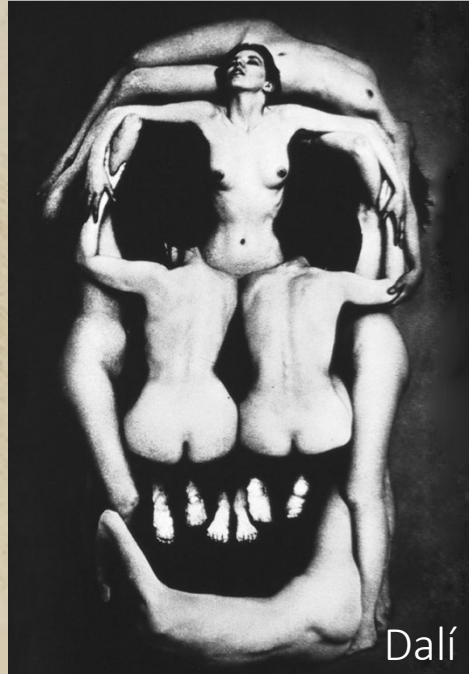


da Vinci



Dalí



Cézanne

Az arckoponya csontjai.
Orbita, cavum nasi.

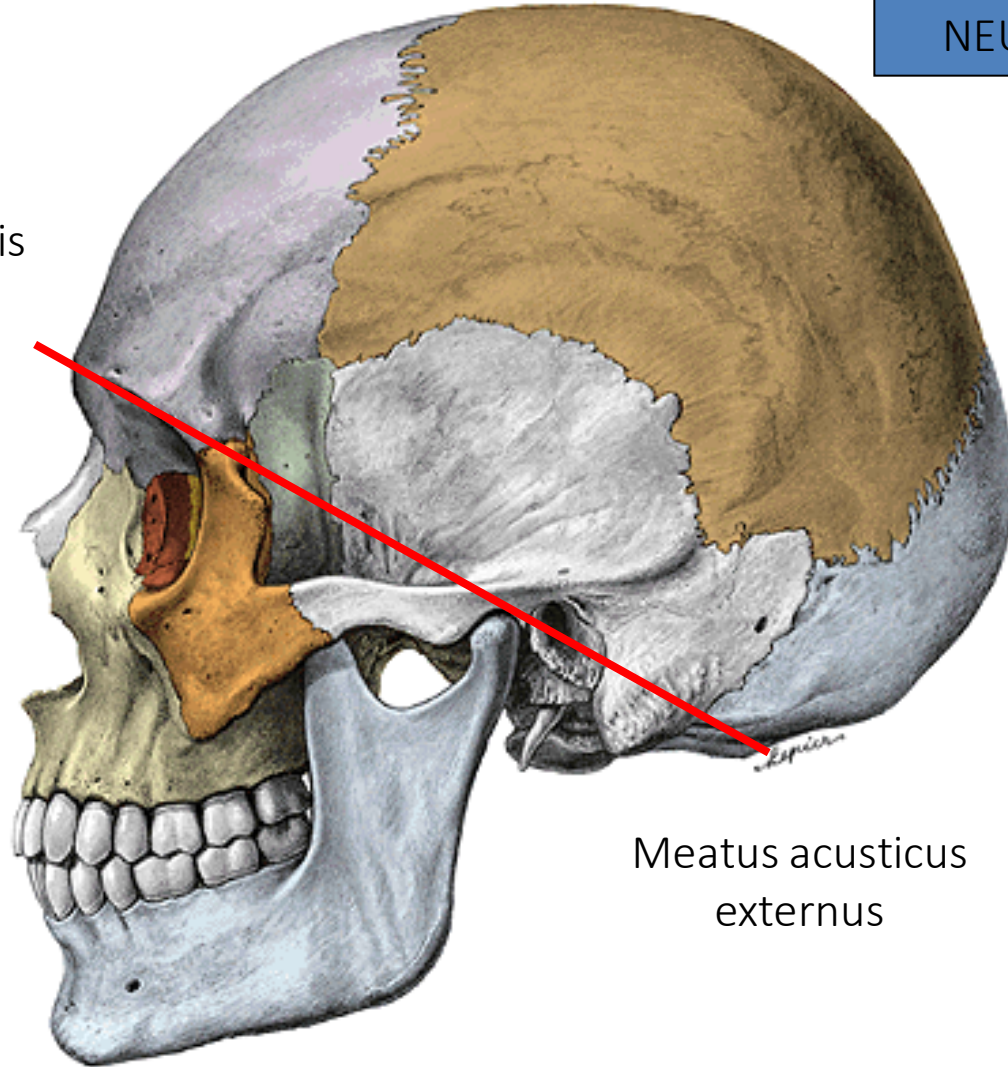
Pálfi Emese

Semmelweis Egyetem

Anatómiai, Szövet- és Fejlődéstani Intézet

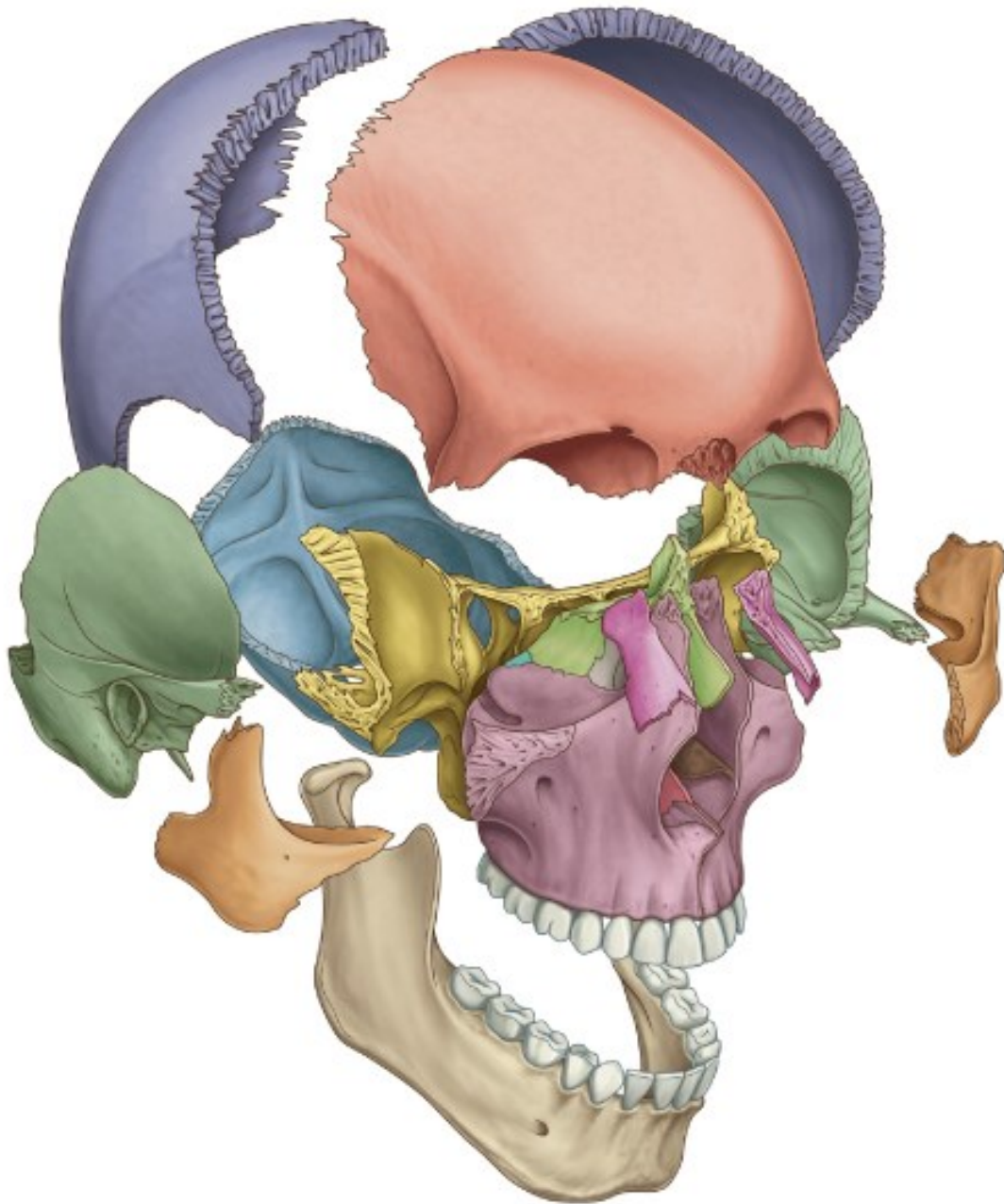
NEUROCRANIUM

Margo
supraorbitalis



Meatus acusticus
externus

VISCEROCRANIUM

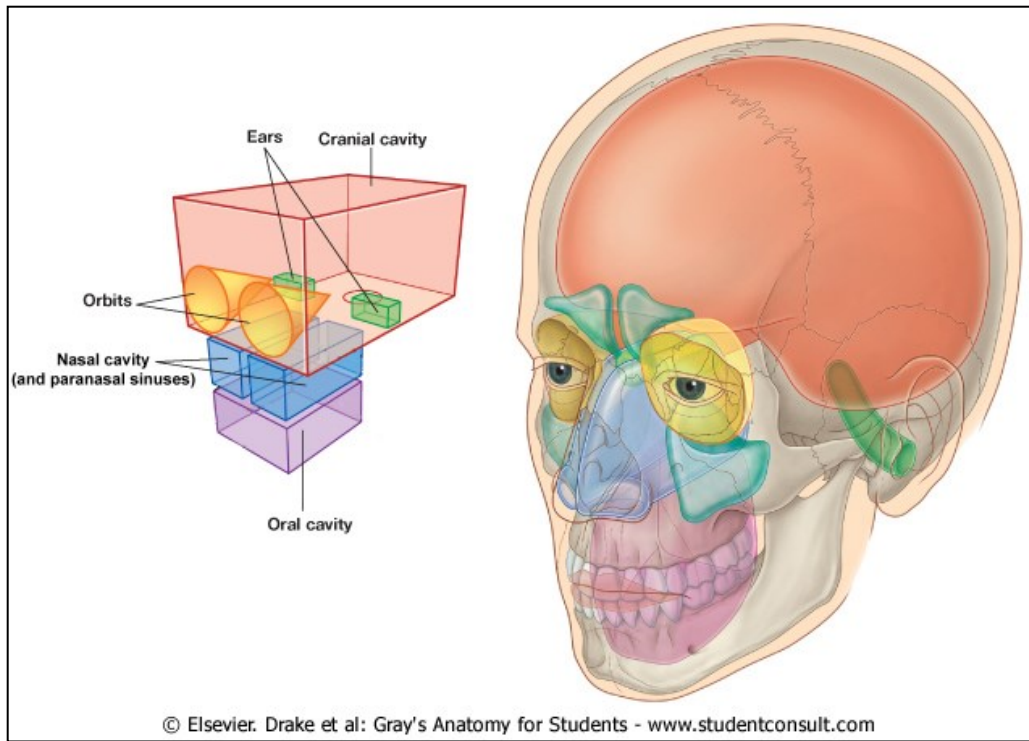


Páros:

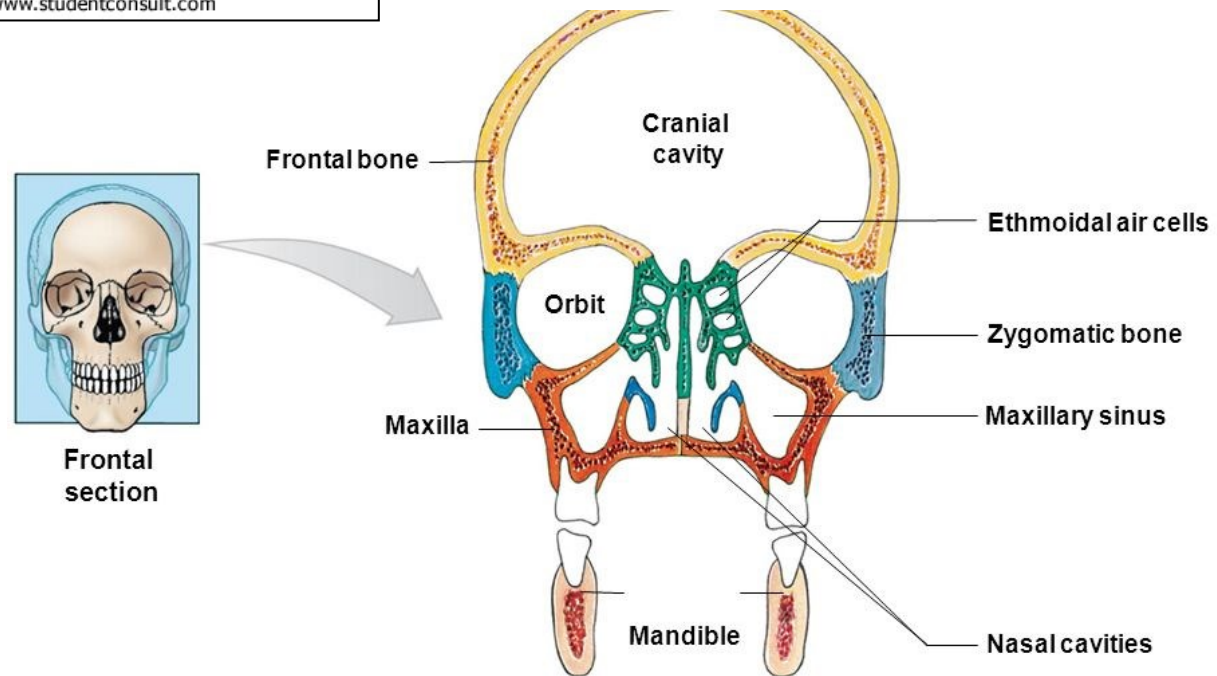
- Os zygomaticum
- Maxilla
- Os nasale
- Os palatinum
- Os lacrimale
- Concha nasalis inferior

Páratlan:

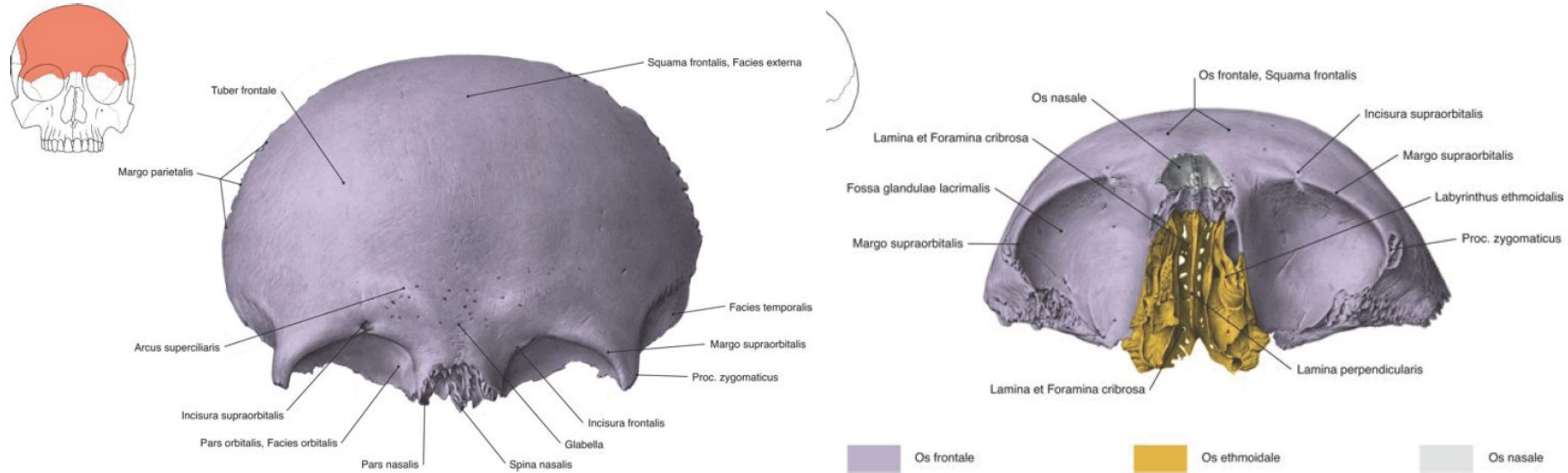
- Os sphenoidale } Neurocranium
- Os ethmoidale } részei is!
- Vomer



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Os frontale

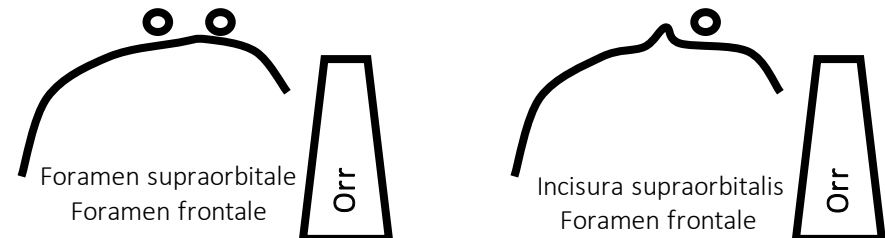
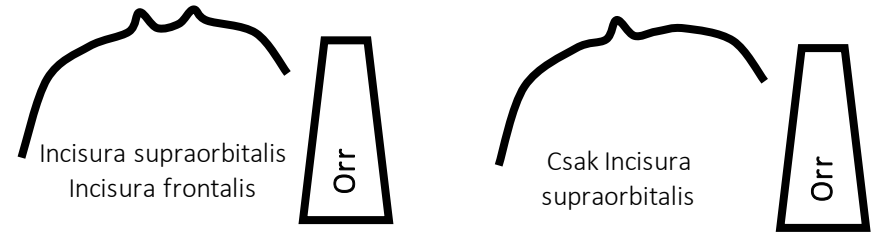


Részei:

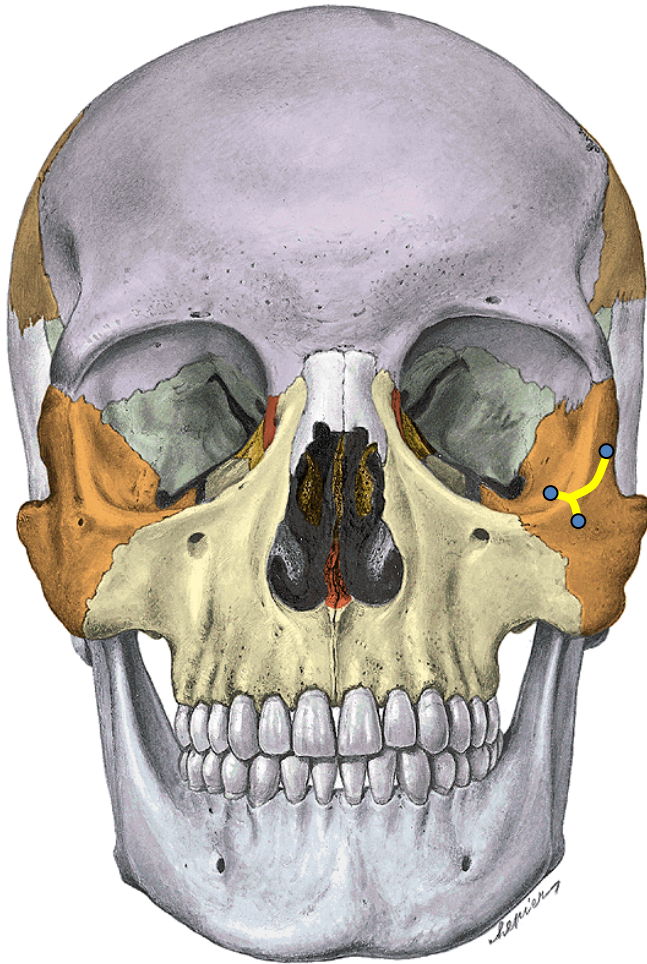
- Squama frontalis
- Pars orbitalis
- Pars nasalis

Ürege:

- Sinus frontalis

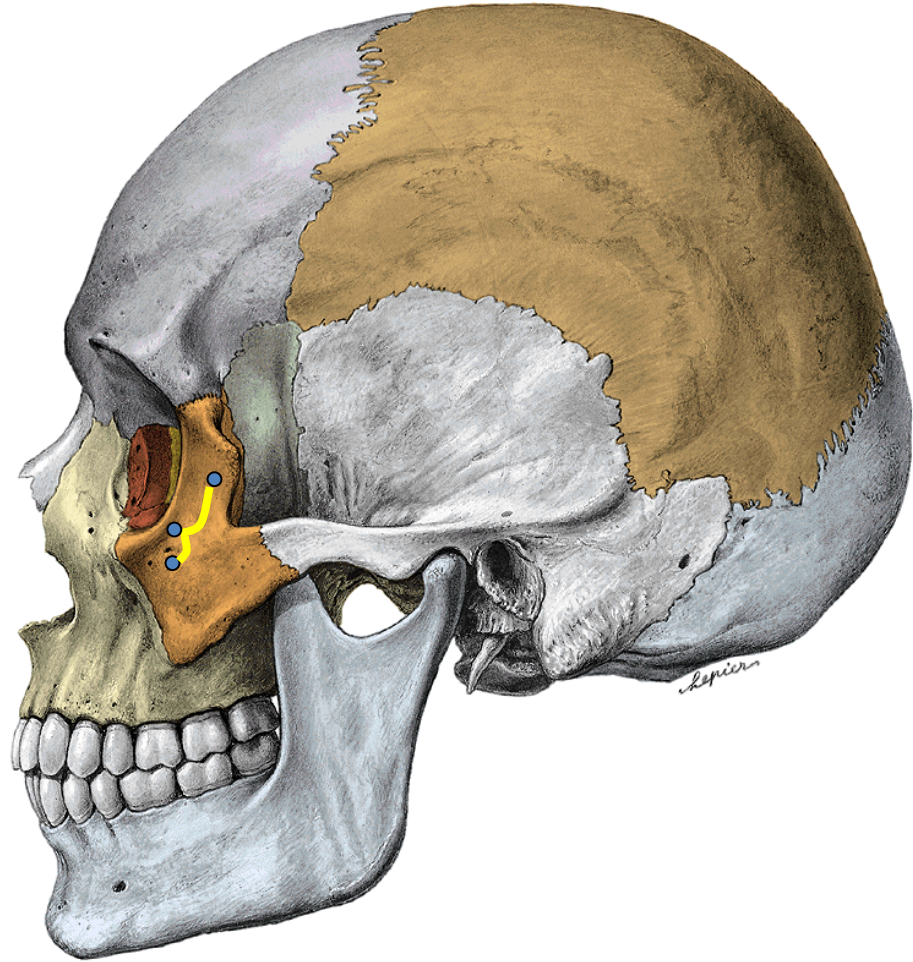


Os zygomaticum



Felszínei:

- Facies orbitalis
- Facies lateralis
- Facies temporalis



Nyúlványai:

- Processus frontalis
- Processus maxillaris
- Processus temporalis

Canalis zygomaticus:

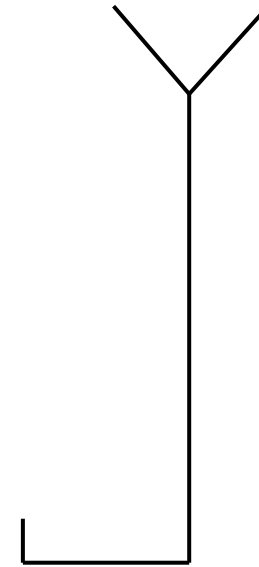
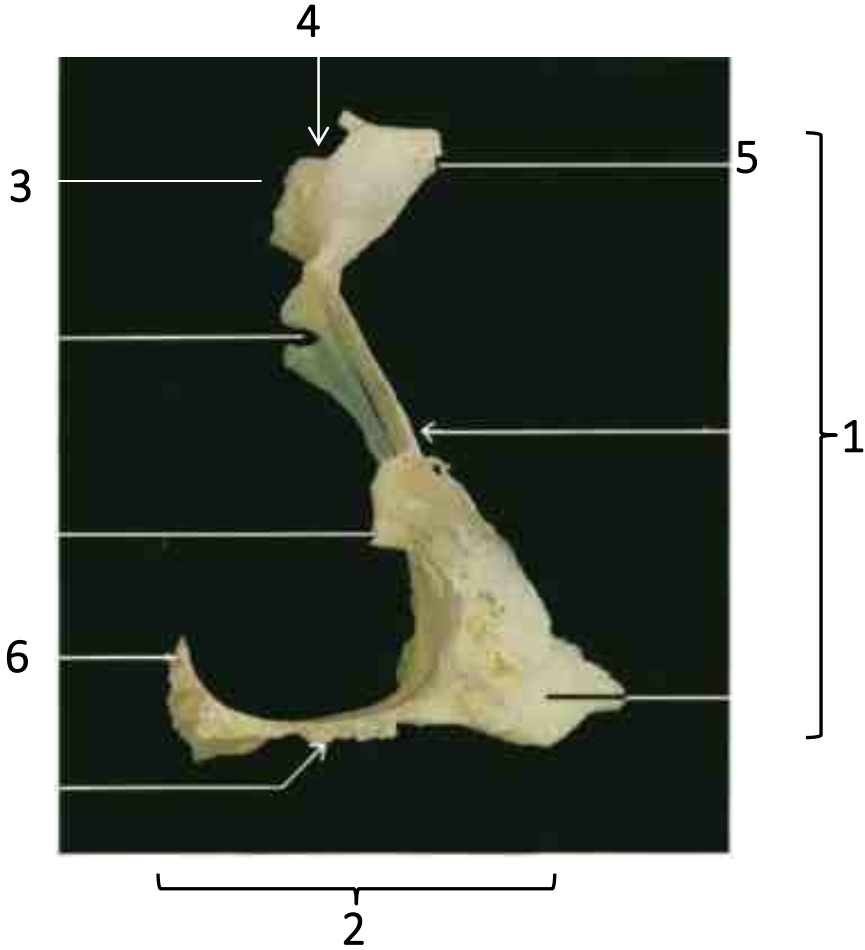
Y alakú

Foramen zygomaticoorbitale

Foramen zygomaticofaciale

Foramen zygomaticotemporale

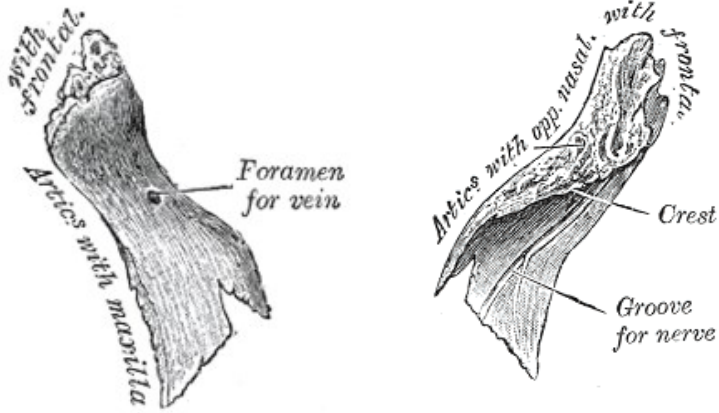
Os palatinum



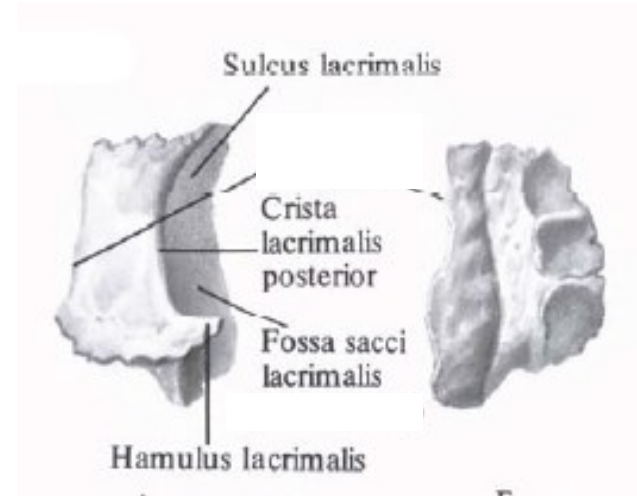
1. Lamina perpendicularis
2. Lamina horizontalis
3. Processus orbitalis

4. Incisura sphenopalatina
5. Processus sphenoidalis
6. Crista nasalis

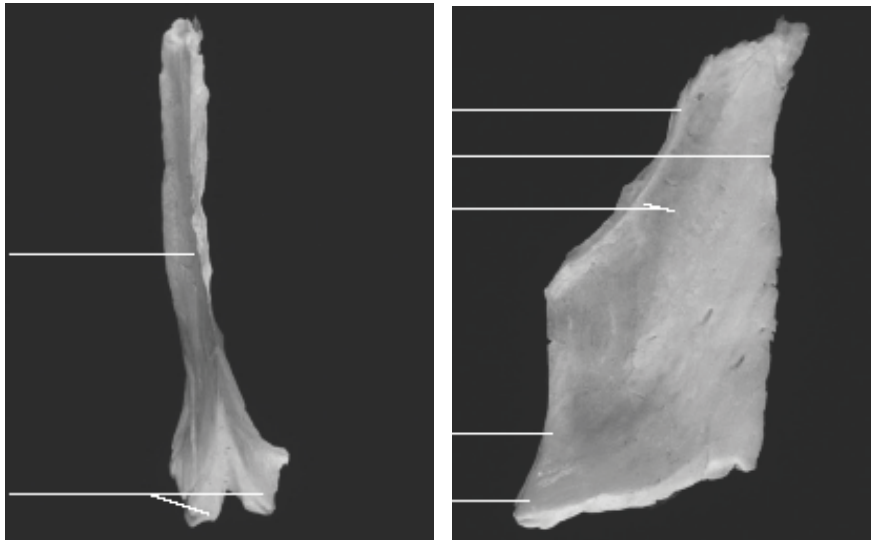
Os nasale



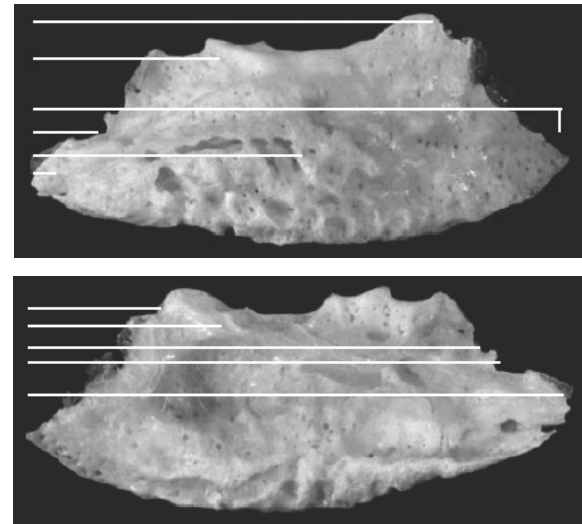
Os lacrimale



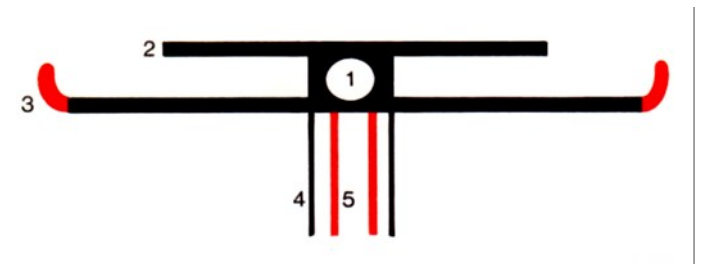
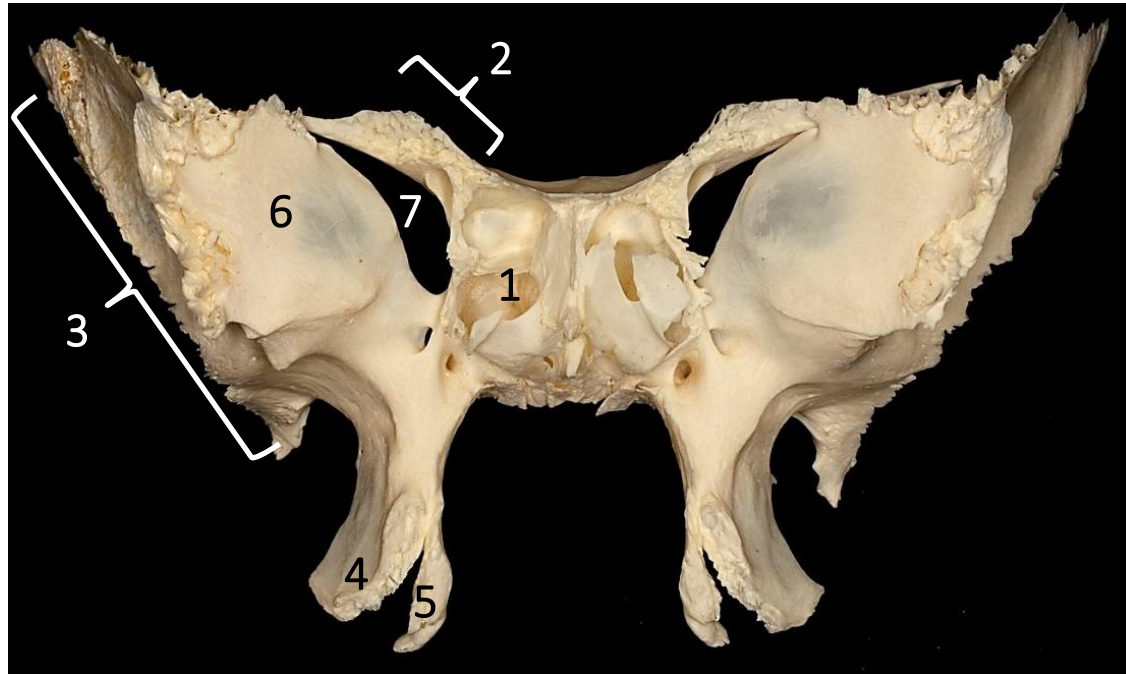
Vomer



Concha nasalis inferior



Os sphenoidale

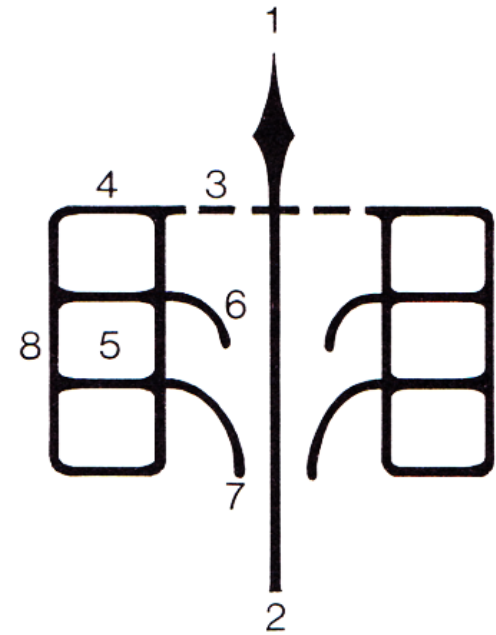
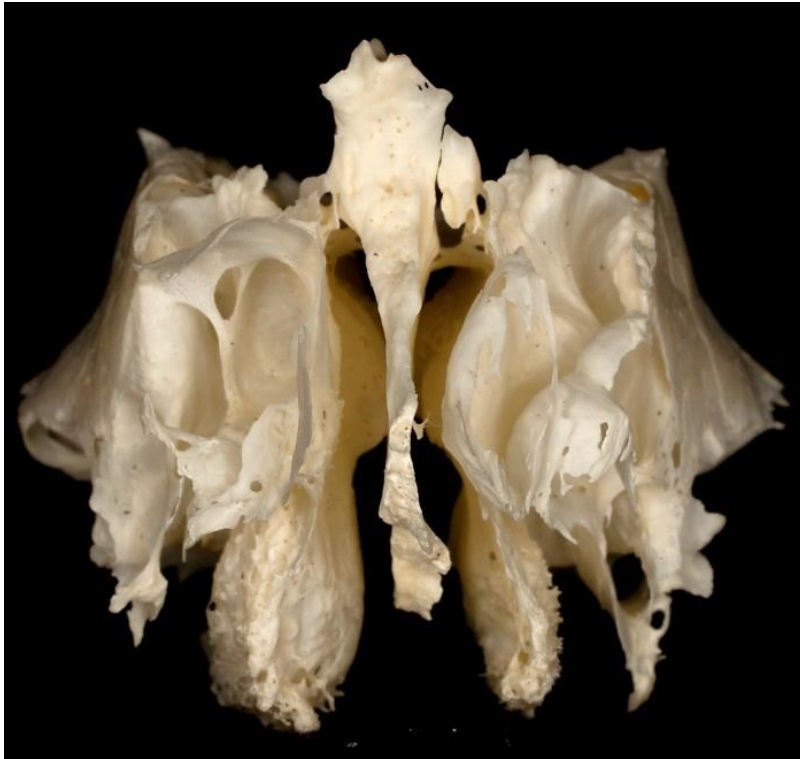


1. Sinus sphenoidalis
2. Ala minor
3. Ala major
4. Processus pterygoideus lamina lat.
5. Processus pterygoideus lamina med.
6. Facies orbitalis
7. Fissura orbitalis sup.

Ala major felszínei:

1. Facies orbitalis
2. Facies maxillaris
3. Facies cerebralis
4. Facies temporalis
5. Facies infratemporalis

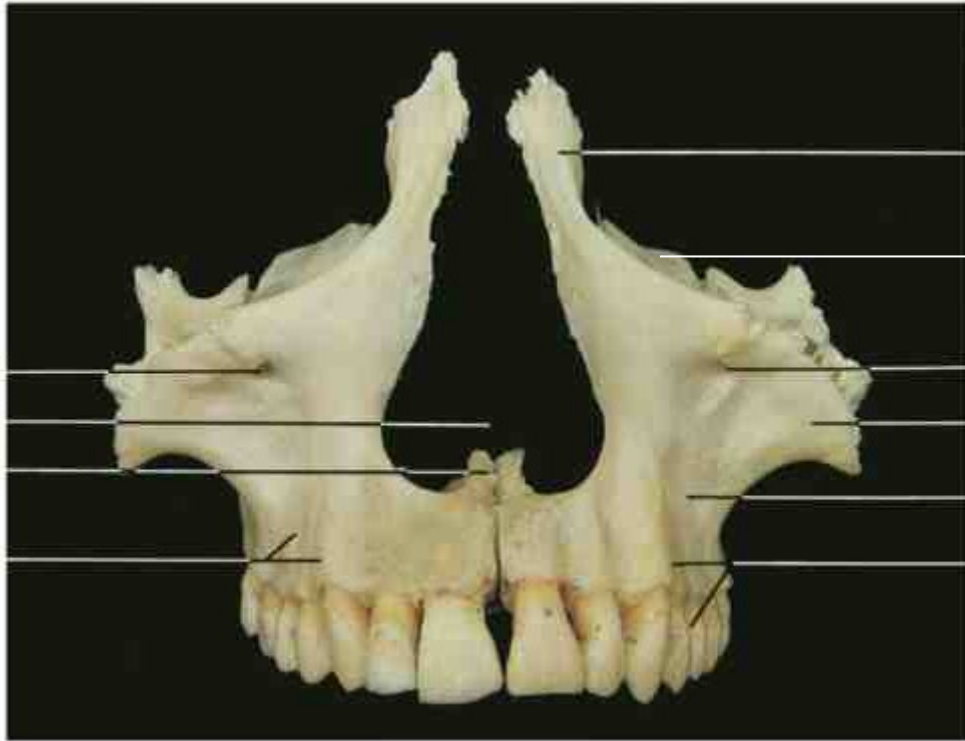
Os ethmoidale



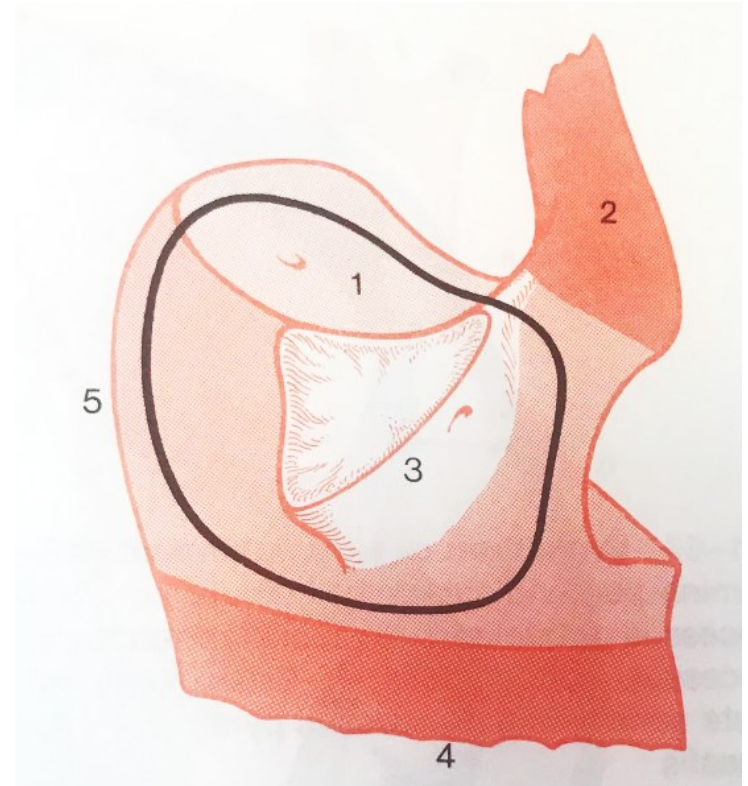
1. Crista galli
2. Lamina perpendicularis
3. Lamina cribrosa
4. Labirynthus ethmoidalis

5. Cellulae ethmoidales
6. Concha nasalis sup.
7. Concha nasalis med.
8. Lamina orbitalis/papiracea

Maxilla



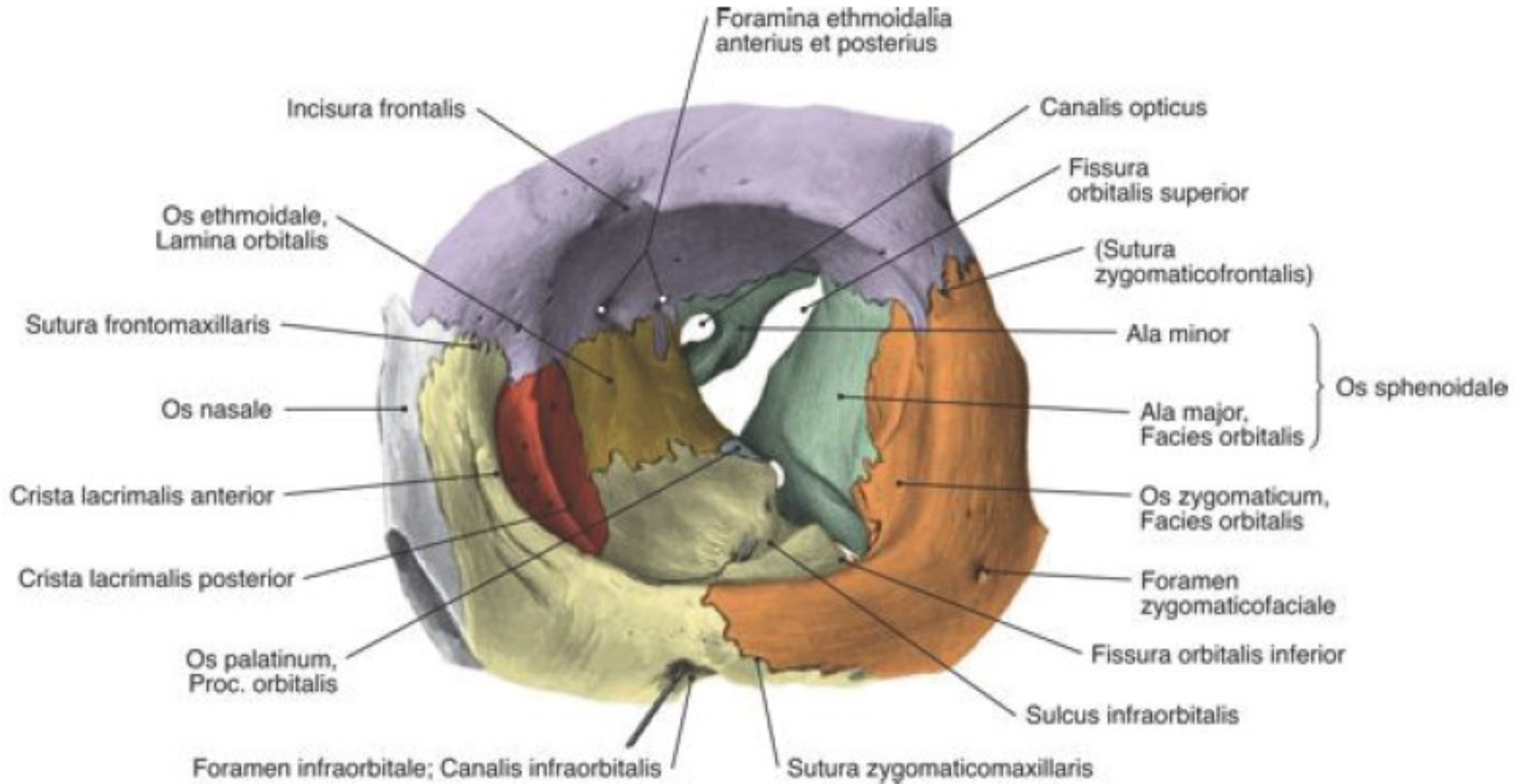
- 2
- 1
- 6 7
- 3
- 4



1. Facies orbitalis
2. Processus frontalis
3. Processus zygomaticus
4. Processus alveolaris

5. Tuber maxillae
6. Fossa canina
7. Foramen infraorbitale

Szemüreg (*orbita*)



Os frontale - Facies orbitalis

Os sphenoidale - Ala minor

Os lacrimale

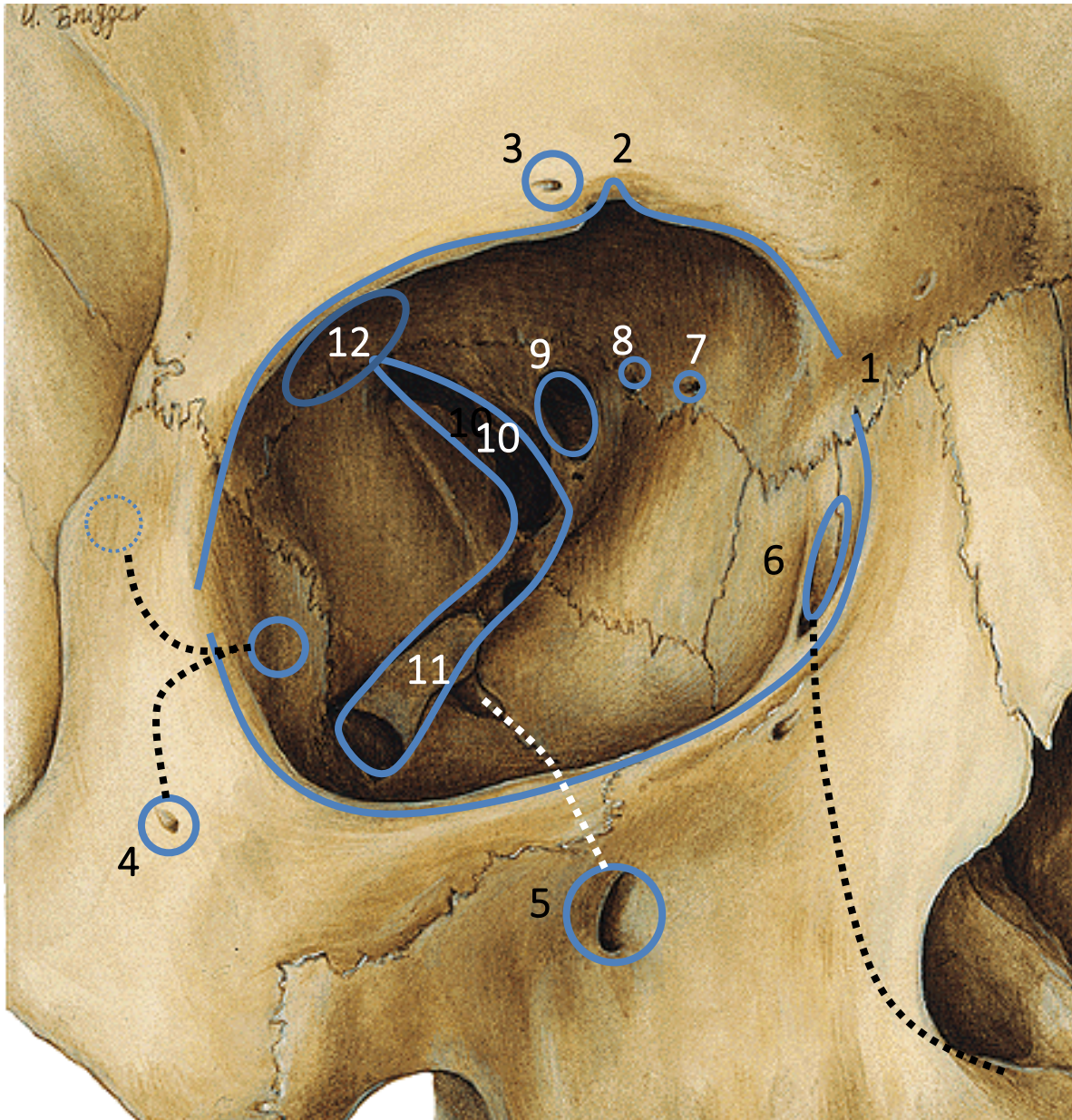
Os ethmoidale - Lam. orbitalis

Os palatinum – Processus orbitalis

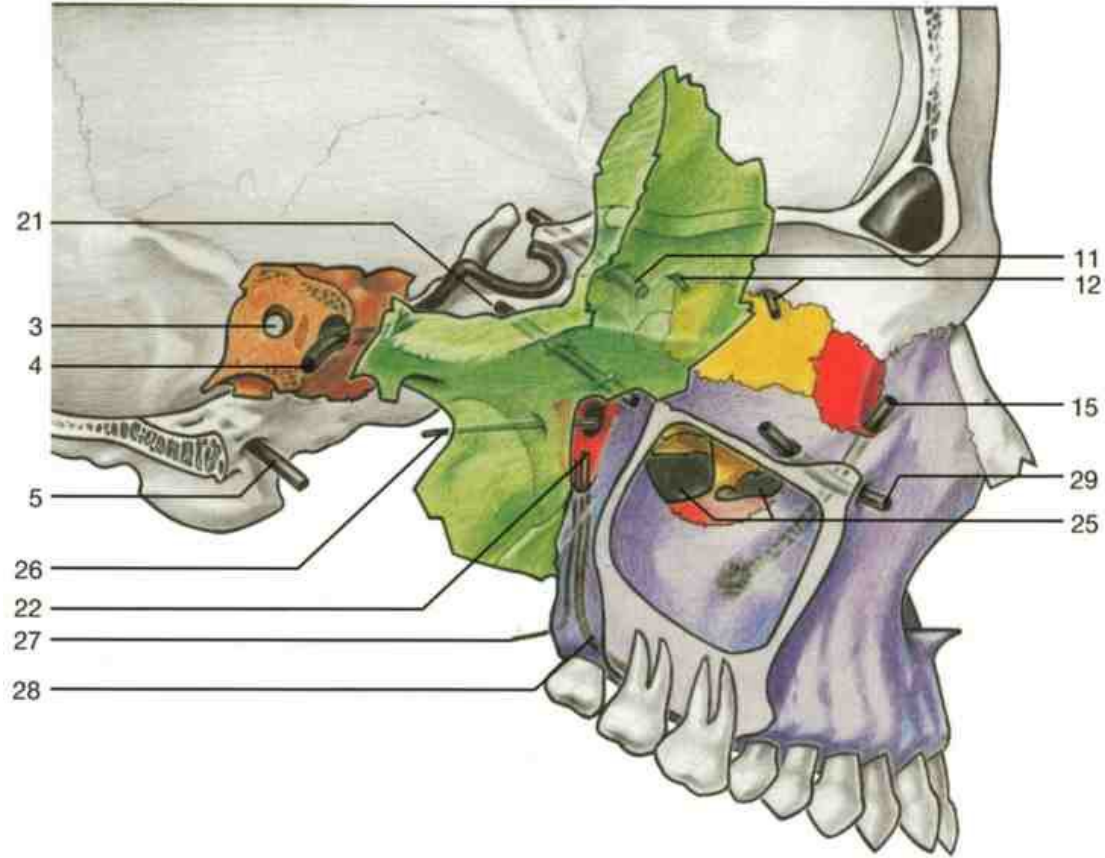
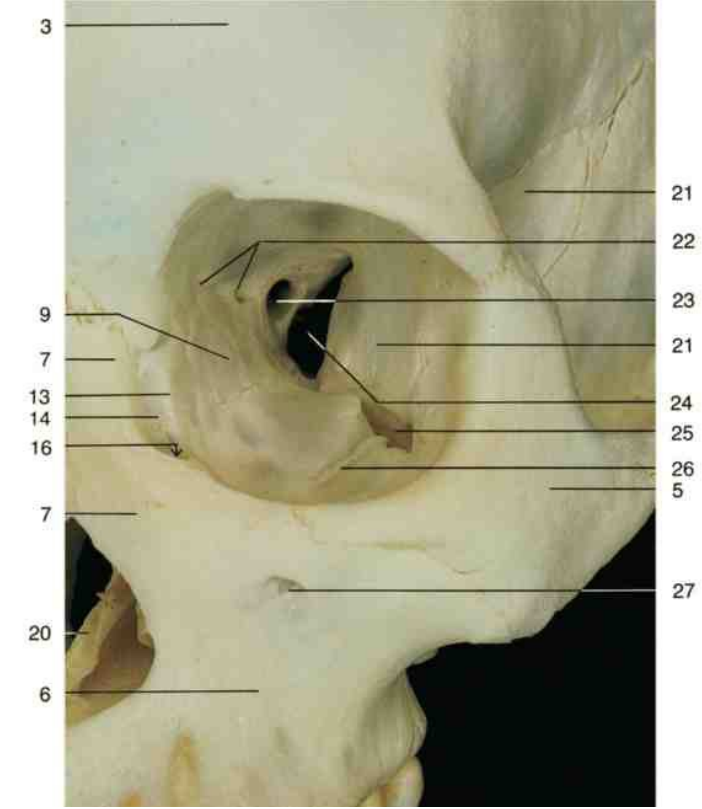
Maxilla – Facies orbitalis

Os sphenoidale - Ala major - Facies orbitalis

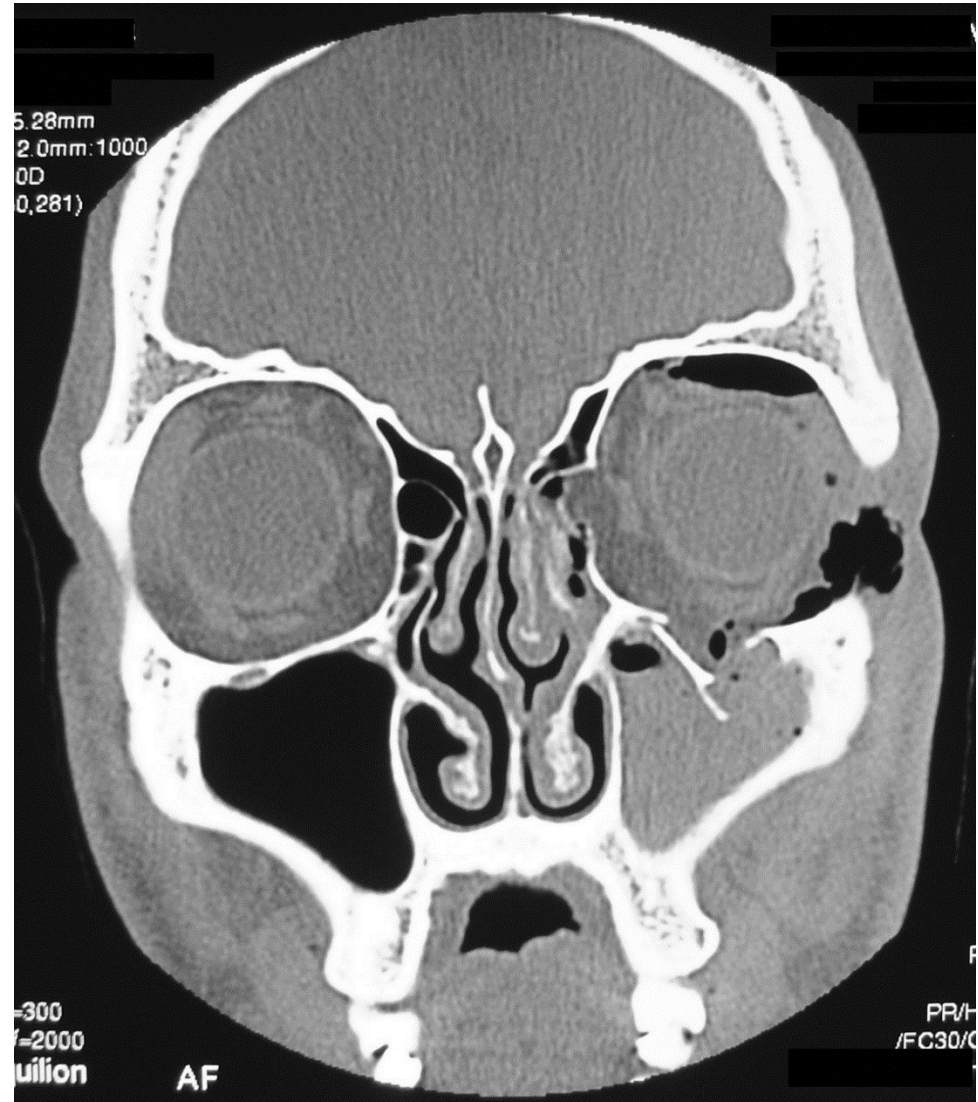
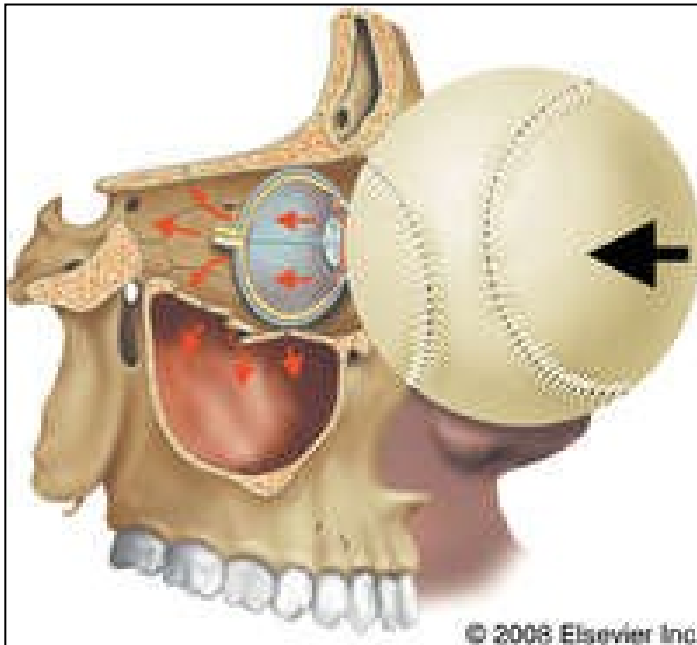
Os zygomaticum – Facies orbitalis



1. Aditus orbitae
2. Incisura frontalis
3. Foramen supraorbitale
4. Foramen zygomaticoorbitale
Foramen zygomaticofaciale
Foramen zygomaticotemporale
Canalis zygomaticus
5. Sulcus/canalis/foramen
infraorbitalis
6. Canalis nasolacrimalis
7. Foramen/canalis ethmoidalis
ant.
8. Foramen/canalis ethmoidalis
post.
9. Canalis opticus
10. Fissura orbitalis sup.
11. Fissura orbitalis inf.
12. Fossa glandulae lacrimalis

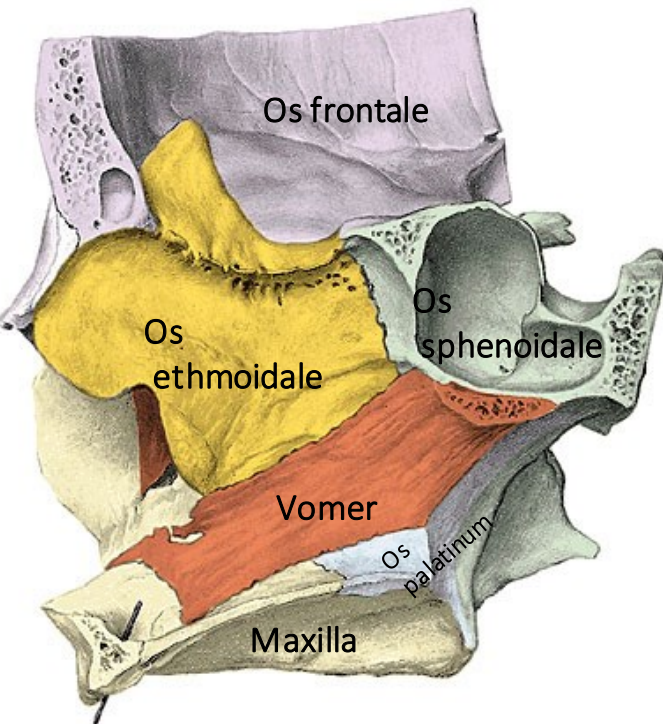


Orbitatörés/Blow-out-törés

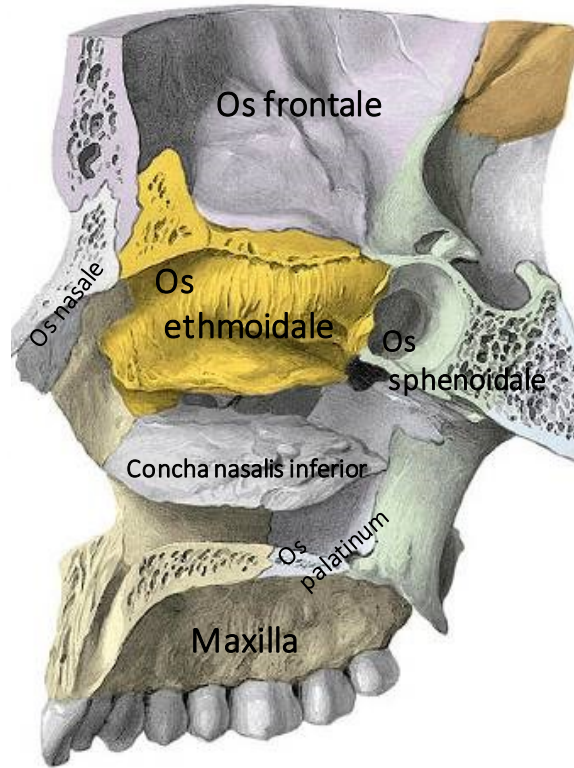


Orrüreg (*cavum nasi*)

Mediális fal



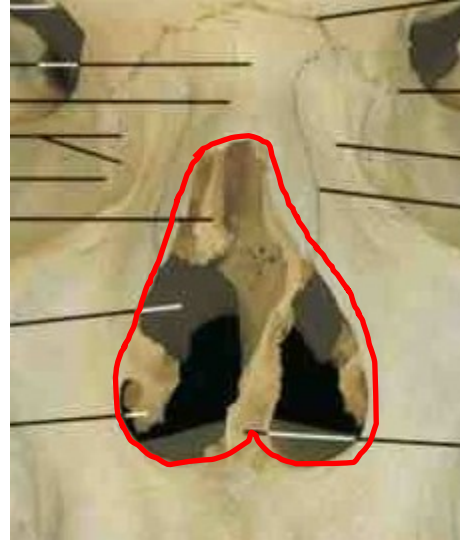
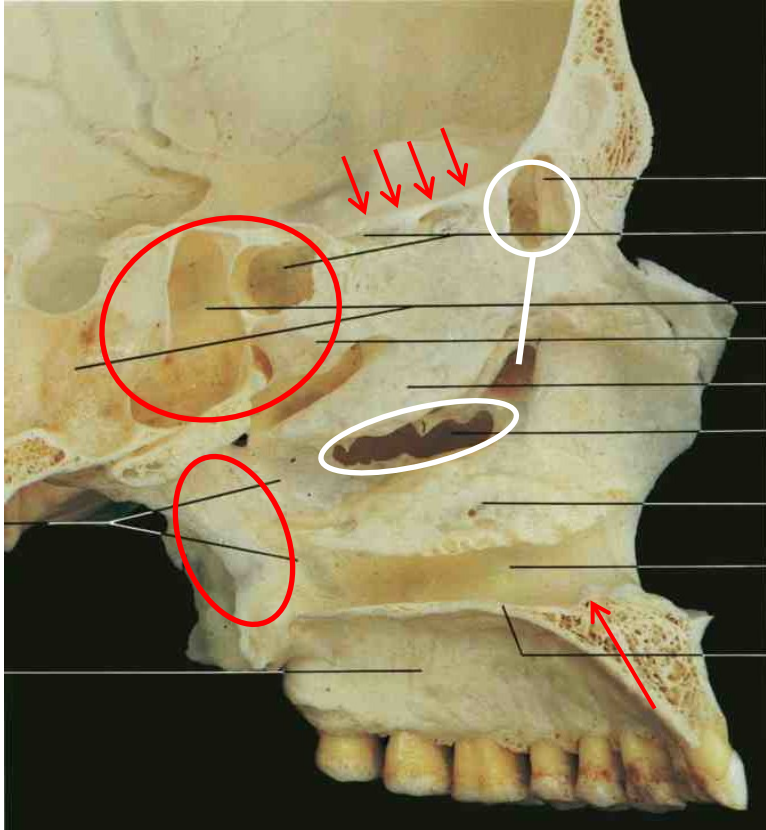
Laterális fal



Frontális nézet



Orrjáratok



Meatus nasi communis

- apertura piriformis
- lamina cribrosa
- canalis incisivus
- foramen sphenopalatinum
- apertura sinus sphenoidalis
- choana

Meatus nasi superior

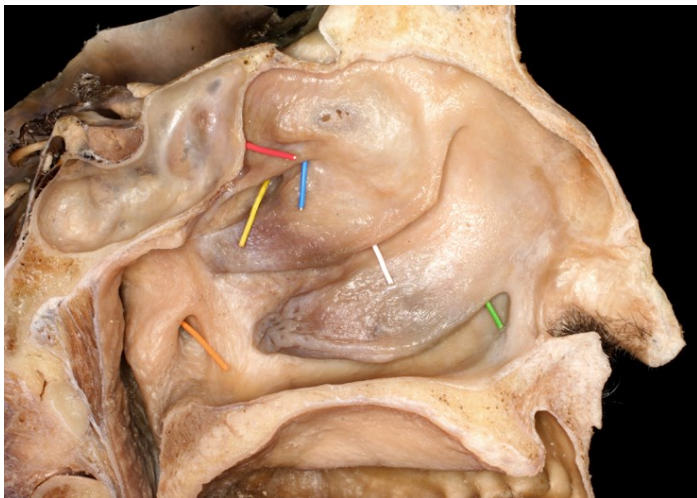
- cellulae ethmoidales posteriores

Meatus nasi medius

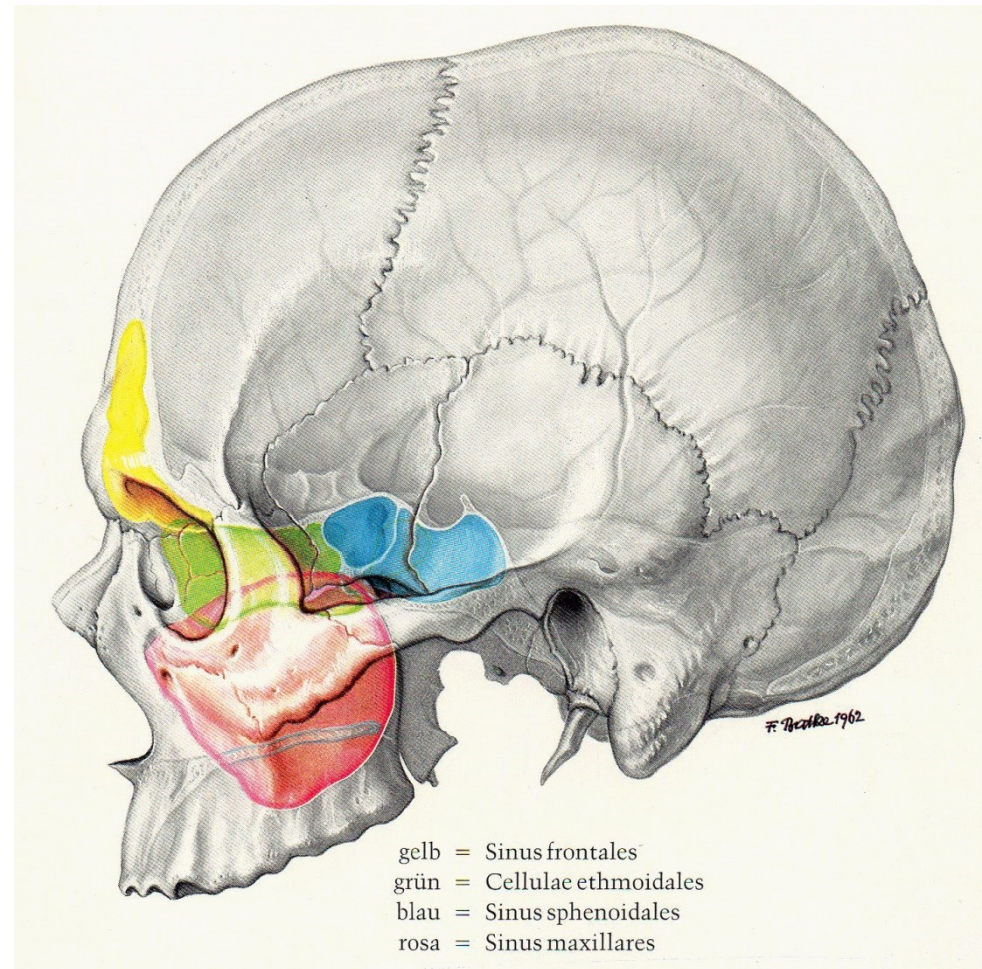
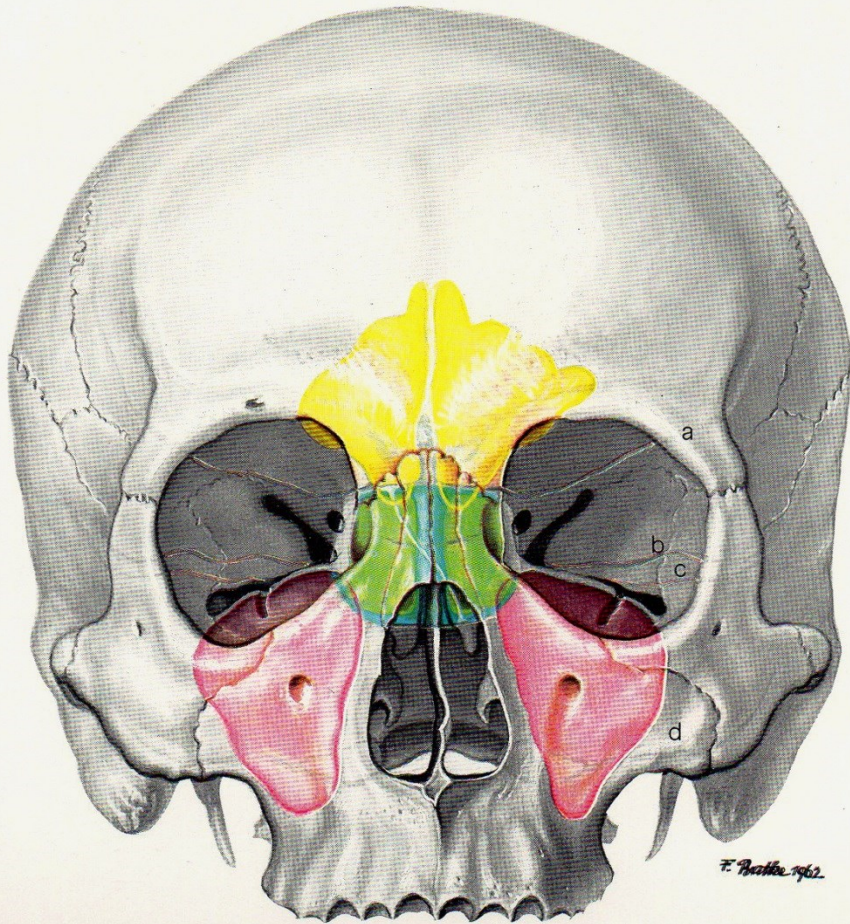
- cellulae ethmoidales anteriores et mediale
- hiatus semilunaris
- infundibulum ethmoidale, apertura sinus maxillaris

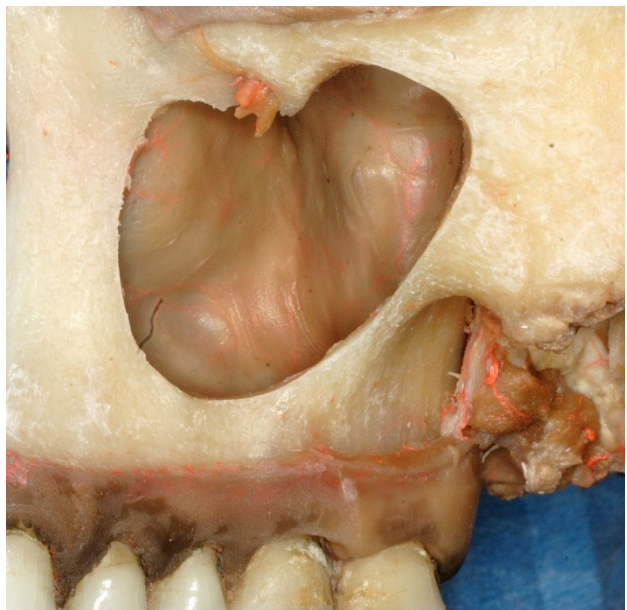
Meatus nasi inferior

- canalis nasolacrimalis



Orrmelléküregek (*sinus paranasales*)





Források:

Márk Kozsurek: Facial skeleton, orbit

Andrea Székely: Fossa pterygopalatina, fossa infratemporalis, szájüreg

Rochen, Yokochi, Drecoll: Color atlas of anatomy (7th edition)

Kahle, Leonhardt, Platzer: Taschenatlas der Anatomie – Bewegungsapparat (6. Auflage)

<http://www.wikiwand.com/hu/Orrcsont>

http://anatomyonline.ru/os_lacrimale.html