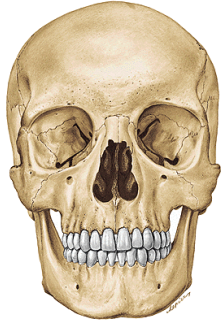


## SPLANCHNOCRANIUM



## Splanchnocranium

Os ethmoidale

Maxilla

Os nasale

Os lacrimale

Os zygomaticum

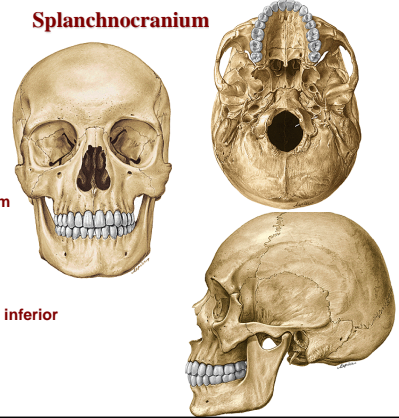
Vomer

Os palatinum

Concha nasalis inferior

Mandibula

Os hyoideum

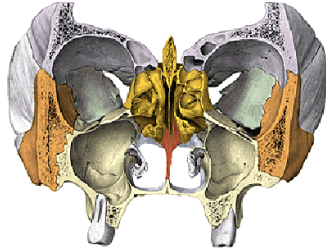


## Os ethmoidale

lamina cribrosa

lamina perpendicularis

labyrinthi ethmoidales



## Lamina cribrosa ossis ethmoidalis



## Lamina perpendicularis ossis ethmoidalis



Crista galli

Septum nasi osseum



## Labyrinthi ethmoidales

Cellulae ethmoidales  
(anteriores, medii, posteriores)

Lamina orbitalis

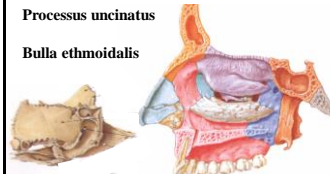
Foramen ethmoidale anterius

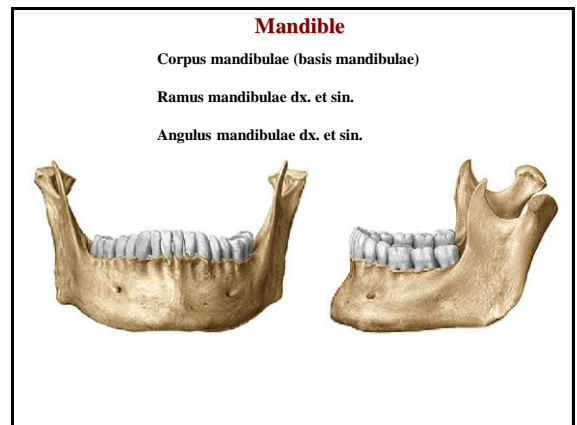
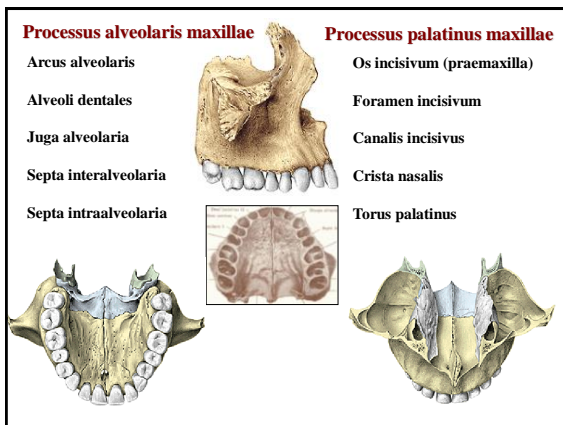
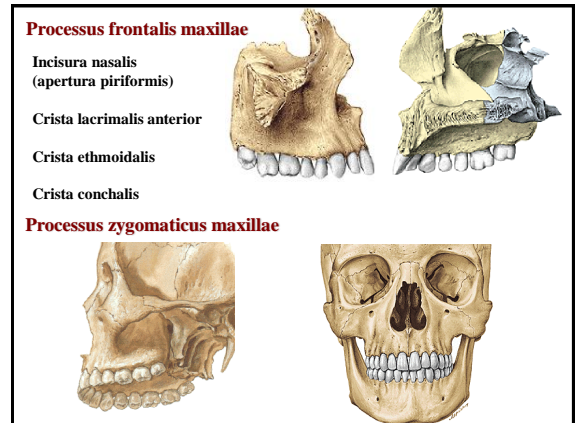
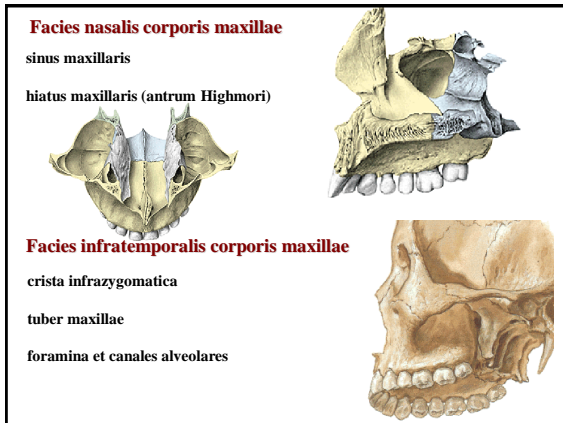
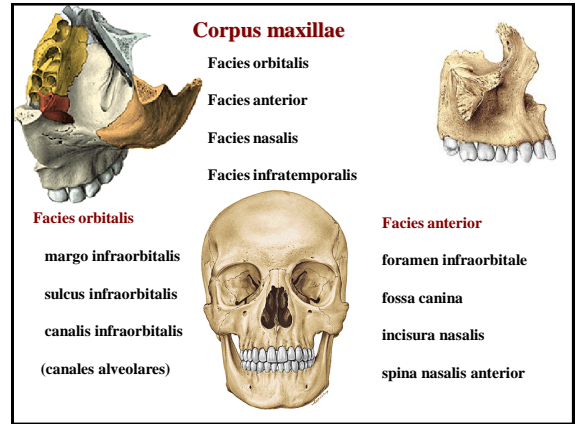
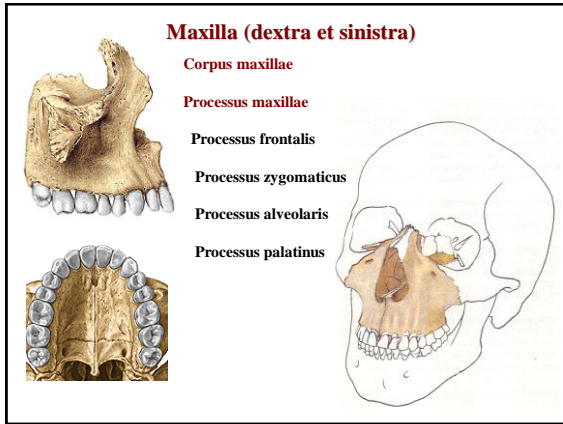
Foramen ethmoidale posterius

Concha nasalis superior et media

Processus uncinatus

Bulla ethmoidalis





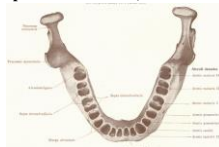
**Corpus mandibulae**

- Fossa digastrica
- Spina mentalis (sup. et inf.)
- Linea mylohyoidea
- Fovea sublingualis
- Fovea submandibularis
- Crista buccinatoria
- Trigonum retromolare



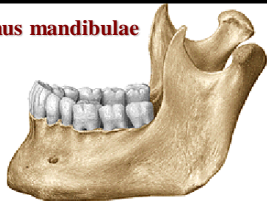
**Corpus mandibulae**

- Tuberculum mentale
- Protuberantia mentalis
- Foramen mentale
- Linea obliqua (trigonum retromolare)
- Pars alveolaris**
- Alveoli dentales, juga alveolaria
- Septa interalveolaria, intraalveolaria



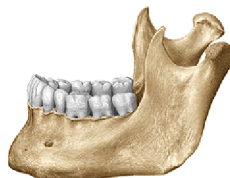
- Processus condylaris
- Caput mandibulae
- Collum mandibulae
- Fovea pterygoidea
- Processus coronoideus
- Incisura mandibulae
- Foramen mandibulae
- Canalis mandibulae
- Lingula mandibulae
- Sulcus mylohyoideus

**Ramus mandibulae**



**Angulus mandibulae (120°-125°)**

- Tuberositas masseterica
- Tuberositas pterygoidea



**Newborn**

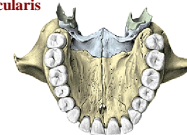
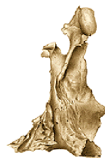


**Old person**



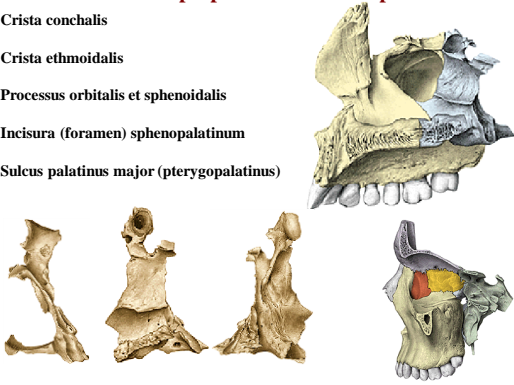
**Os palatinum**

- Lamina horizontalis
- Spina nasalis posterior
- Crista nasalis
- Foramen palatinum majus
- Processus pyramidalis
- Foramina palatina minora
- Lamina perpendicularis**



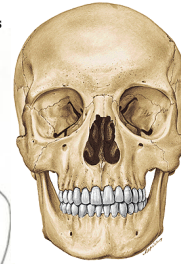
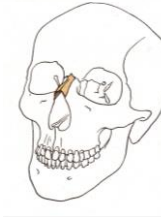
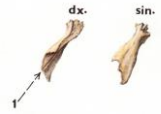
### Lamina perpendicularis ossis palatini

- Crista conchalis
- Crista ethmoidalis
- Processus orbitalis et sphenoidalis
- Incisura (foramen) sphenopalatinum
- Sulcus palatinus major (pterygopalatinus)



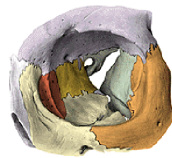
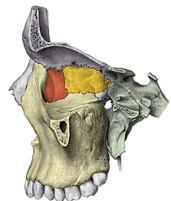
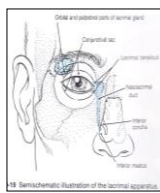
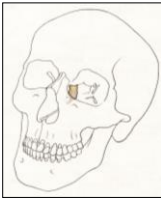
### Os nasale

Sulcus ethmoidalis



### Os lacrimale

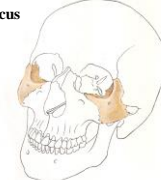
- Crista lacrimalis posterior
- Sulcus lacrimalis
- Fossa saci lacrimalis
- Canalis nasolacrimalis
- Hamulus lacrimalis



### Os zygomaticum

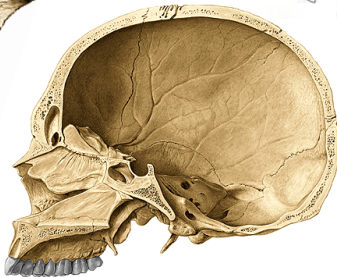
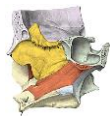
Corpus

- Facies lateralis - foramen zygomaticofaciale
- Facies orbitalis - foramen zygomaticoorbitale
- Facies temporalis - foramen zygomaticotemporale
- Processus maxillaris, frontalis, zygomaticus
- Arcus zygomaticus



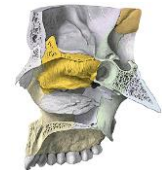
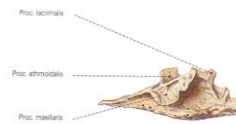
### Vomer

Alae vomeris (rostrum ossis sphenoidalis)



### Concha nasalis inferior

- Processus maxillaris
- Processus lacrimalis
- Processus ethmoidalis

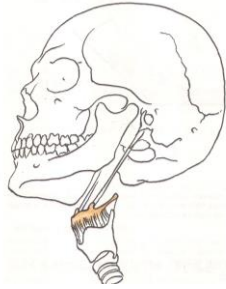
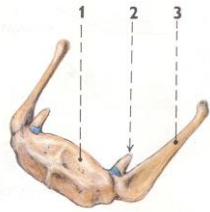


### Os hyoideum

Corpus ossis hyoidei

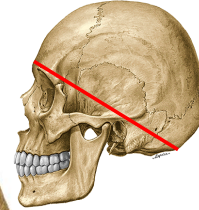
Cornua minora ossis hyoidei

Cornua majora ossis hyoidei

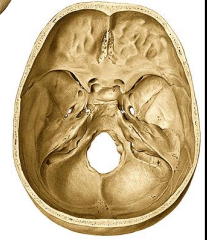


### Skull topography – fossae and cavities

Calvaria



Basis cranii



### Calvaria



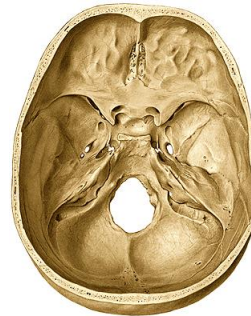
frons, vertex, occiput  
sutura sagittalis, coronalis, lambdoidea, squamosa  
tubera frontalia, parietalia  
linea temporalis superior et inferior,  
foramina parietalia



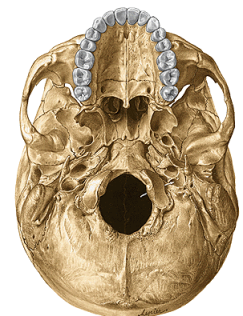
impressiones gyrorum  
juga cerebrialia  
sulci arteriosi,  
sulcus sinus sagittalis superior  
sulcus sinus transversi  
foveolae granulares

### Basis cranii

Basis cranii interna



Basis cranii externa

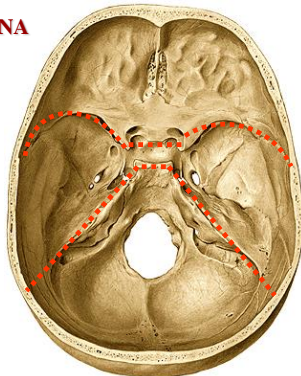


### BASIS CRANII INTERNA

Fossa cranii anterior

Fossa cranii media

Fossa cranii posterior

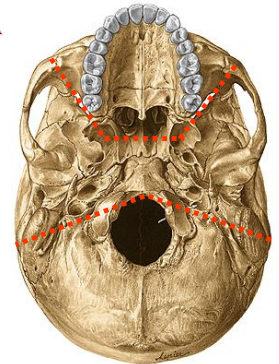


### BASIS CRANII EXTERNA

Fossa cranii anterior

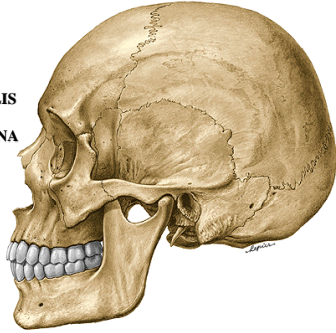
Fossa cranii media

Fossa cranii posterior



**FOSSAE CRANII**

- FOSSA TEMPORALIS
- FOSSA INFRATEMPORALIS
- FOSSA PTERYGOPALATINA
- ORBITA
- CAVITAS NASI OSSEA
- CAVUM ORIS



**Fossa temporalis**

**Medial wall**

- linea temporalis superior (os frontale, os parietale)
- facies temporalis alae majoris ossis sphenoidalis
- pars squamosa ossis temporalis

**Ventral wall**

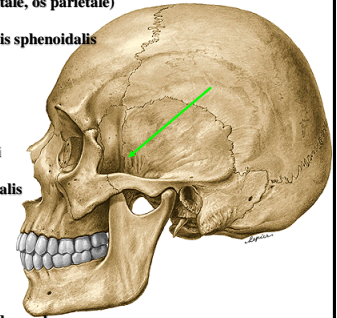
- facies temporalis ossis zygomatici
- processus zygomaticus ossis frontalis

**Lateral wall**

- arcus zygomaticus

**Content:**

- musculus temporalis + nerves and vessels



**Fossa infratemporalis**

**Superior wall**

- Crista infratemporalis alae majoris ossis sphenoidalis

**Medial wall**

- Lamina lateralis processus pterygoidei

**Ventral wall**

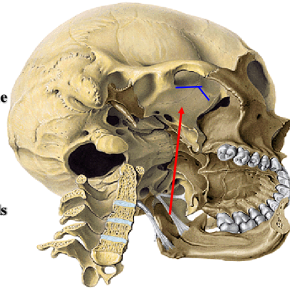
- Facies infratemporalis corporis maxillae

**Lateral wall**

- Ramus mandibulae

**Content:**

- musculi pterygoidei + nerves and vessels



**Fossa pterygopalatina**

**Superior wall**

- Facies maxillaris alae majoris ossis sphenoidalis

**Medial wall**

- Lamina perpendicularis ossis palatini

**Ventral wall**

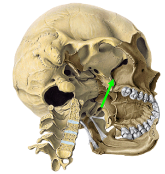
- tuber maxillae

**Dorsal wall**

- Processus pterygoideus ossis sphenoidalis

**Content:**

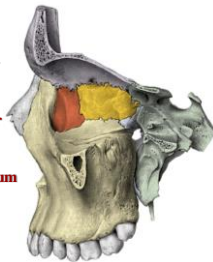
- Nerves and vessels (ganglion pterygopalatinum)



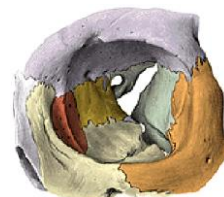
**Fossa pterygopalatina – communication**



- foramen rotundum  
fossa cranii media
- canalis palatinus major  
cavum oris
- fissura orbitalis inferior  
orbita
- foramen sphenopalatinum  
cavum nasi osseum
- canalis pterygoideus  
basis cranii externa



**Orbit**

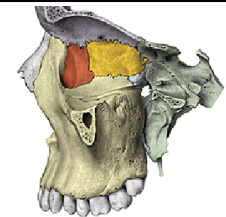


**Aditus orbitae**

- margo supraorbitalis, infraorbitalis

**Superior wall**

- pars orbitalis ossis frontalis
- ala minor ossis sphenoidalis



**Medial wall**

- processus frontalis maxillae

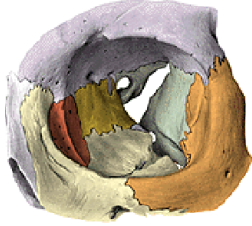
- os lacrimale

- lamina orbitalis ossis ethmoidalis

- ala minor ossis sphenoidalis

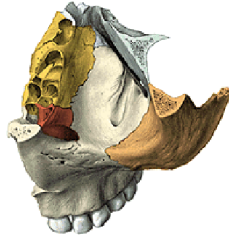
**Lateral wall**

facies orbitalis ossis zygomatici  
 facies orbitalis alae majoris ossis sphenoidalis  
 fissura orbitalis superior et inferior



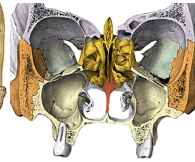
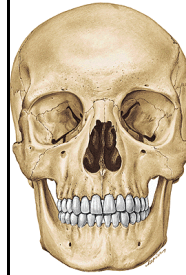
**Inferior wall**

facies orbitalis corporis maxillae  
 facies orbitalis ossis zygomatici  
 processus orbitalis ossis palatini



**Cavitas nasi ossea**

apertura piriformis  
 choanae

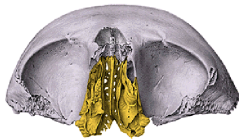
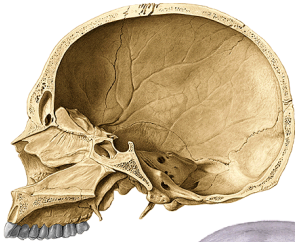


Roof (superior wall)  
 Bottom (palatum durum)  
 Medial wall (septum nasi)  
 Lateral wall (three layers)

**Cavitas nasi ossea**

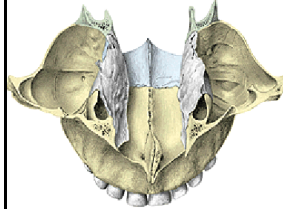
**Superior wall**

ossa nasalia  
 pars nasalis ossis frontalis  
 lamina cribrosa ossis ethmoidalis  
 corpus ossis sphenoidalis



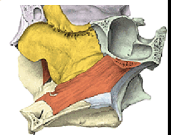
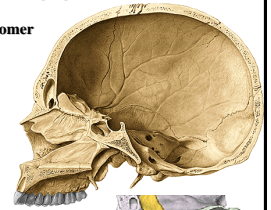
**Inferior wall**

(palatum durum)  
 os incisivum (premaxilla)  
 processus palatini maxillarum  
 laminae horizontales ossis palatini

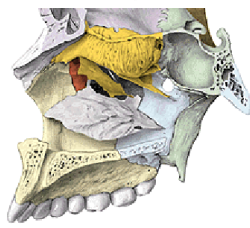
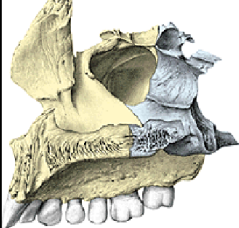


**Medial wall**

(septum nasi)  
 lamina perpendicularis ossis ethmoidalis  
 vomer



**Lateral wall – lateral (outermost) layer**



processus frontalis maxillae  
 facies nasalis corporis maxillae  
 lamina medialis processus pterygoidei

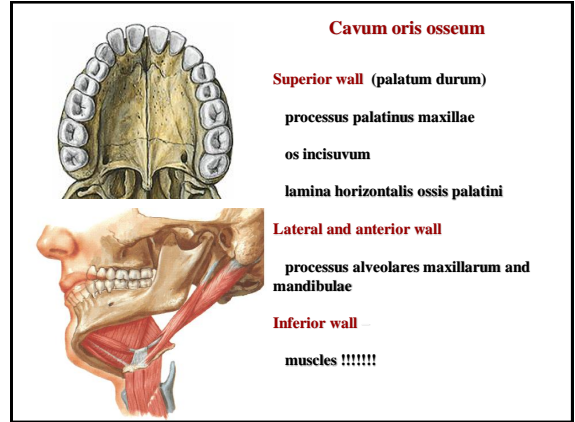
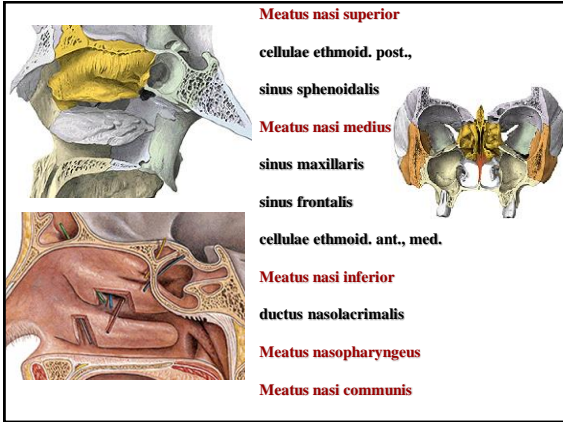
**Lateral wall of the cavum nasi osseum**



**Middle layer:**  
 os lacrimale  
 lamina perpendicularis ossis palatini



**Medial (innermost) layer:**  
 labyrinthus ethmoidalis  
 (concha nasalis superior et media,  
 bulla ethmoidalis, processus uncinatus)  
 concha nasalis inferior



**References:**

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Atlas of Human Anatomy Sobotta. Elsevier Books.

**Keith L. Moore, Arthur F. Dalley (2005):**  
Clinically Oriented Anatomy. Williams and Wilkins.

**Platzer, W., Kahle, W., Leonhardt H. (1992):**  
Locomotor system. Georg Thieme Verlag, Stuttgart,  
New York, 4th edition.

**Čihák, R. (1987):** Anatomie 1. Avicenum, Zdravotnické  
nakladatelství.