

A koponya felépítése. Az ékcsont (os sphenoidale) és a rostacsont (os ethmoidale) anatómiája



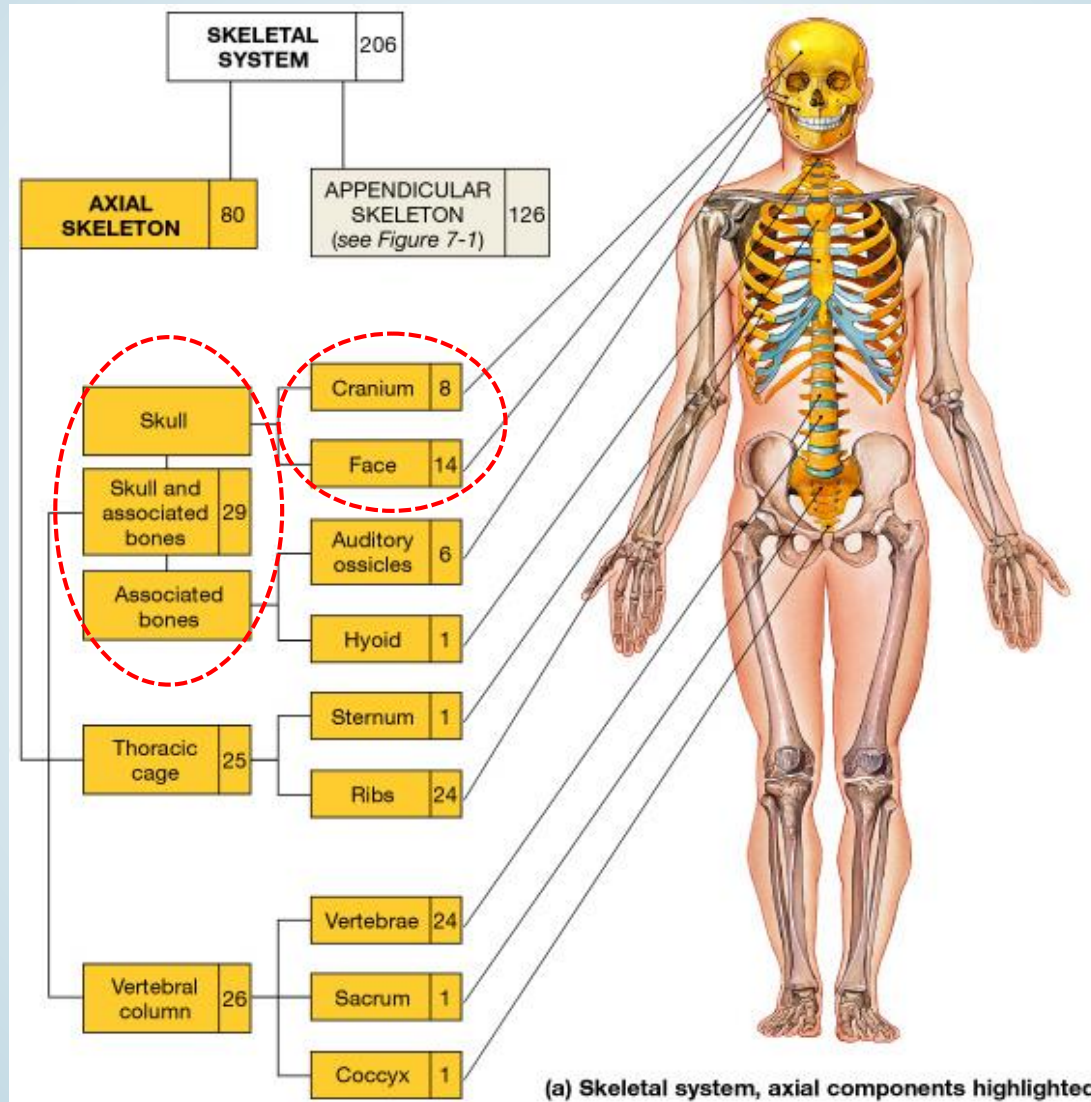
*„To be, or not to be, that is the question...“
(by: William Shakespeare
from Hamlet, spoken by Hamlet)*

Ph.D., Dr. Lendvai Dávid

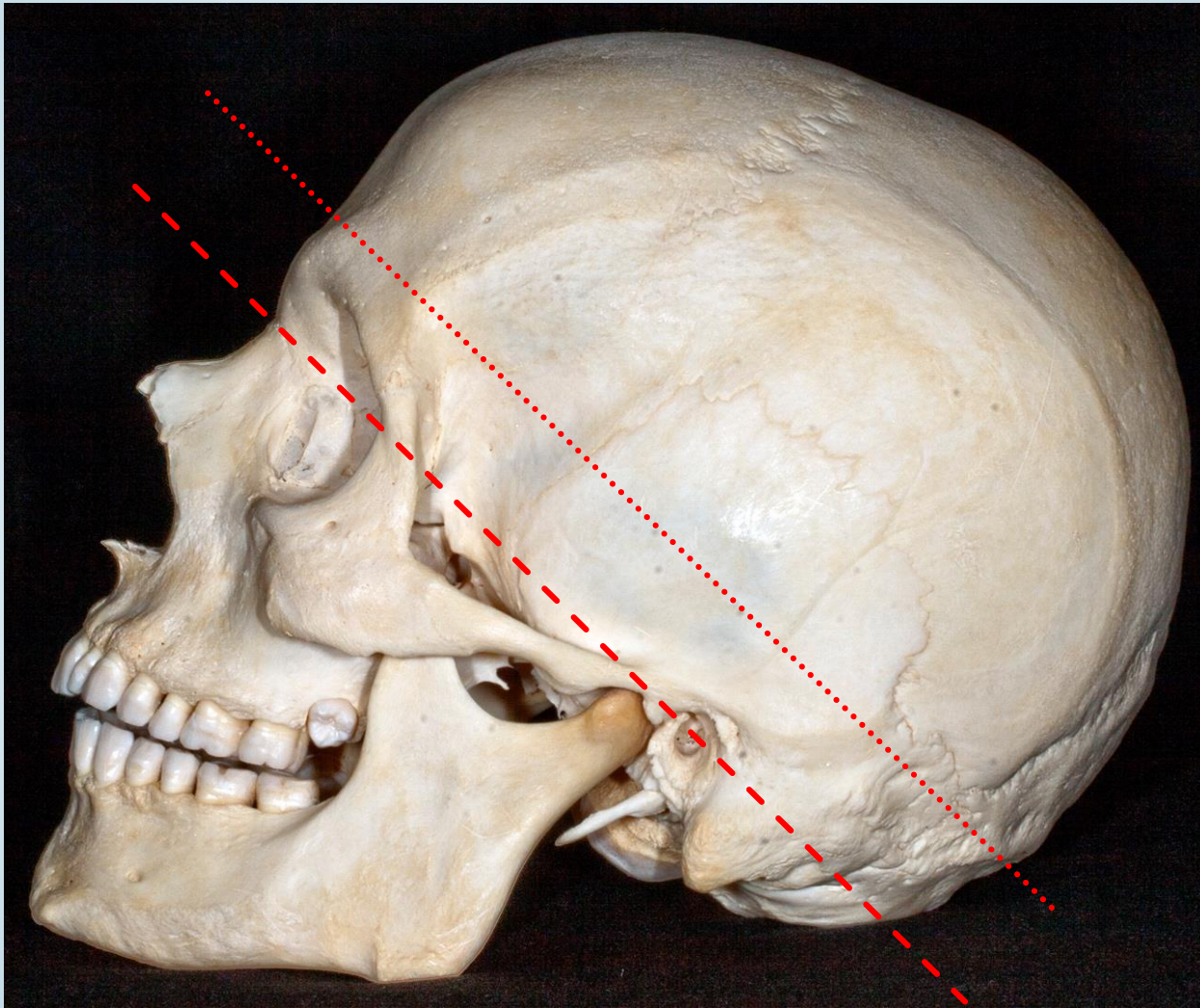
Anatómia, Szövet- és Fejlődéstani Intézet

2018.

Skeletalis rendszer



A koponya strukturális felépítése



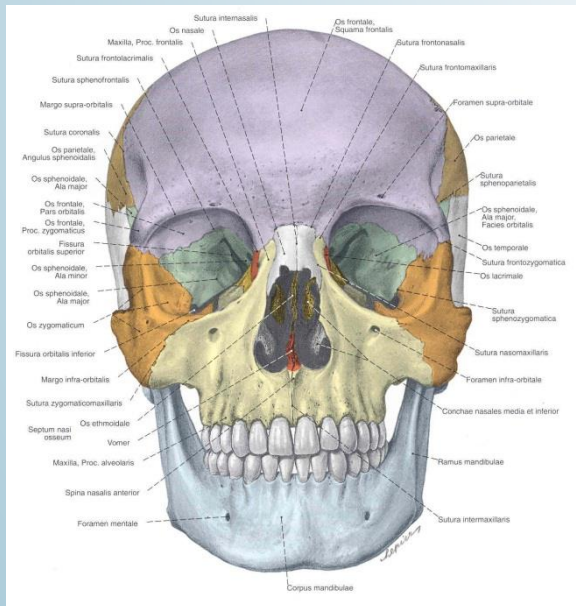
- - - - Határ a viscerocranium és neurocranium között

..... A boncteremben látható metszési sík (calvaria)

A koponya fő részei

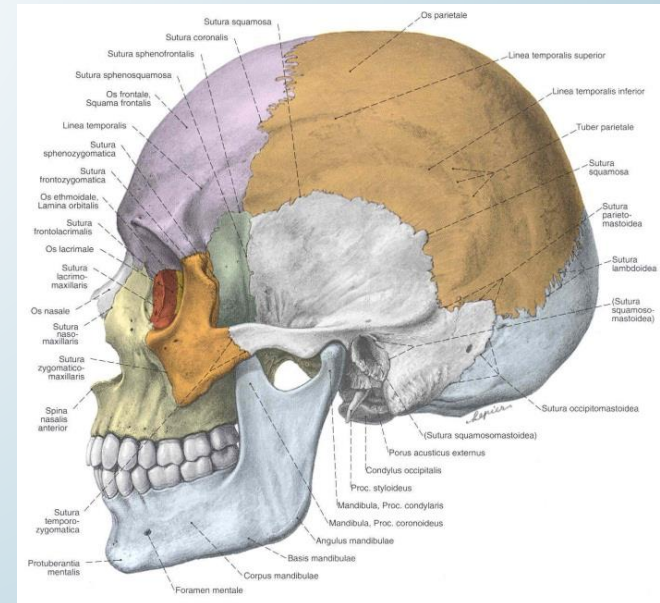
- 22 csontból épül fel:
- *neurocranium* (8) – **PÁRATLAN**: os -frontale, -occipitale, -sphenoidale, -ethmoidale
PÁROS: os -temporale, -parietale
- *viscerocranium* (14) - **PÁRATLAN** : mandibula, vomer.
PÁROS: os nasale, maxilla, -zygomaticum, -lacrimale, -palatinum, concha nasalis inferior

Szerepük - az üregek kialakulása, a zsigerek védelme, fonáció, a gastrointestinális és a légzőrendszer kezdeti szakasza, az izmok eredése/tapadása (rágás, fejmozgások)



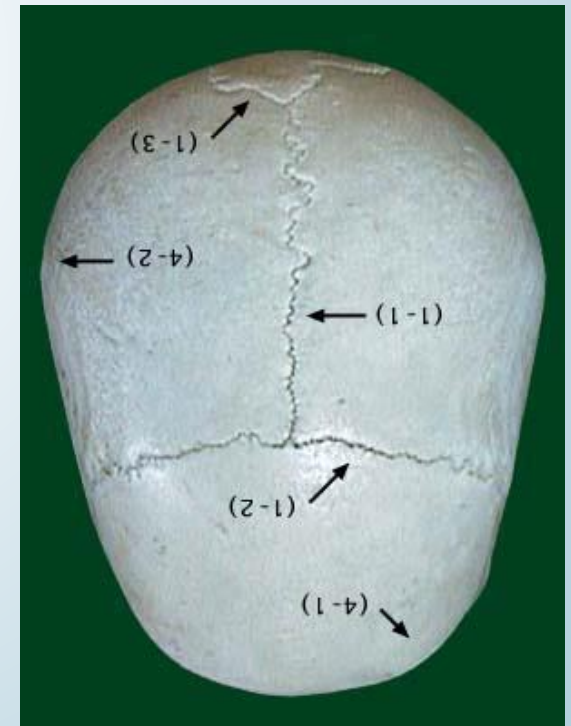
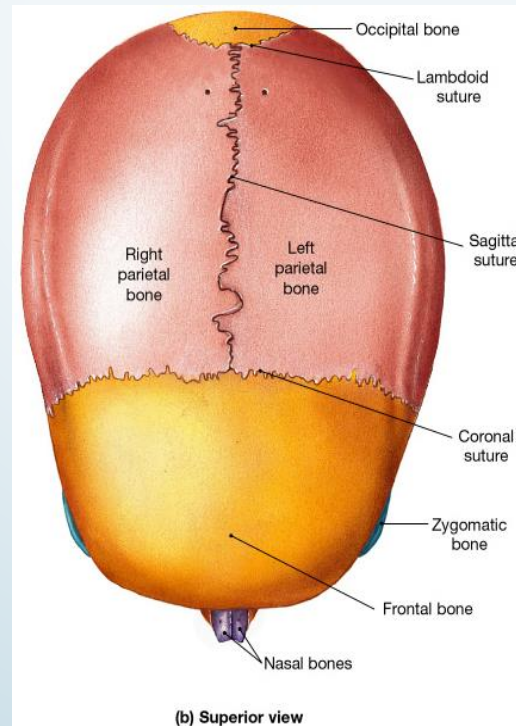
Üregek:

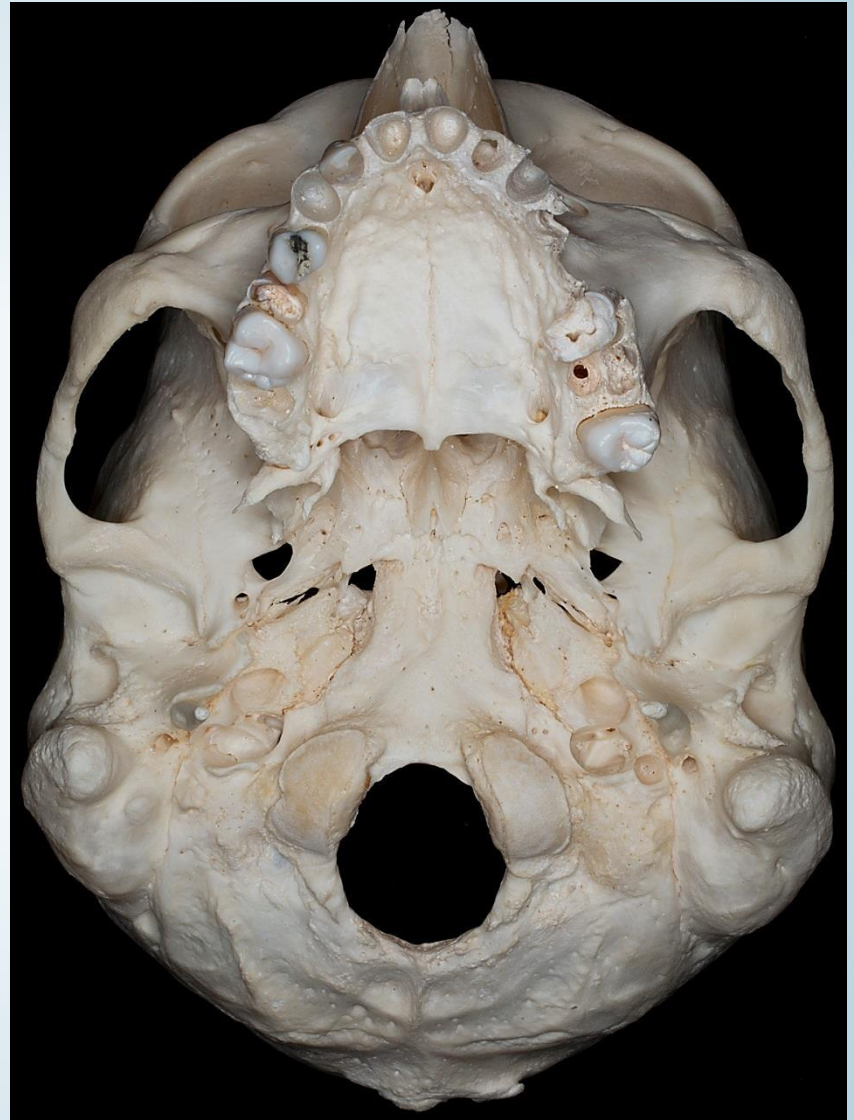
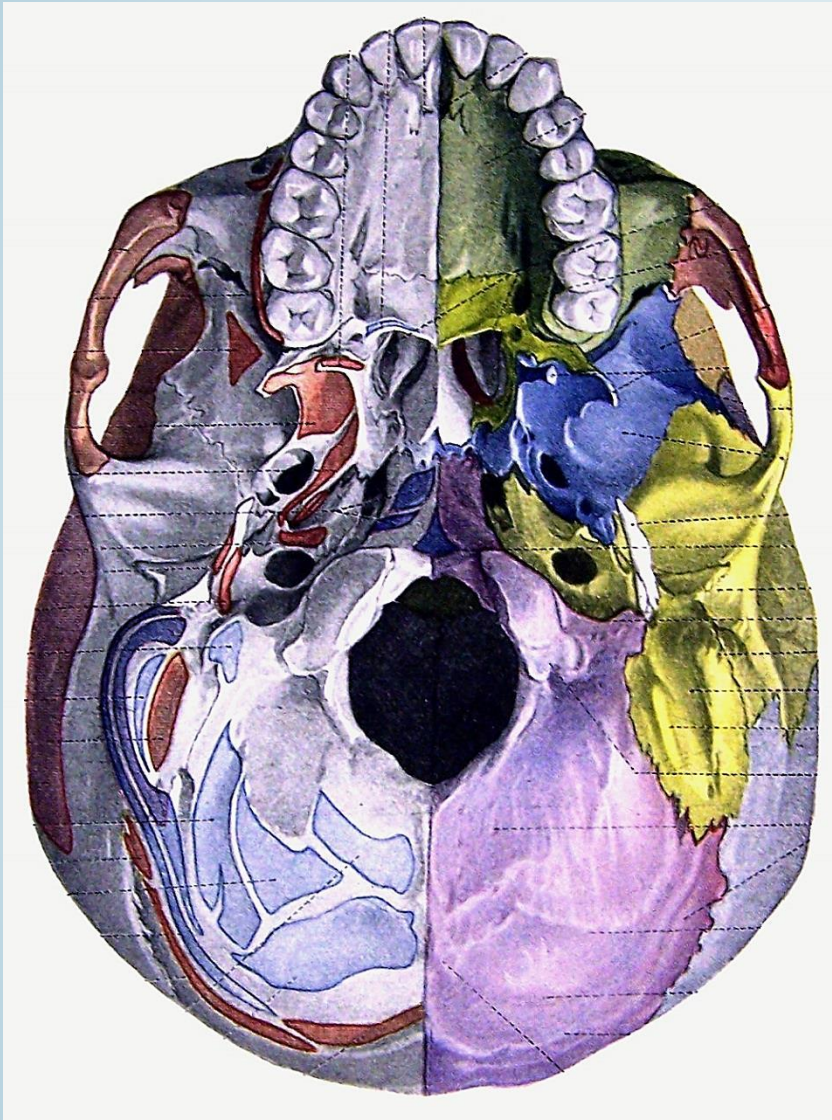
- *Cavum craniale,*
- *Cavum nasi,*
- *Sinus paranasales*
- *Cavum oris,*
- *Orbita,*
- *(Cavum tympani,*
Belső fül)



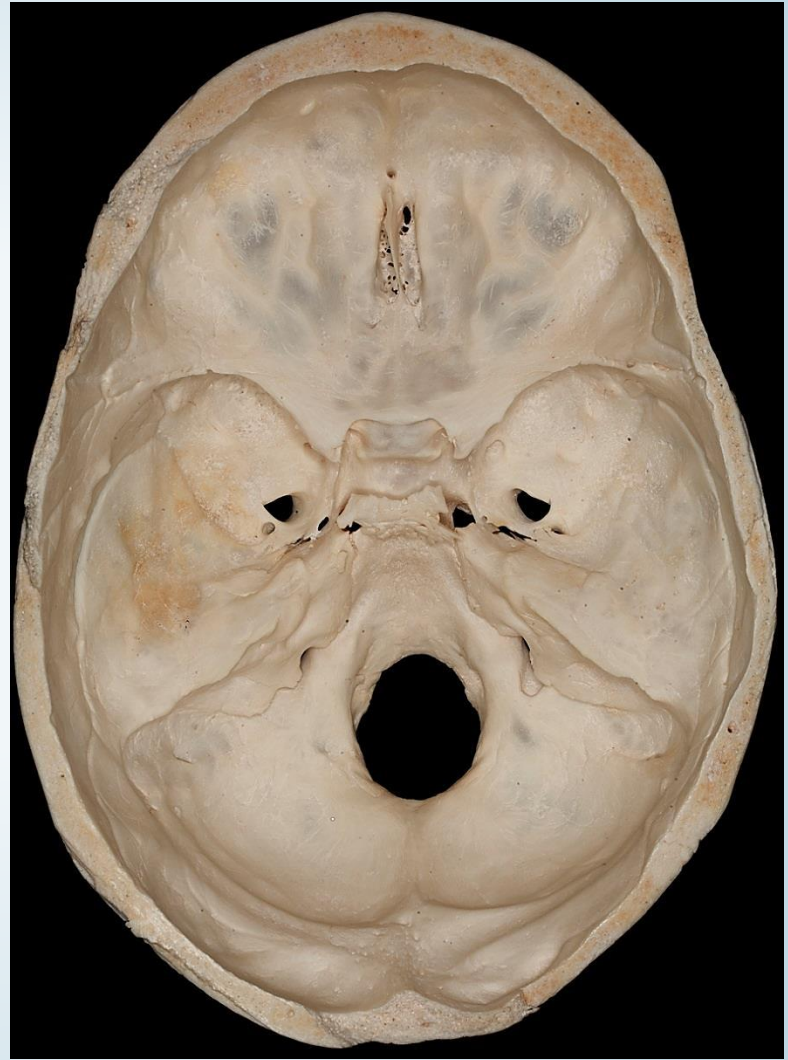
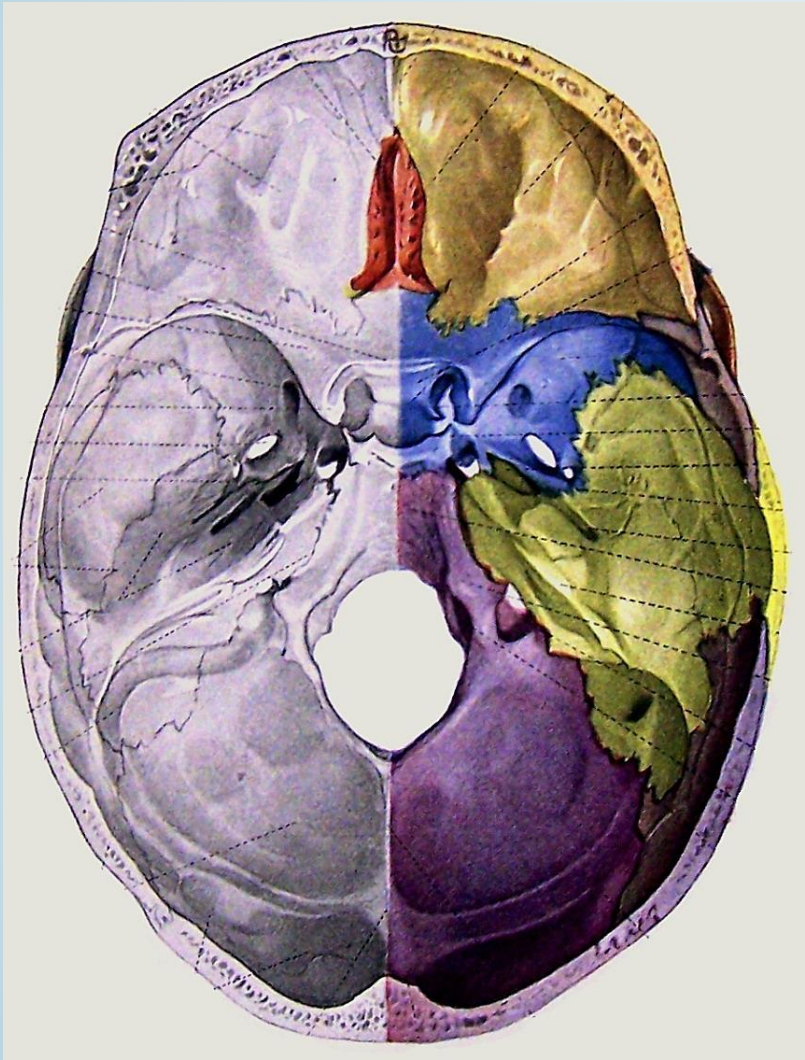
Csontok közötti összeköttetések

- *Synchondrosis, synostosis*
(porcos és csontos összeköttetés)
- *Suturae*
 - *Coronalis*
 - *Sagittalis*
 - *Lambdaidea*





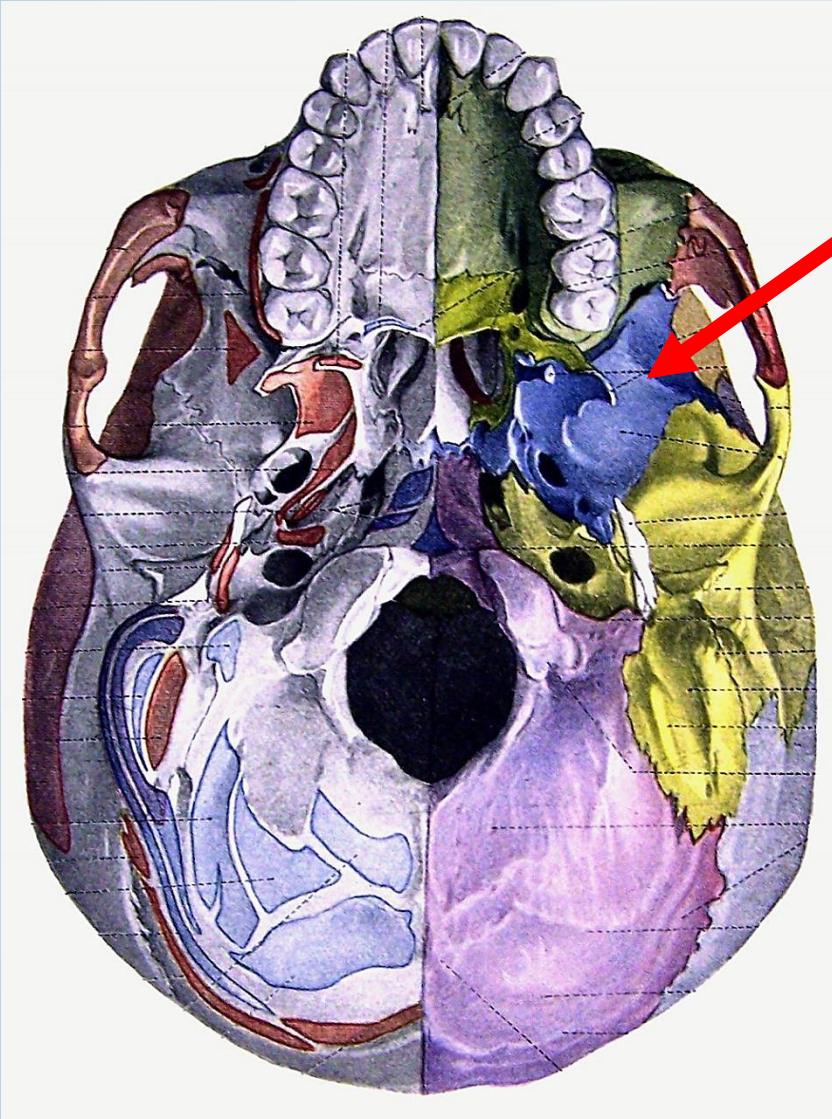
Braus



Braus

Os sphenoidale

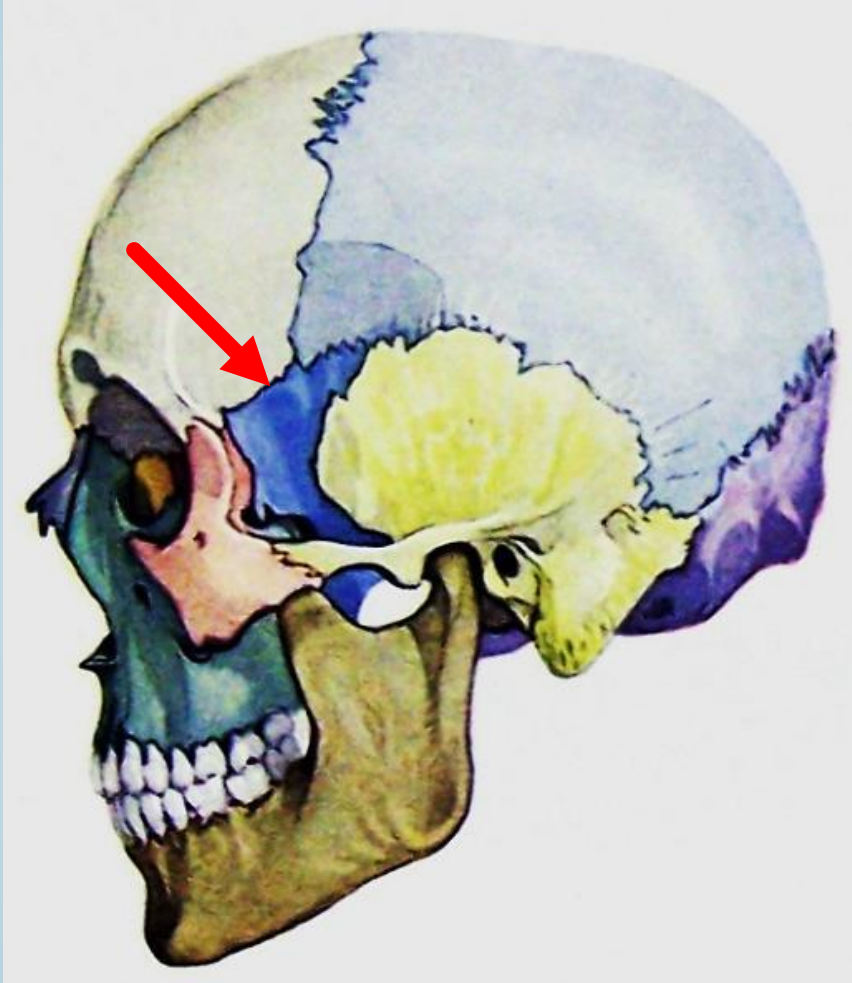
Braus



A basis crani externa része (- test (Corpus), processus pterygoideus, nagy szárny (Ala major)

Os sphenoidale

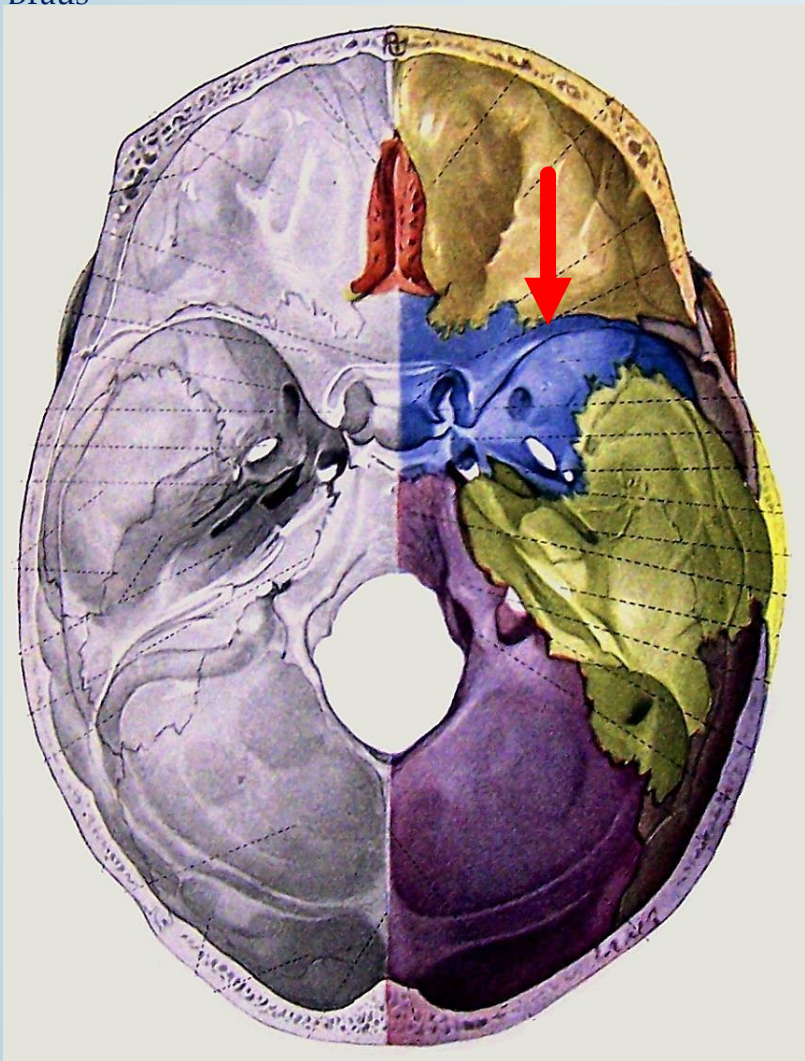
Braus



A fossa temporalis része, nagy szárny (Ala major)

Os sphenoidale

Braus



A basis crani interna része (Corpus, Ala minor, Ala major)

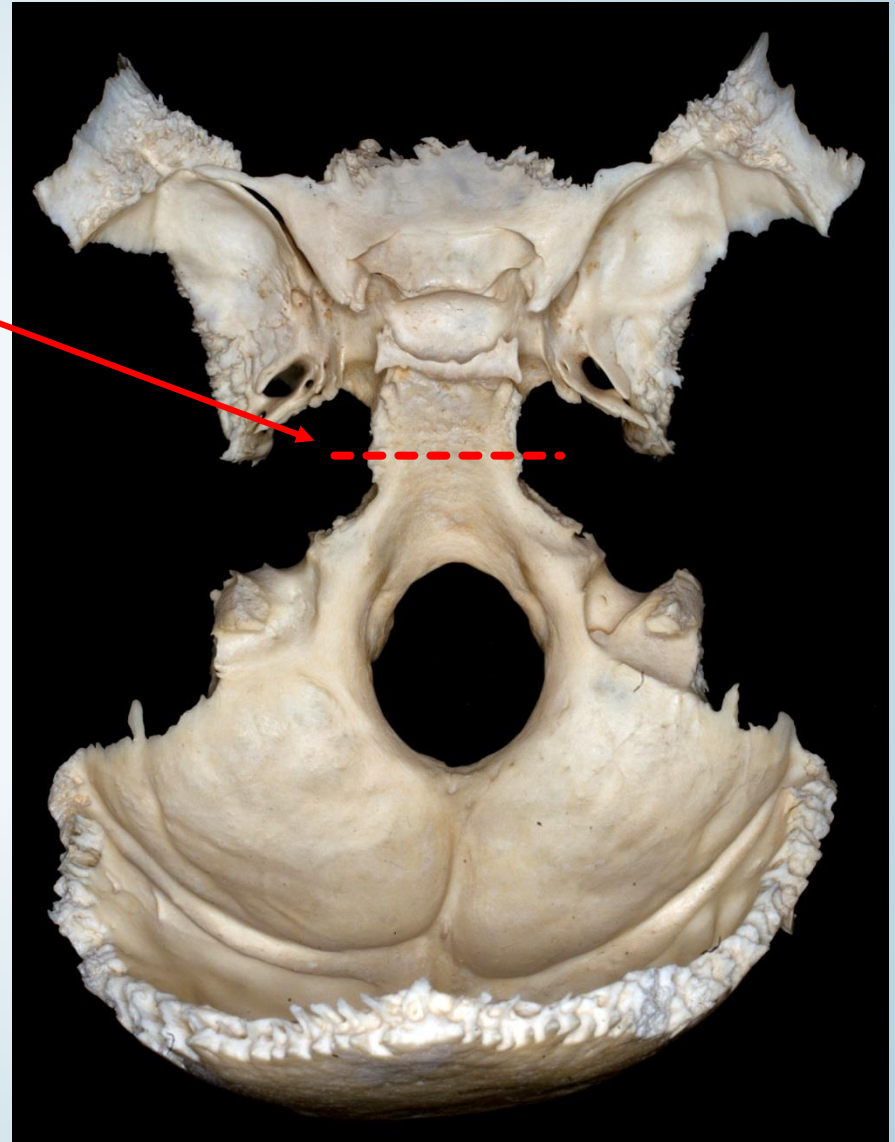
Os sphenoidale

sphenooccipital synchondrosis:

A felnőttkor kezdetén
elcsontosodik

Körülbelül 18 éves korban
az os occipitale és a sphenoidale
összenő

Más csontokkal való kapcsolata
(sutura) szintén elcsontosodhat



Os sphenoidale



Os sphecoideum ~ Wespe (darázs) ~Os vespiforme

Os sphenoidale = ék forma

Os cumeiforme, alatum, pterygoideum, polymorphon, carinae, colatorii, paxillare

Os sphenoidale

www.hrlfg.eoldal.hu



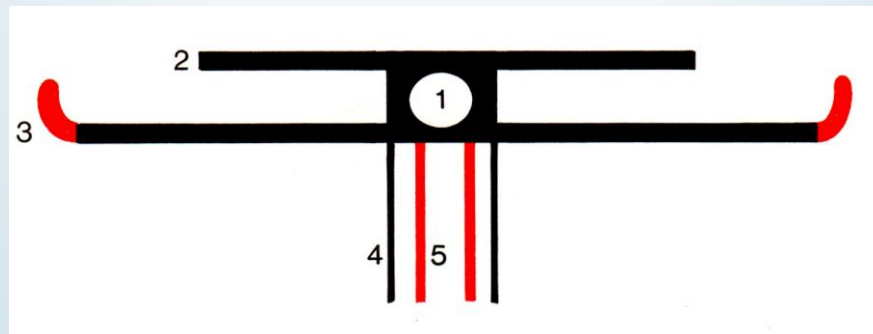
Os sphecoideum ~ Wespe (darázs) ~ Os vespiforme

Os sphenoidale = ék forma

Os cumeiforme, alatum, pterygoideum, polymorphon, carinae, colatorii, paxillare



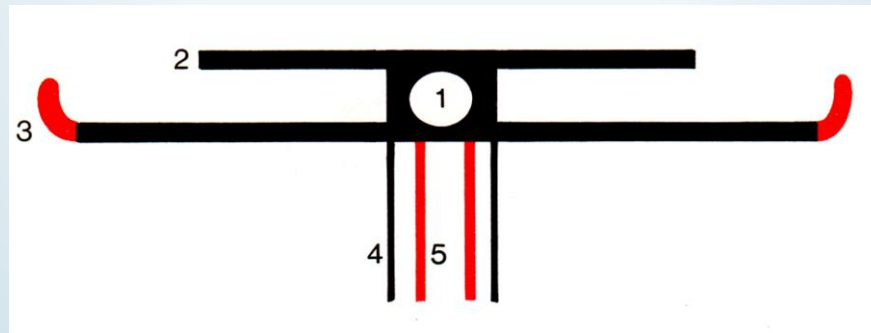
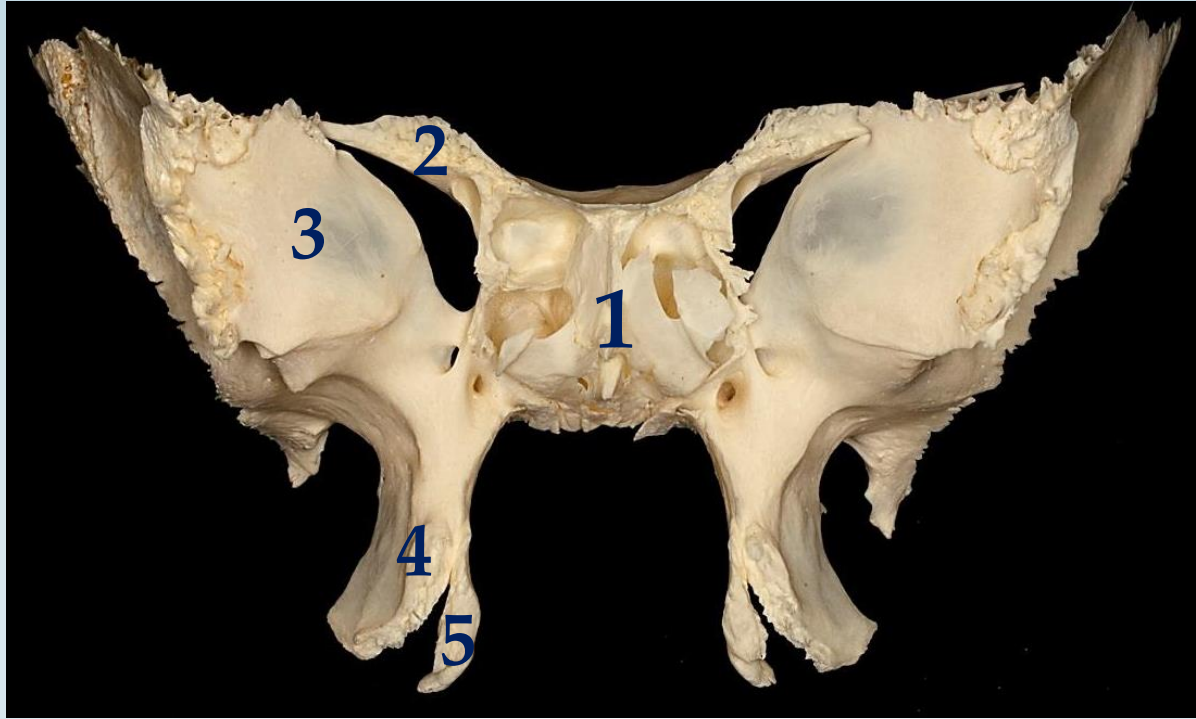
fotó: Semmelweis Egyetem ©



Faller

- 1 Sinus sphenoidalis
- 2 Ala minor ossis sphenoidalis
- 3 Ala major ossis sphenoidalis

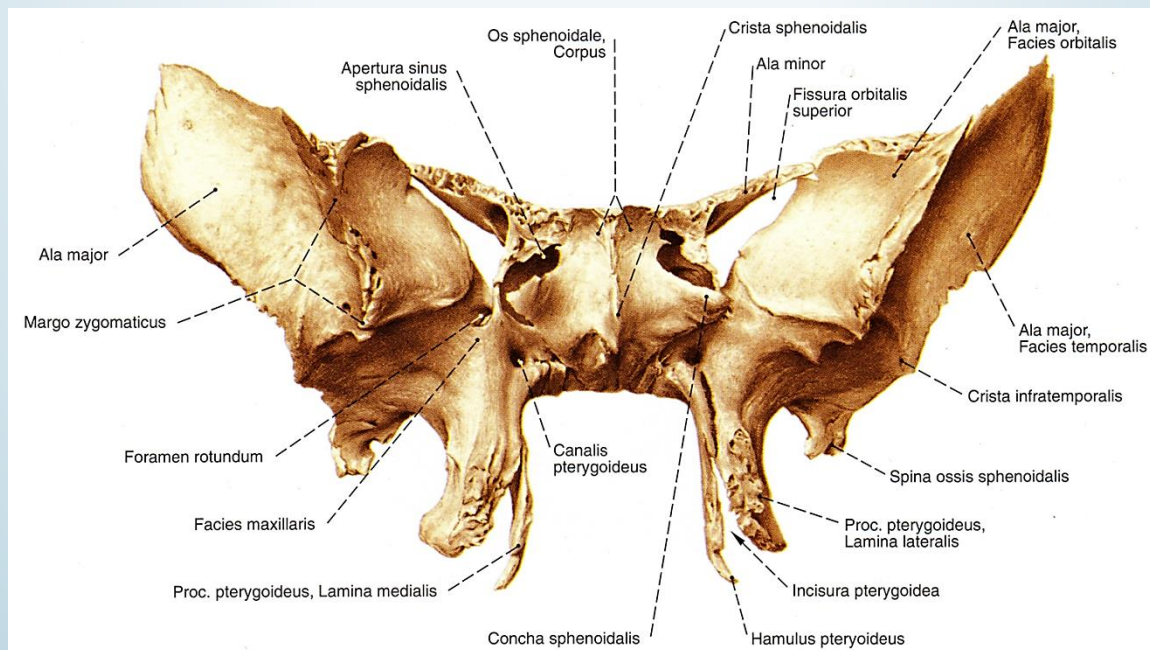
- 4 Lamina lateralis processus pterygoidei
- 5 Lamina medialis processus pterygoidei

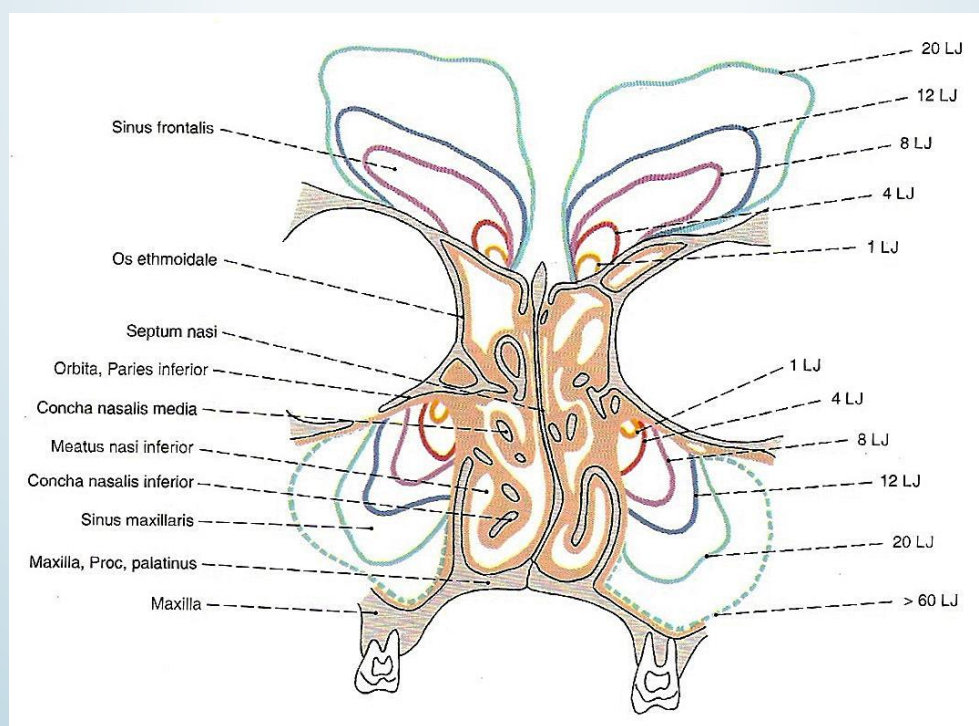


Faller

- 1 Sinus sphenoidalis
- 2 Ala minor ossis sphenoidalis
- 3 Ala major ossis sphenoidalis

- 4 Lamina lateralis processus pterygoidei
- 5 Lamina medialis processus pterygoidei





Os sphenoidale

Ala major felszínei:

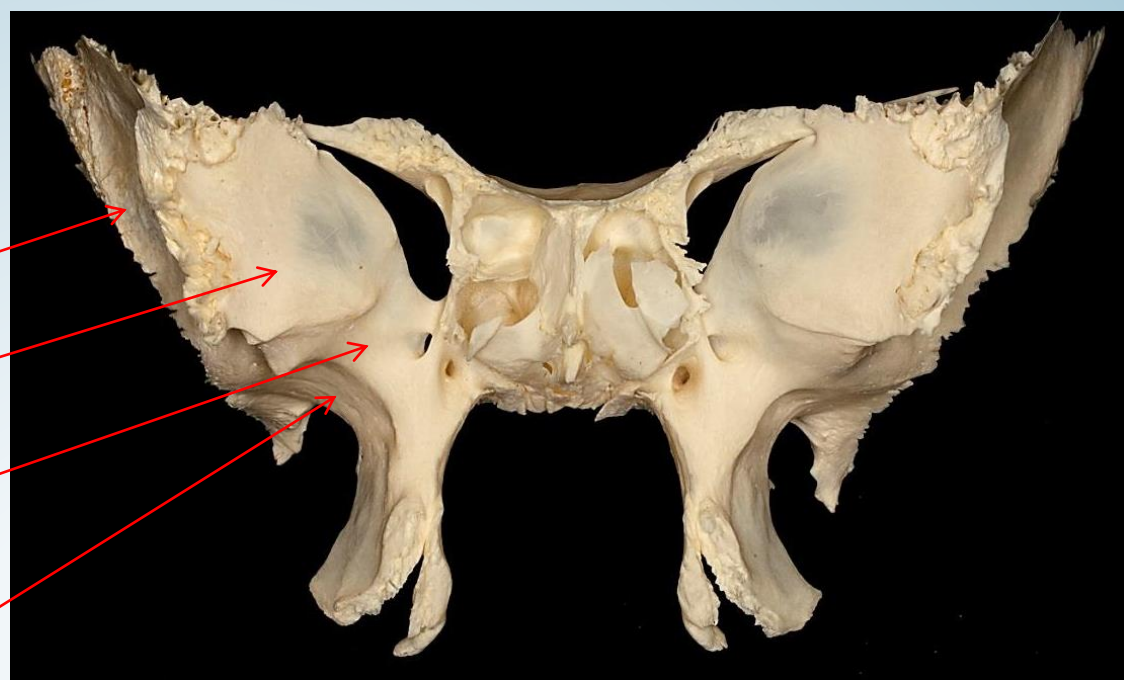
- Temporalis

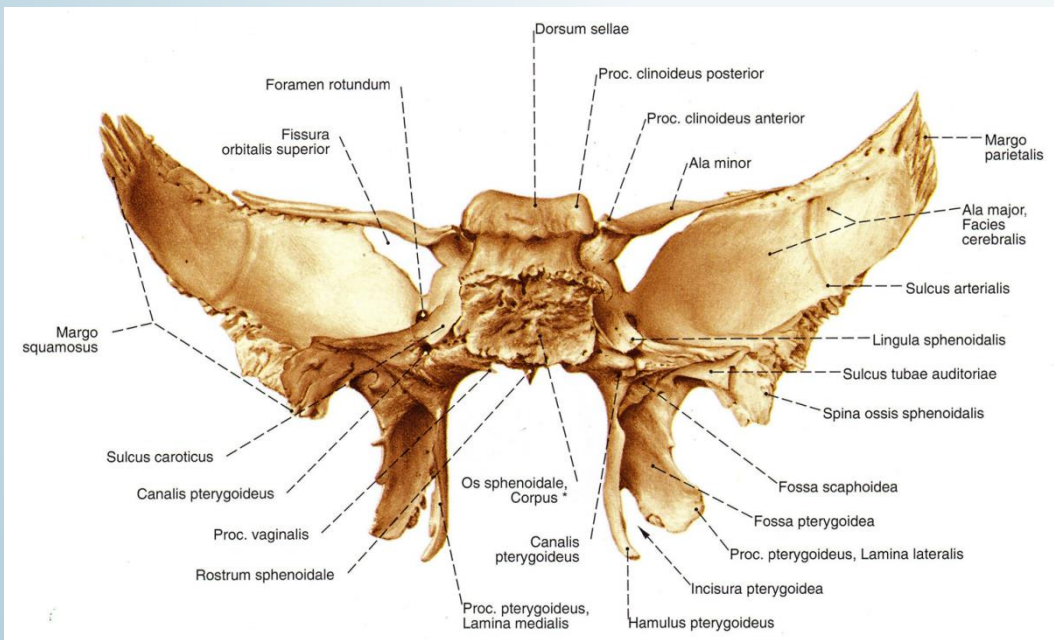
- Orbitalis

- Maxillaris
(a foramen rotundum körül)

- Infratemporalis

- Cerebralis





www.mozaweb.hu

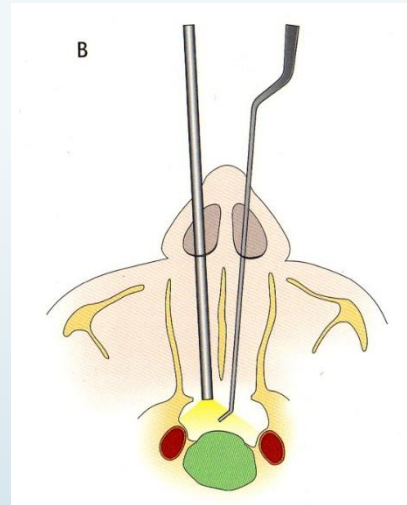
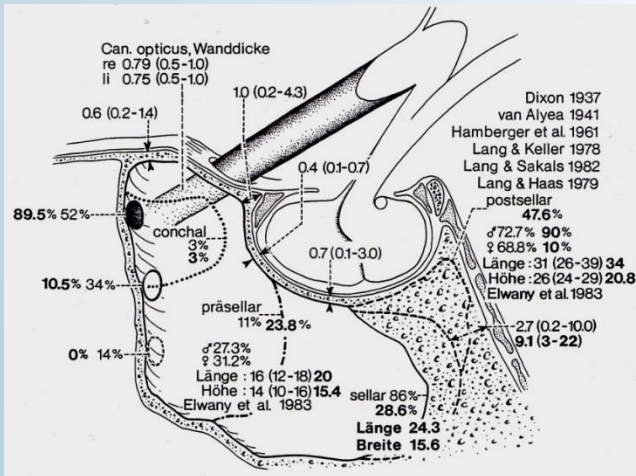
Sinus sphenoidalis; Sella turcica

Eördögh



Aesculap – B Braun

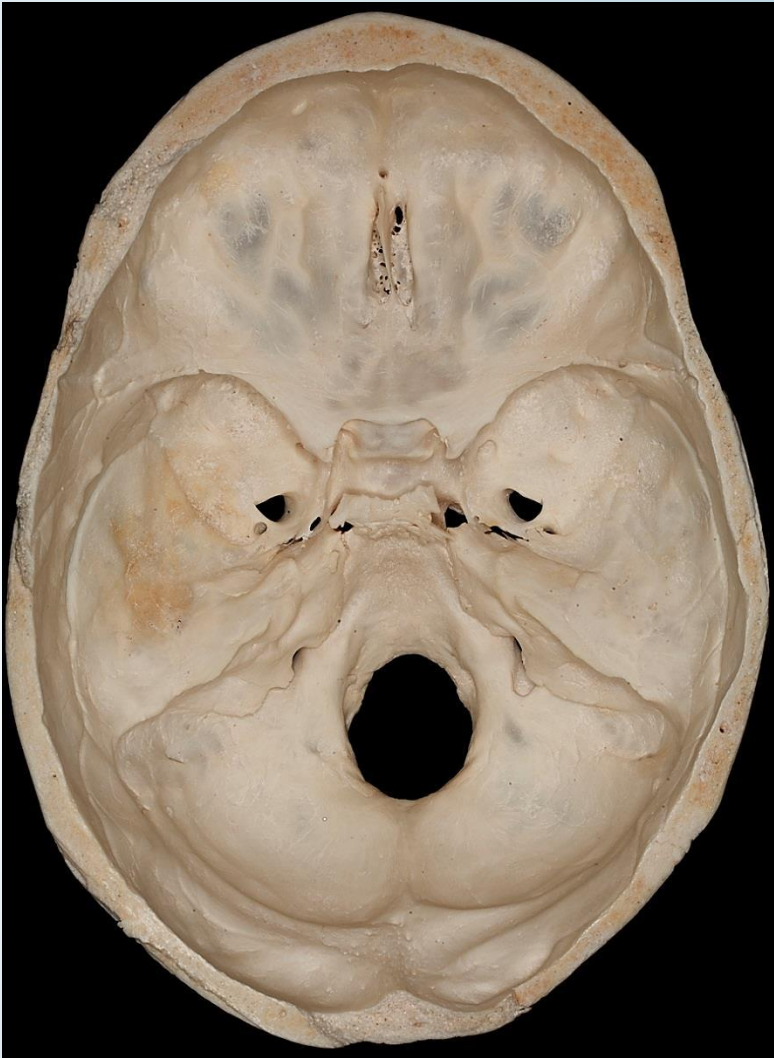
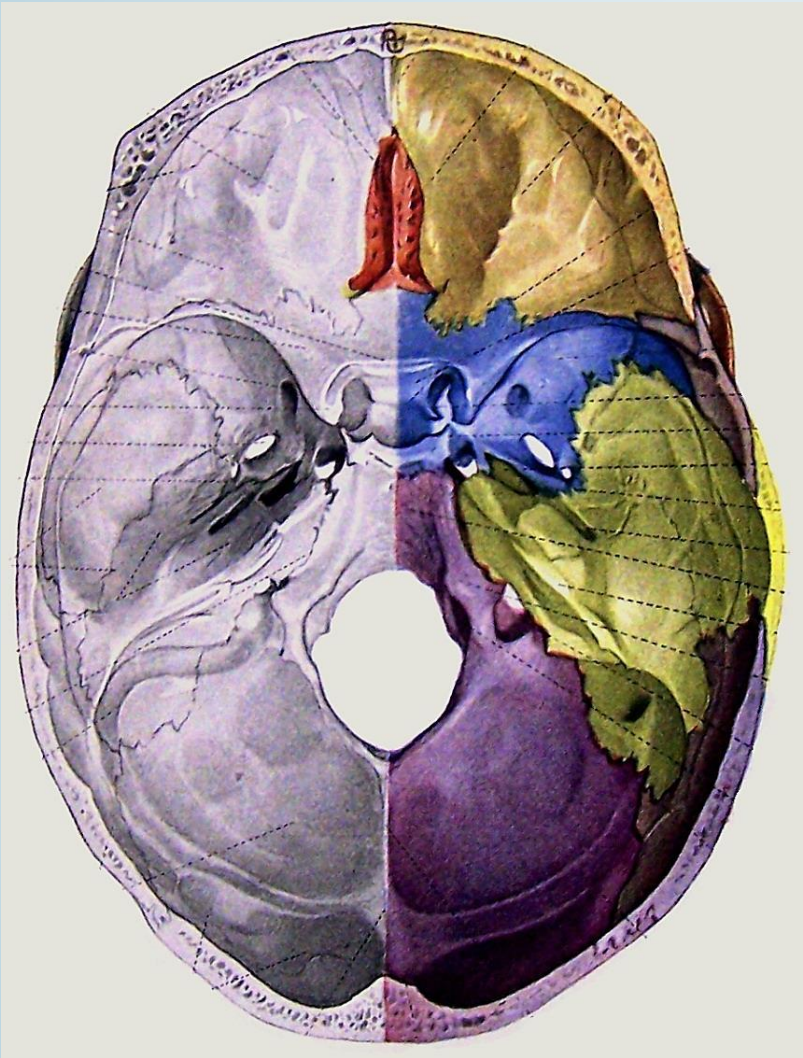
www.commonswiki.org



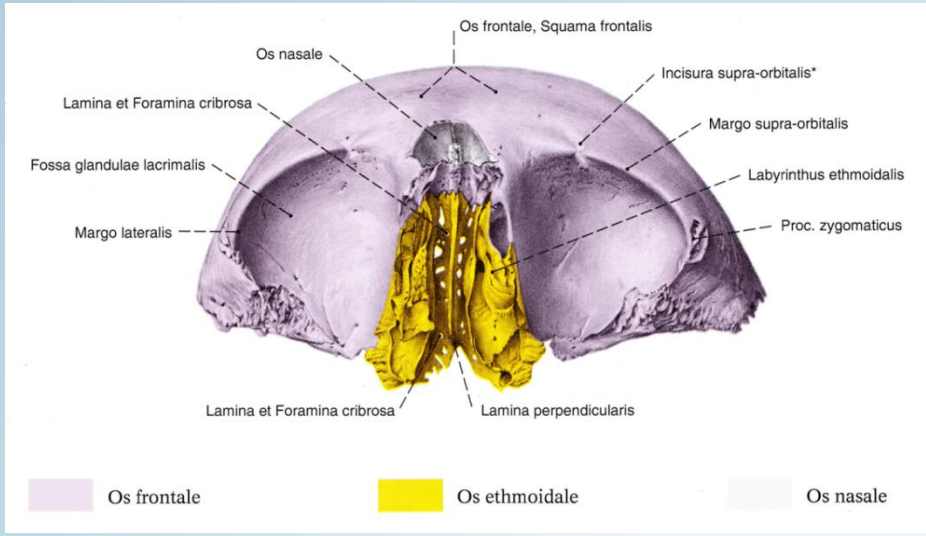
Lang

www.mozaweb.hu

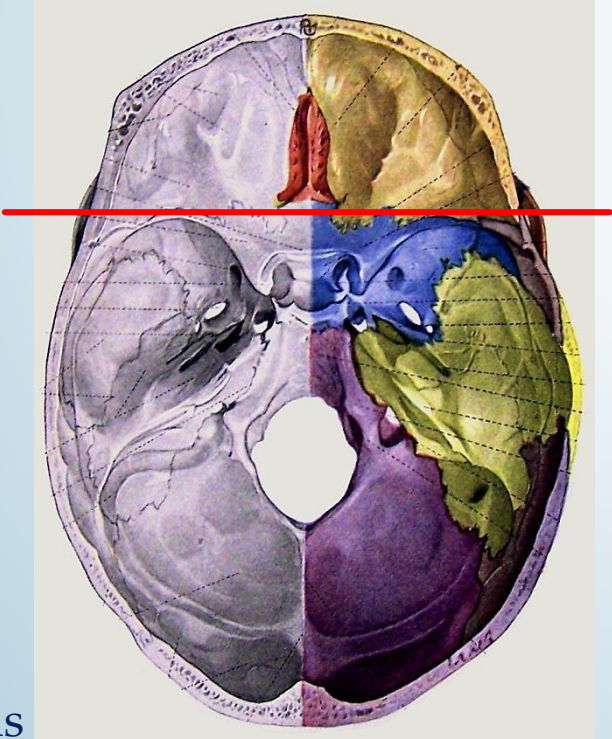
Os ethmoidale



Braus

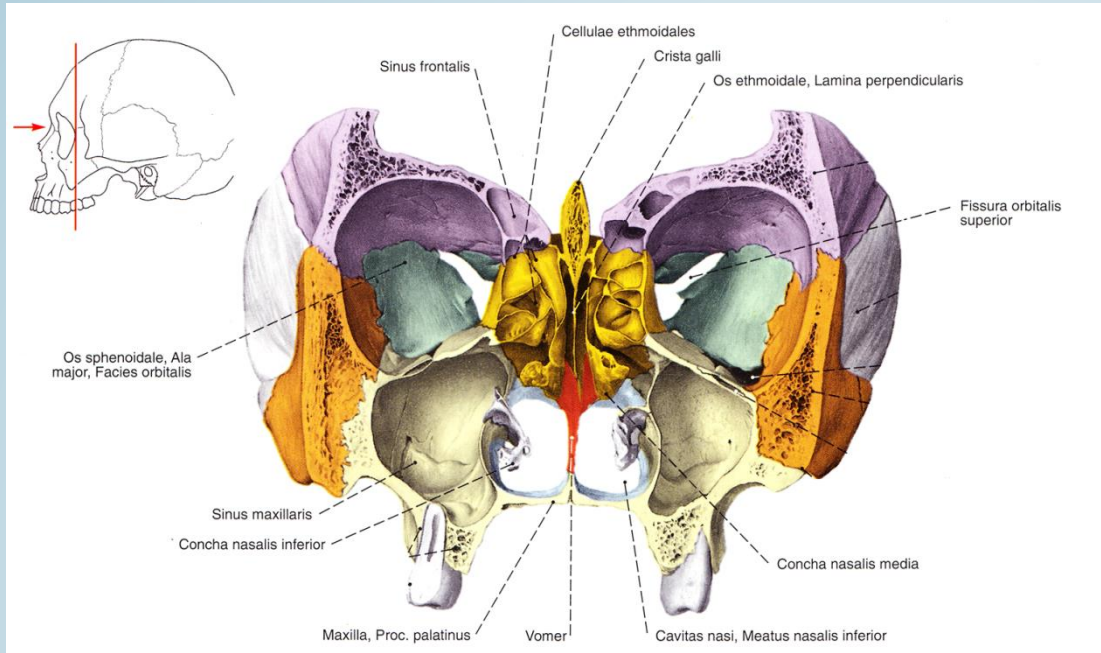


Sobotta

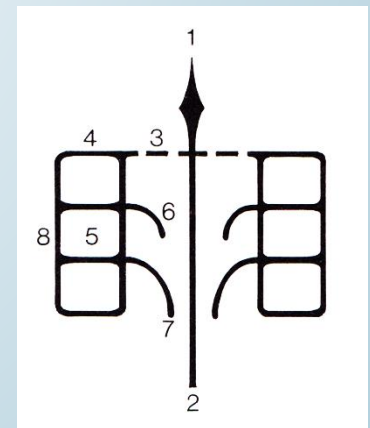


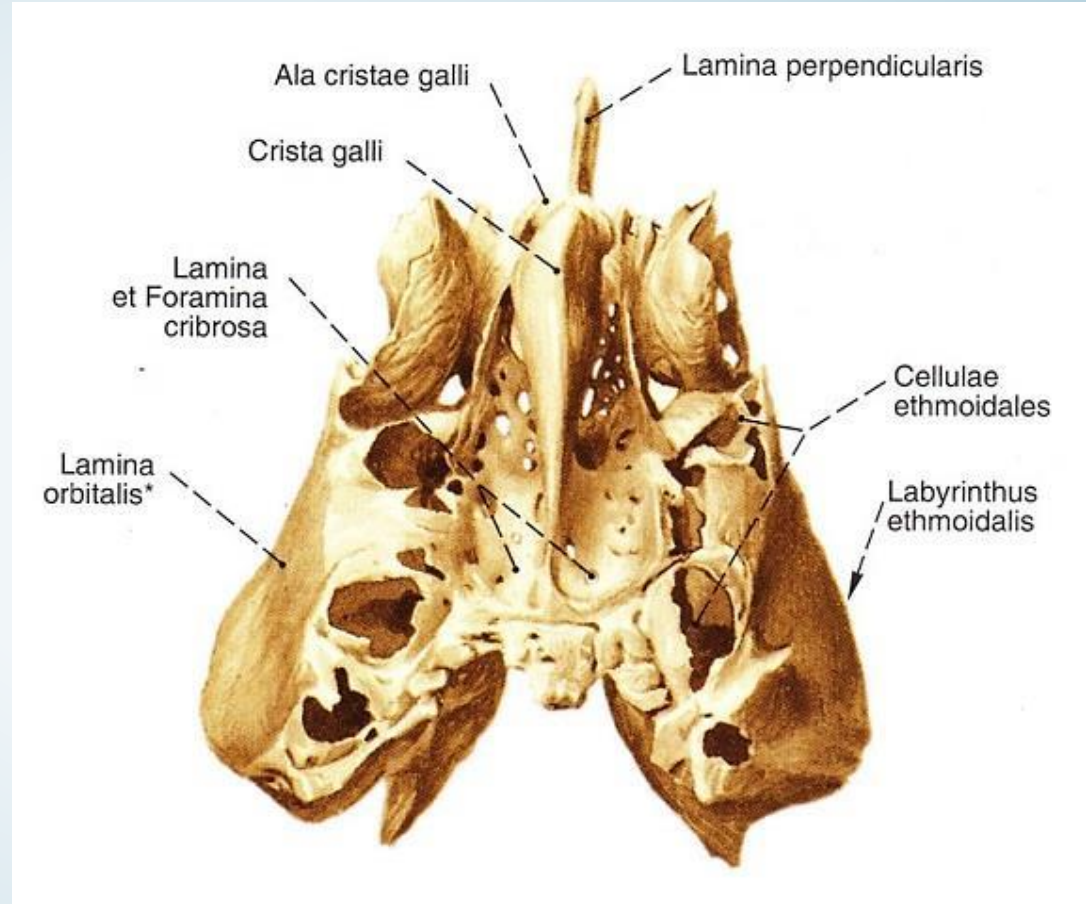
Braus

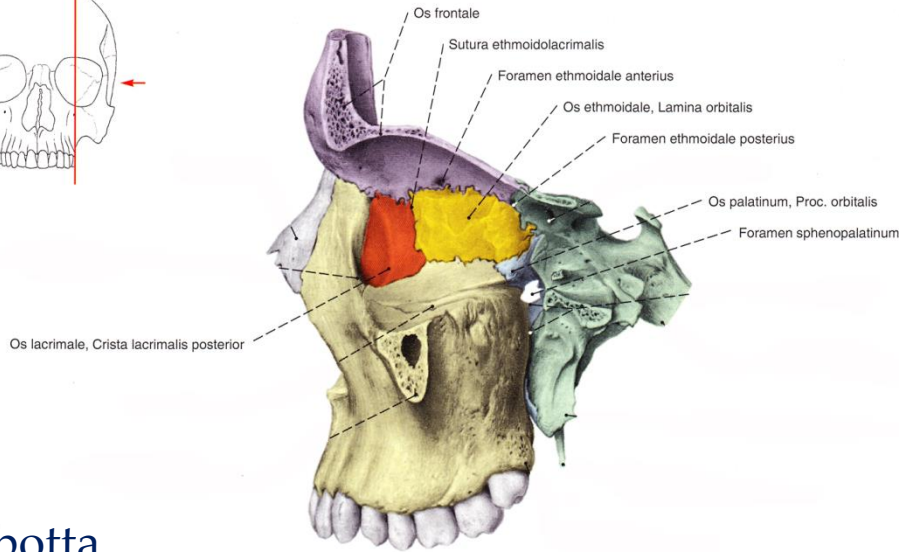
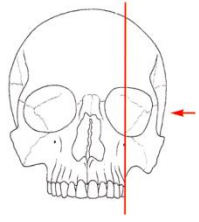




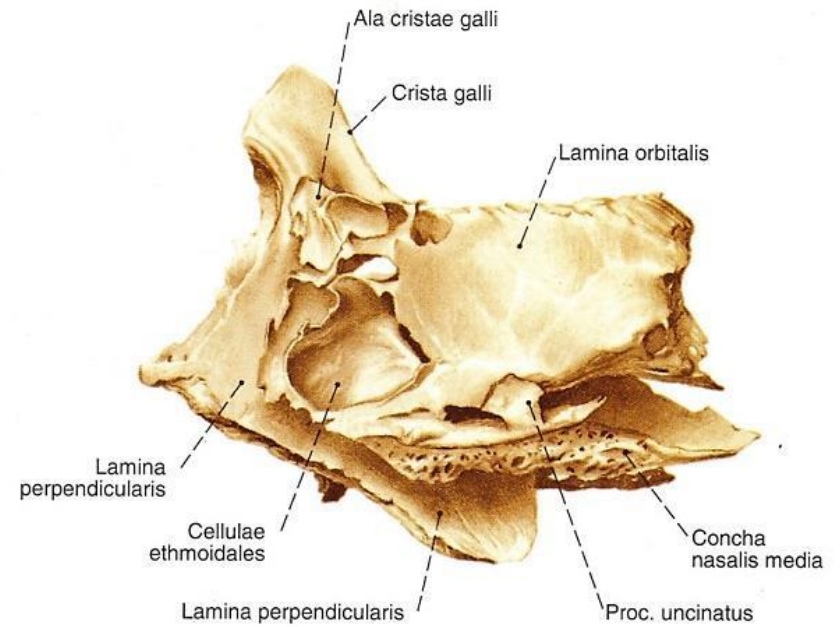
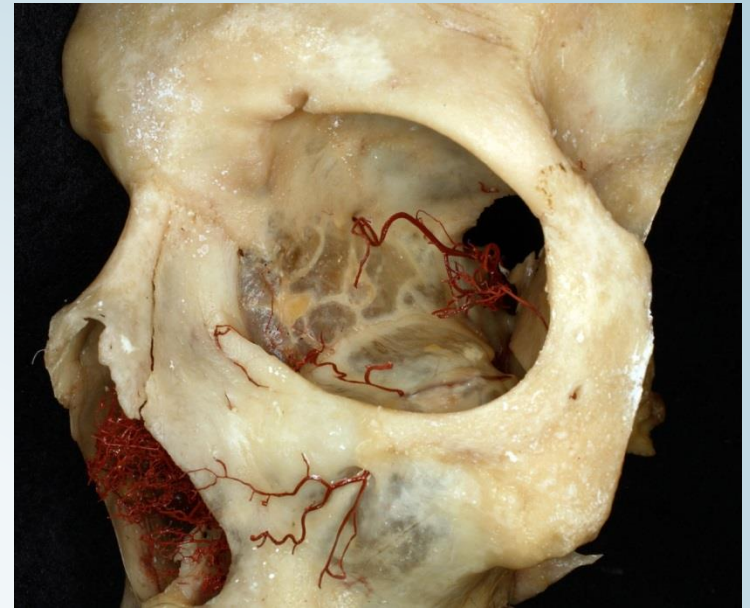
- 1 Crista galli
- 2 Lamina perpendicularis
- 3 Lamina cribrosa
- 4 Labyrinthus ethmoidalis
- 5 Cellulae ethmoidales
- 6 Concha nasalis superior
- 7 Concha nasalis media
- 8 Lamina orbitalis / papyracea



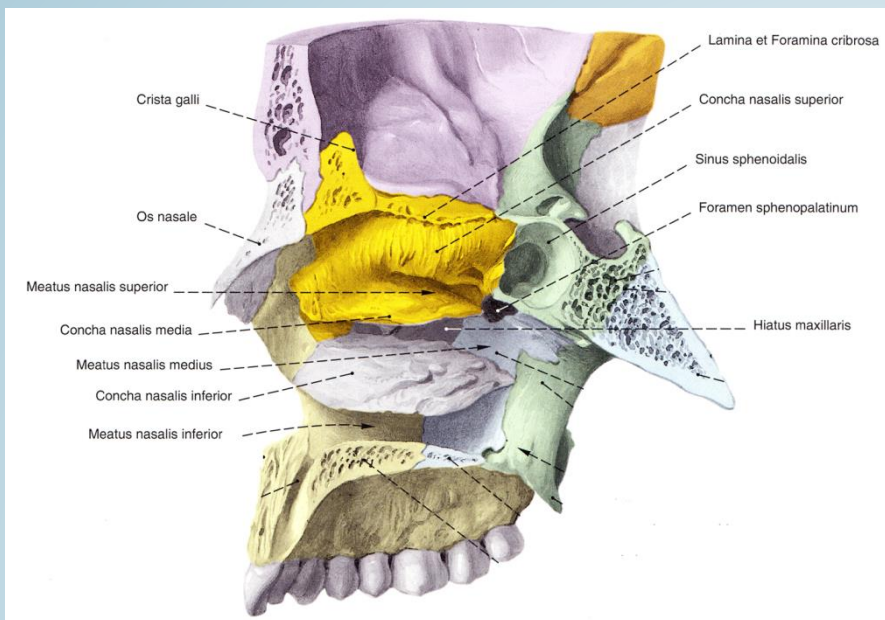




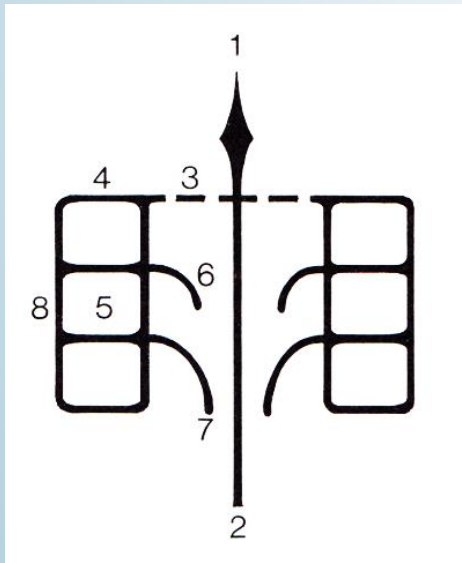
Sobotta



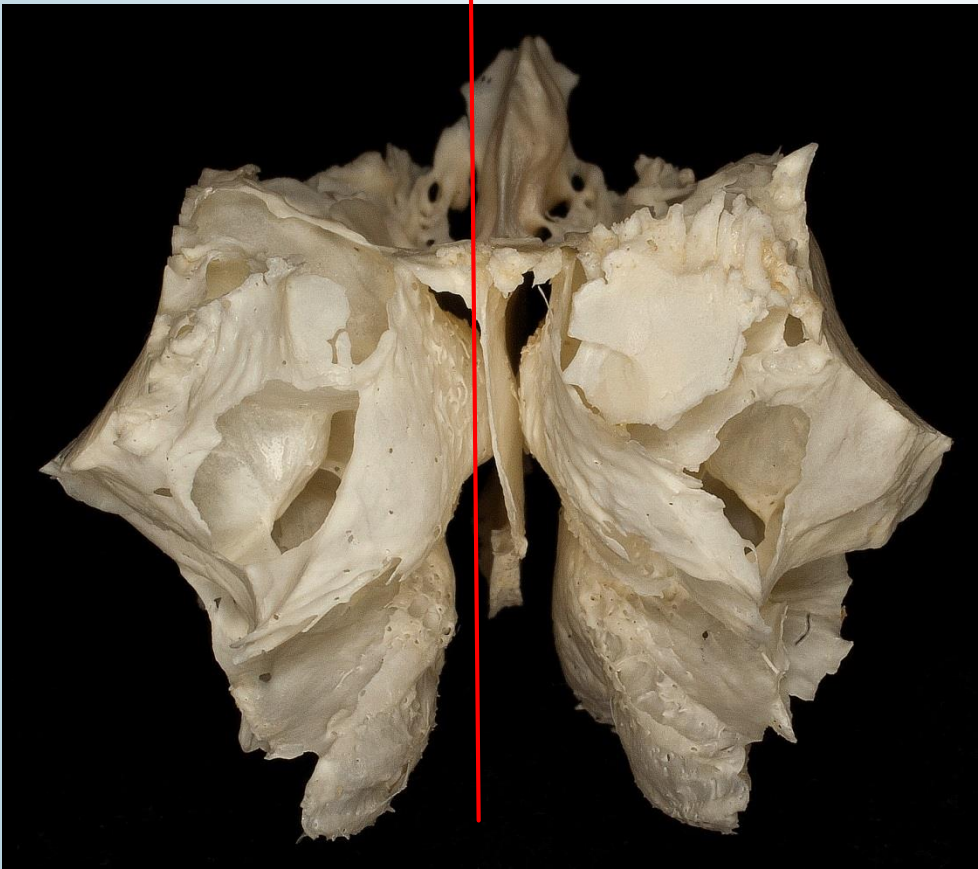
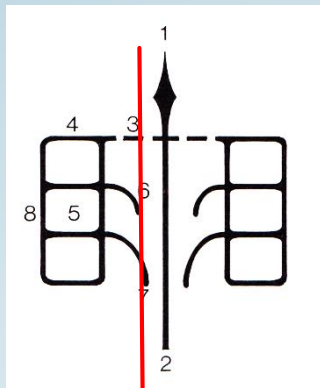
Sobotta

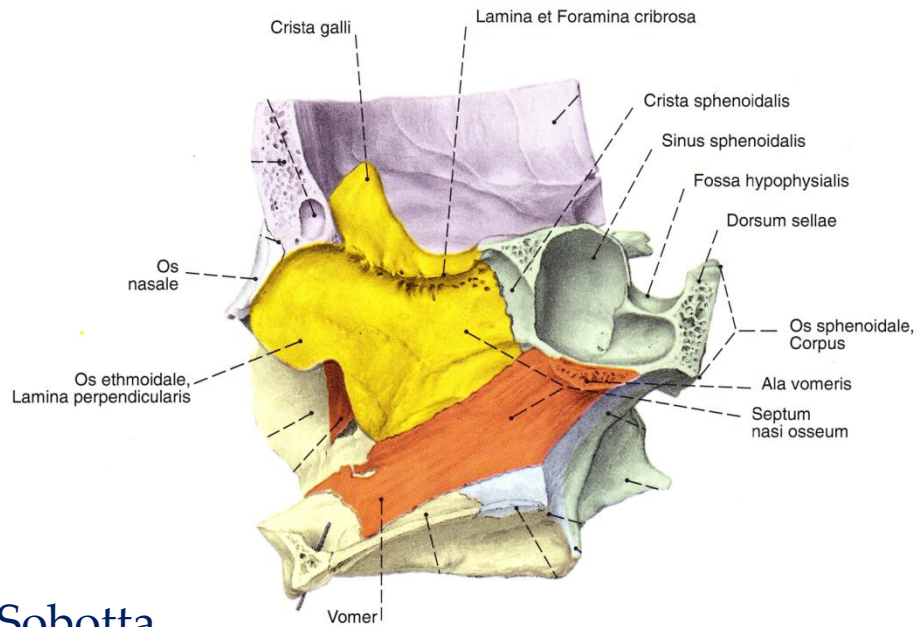


Sobotta

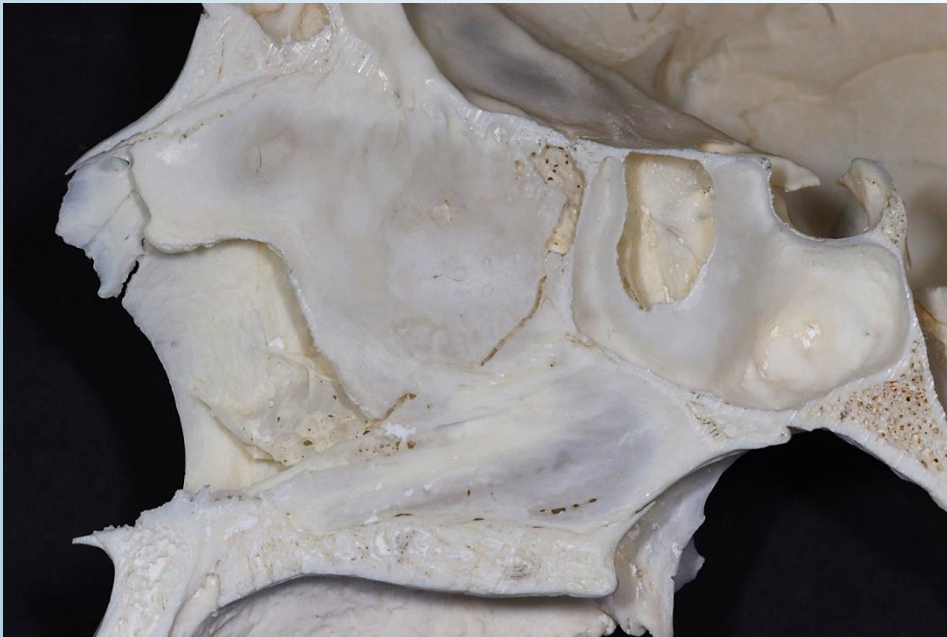


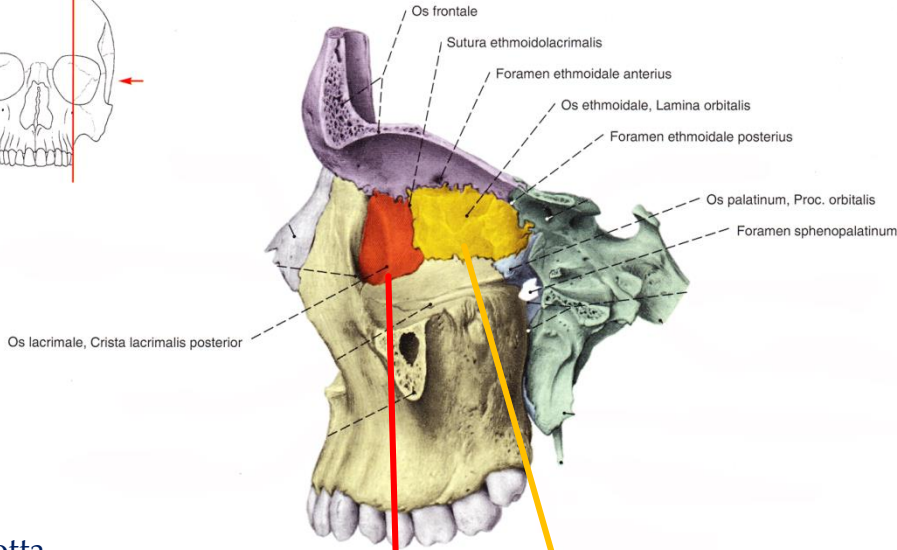
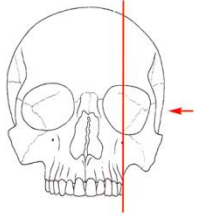
Faller



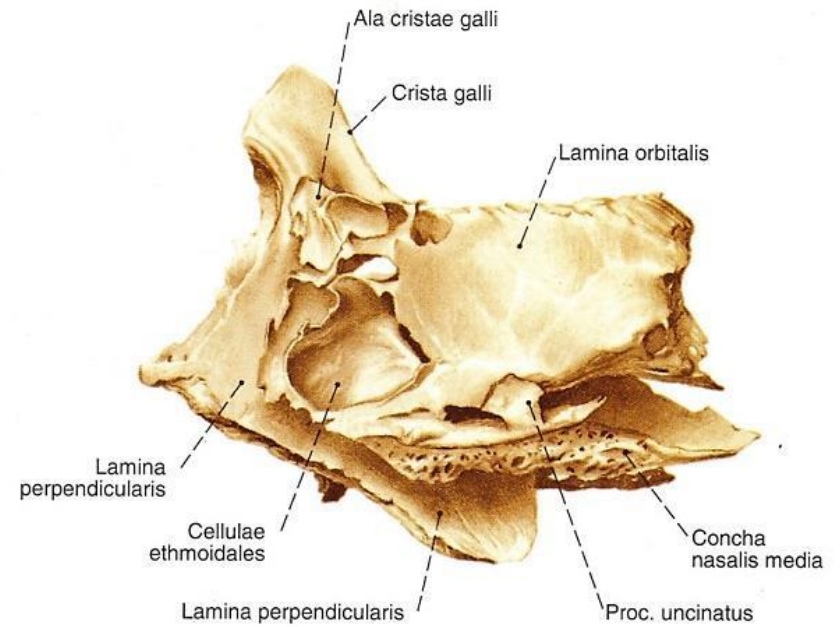
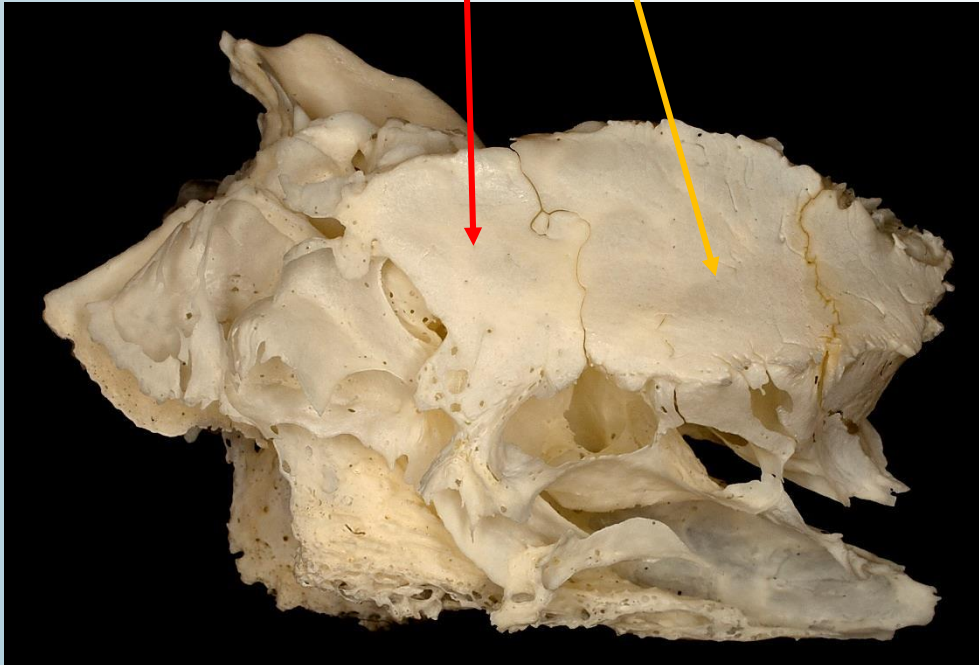
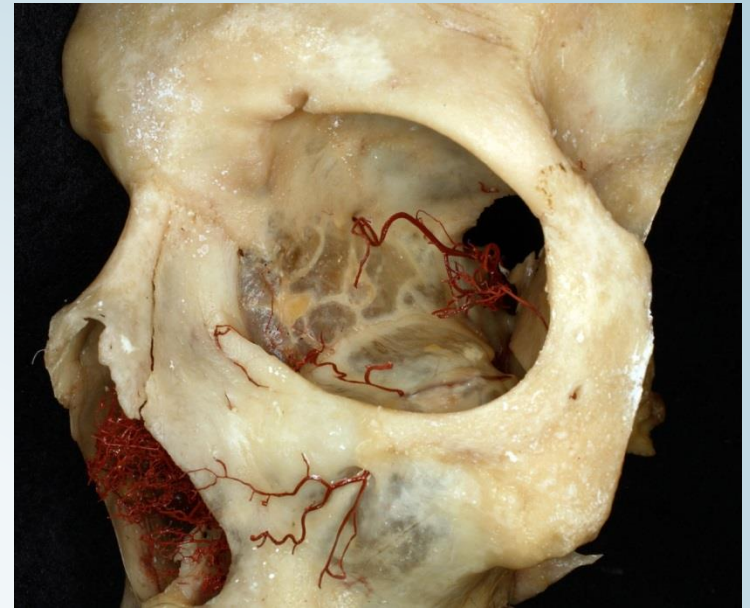


Sobotta



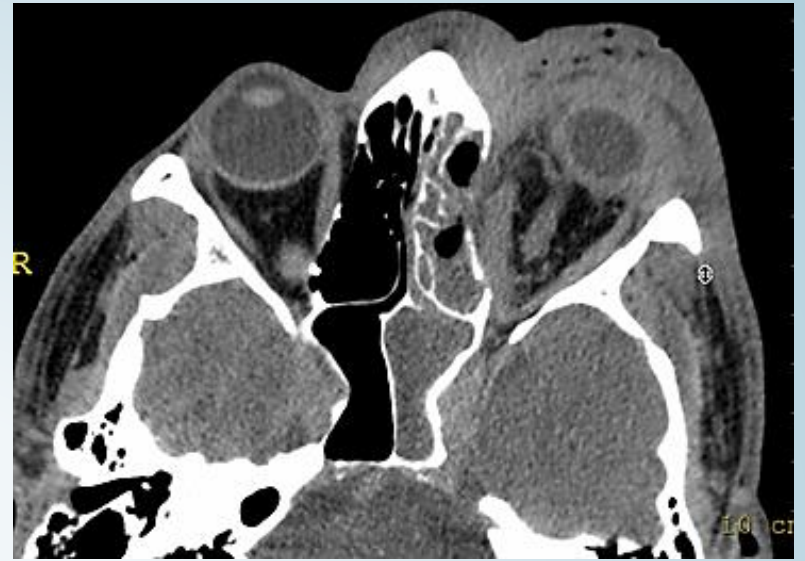
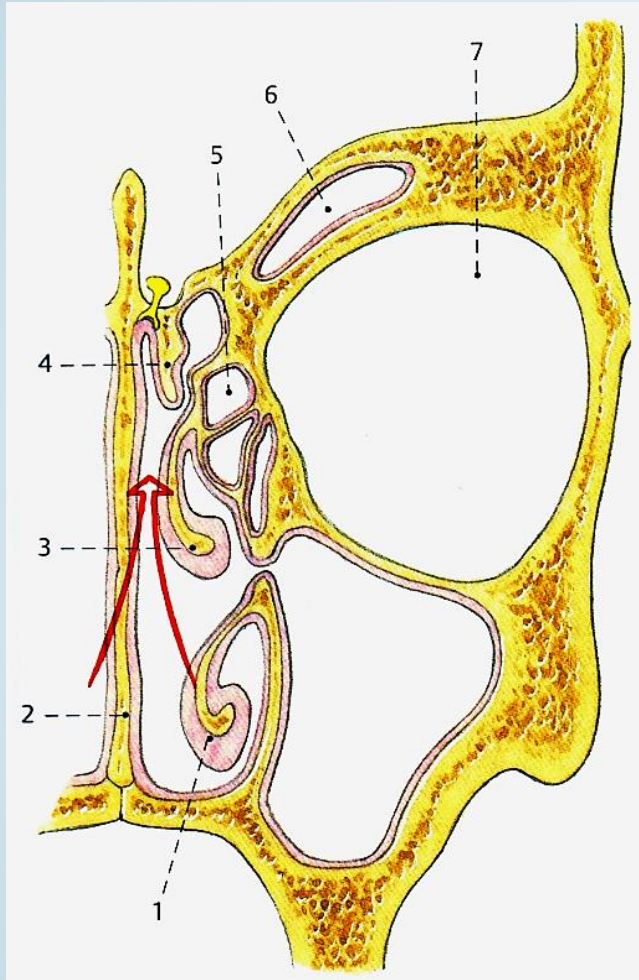


Sobotta



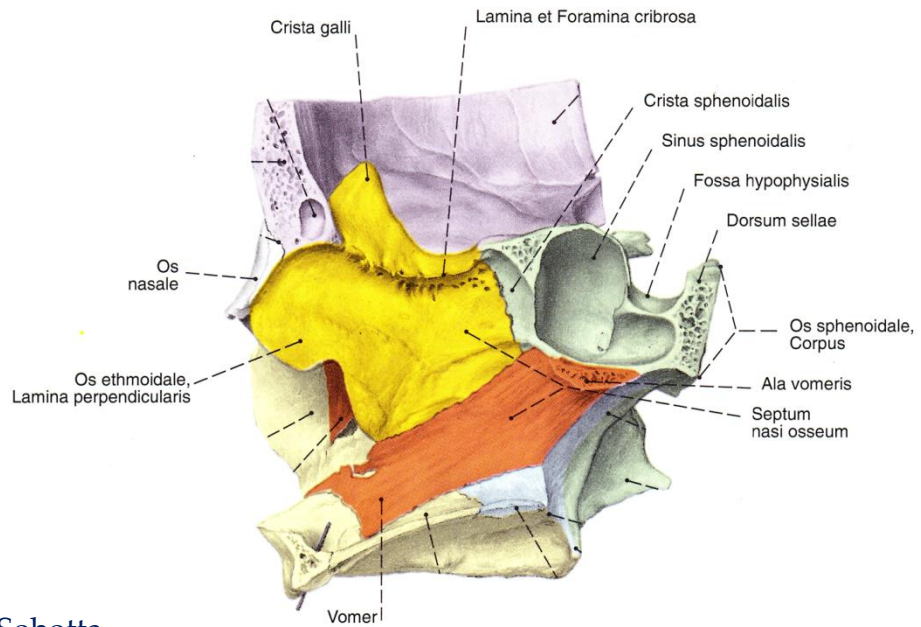
Sobotta

Thumfart

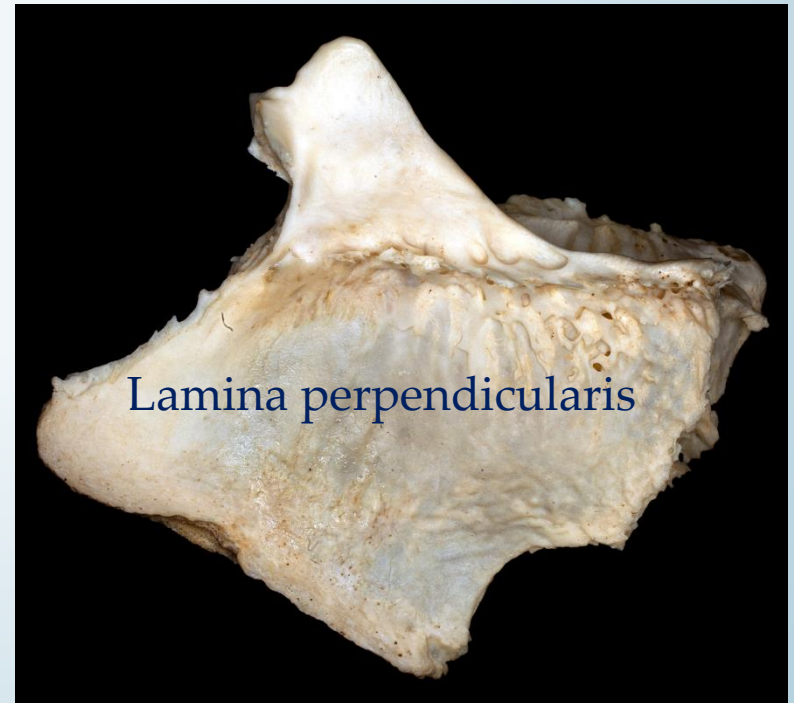
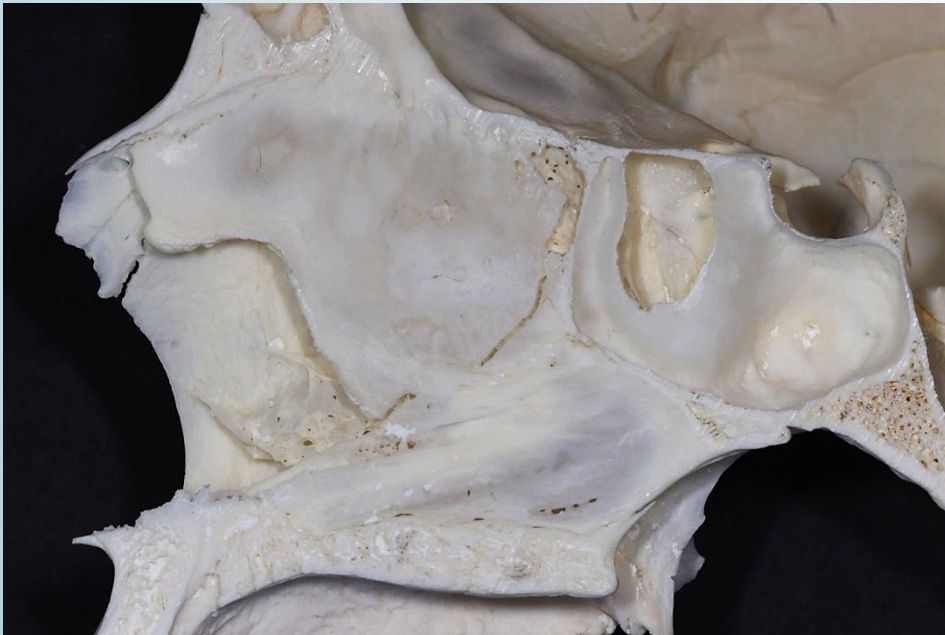
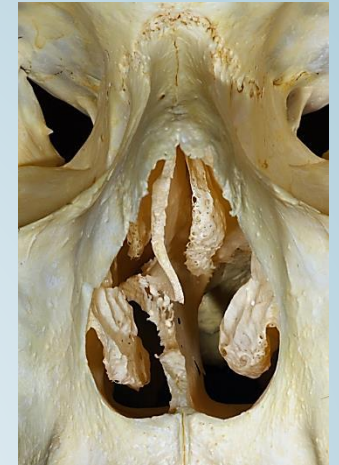


aus der Vorlesung von Hrn. Dr. Magyar Péter





Sobotta



Forrásmunkák

Dr. Baksa Gábor, Dr. Hanics János előadásai

Braus Anatomie des Menschen Band I (Verlag von Julius Springer 1929.)

Faller: Anatomie in Stichworten: Ein Arbeitsbuch für Medizinstudenten und praktische Ärzte (Ferdinand Enke Verlag 1988.)

Sobotta: Az ember anatómiájának atlasza (Urban & Fischer 2000.)

Thumfart: Operative Zugangswege in der HNO-Heilkunde (Thieme 1998.)

Az előadásban bemutatott anatómiai készítmények fényképeinek szerzői jogai a preparátort illetik.