

Kosti hlavy (lebka)
ossa capitis (cranium)



Lebka (*cranium*)

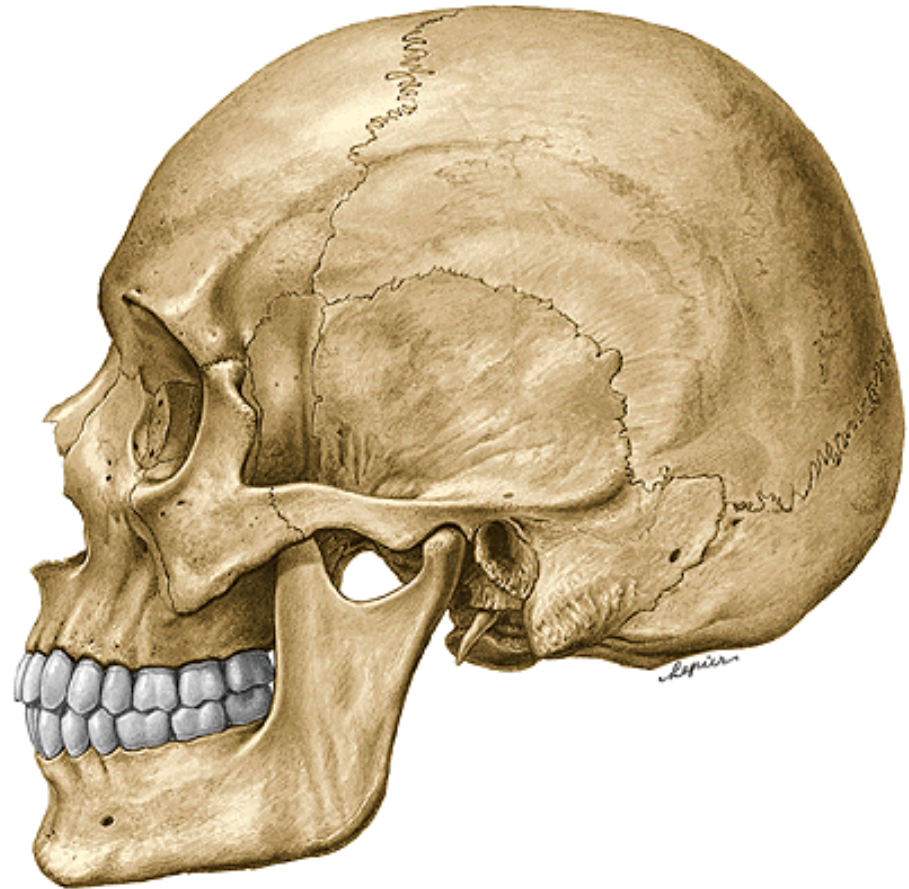
I. Neurocranium (pouzdro kolem mozku a smyslových orgánů)

II. Splanchnocranium (obklopuje začátek trávicí a dýchací soustavy)

Hranice – od stropu očníce po zevní zvukovod



norma frontalis
(pohled zepředu)



norma lateralis
(pohled z boku)

Mozková část lebky (*Neurocranium*)

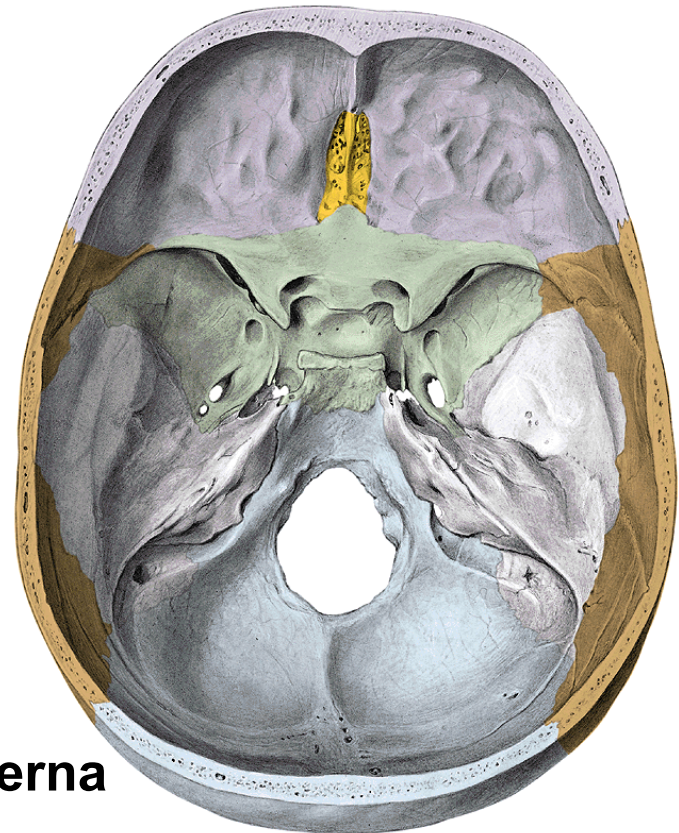
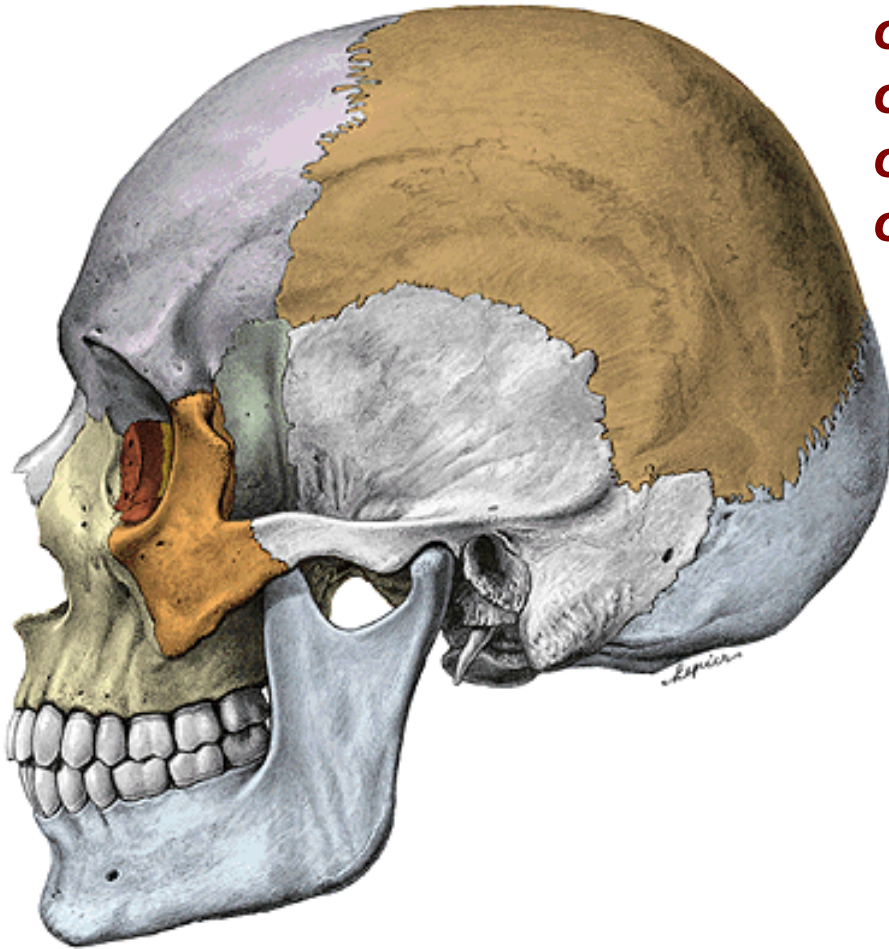
os frontale (čelní kost)

ossa parietalia dx, sin (temenní kosti)

os occipitale (týlní kost)

os sphenoidale (klínová kost)

ossa temporalia dx, sin (spánkové kosti)



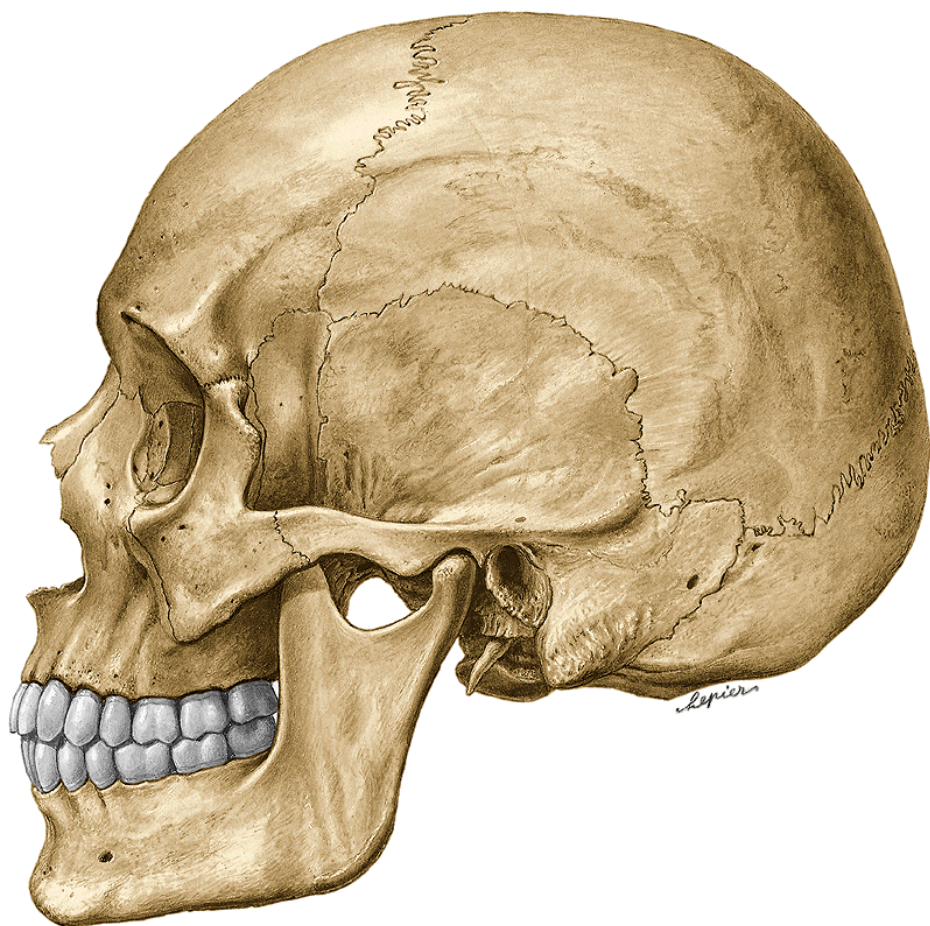
Basis cranii interna

Os frontale (čelní kost)

Squama ossis frontalis (šupina čelní kosti)

Partes orbitales (očnicové části)

Pars nasalis (nosní část)



Squama ossis frontalis (zevní plocha)

sutura coronalis

tubera frontalia

arcus superciliares

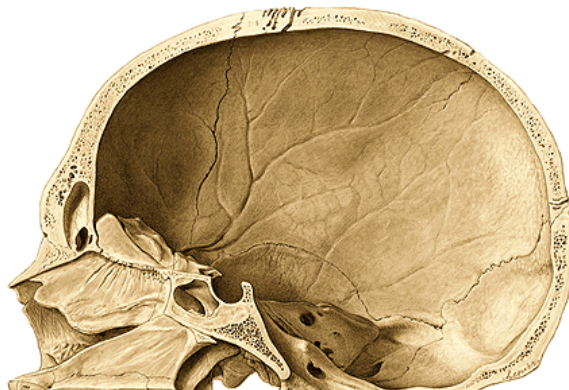
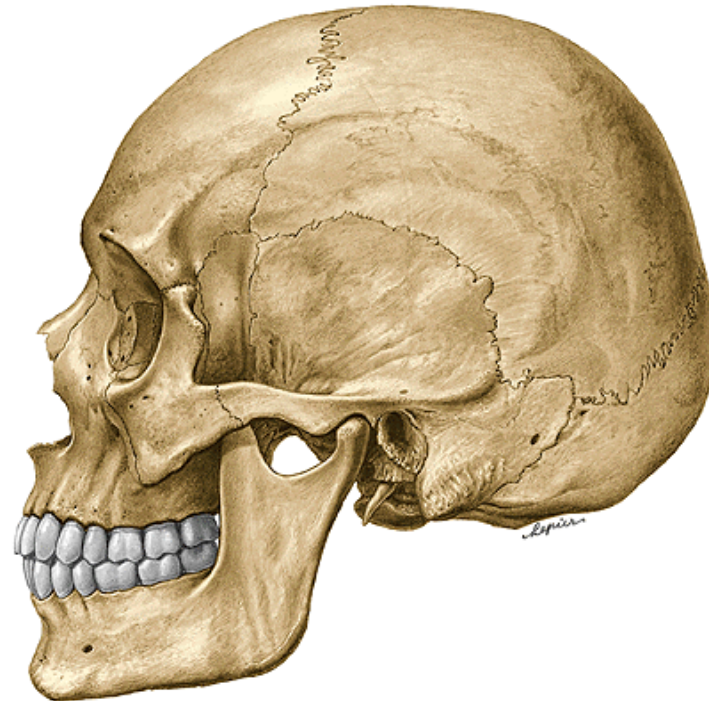
margo supraorbitalis

incisura frontalis (foramen frontale)

incisura supraorbitalis (foramen supraorbitale)

linea temporalis superior

Uvnitř je *sinus frontalis*



Partes orbitales

fossa glandulae lacrimalis*

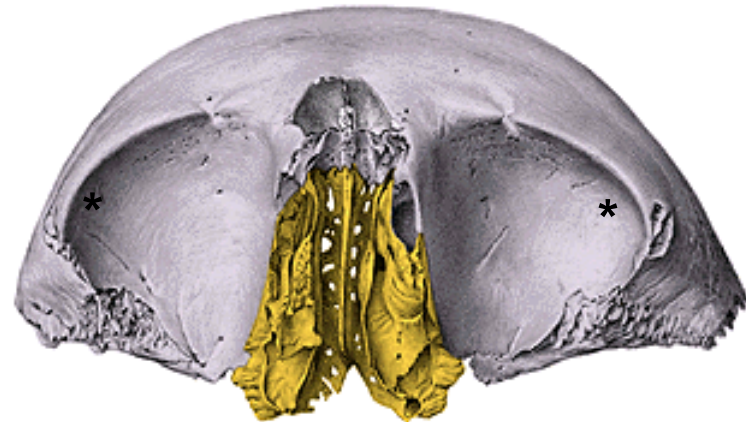
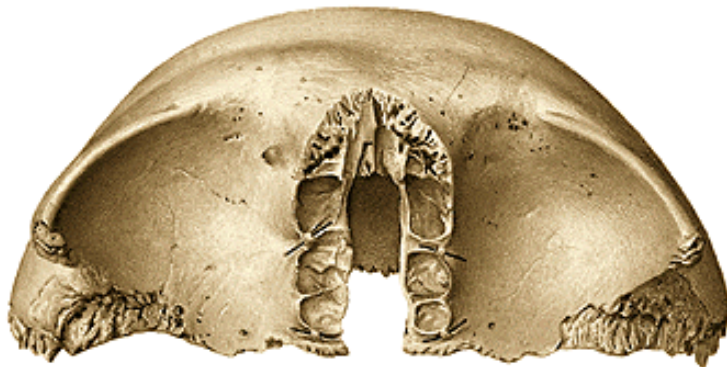
foramen ethmoidale anterius

foramen ethmoidale posterius



Pars nasalis ossis frontalis

incisura ethmoidalis





Os sphenoidale (kost klínová)

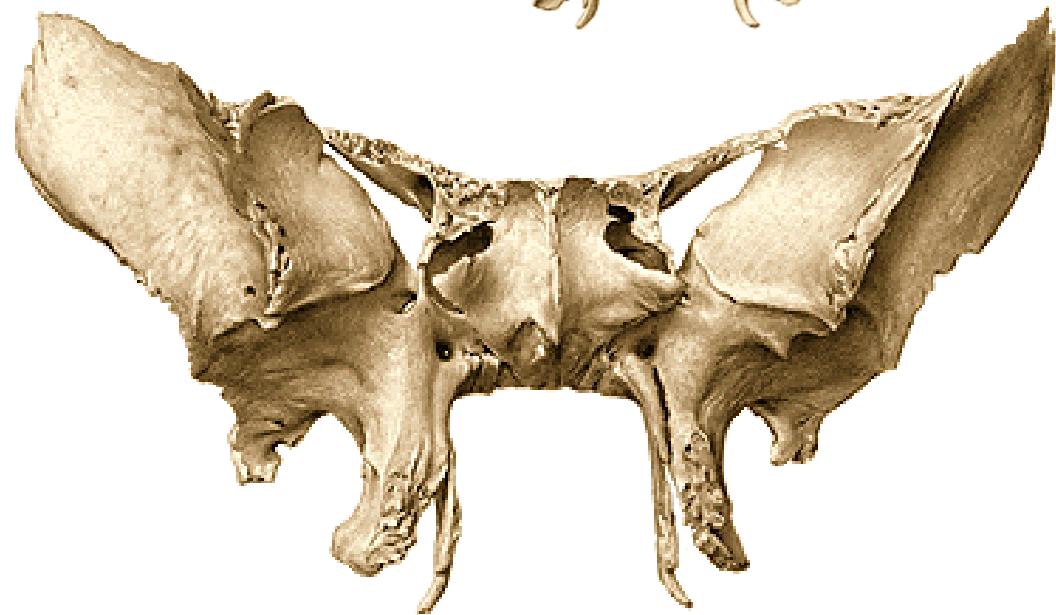
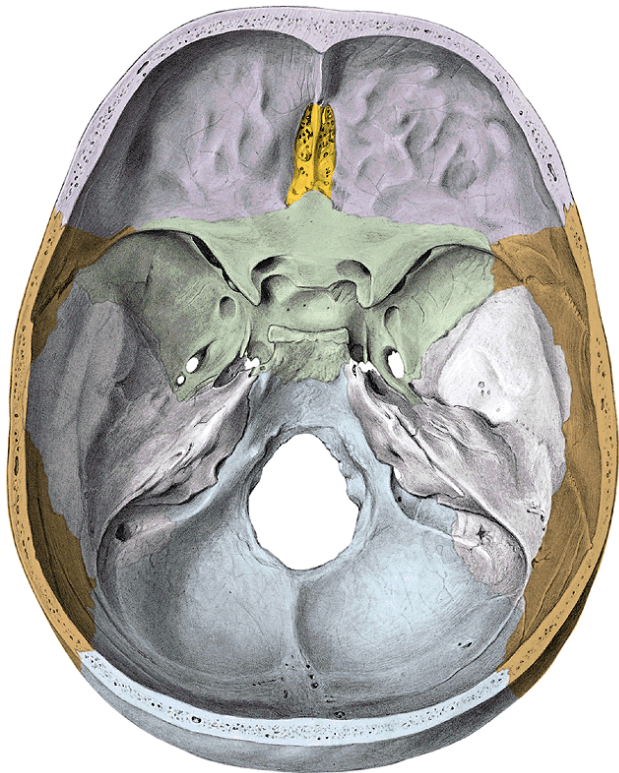


Corpus ossis sphenoidalis (tělo)

Alae minores (malá křídla)

Alae majores (velká křídla)

Processus pterygoidei (křídlaté výběžky)



Corpus ossis sphenoidalis

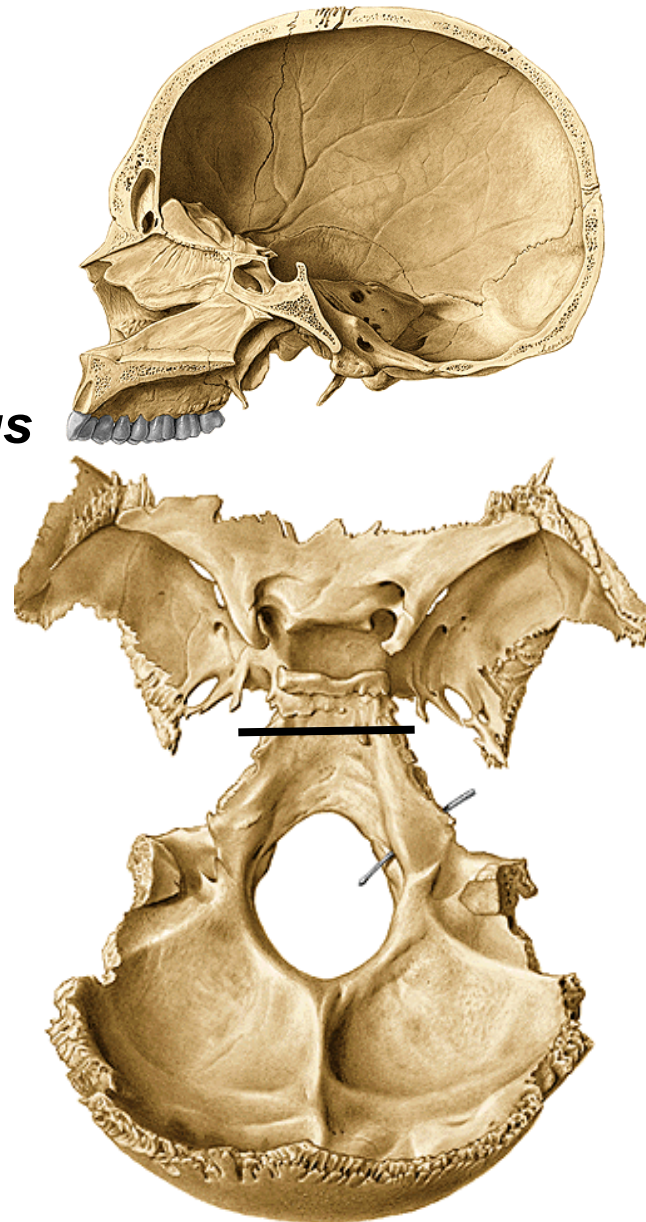
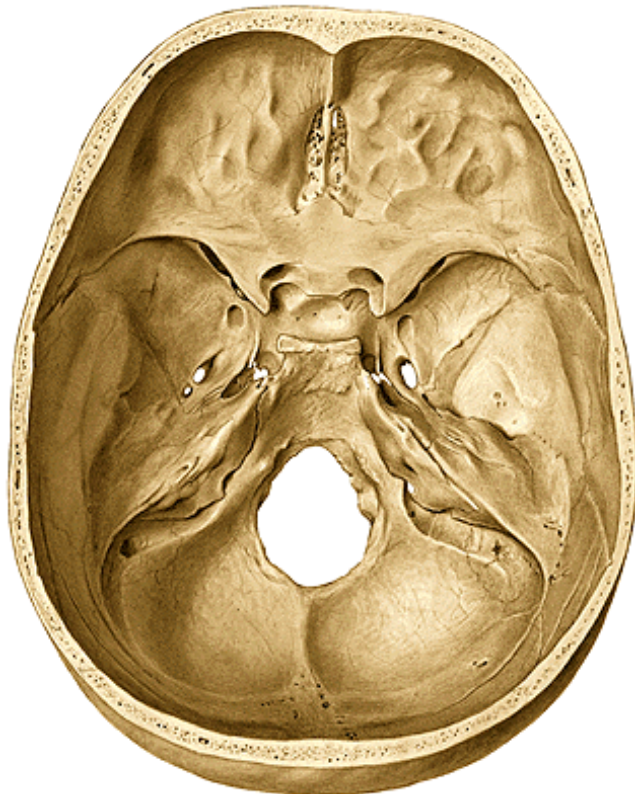
Uvnitř těla je **sinus sphenoidalis**

Vně - **sella turcica**

fossa hypophysialis

+ **dorsum sellae**

synostosis sphenoccipitalis - clivus
(**synchondrosis sphenoccipitalis**)

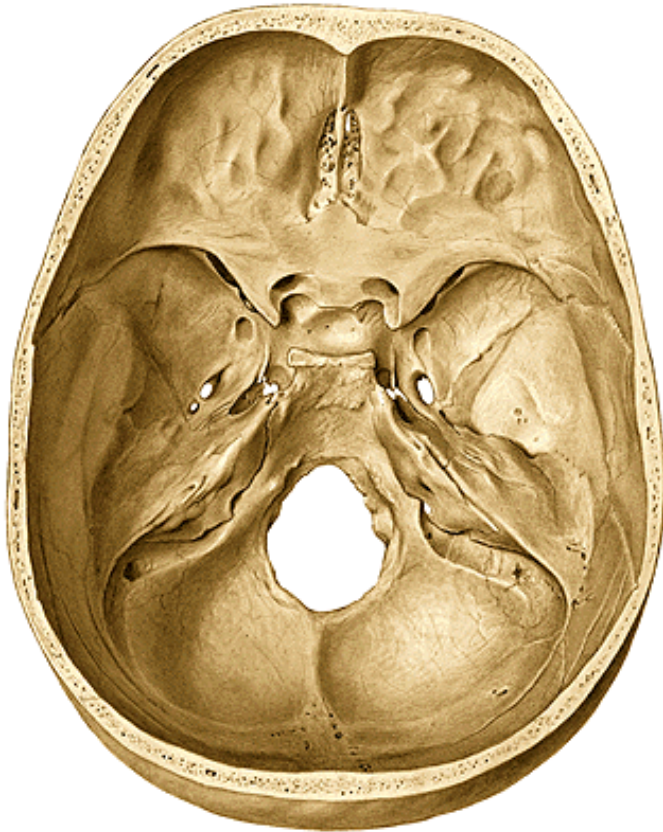
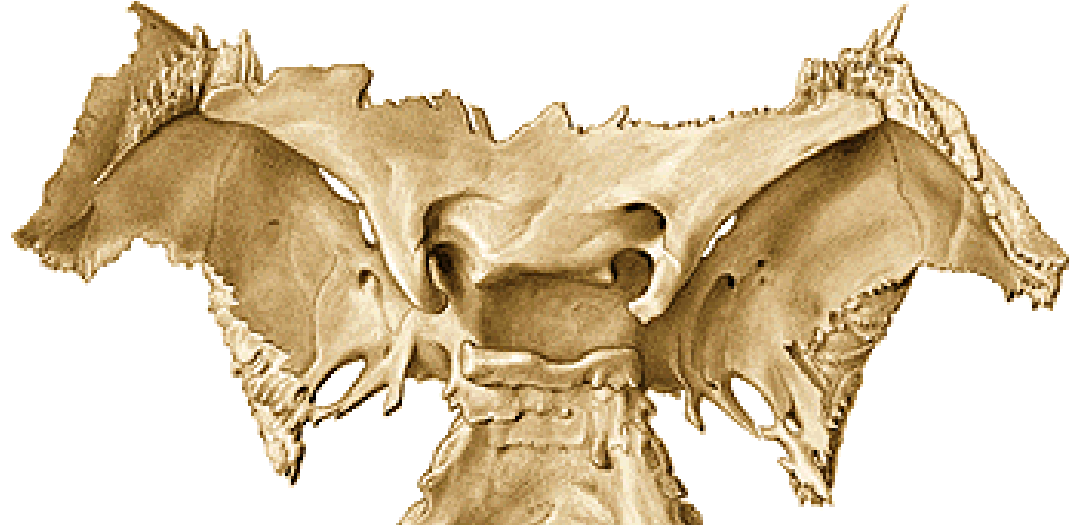


Alae minores ossis sphenoidalis

(malá křídla klínové kosti)

*processus clinoides anteriores + zadní okraj křídel ohraničují
fissura orbitalis superior*

*canalis opticus
sulcus praehiasmaticus*



Alae majores ossis sphenoidalis

(velká křídla kosti klínové)

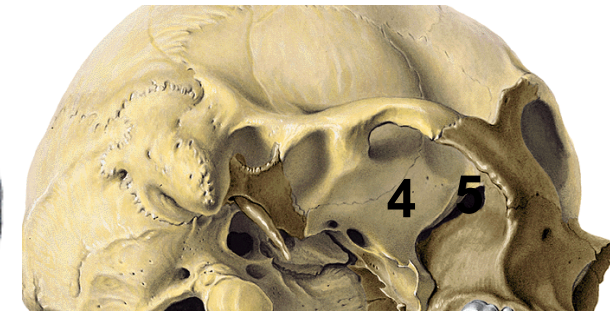
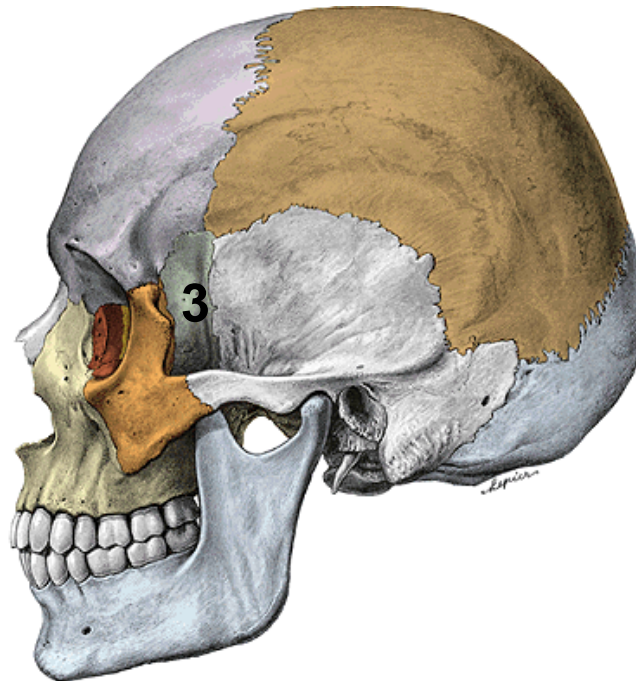
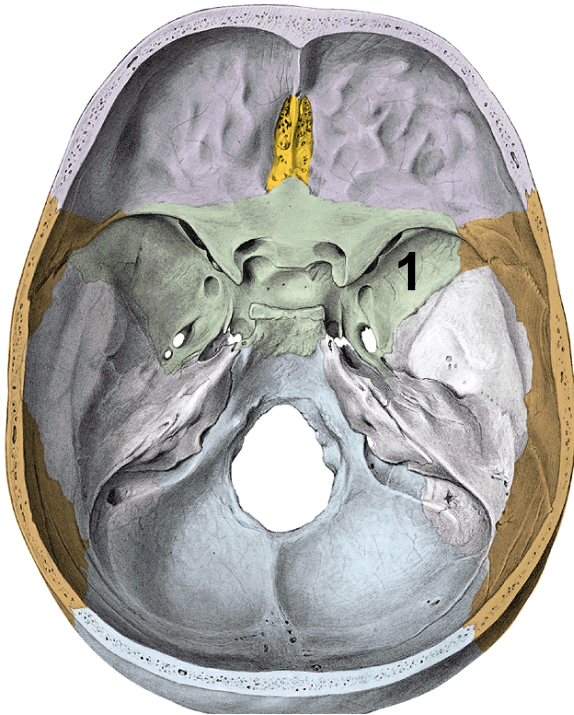
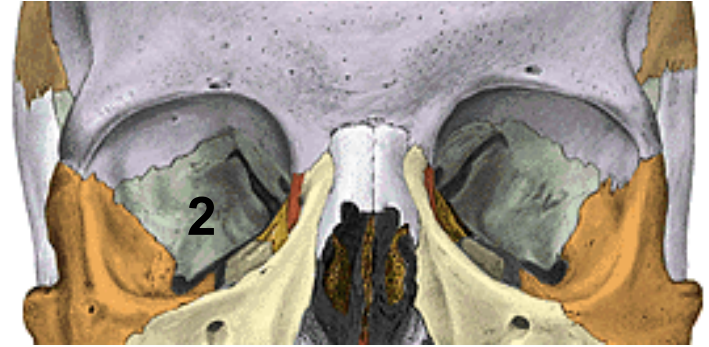
1. *Facies cerebralis*

2. *Facies orbitalis*

3. *Facies temporalis (crista infratemporalis)*

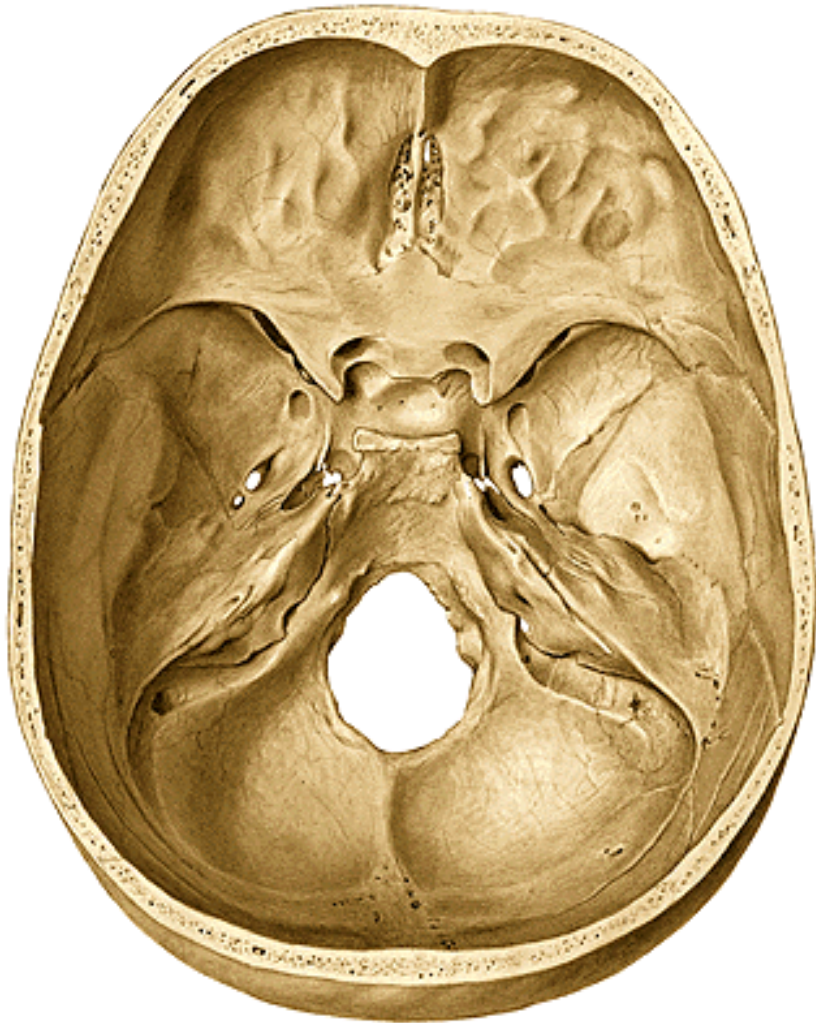
4. *Facies infratemporalis*

5. *Facies maxillaris (na stropu fossa pterygopalatina)*



Facies cerebralis alae majoris

Ohraničuje kaudální okraj Fissura orbitalis superior



Foramen rotundum (v2)

Foramen ovale (v3)

Foramen spinosum (pro arterii)

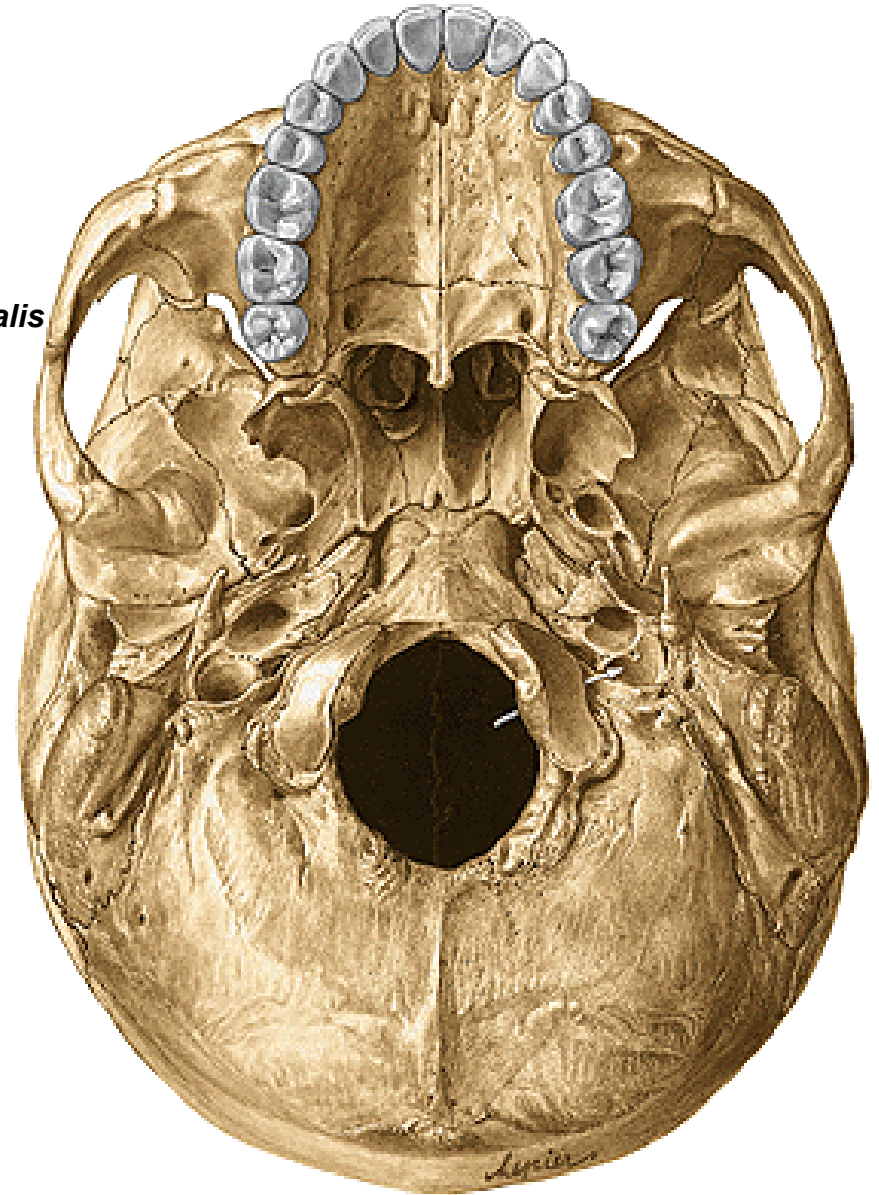


Facies temporalis et infratemporalis alae majoris

Vyústíuje zde **Foramen ovale**

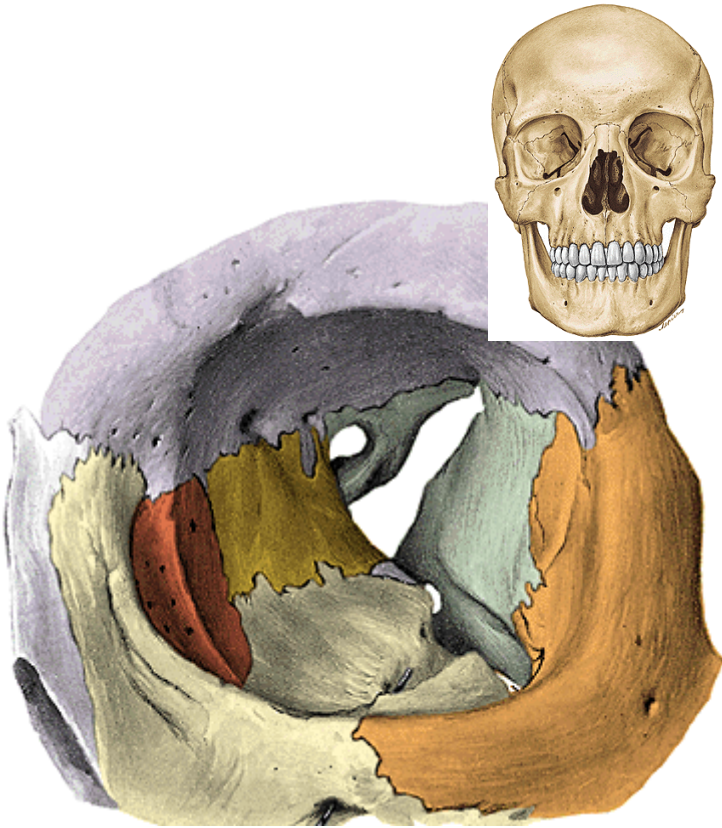
Foramen spinosum

Obě plošky velkých křídel zde odděluje *Crista infratemporalis*



Facies orbitalis alae majoris

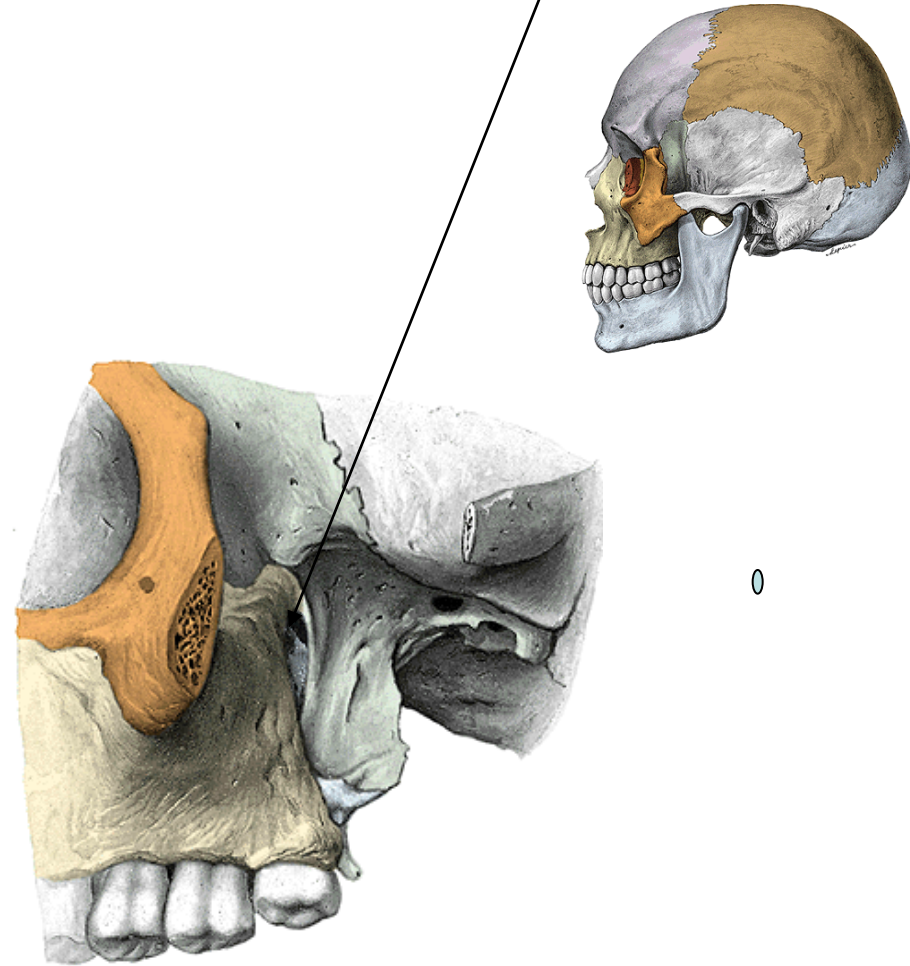
fissura orbitalis superior et inferior



Pohled do levé očníce

Facies maxillaris alae majoris

***Otvírá se zde do tzv. fossa pterygopalatina
foramen rotundum***



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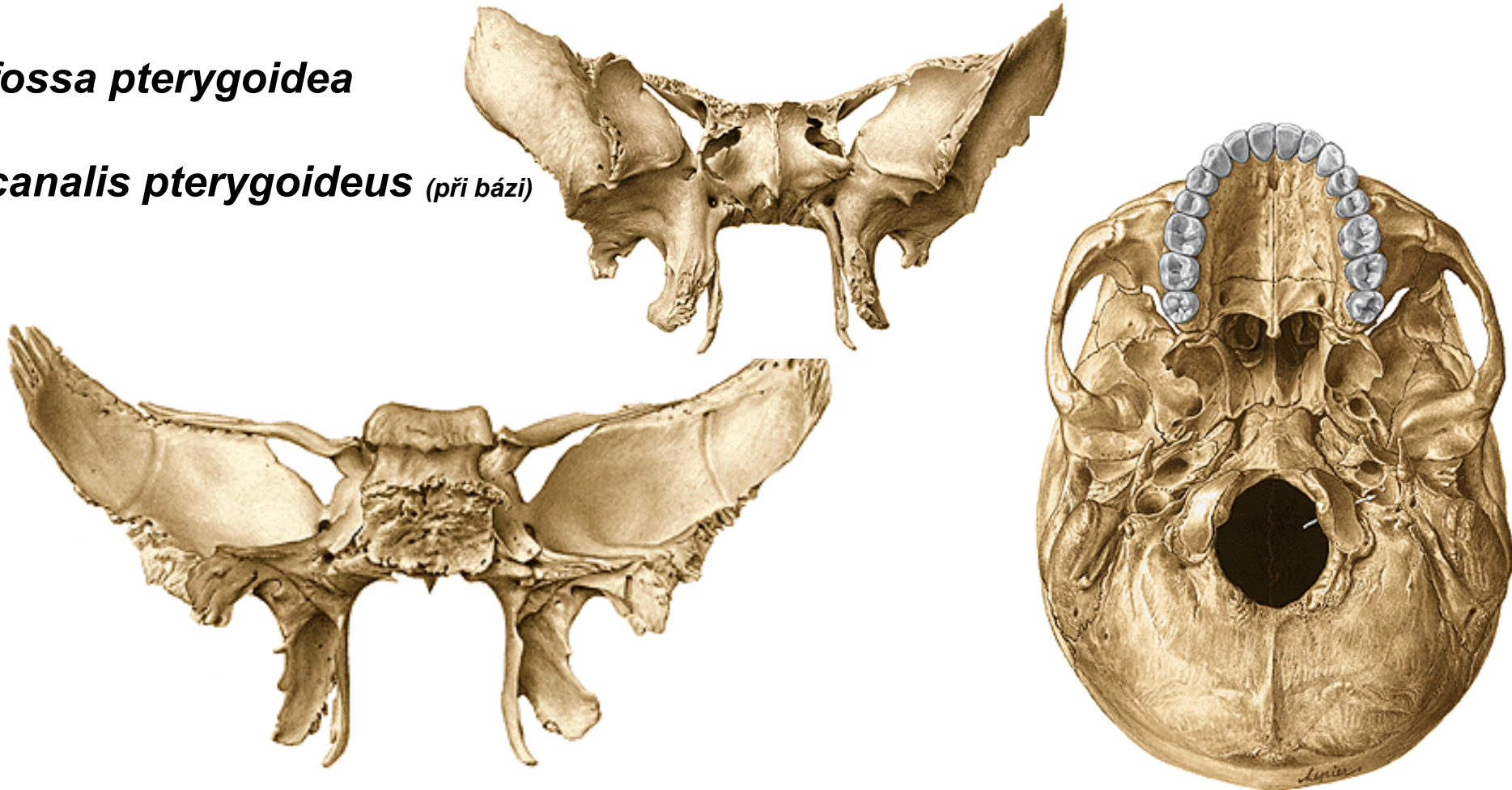
Processus pterygoideus ossis sphenoidalis

lamina medialis processus pterygoidei (+hamulus pterygoideus)

lamina lateralis processus pterygoidei

fossa pterygoidea

canalis pterygoideus (při bázi)



Týlní kost (*os occipitale*)

Partes laterales

Pars basilaris

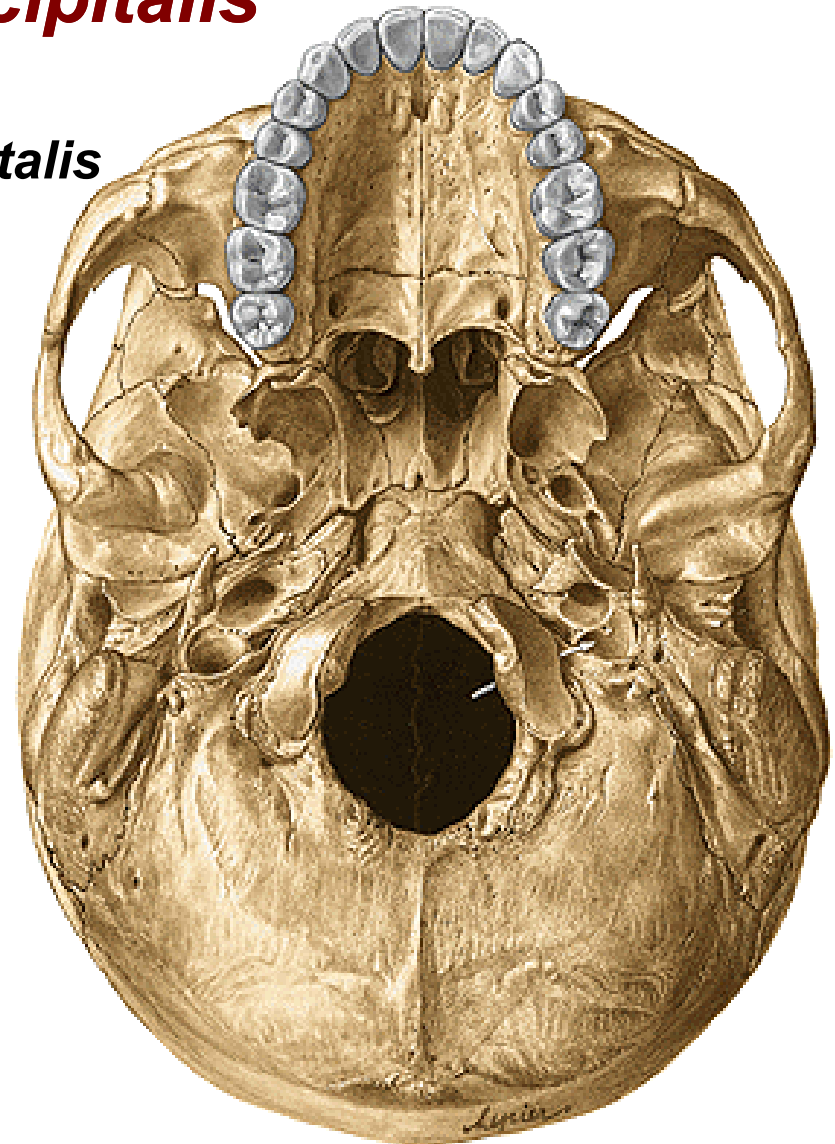
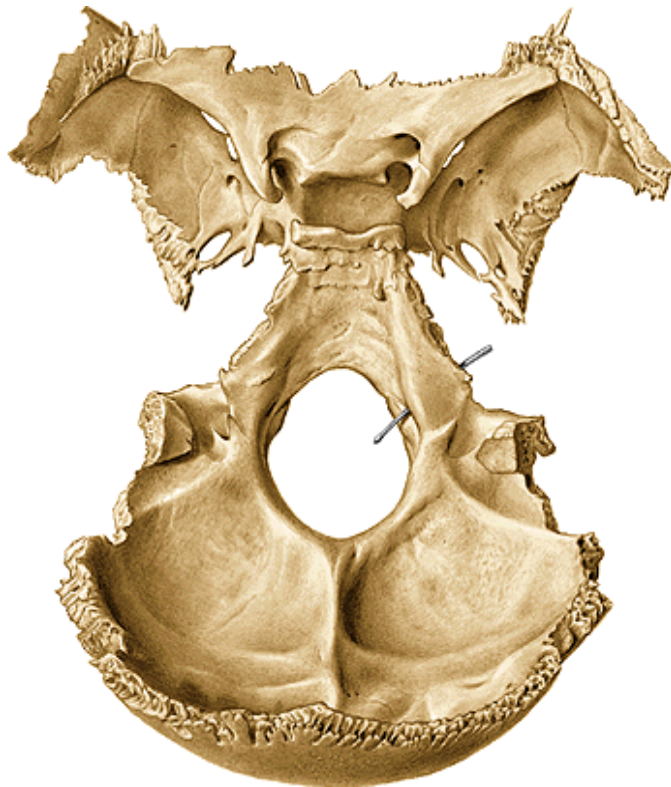
Squama occipitalis

Foramen magnum

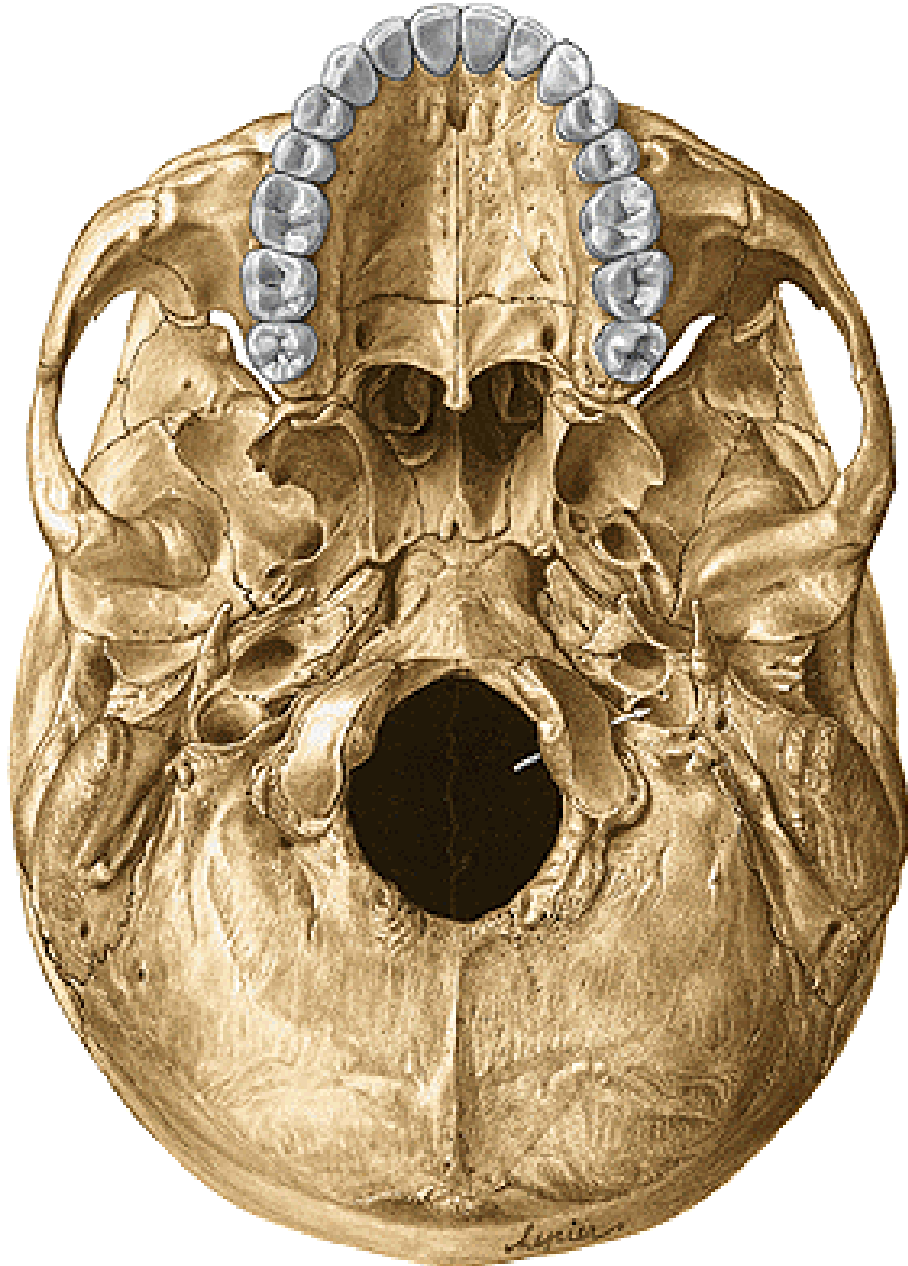


Pars basilaris ossis occipitalis

synostosis (synchondrosis) sphenoccipitalis
clivus (leží na něm mozkový kmen)

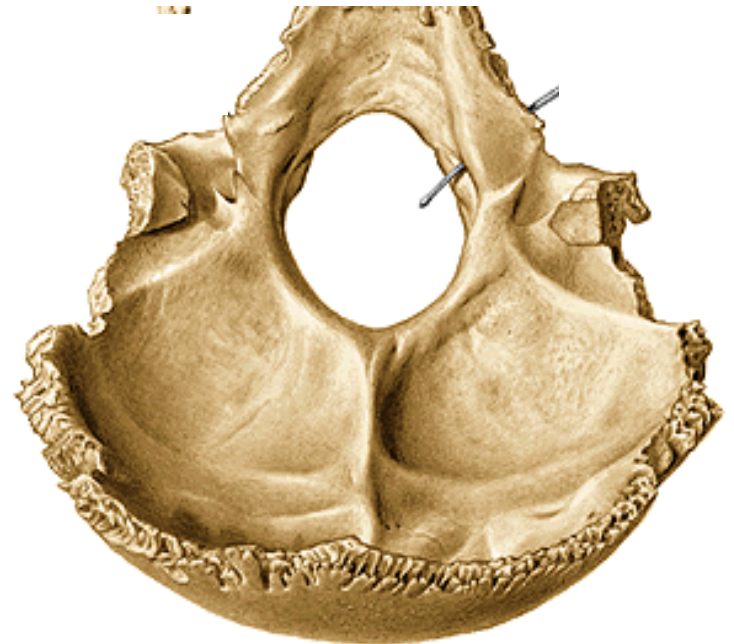


Partes laterales ossis occipitalis

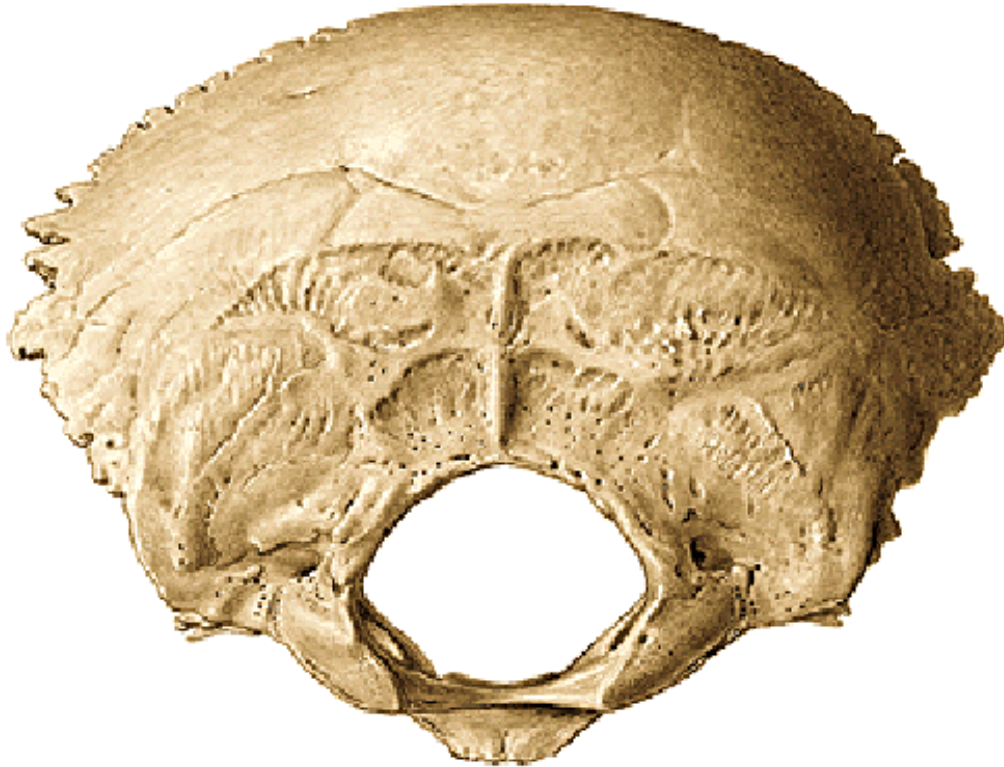


condyli occipitales
canalis hypoglossalis

incisura jugularis

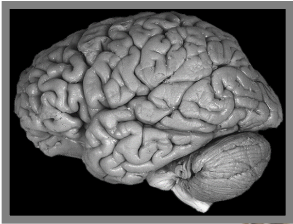


Squama ossis occipitalis (extrakraniální plocha)



protuberantia occipitalis externa
crista occipitalis externa
linea nuchae suprema, superior
a inferior

Squama ossis occipitalis (intrakraniální plocha)



protuberantia occipitalis interna

žlábký pro žilní splavy:

sulcus sinus sagittalis superioris

sulcus sinus transversi

sulcus sinus sigmoidei

crista occipitalis interna

fossae cerebrales

fossae cerebellares



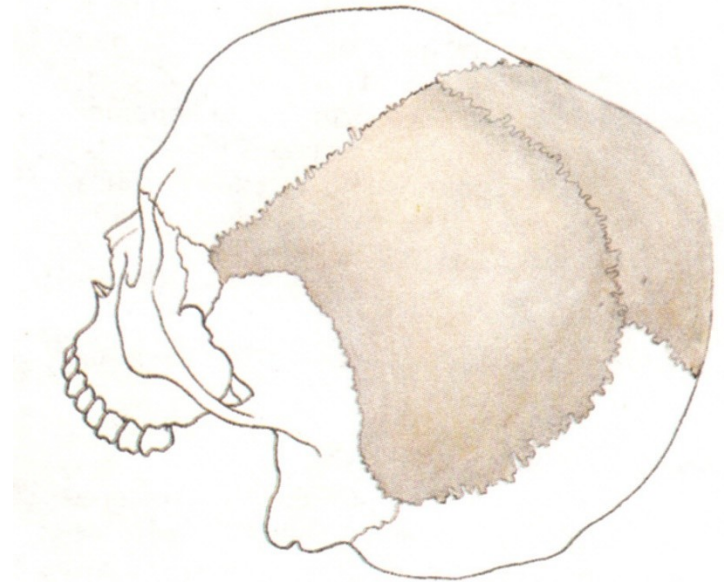
Ossa parietalia

sutura coronalis

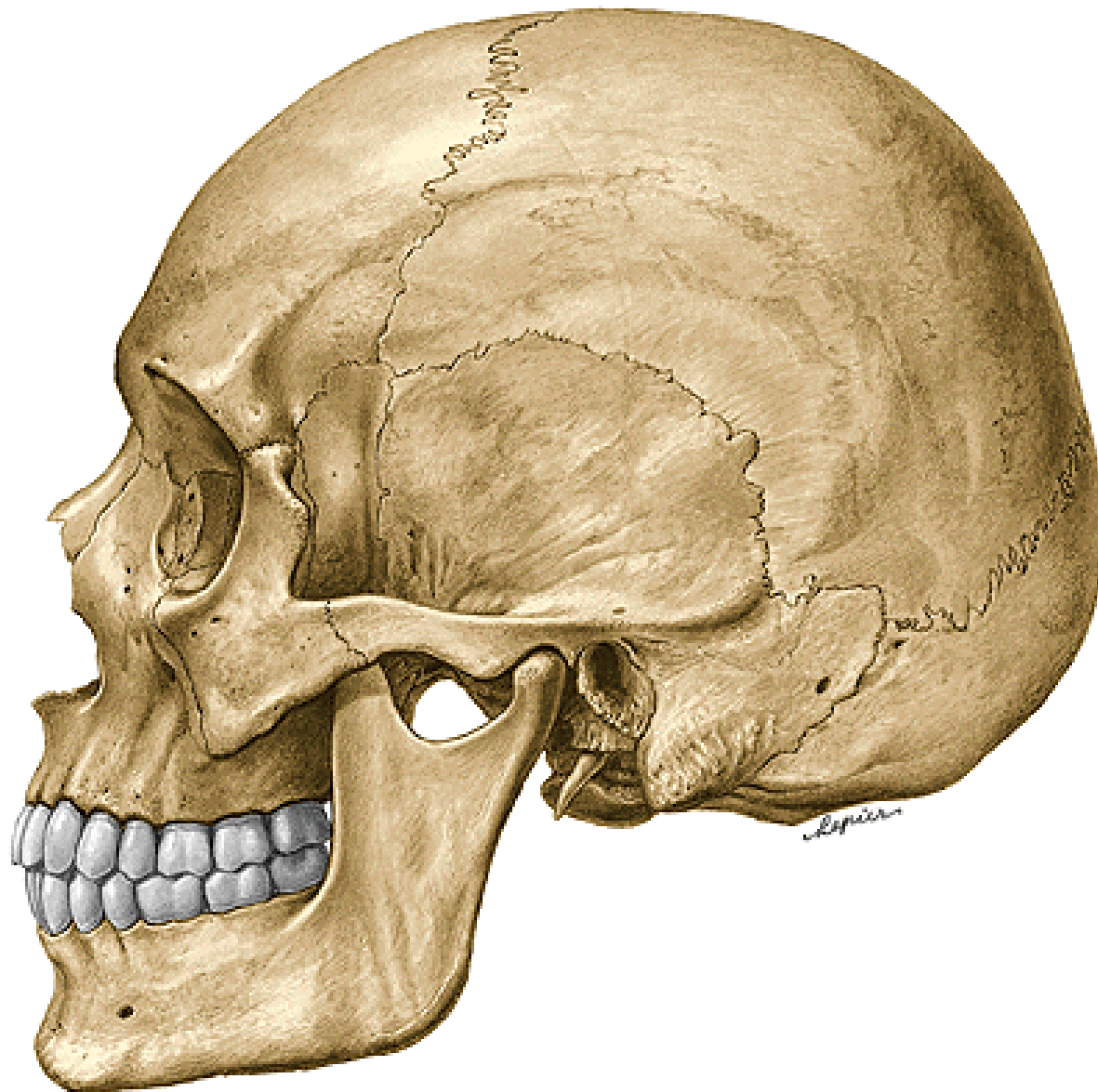
sutura sagittalis

sutura lambdoidea

suturæ squamosæ



Os parietale (temenní kost)



tuber parietale
linea temporalis superior
linea temporalis inferior

Os parietale (vnitřní povrch)



žlábky pro tepnu

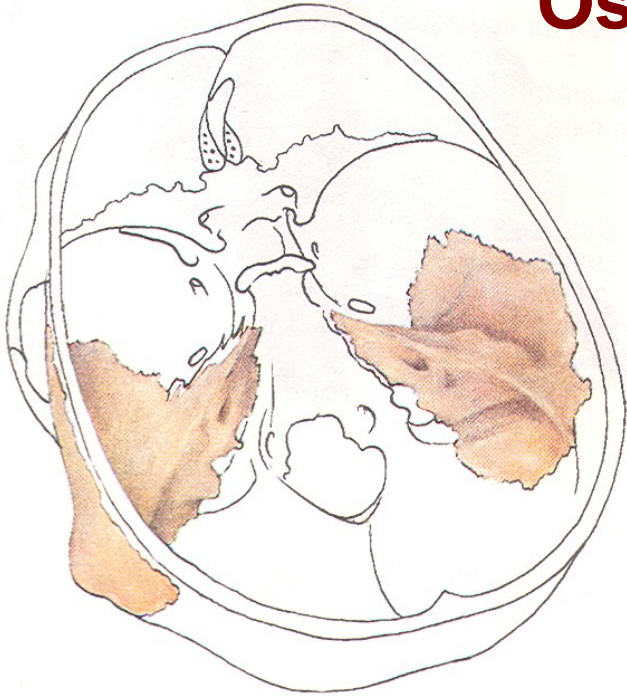
sulci arteriae meningeae mediae

žlábky pro žilní splavy

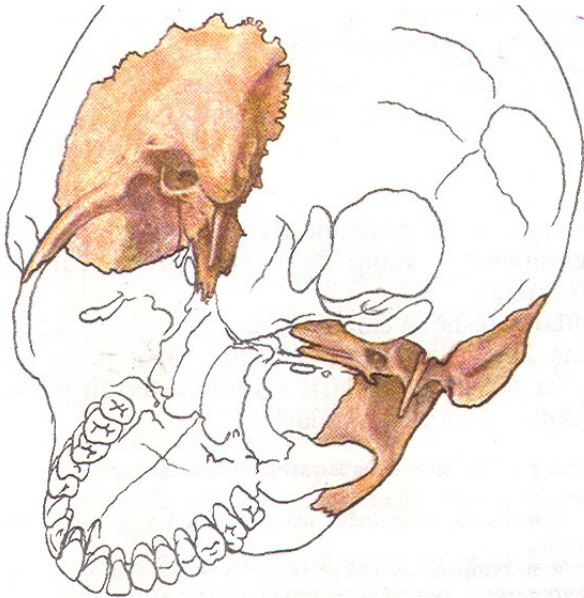
sulcus sinus sagittalis superioris

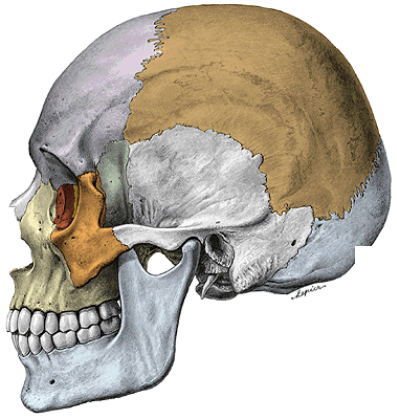
sulcus sinus sigmoidei

Os temporale (kost spánková)



1. *Pars squamosa*
2. *Pars petrosa (pyramis)*
3. *Pars mastoidea*
4. *Pars tympanica*
5. *Processus styloideus*





1. Pars squamosa ossis temporalis



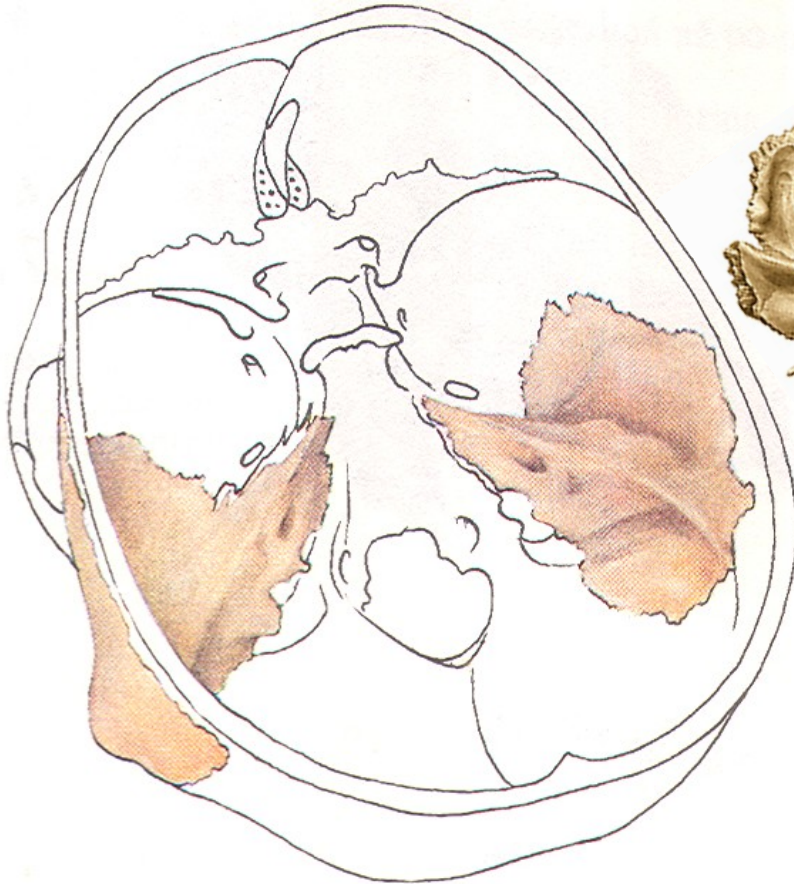
***processus zygomaticus
fossa mandibularis
tuberculum articulare***



sulci arteriosi (vnitřní povrch)

2. Pars petrosa (pyramis)

- a) *Facies anterior (cerebralis) pyramidis*
- b) *Facies posterior*
- c) *Facies inferior*
- d) *Facies ventrobasalis (sluchové ústrojí)*



a) *Facies anterior pyramidis*

impressio trigeminalis

***sulcus, hiatus et canalis
nervi petrosi majoris et minoris***

canalis musculotubarius



b) Facies posterior pyramidis

porus acusticus internus

meatus acusticus internus
fundus meatus acustici interni
(introitus canalis nervi facialis)

incisura jugularis
sulcus sinus sigmoidei
(foramen jugulare!)



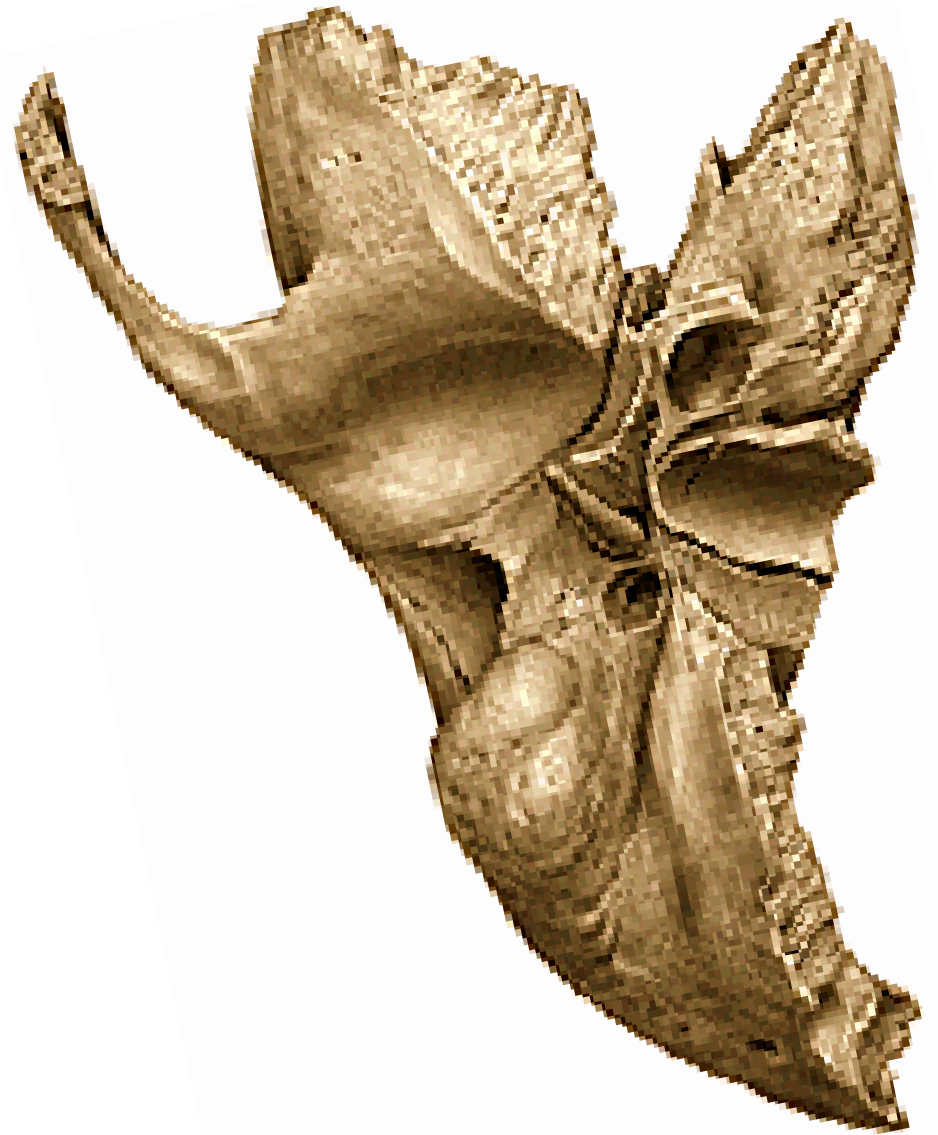
c) Facies inferior pyramidis

apertura externa canalis carotici

canaliculus mastoideus

apertura externa canaliculi tympanici
(fossula petrosa)

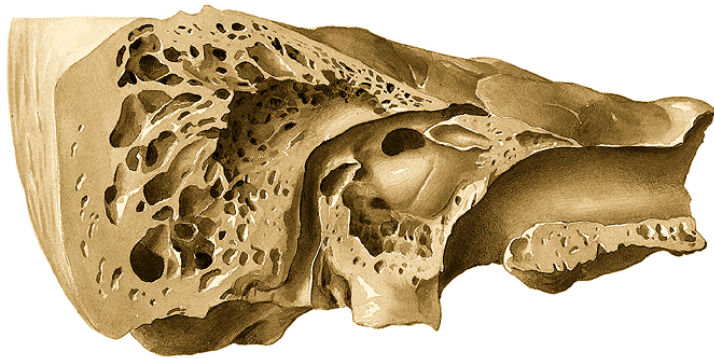
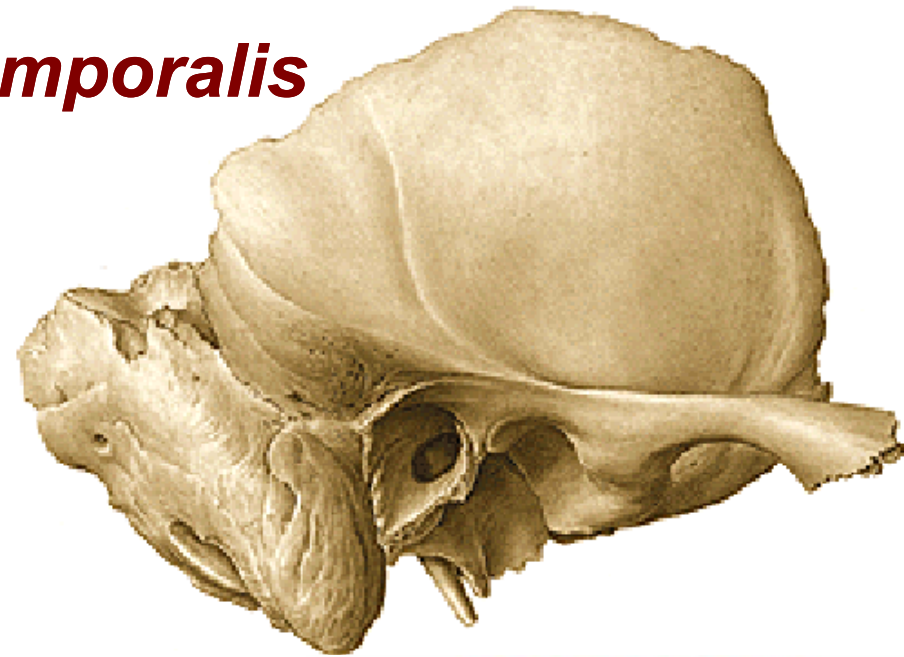
Foramen stylomastoideum



3. Pars mastoidea ossis temporalis

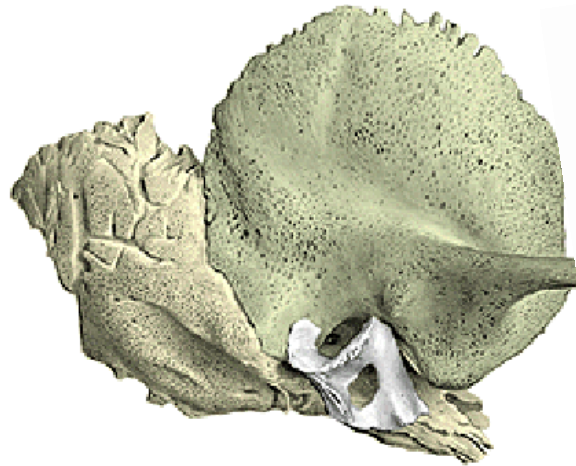
processus mastoideus
(uvnitř - cellulae mastoideae)

incisura mastoidea
sulcus arteriae occipitalis



4. Pars tympanica ossis temporalis

porus acusticus externus
meatus acusticus externus



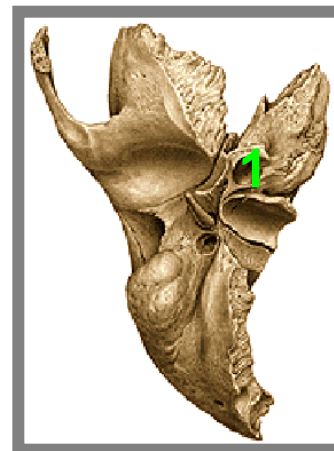
5. Processus styloideus

Foramen stylomastoideum!

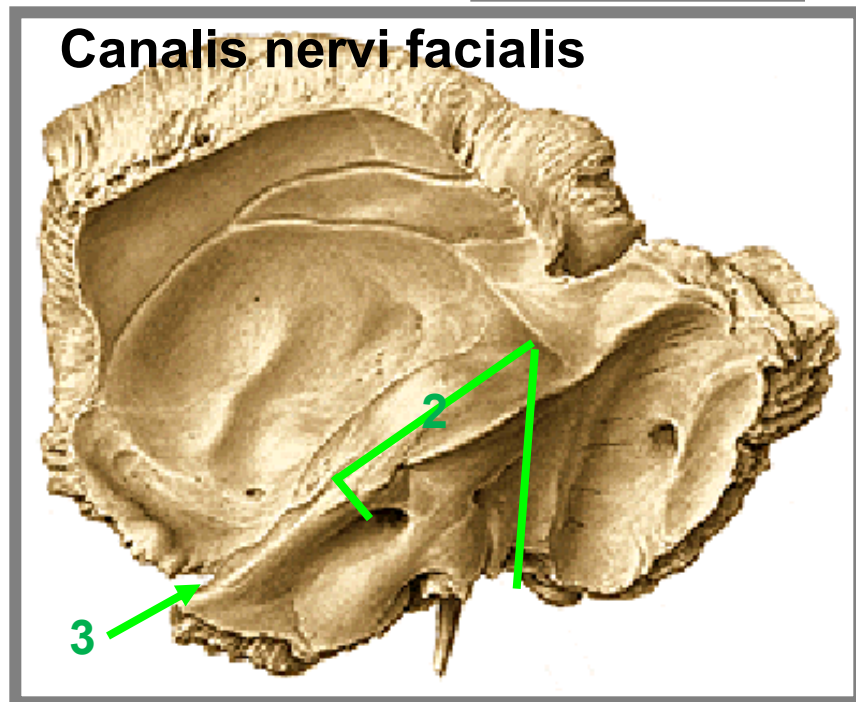


Kanálky v os temporale

1. canalis caroticus
2. canalis nervi facialis
3. canalis musculotubarius



Canalis nervi facialis



Kapacita lebky

Muži asi 1450 ccm

Ženy asi 1350 ccm

Microcephalia (méně než 1100 ccm - Anatomické muzeum LF MU)

Macrocephalia



SPLANCHNOCRANIUM

(viscerocranium, obličejová část lebky)



Splanchnocranium

Os ethmoidale

(kost čichová)

Maxillae

(horní čelisti)

Ossa nasalia

(nosní kosti)

Ossa lacrimalia

(slzní kosti)

Ossa zygomatica

(lícní kosti)

Vomer

(radličná kost)

Ossa palatina

(patrové kosti)

Concha nasalis inferior

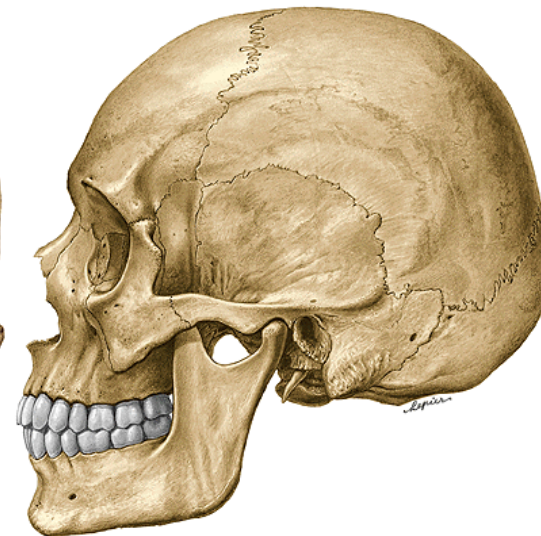
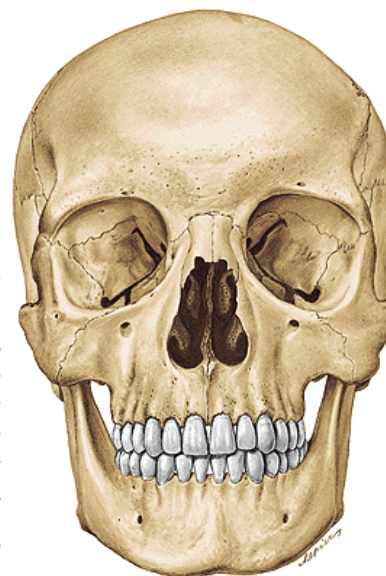
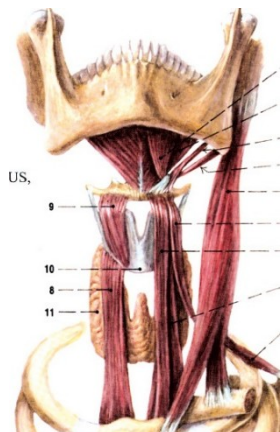
(dolní skořepa nosní)

Mandibula

(dolní čelist)

Os hyoideum

(jazyk)



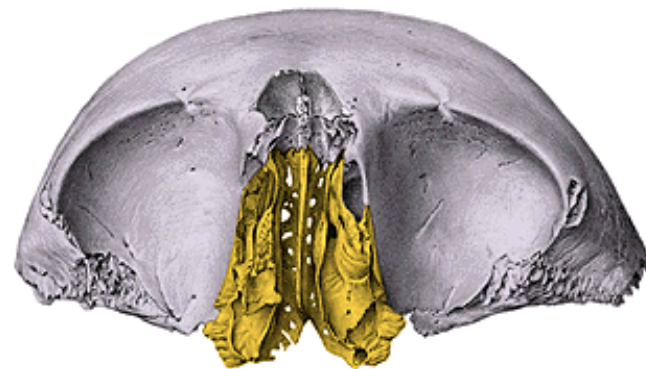
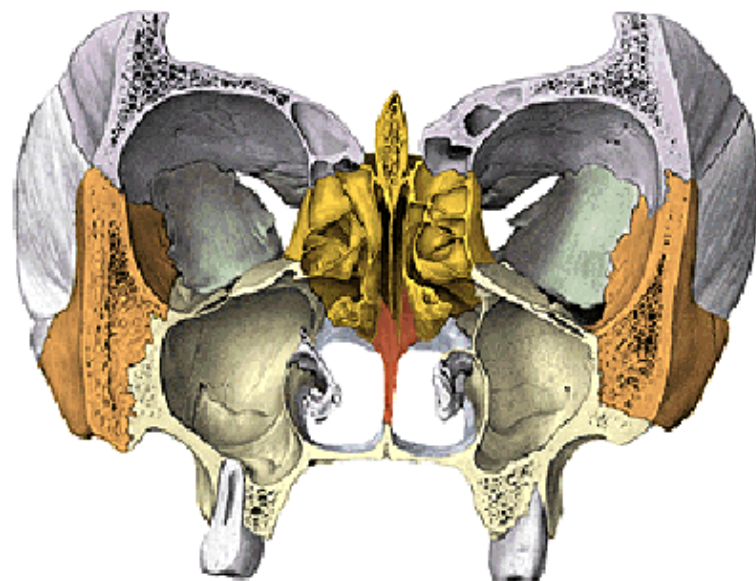
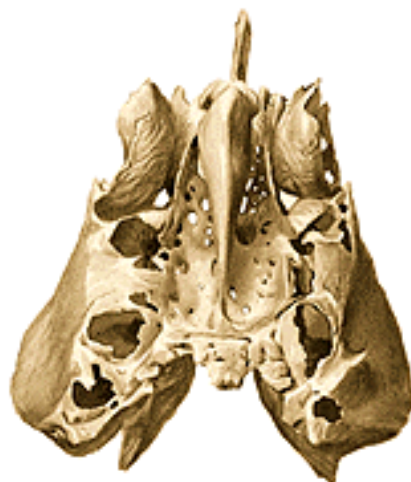
Os ethmoidale

(čichová kost)

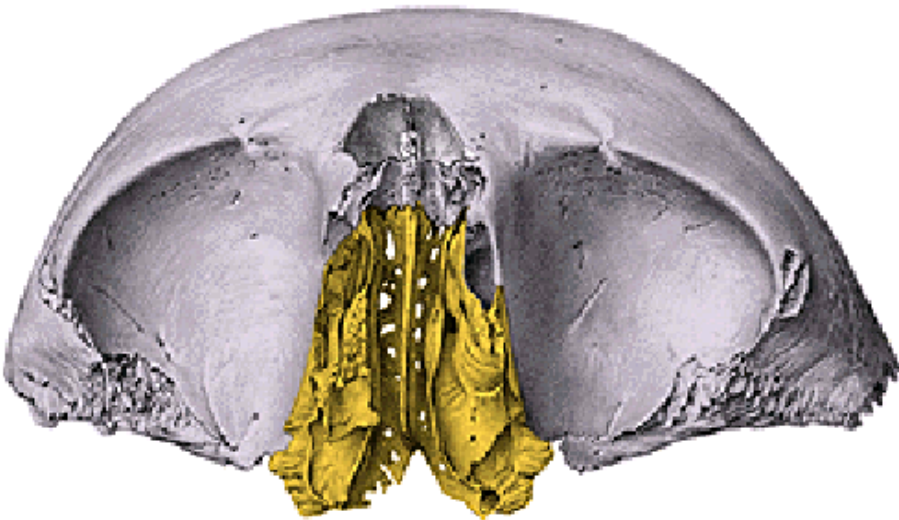
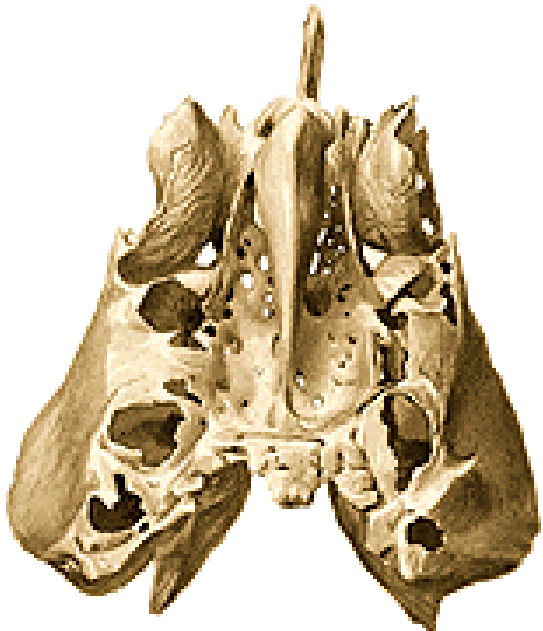
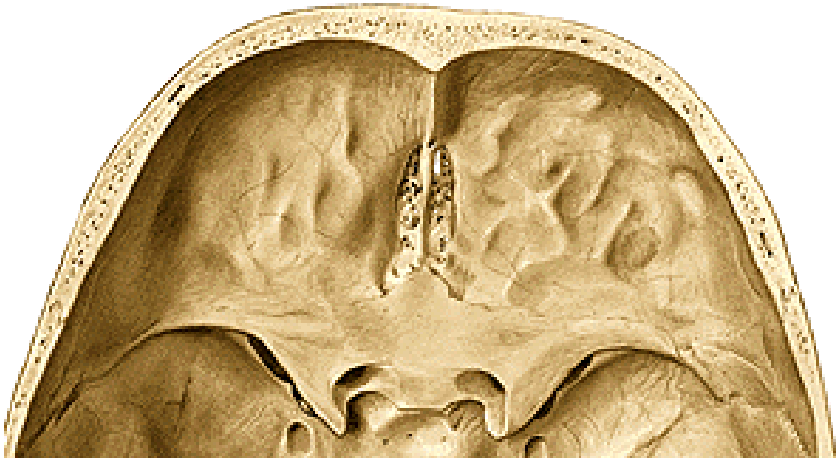
lamina cribrosa

lamina perpendicularis

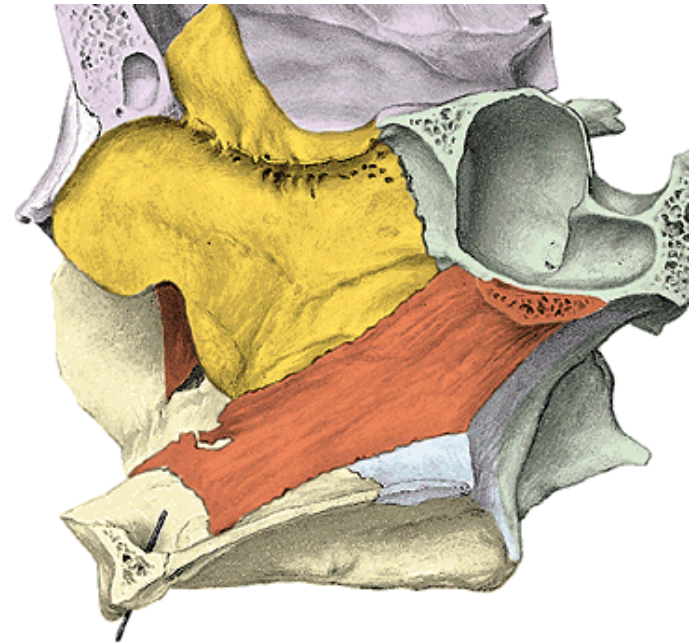
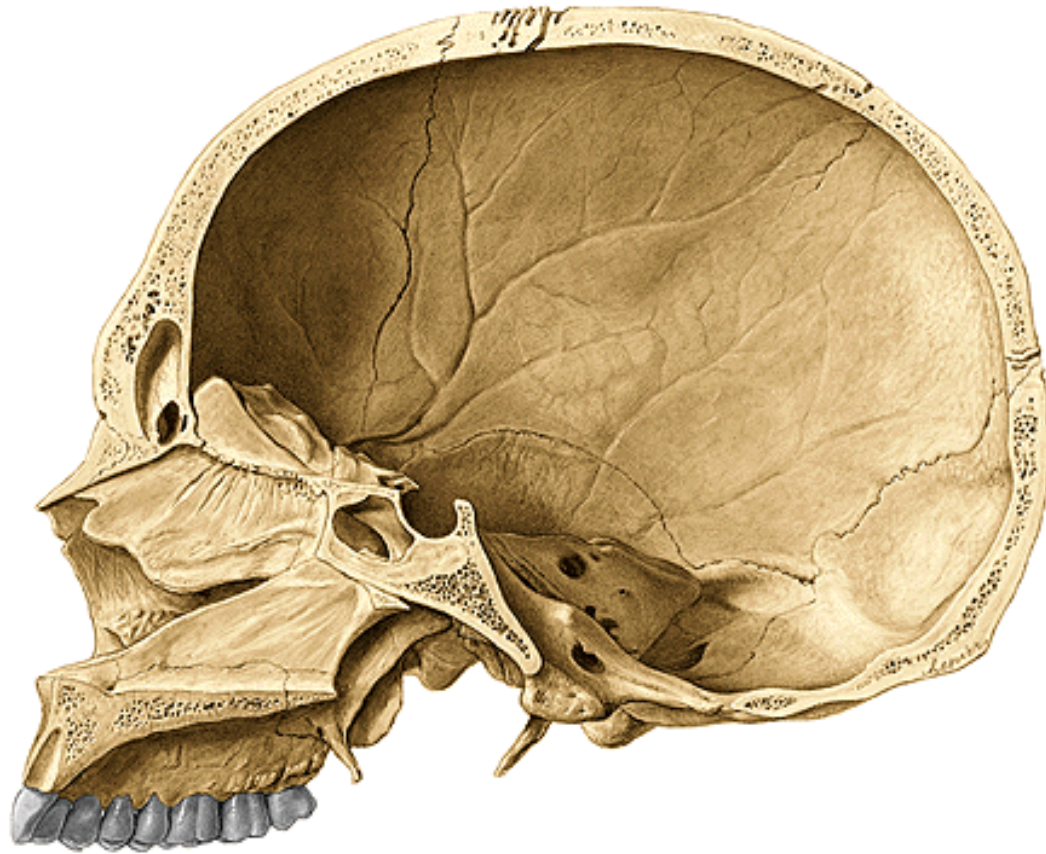
labyrinthis ethmoidales



Lamina cribrosa ossis ethmoidalis



Lamina perpendicularis ossis ethmoidalis



Crista galli
(septum nasi osseum)

Labyrinthi ethmoidales

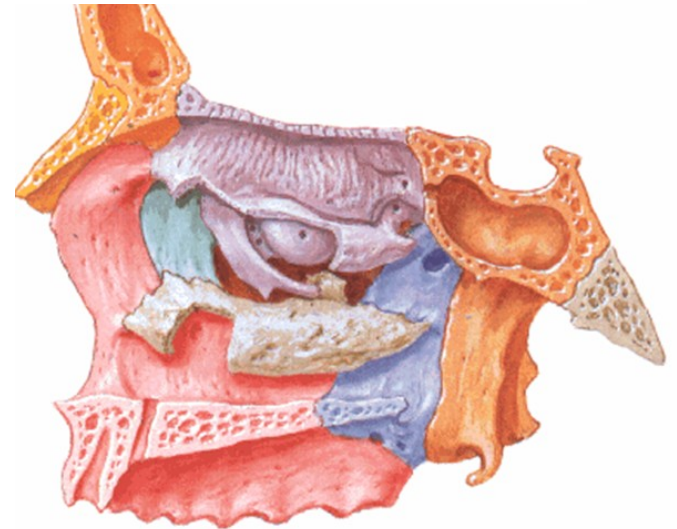
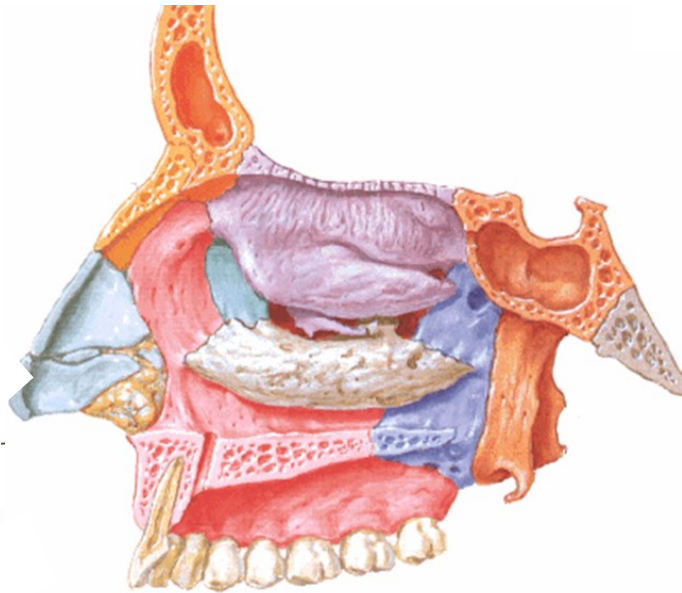
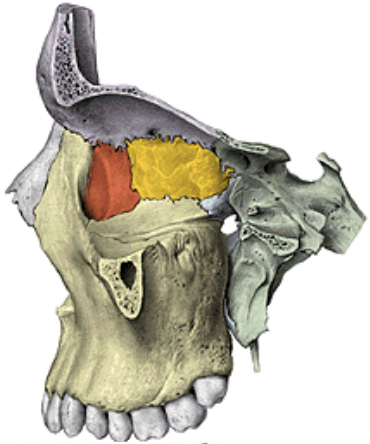
Cellulae ethmoidales

Lamina orbitalis (hranice s mediální stěnou očnice)

Foramen ethmoidale anterius

Foramen ethmoidale posterius

Concha nasalis superior et media

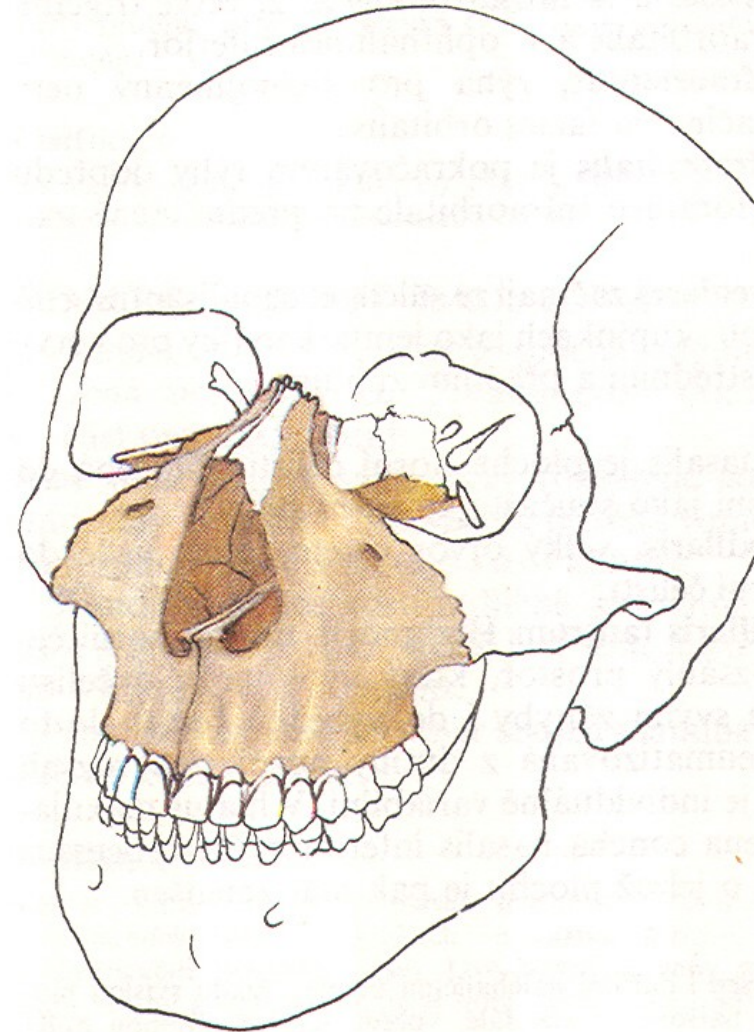
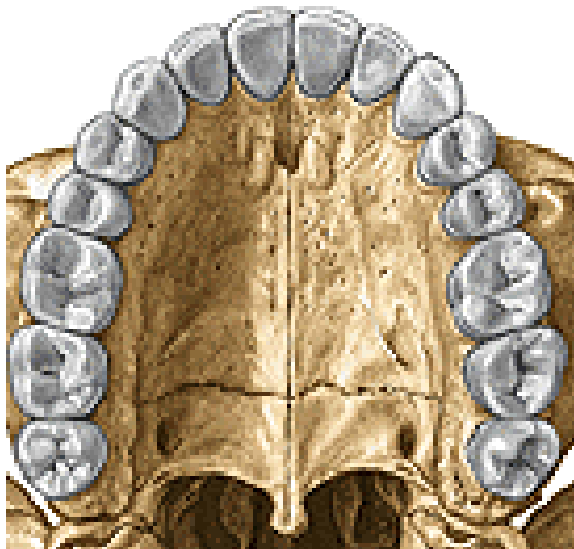
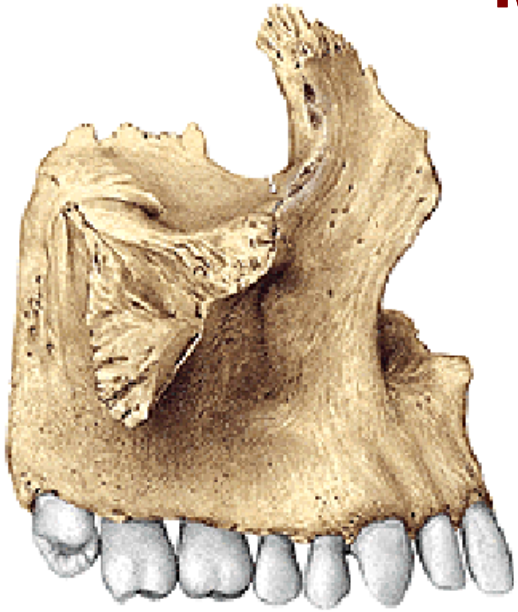


Maxilla (dextra et sinistra!)

Corpus maxillae

Processus maxillae

- Processus frontalis*
- Processus zygomaticus*
- Processus alveolaris*
- Processus palatinus*



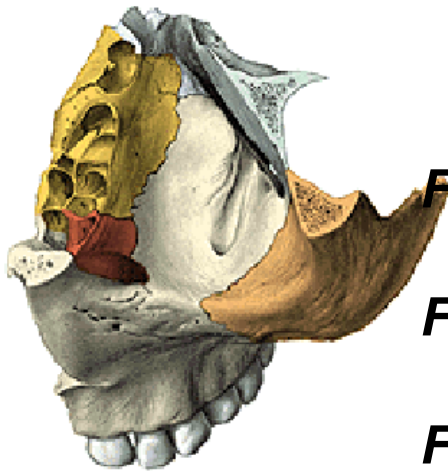
Corpus maxillae

Facies orbitalis (sulcus et canalis infraorbitalis)

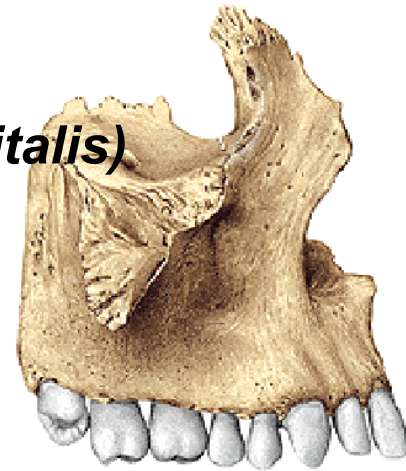
Facies anterior (foramen infraorbitale)

Facies nasalis (sinus maxillaris, hiatus maxillaris)

Facies infratemporalis (tuber maxillae)



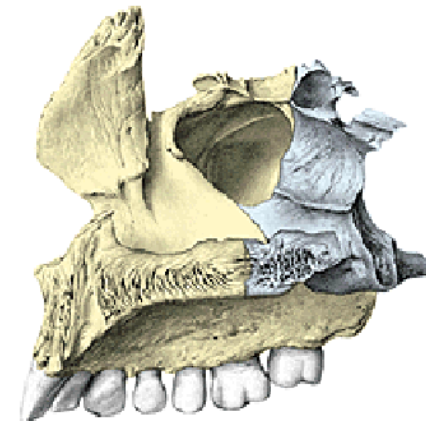
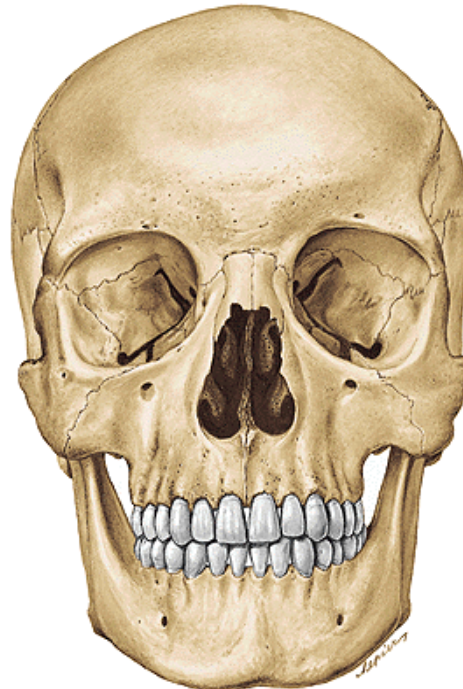
Facies orbitalis



Facies anterior



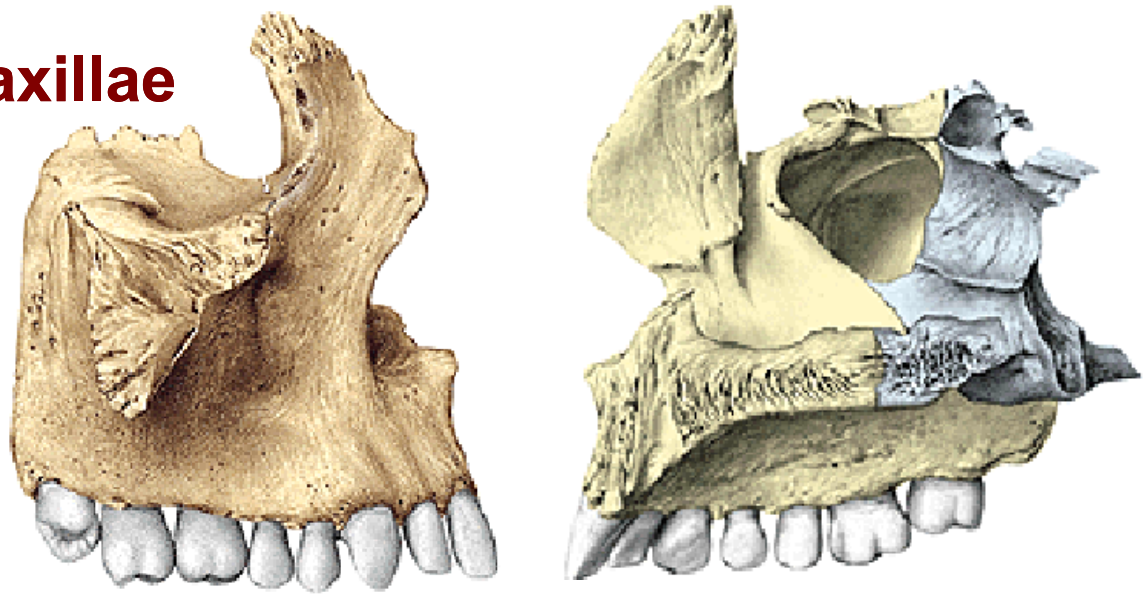
Facies infratemporalis



Facies nasalis

Processus frontalis maxillae

Incisura nasalis
(*apertura piriformis*)



Processus zygomaticus maxillae



Processus alveolaris maxillae

Alveoli dentales



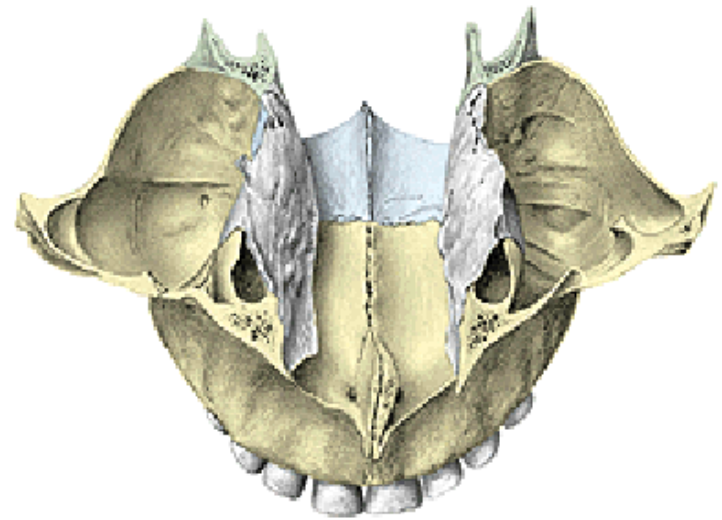
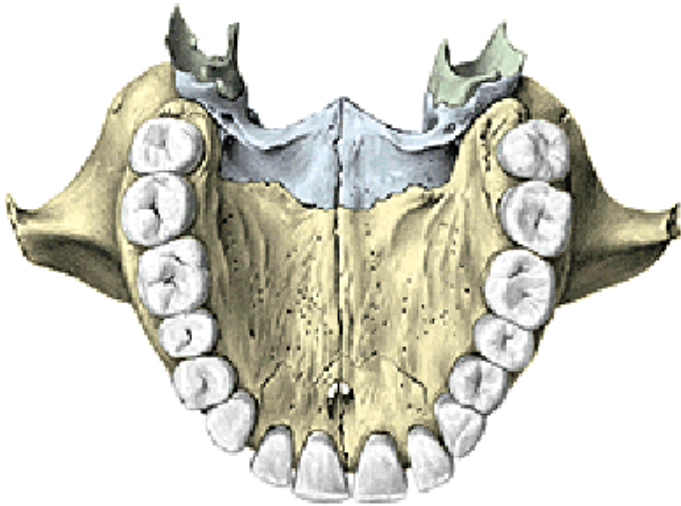
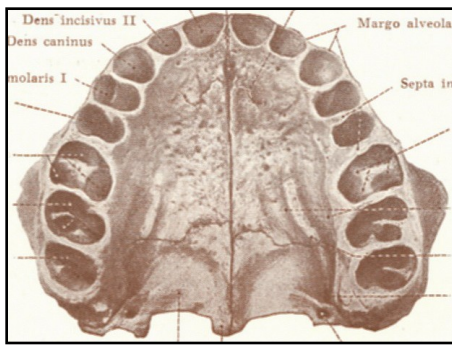
Processus palatinus maxillae

(tvorí ¾ tvrdého patra!)

Os incisivum (praemaxilla)

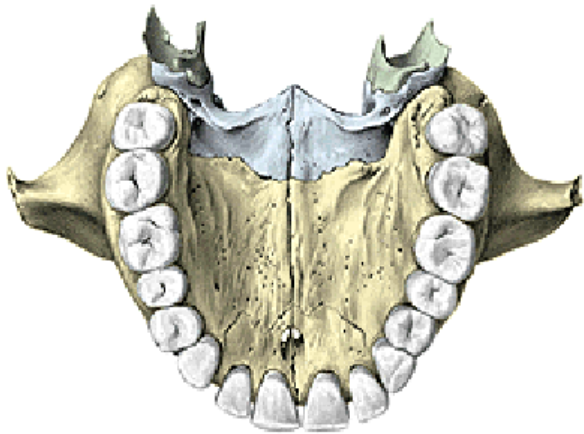
Foramen incisivum

Canalis incisivus



Os palatinum (patrová kost)

(tvoří ¼ tvrdého patra)

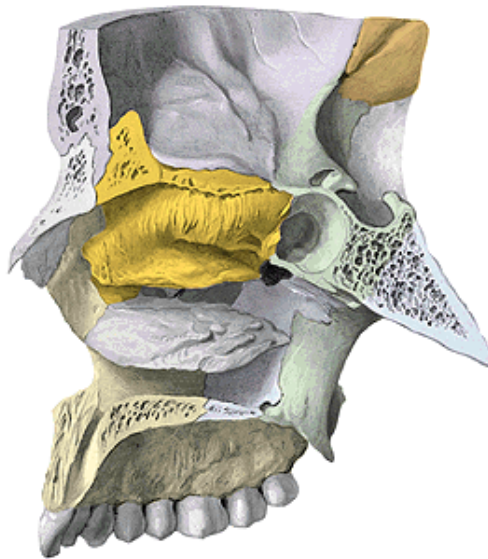
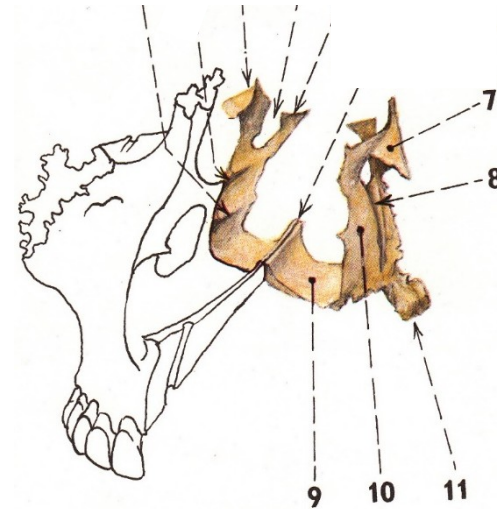


Lamina horizontalis

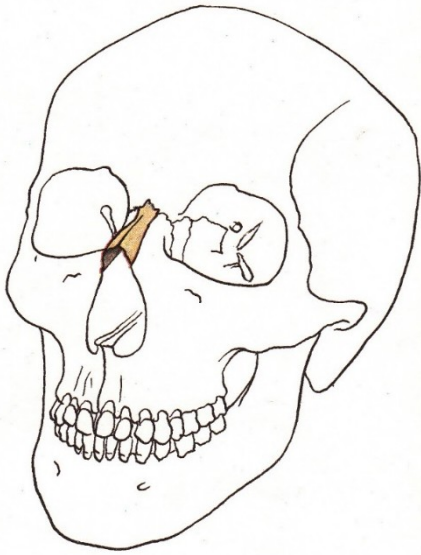
Foramen palatinum majus
Foramina palatina minora

Lamina perpendicularis

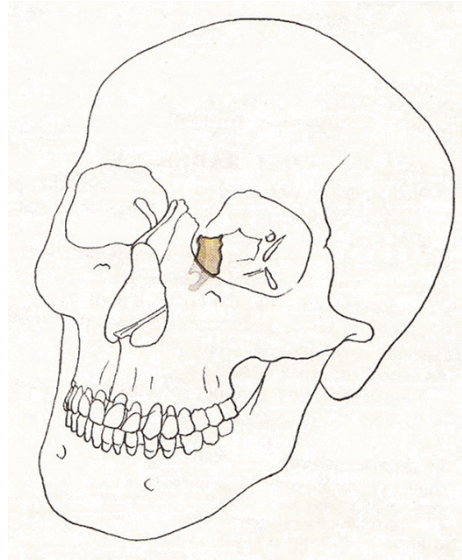
(*foramen sphenopalatinum*)



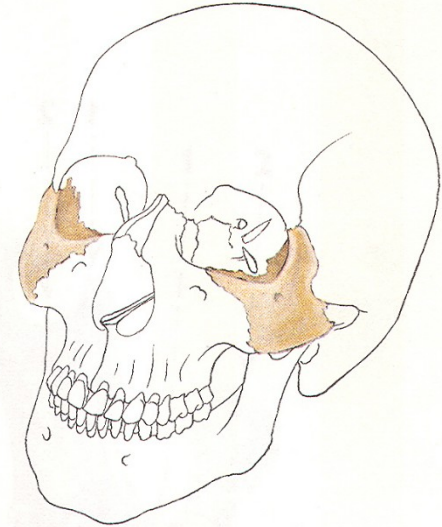
Os nasale



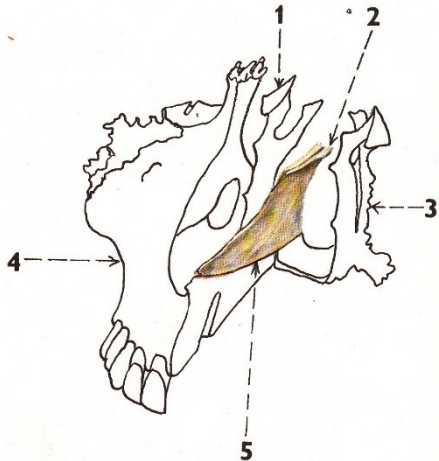
Os lacrimale



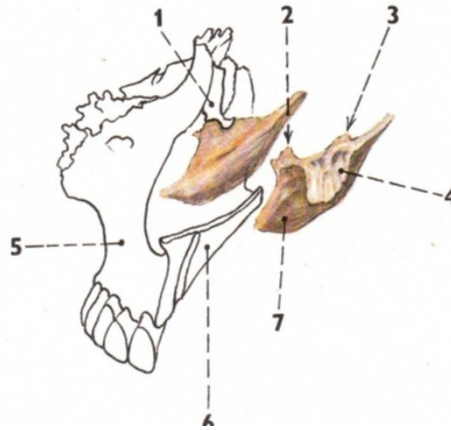
Os zygomaticum



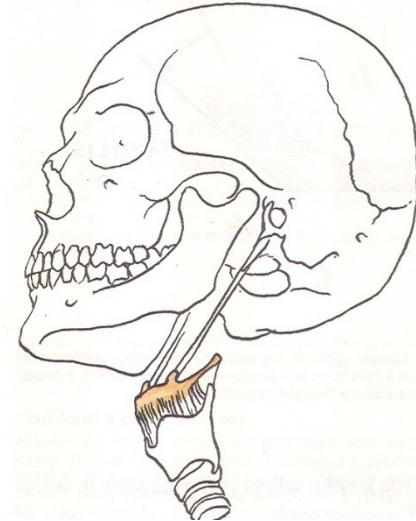
Vomer



Concha nasalis inferior



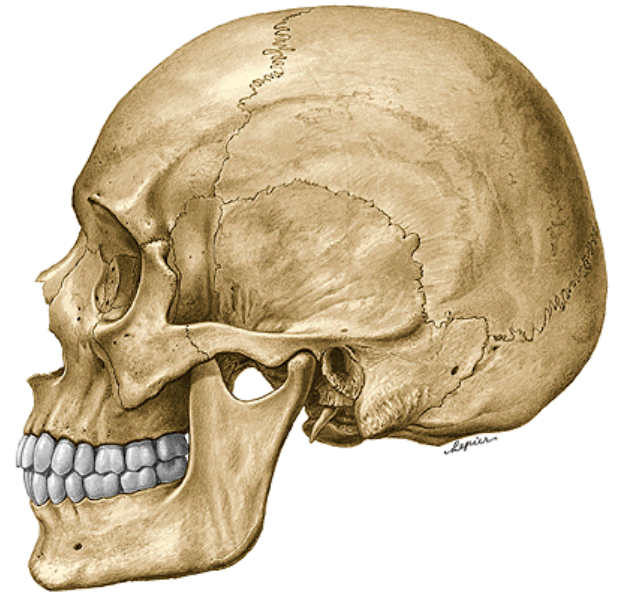
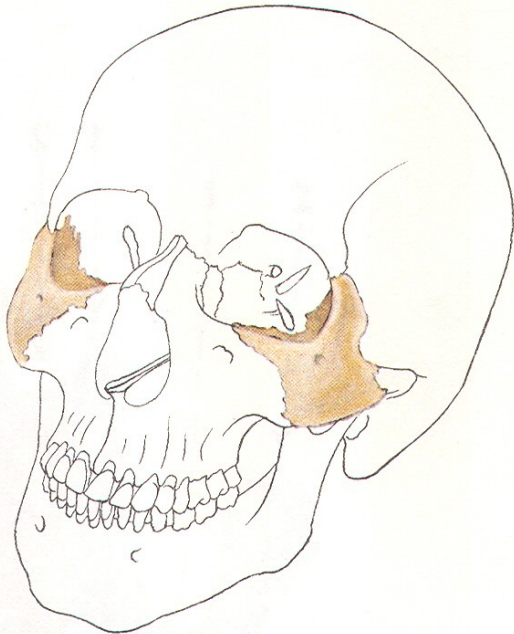
Os hyoideum



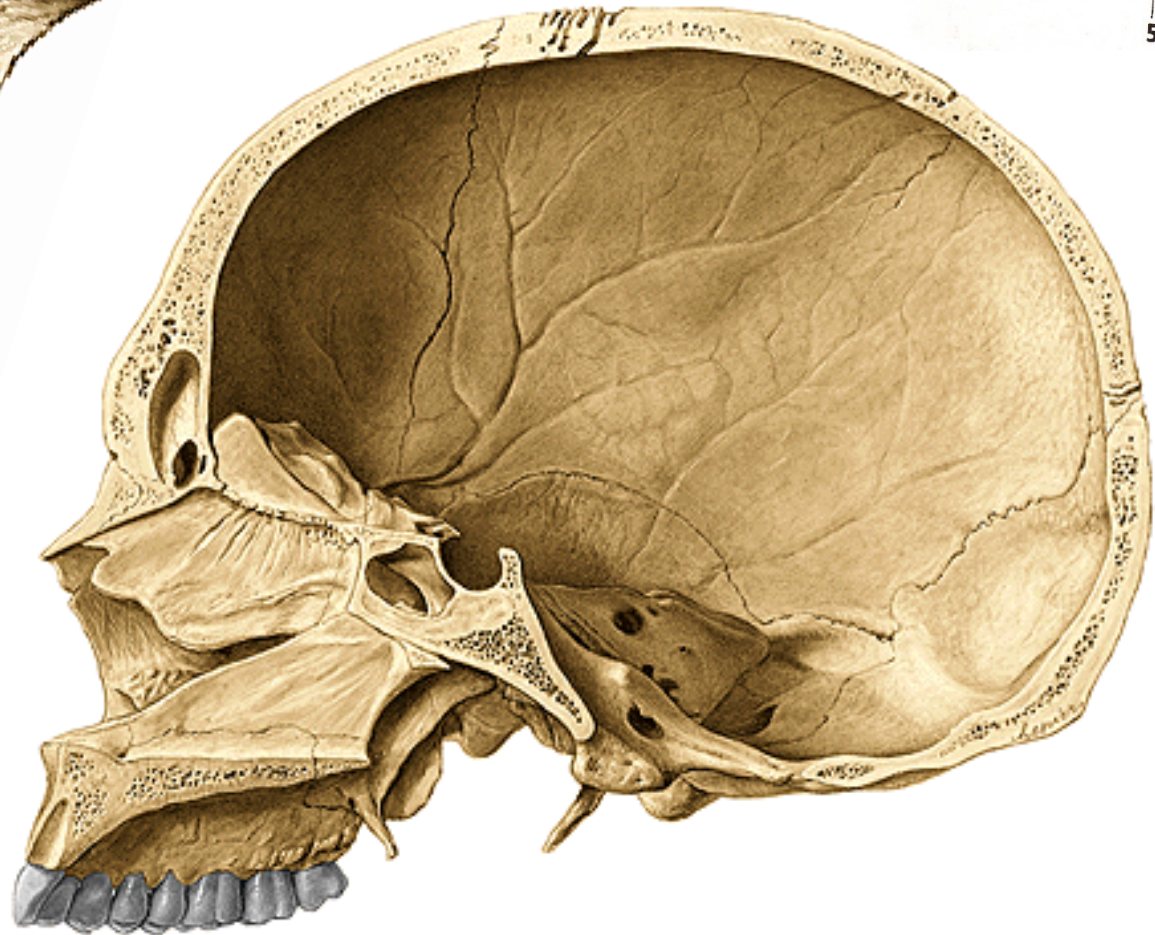
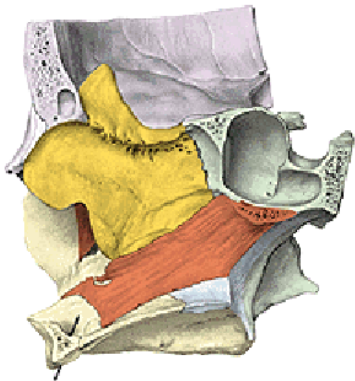
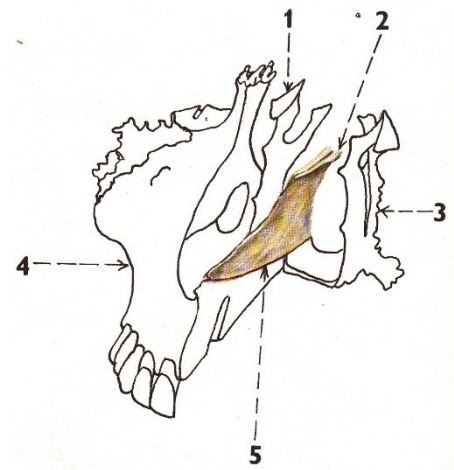
Os zygomaticum

foramen zygomaticofaciale
zygomaticoorbitale
zygomaticotemporale

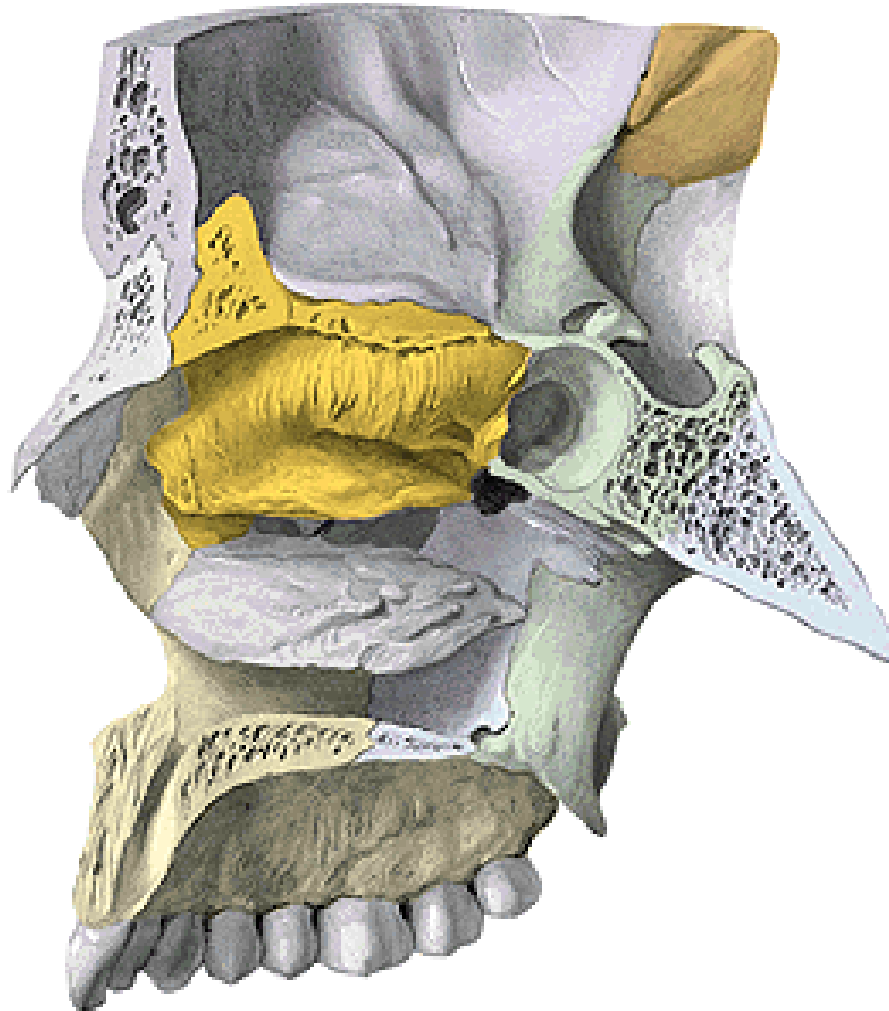
Arcus zygomaticus = *processus temporalis lícní kosti a processus zygomaticus spánkové kosti*



Vomer



Concha nasalis inferior (dolní nosní skořepa)



Mandibula

Corpus mandibulae

Ramus mandibulae dx. et sin.

Angulus mandibulae dx. et sin.



Corpus mandibulae (zevnitř)

Fossa digastrica

Spina mentalis

Linea mylohyoidea

Fovea sublingualis

Fovea submandibularis

Trigonum retromolare

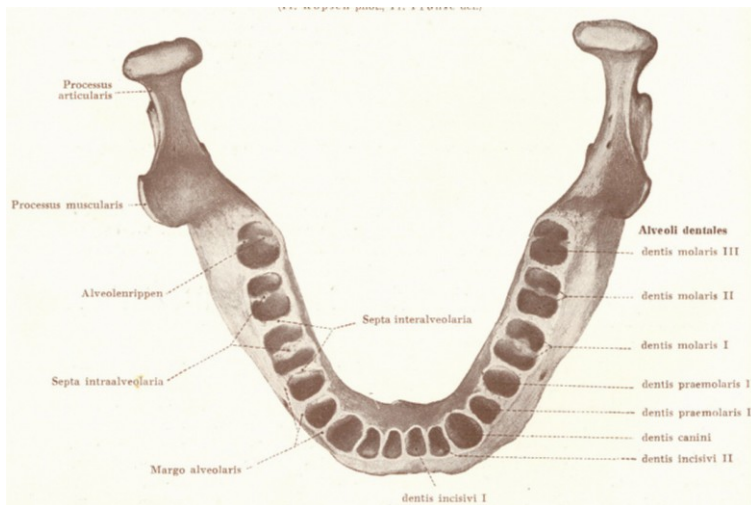


Corpus mandibulae (zevně)

Protuberantia mentalis

Foramen mentale

Alveoli dentales

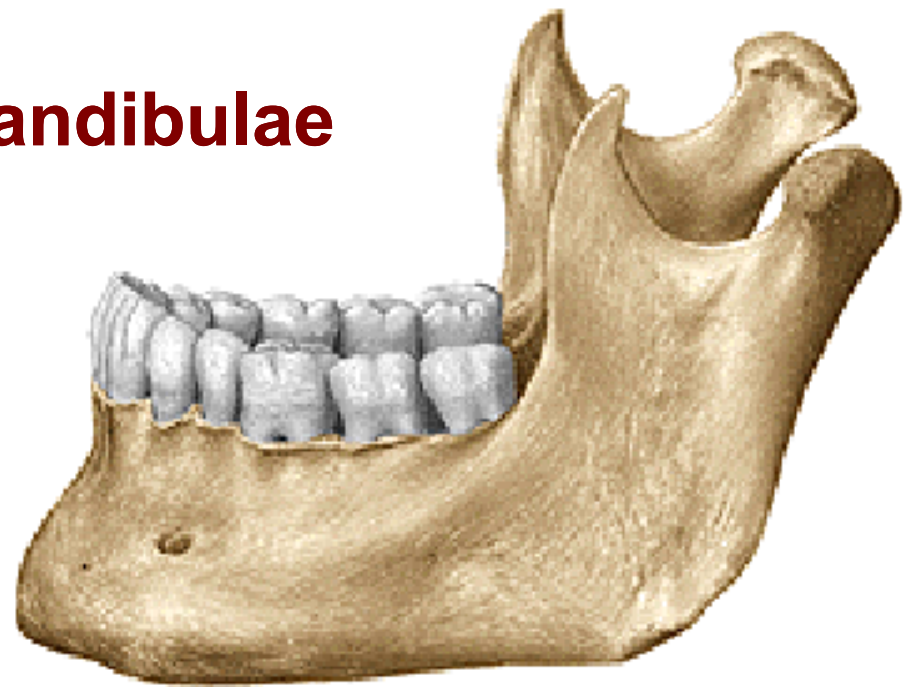


Ramus mandibulae

Processus condylaris
+ *Caput mandibulae*

Collum mandibulae
+ *Fovea pterygoidea*

Processus coronoideus



Foramen mandibulae
Canalis mandibulae

Sulcus mylohyoideus



Angulus mandibulae (120°-125°)

Tuberositas masseterica (zevně)

Tuberositas pterygoidea (zevnitř)



Mandibula novorozence



Mandibula starého člověka

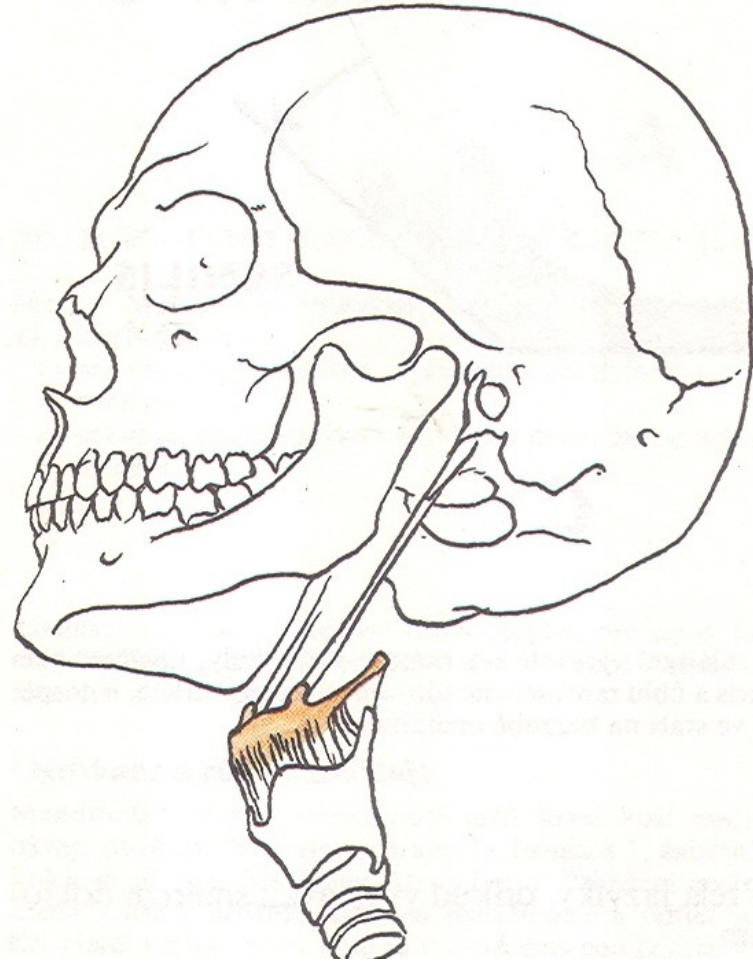
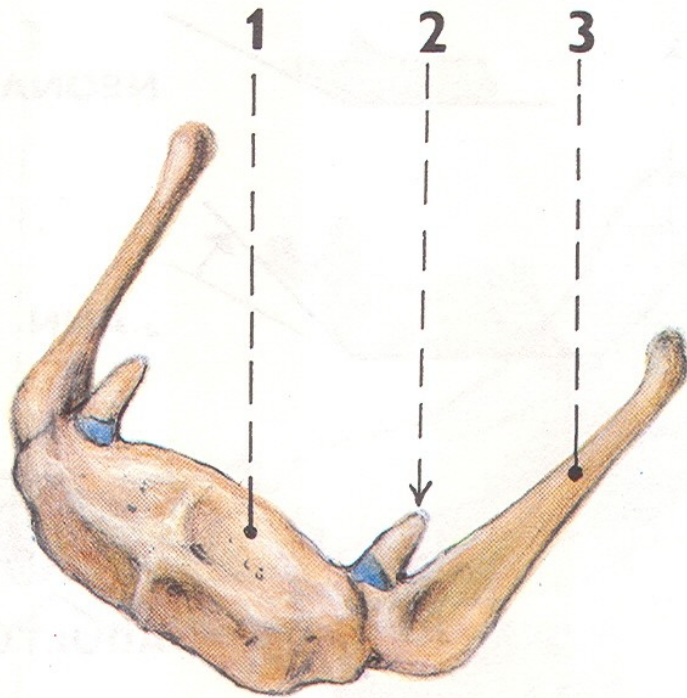


Os hyoideum (języłka)

Corpus

Cornua minora ossis hyoidei

Cornua majora ossis hyoidei



Použité obrázky byly převzaty z

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