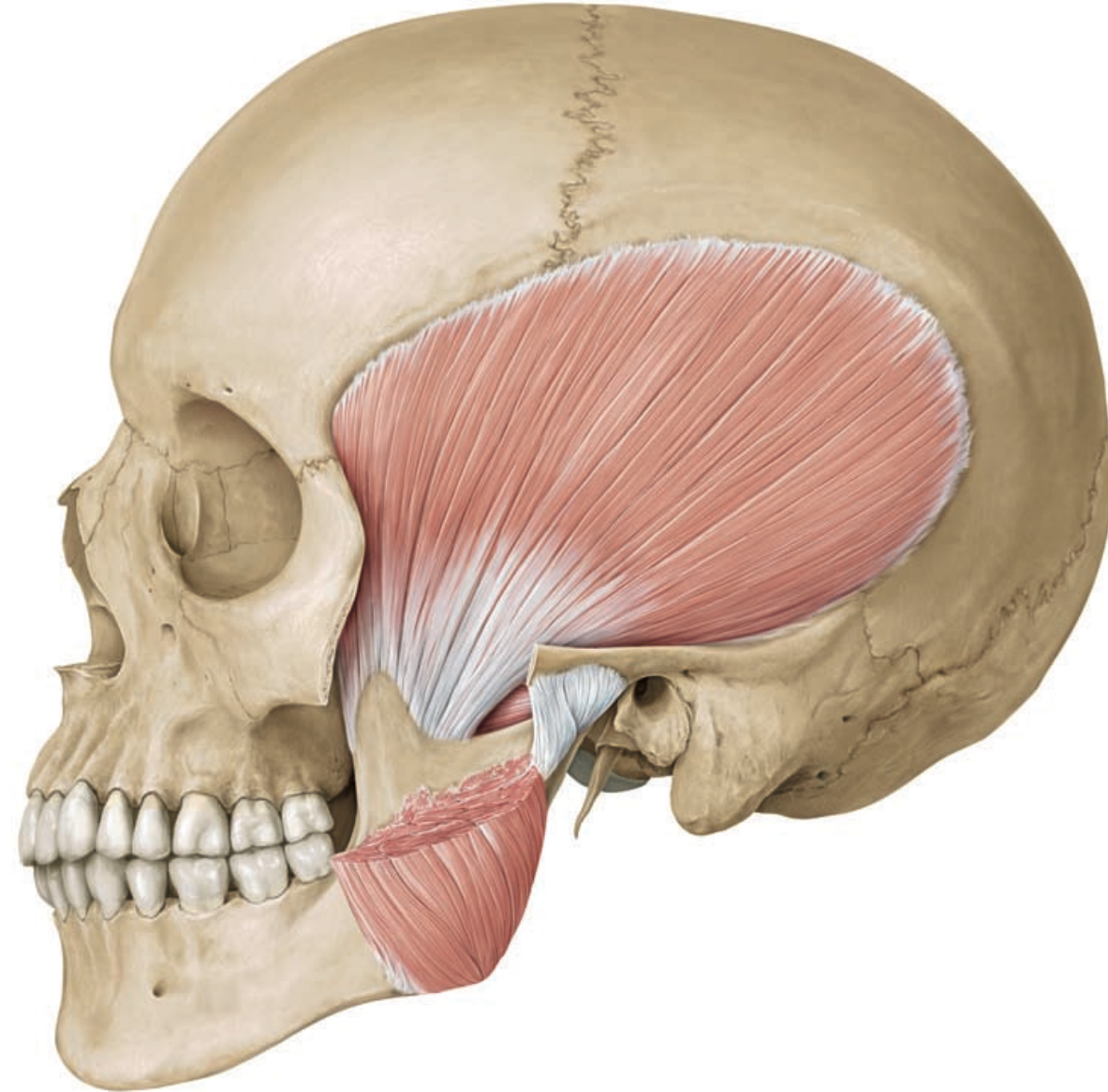
- ♦ **M. pterygoideus lateralis**

- ♦ Caput superior – ala major ossis sph. – pouzdro
- ♦ Caput inferior – lamella later. proc. pterygoidei - capsula

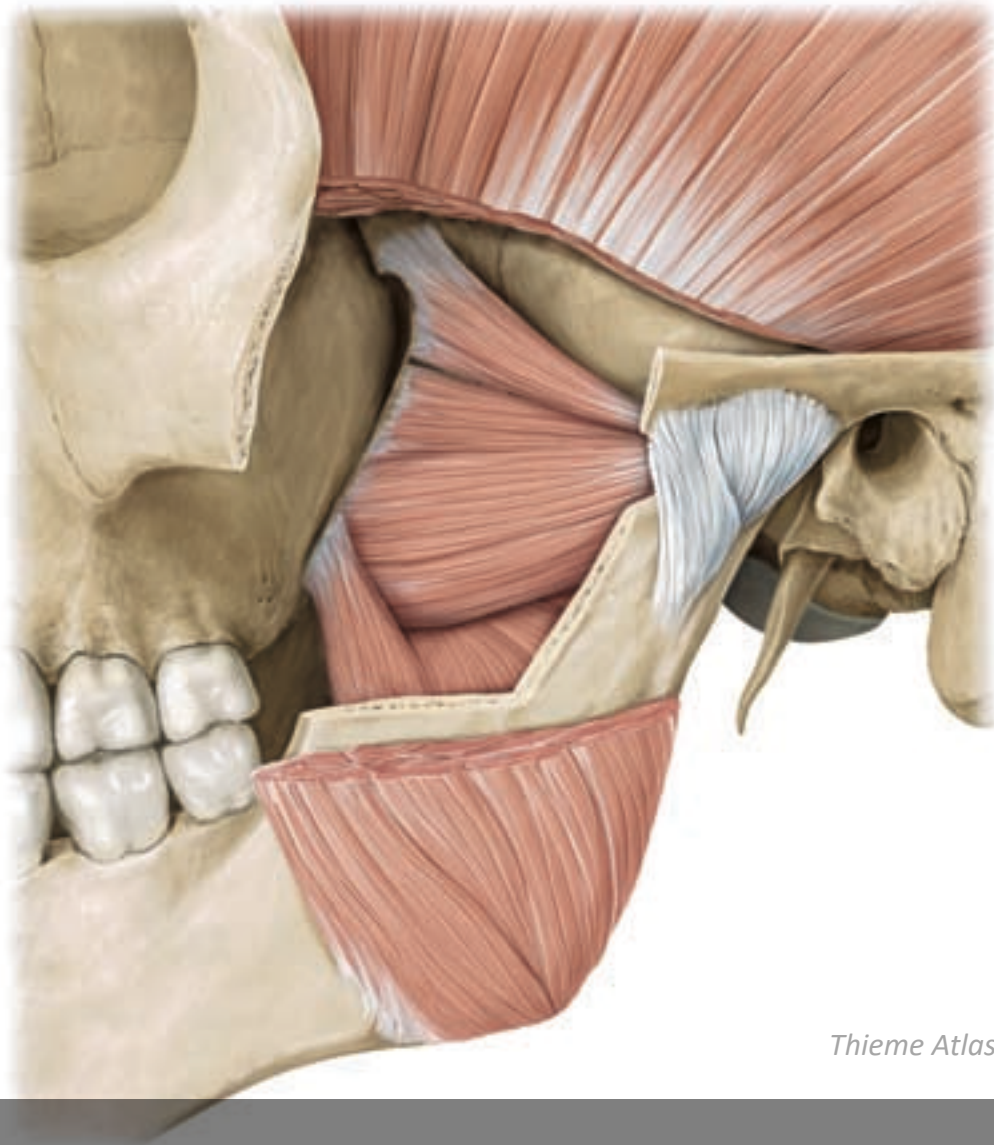
MUSCLES OF MASTICATION



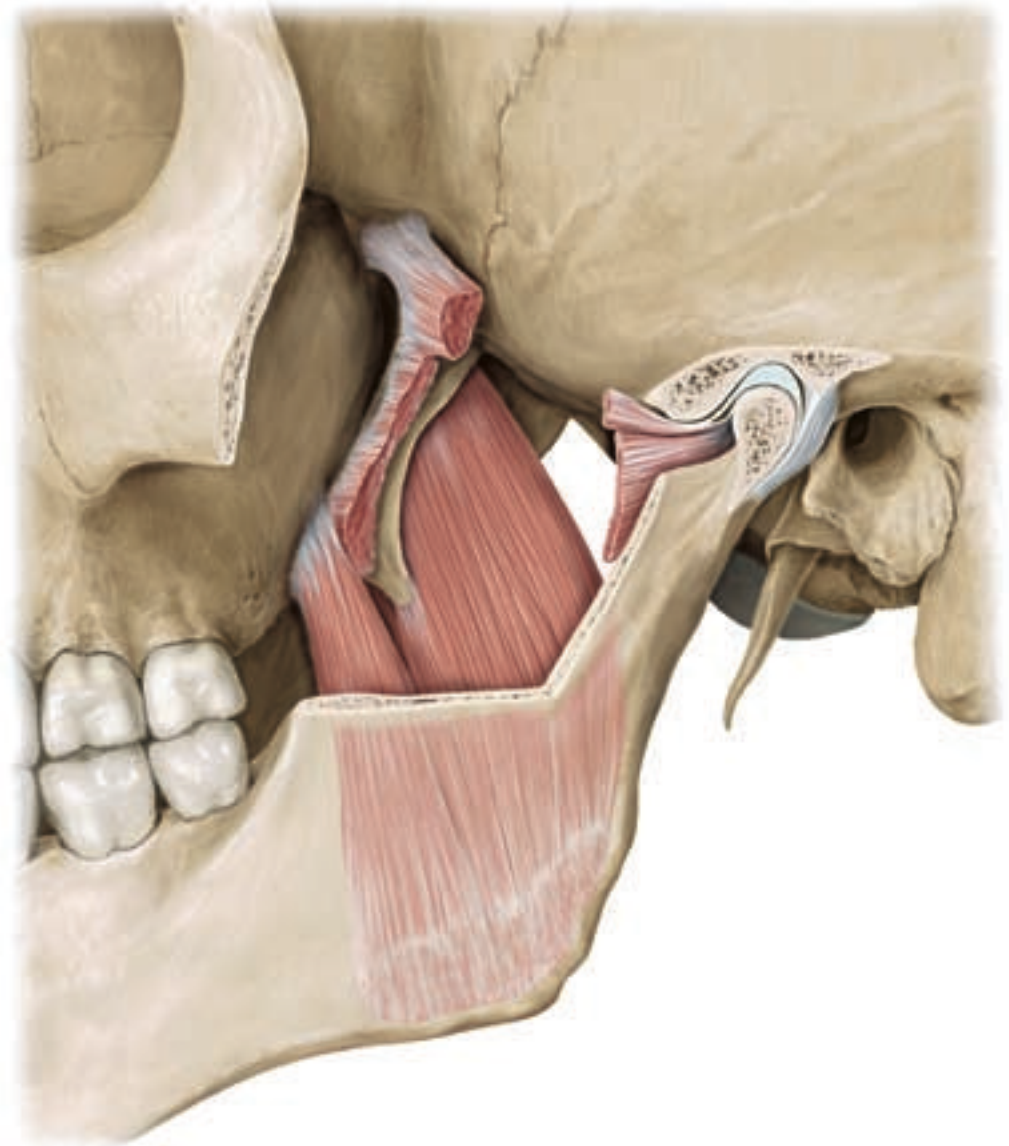
Thieme Atlas of Anatomy



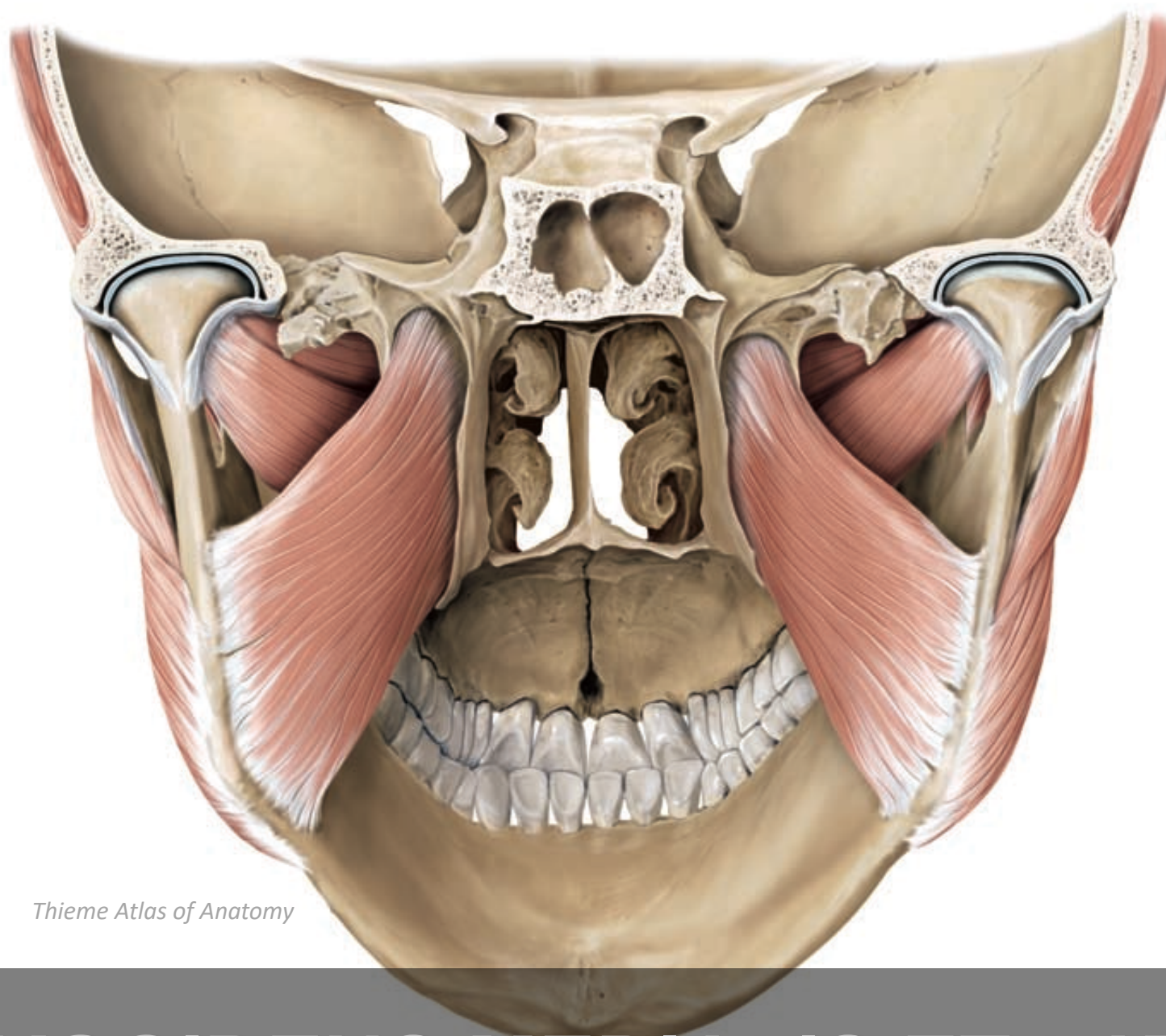
MASSETER AND TEMPORALIS SUPERF.



Thieme Atlas of Anatomy

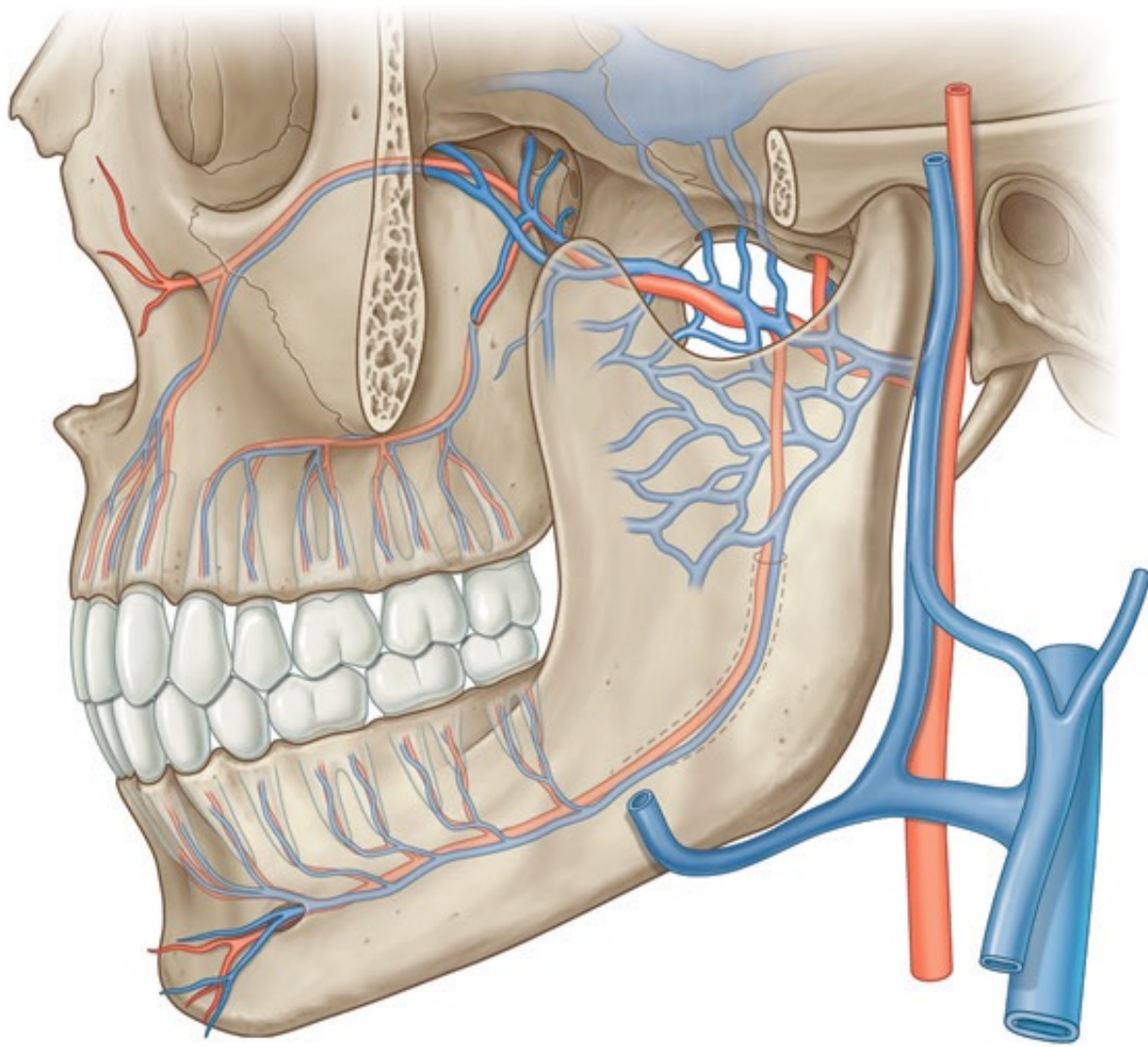


M. PTERYGOIDEUS MEDIALIS ET LATERALIS



Thieme Atlas of Anatomy

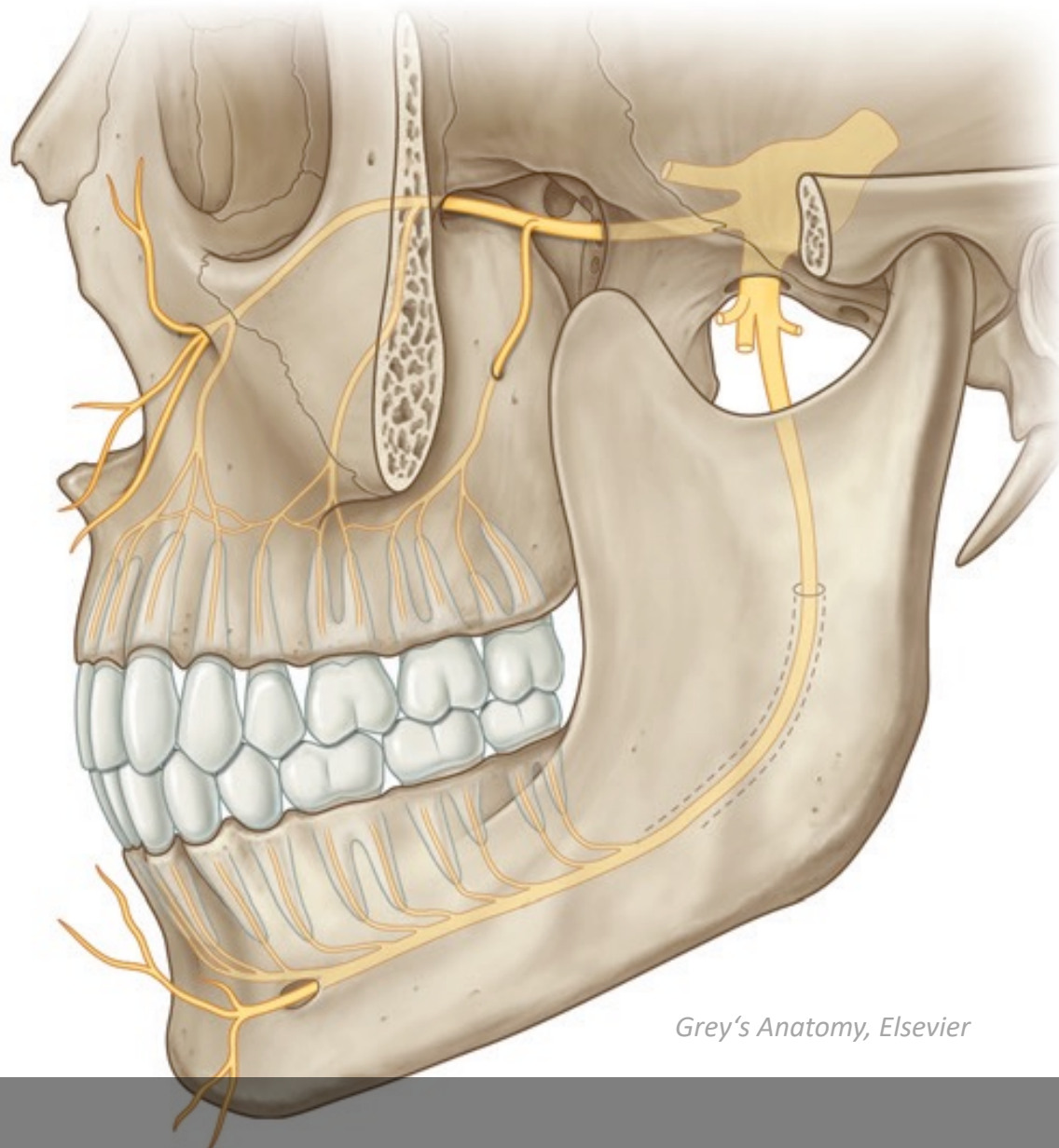
M. PTERYGOIDEUS MEDIALIS ET LATERALIS



Grey's Anatomy, Elsevier

- ♦ **A. maxillaris**
- ♦ **A. alveolaris superior posterior**
- ♦ **A. infraorbitalis**
- ♦ **A. alveolaris superior anterior**
- ♦ **V. alveolaris superior anterior**
- ♦ **V. alveolaris superior posterior**
- ♦ **Plexus pterygoideus**
- ♦ **V. retromandibularis**
- ♦ **Sinus cavernosus**

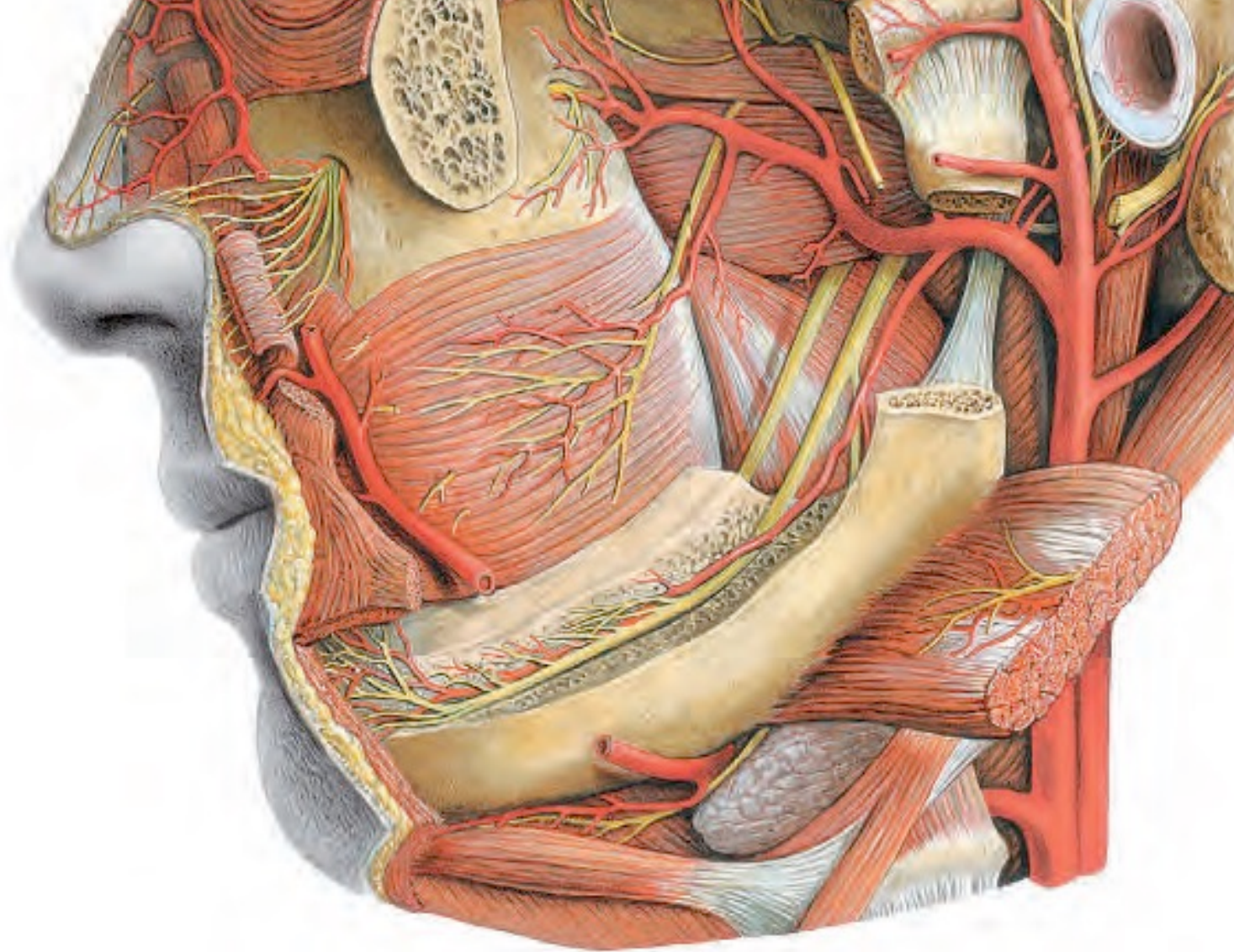
VASA MANDIBULAE ET MAXILLAE



Grey's Anatomy, Elsevier

- ♦ **N. maxillaris (n. V2)**
 - ♦ **FOSSA PTERYGOPALATINA**
- ♦ **N. alveolaris superior posterior**
- ♦ **N. alveolaris superior medius**
- ♦ **N. infraorbitalis**
- ♦ **N. alveolaris superior anterior**
- ♦ **Plexus alveolares**
- ♦ **N. alveolaris inferior**

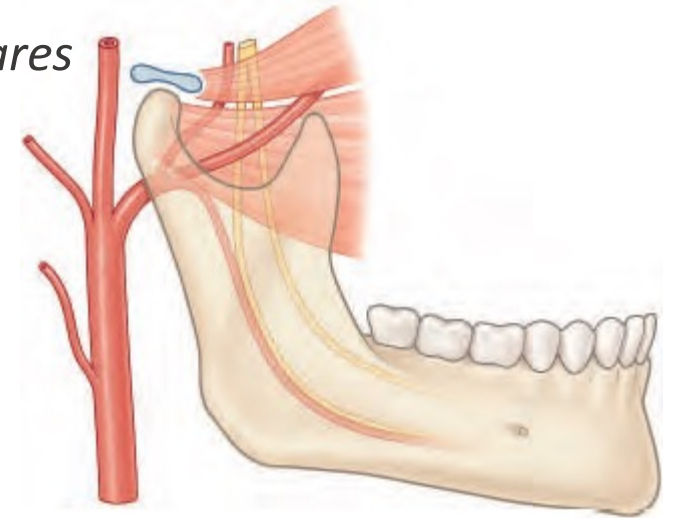
NERVI MAXILLAE ET MANDIBULAE



Grey's Anatomy, Elsevier

- ♦ A. maxillaris
- ♦ **A. alveolaris inferior**
- ♦ *Rami alveolares*

- ♦ N. trigeminus III. větev
- ♦ **N. alveolaris inferior**
- ♦ **(n. lingualis)**
- ♦ *Rami alveolares*
- ♦ *N. mentalis*



CANALIS MANDIBULARIS