

UNIVERSITAS CAROLINA PRAGENSIS

Univerzita Karlova v Praze – 1. lékařská fakulta

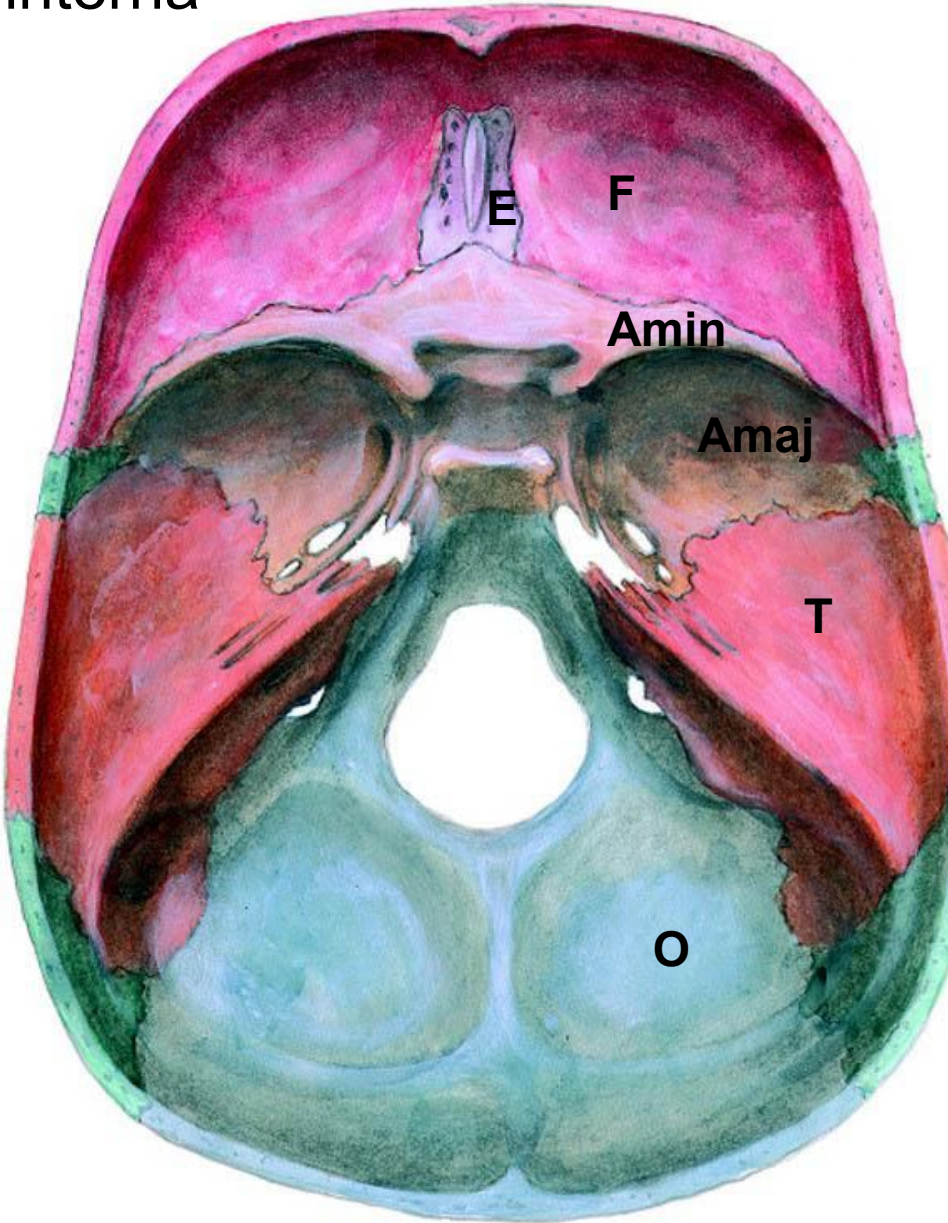
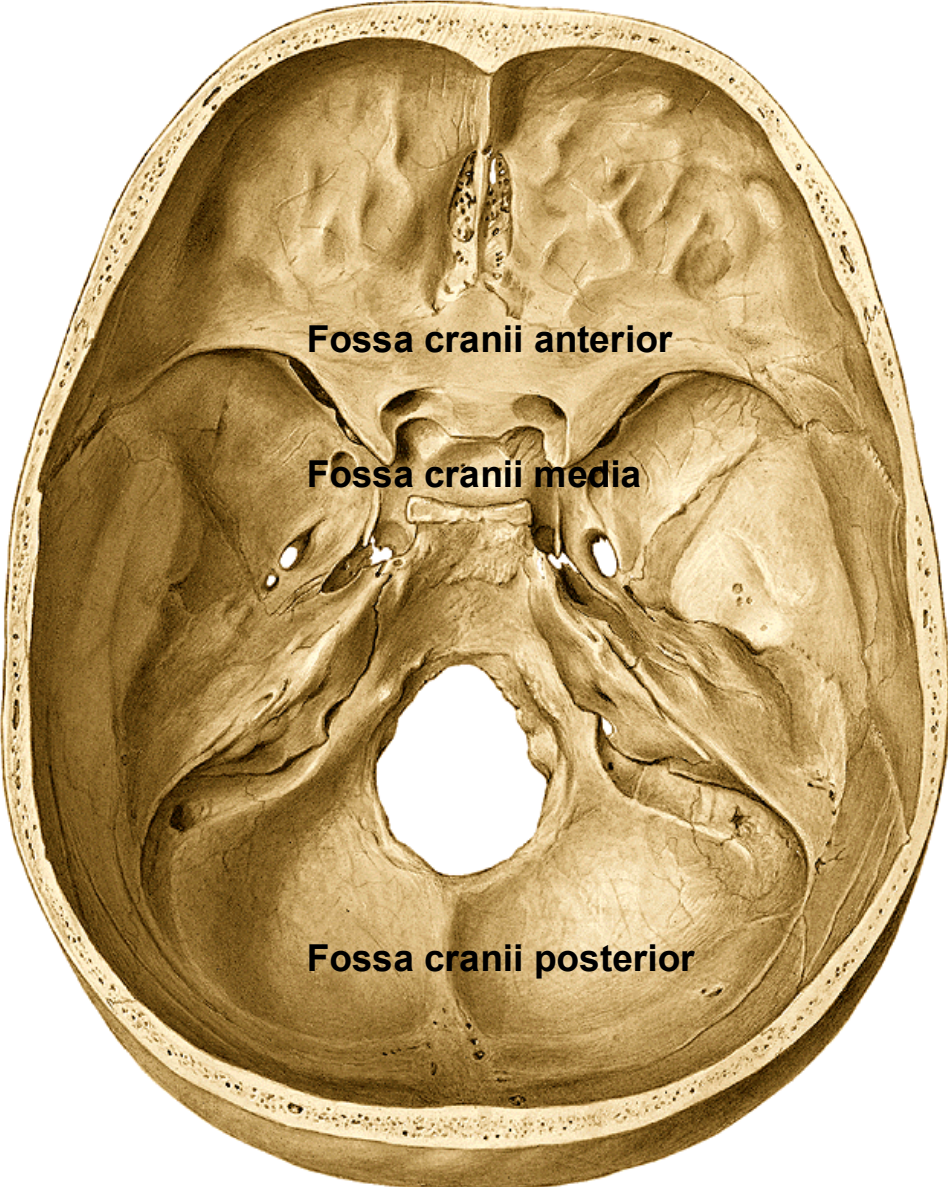


Dutiny a prostory lebky, paranasální dutiny, prostupy bazí lebky

Anatomický ústav

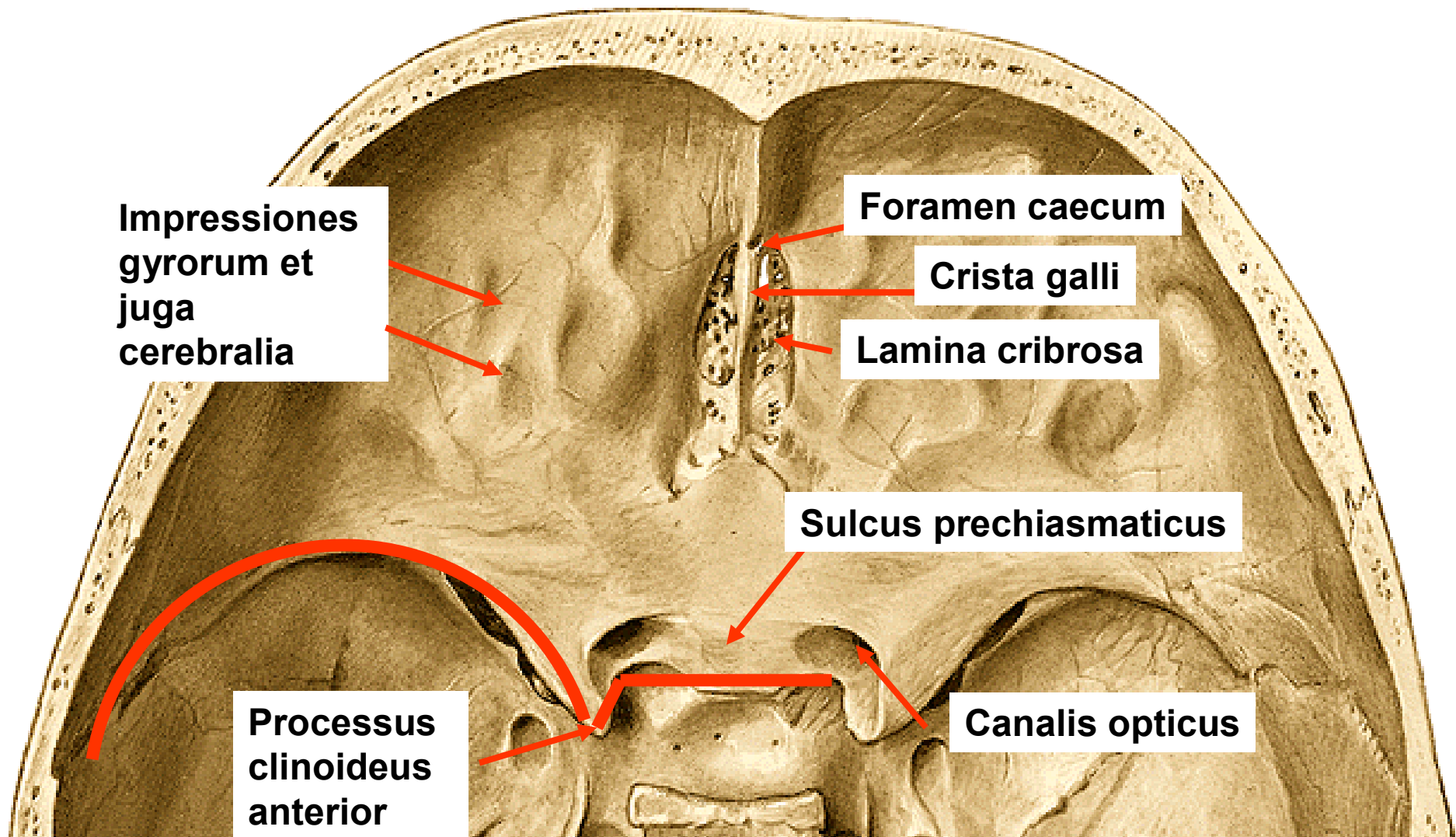
Autor: Veronika Němcová
Obor: lékařství – Anatomie 1

Basis cranii interna

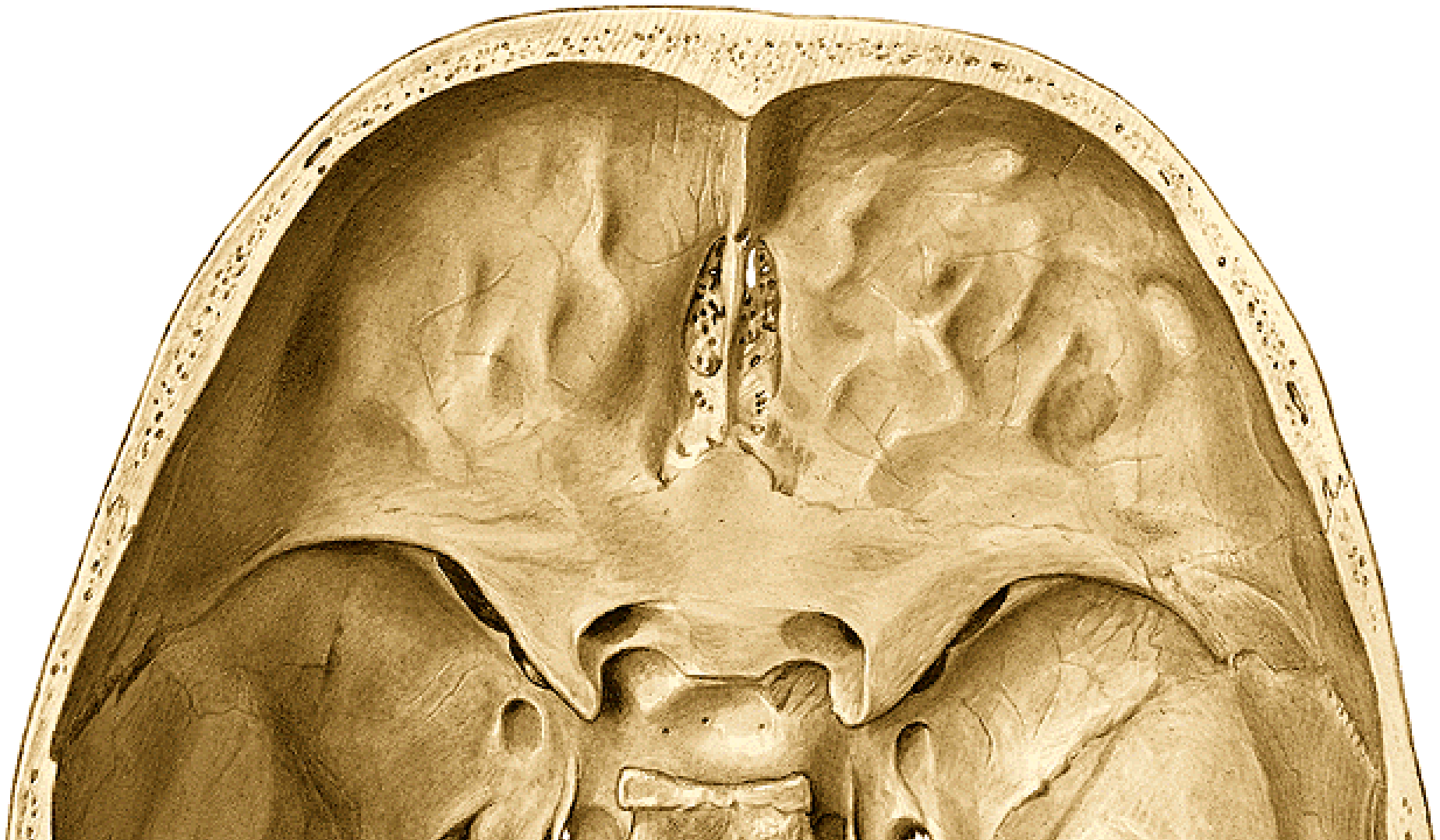


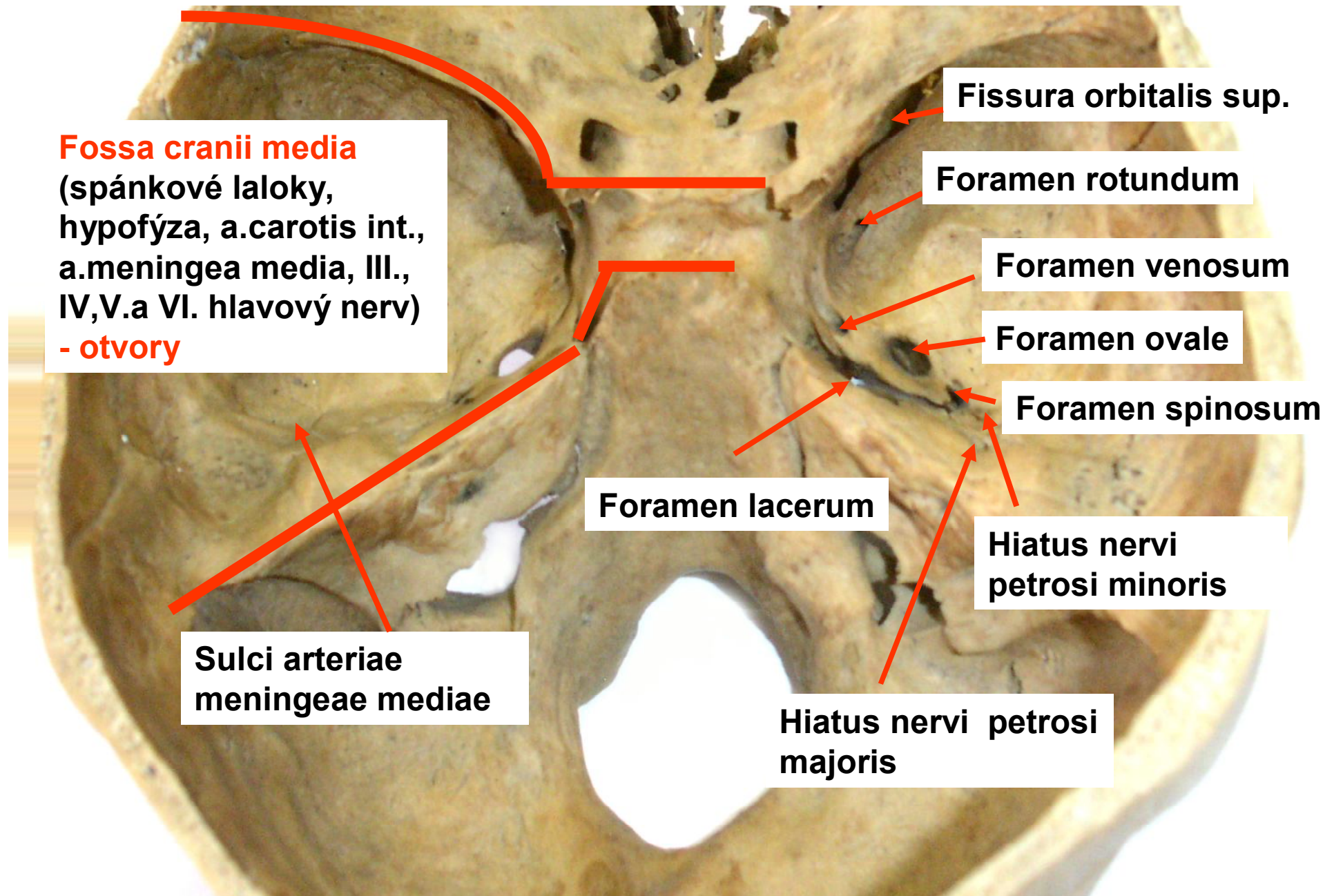
Fossa cranii anterior

(čelní laloky mozku, I. a II. hlavový nerv)

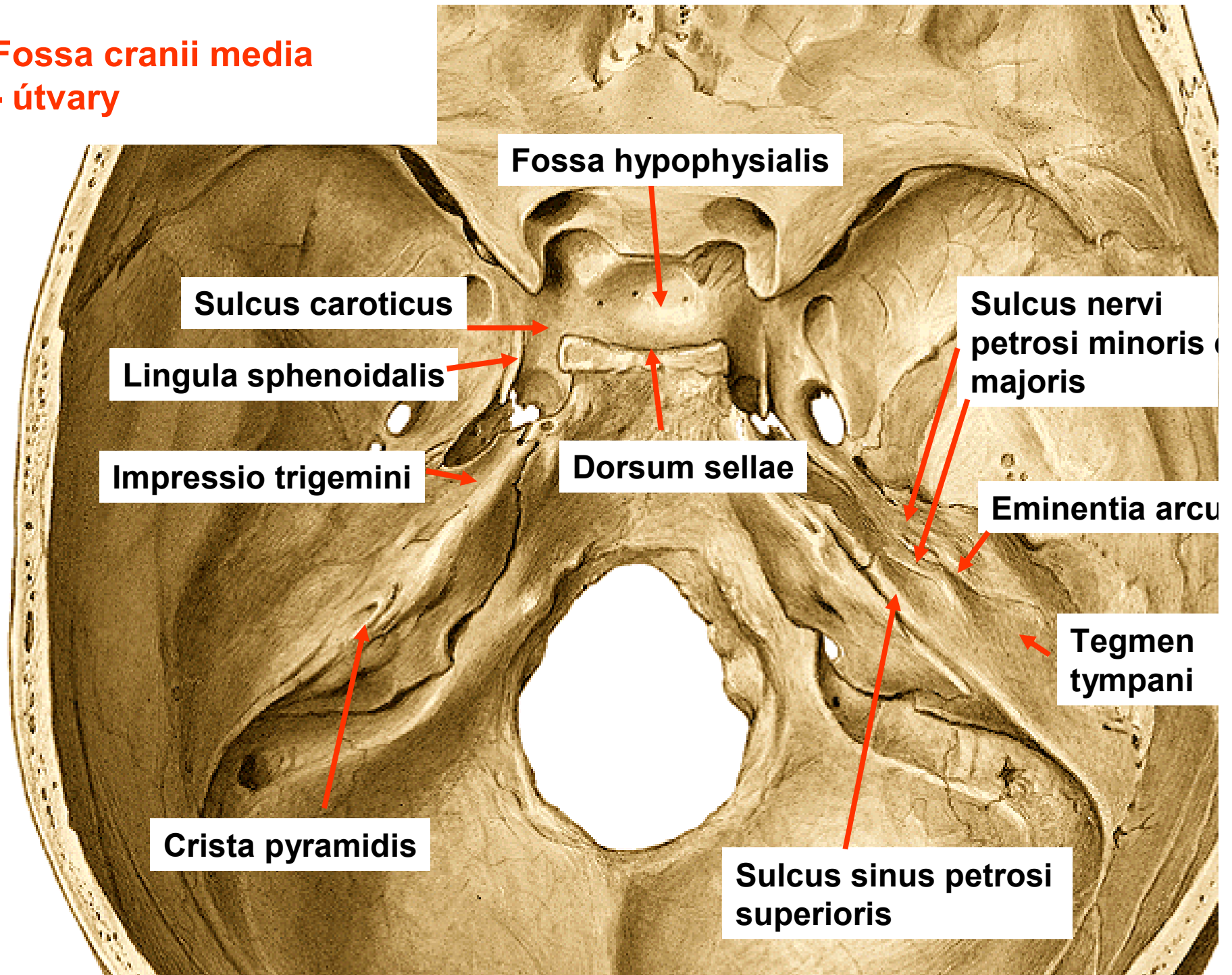


Opakování fossa cranii ant





**Fossa cranii media
- útvary**



Opakování - fossa cranii media



Fossa cranii posterior - otvory

mozkový kmen, mozeček,
týlní laloky, velké žilní
splavy, a.vertebralis, otvory
pro VII. -XII. hlavový nerv

Apertura
externa
aquaeductus
vestibuli

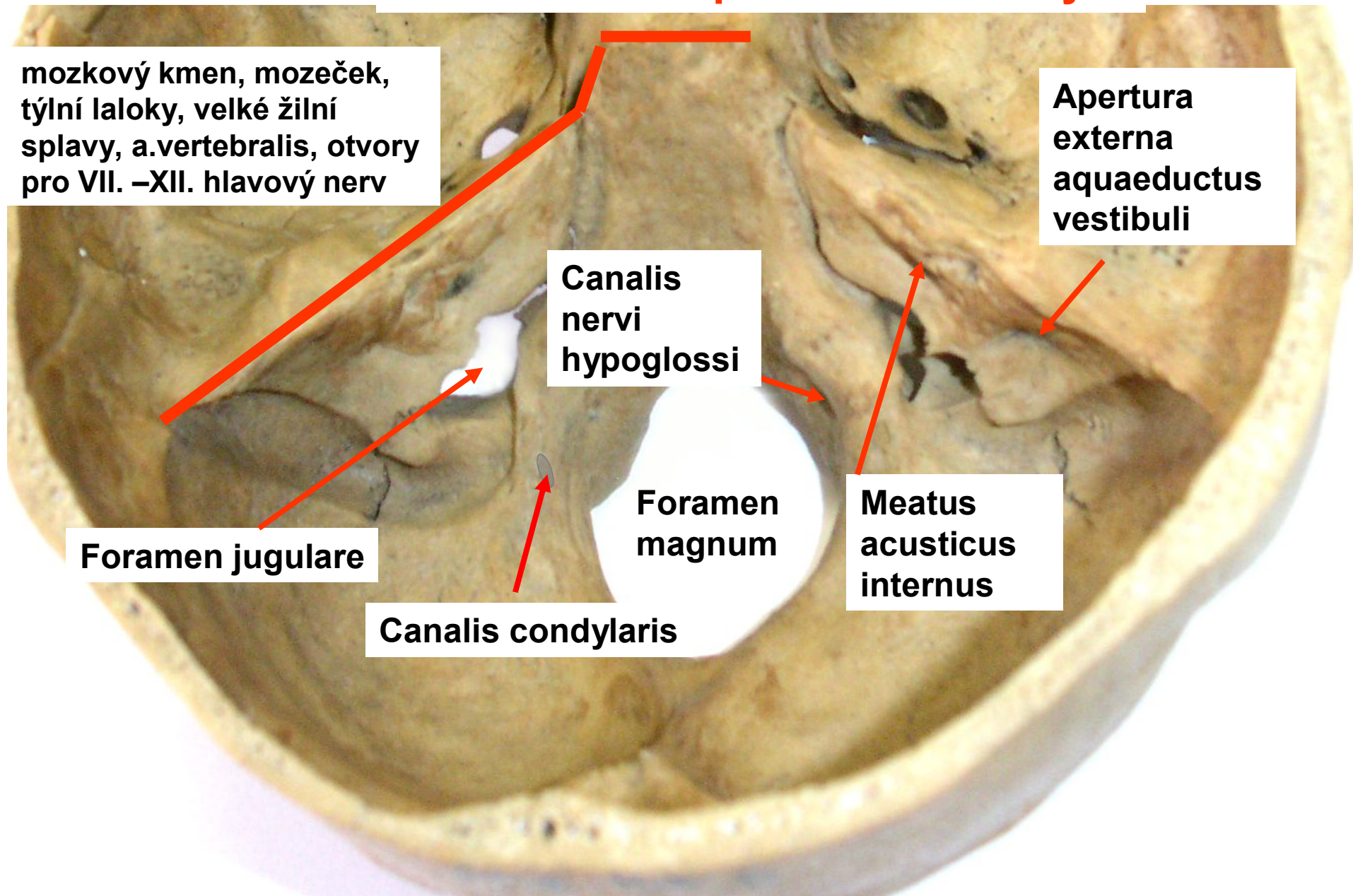
Canalis
nervi
hypoglossi

Foramen jugulare

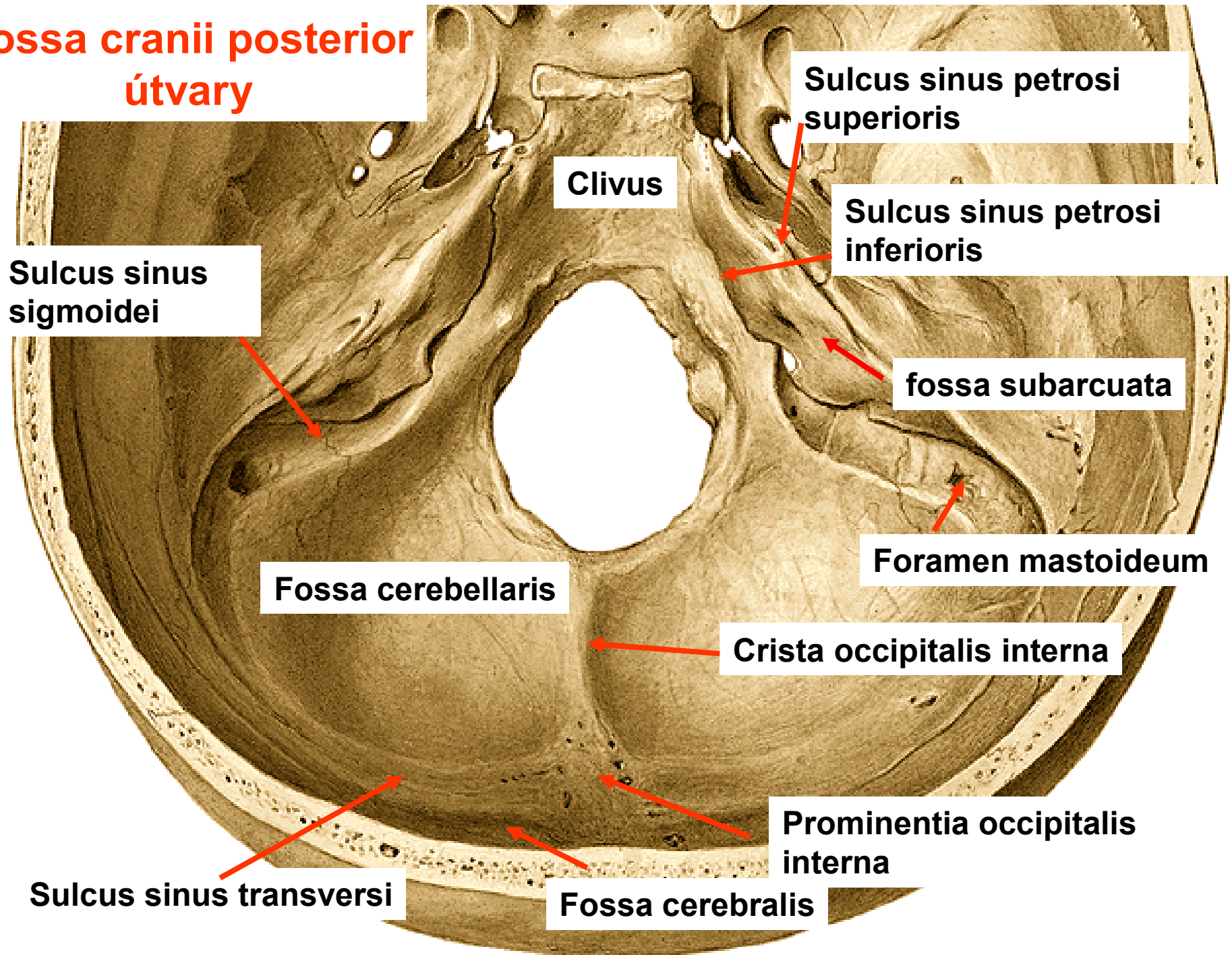
Foramen
magnum

Meatus
acusticus
internus

Canalis condylaris

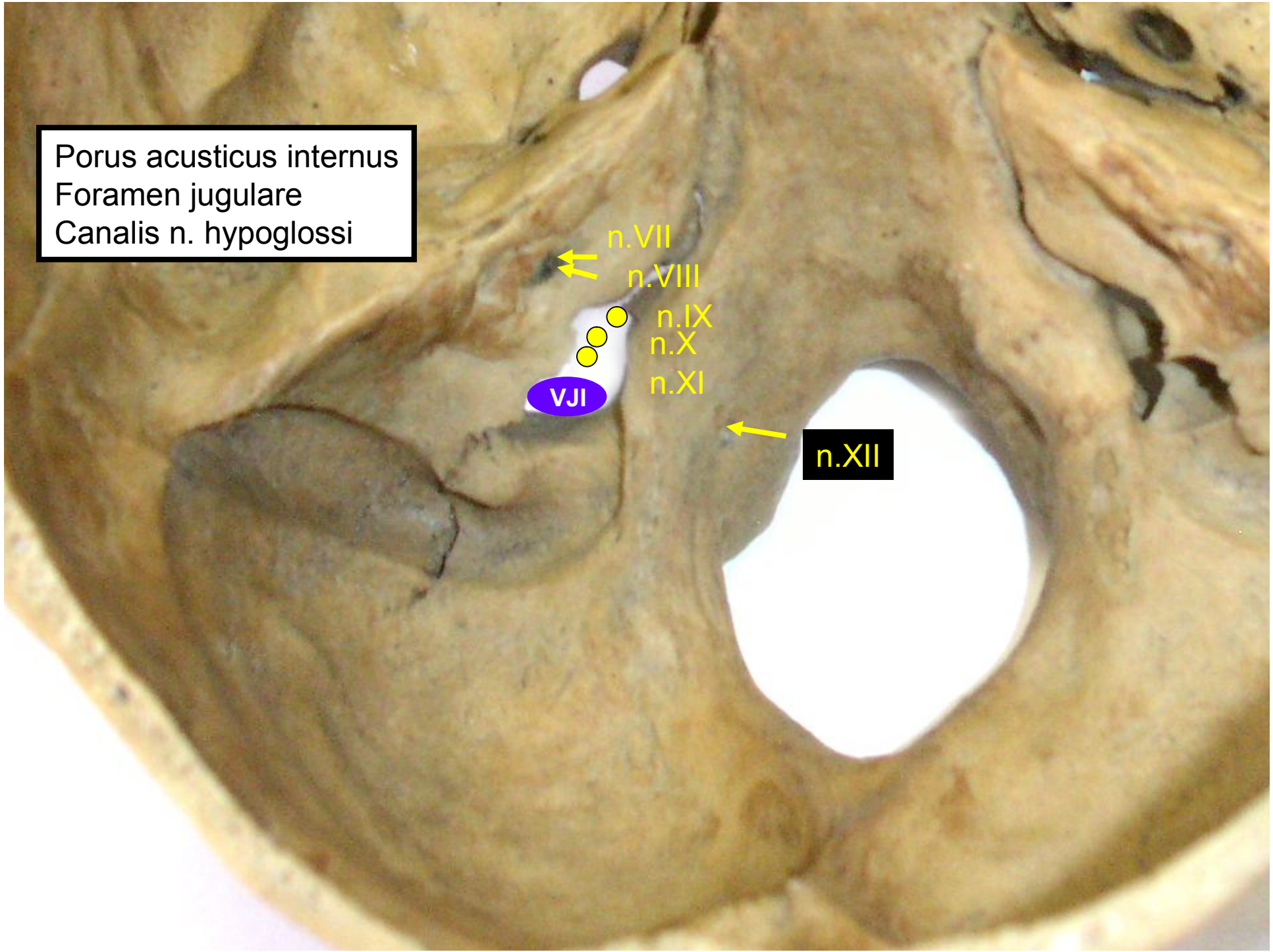


Fossa cranii posterior útváry



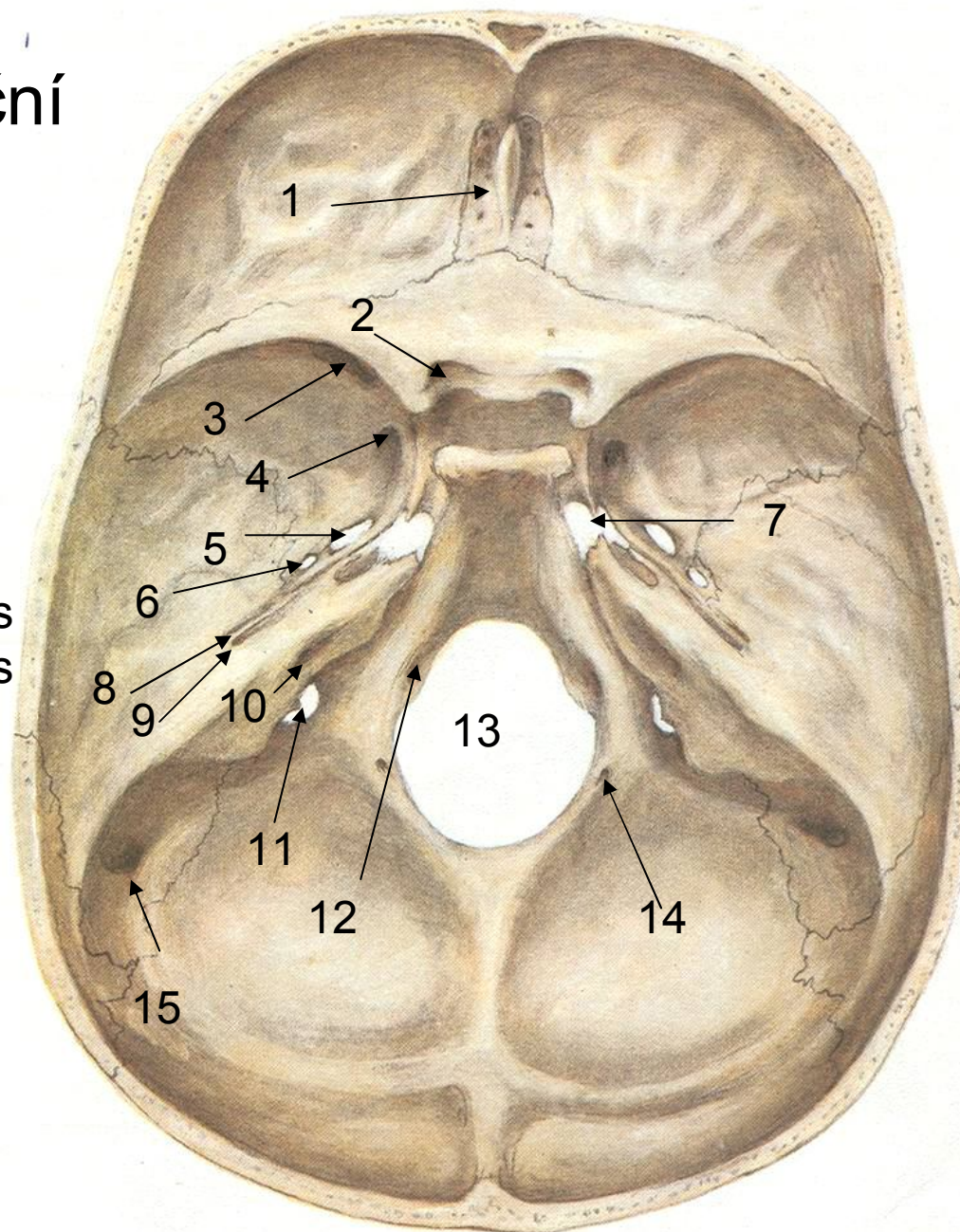
Porus acusticus internus
Foramen jugulare
Canalis n. hypoglossi

n.VII
n.VIII
n.IX
n.X
n.XI
VXI
n.XII



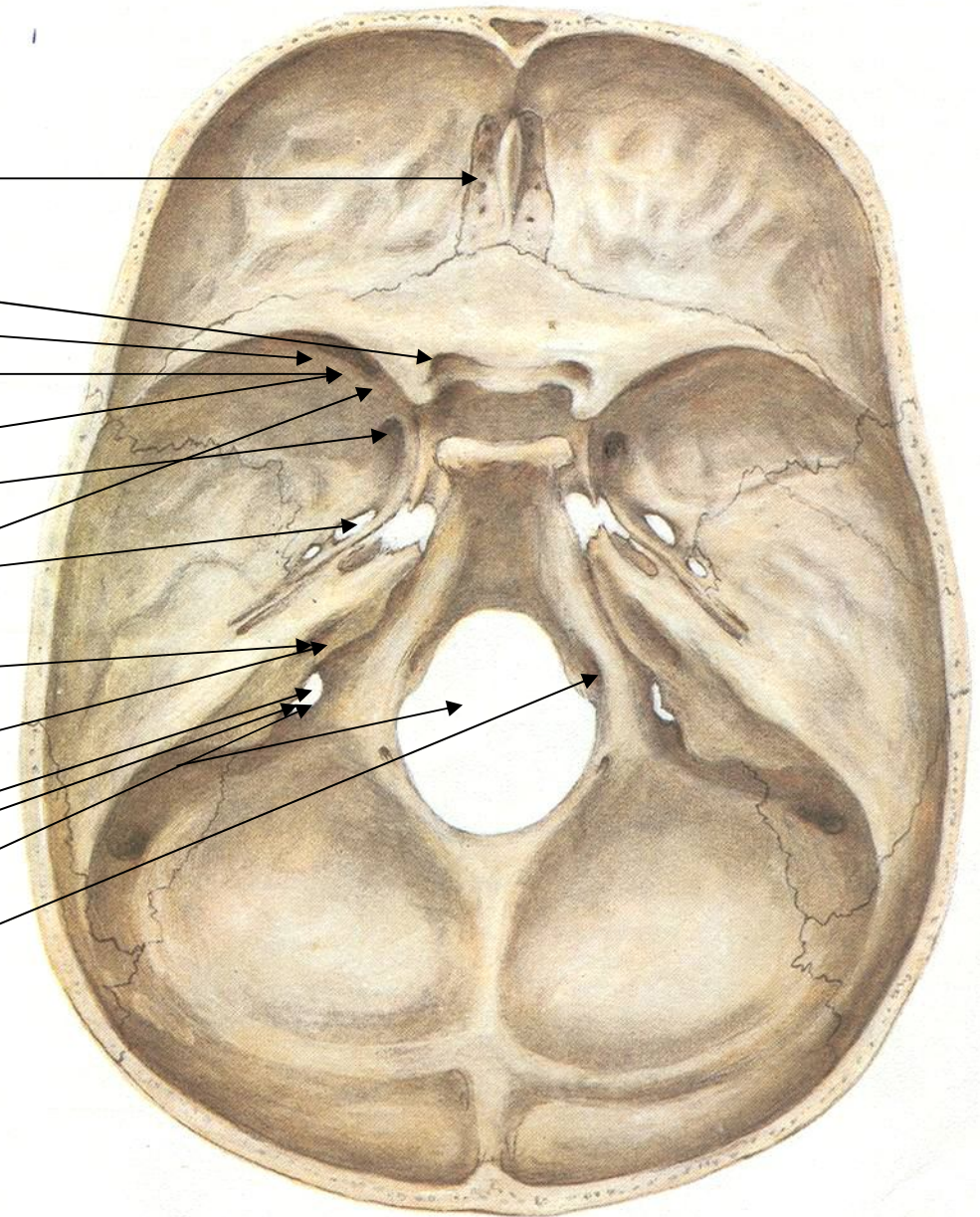
Otvory v basi lebeční

- 1-lamina cribrosa
- 2-canalis opticus
- 3-fissura orbitalis superior
- 4-foramen rotundum
- 5-foramen ovale
- 6-foramen spinosum
- 7-foramen lacerum
- 8-hiatus nervi petrosi minoris
- 9-hiatus nervi petrosi majoris
- 10-porus acusticus internus
- 11-foramen jugulare
- 12-canalis nervi hypoglossi
- 13-foramen magnum
- 14-canalis condylaris
- 15-foramen mastoideum



Nervi craniales (hlavové nervy)

- I. nn. olfactorii
- II. n. opticus
- III. n. oculomotorius
- IV. n. trochlearis
- V. n. trigeminus
 - 1. ophthalmicus
 - 2. maxillaris
 - 3. mandibularis
- VI. nervus abducens
- VII. nervus facialis
- VIII. nervus vestibulocochlearis
- IX. nervus glossopharyngeus
- X. nervus vagus
- XI. nervus accessorius
- XII. nervus hypoglossus



Basis cranii interna

Fossa cranii anterior

lobi frontales, n.I. a n.II.,
falx cerebri
canalis orbitocranialis

Zadní okraj alae minores a sulcus
prechiasmaticus

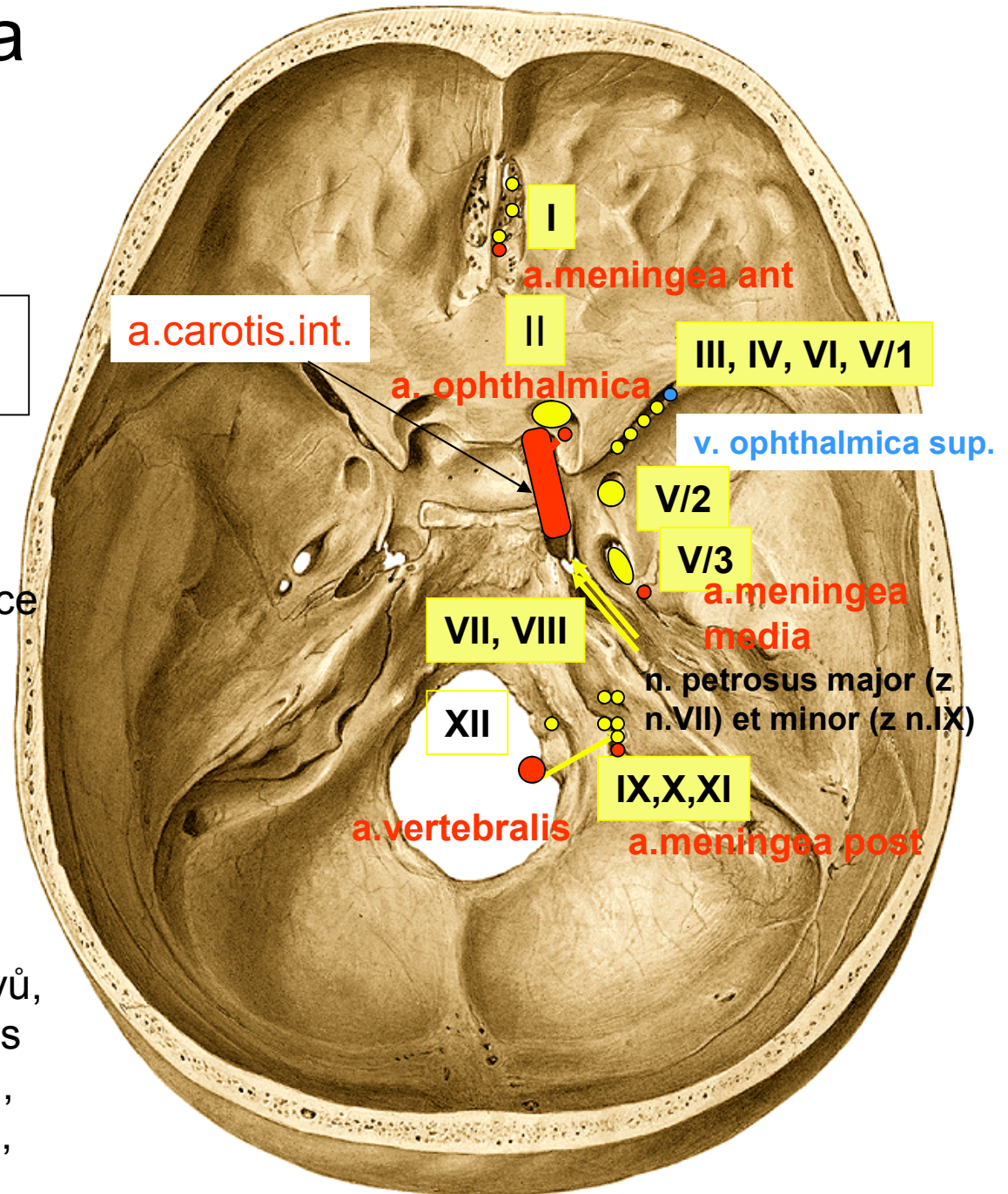
Fossa cranii media

lobi temporales,
hypophysis cerebri,
okohybné nervy a V/1 do očnice
větve n.V, sinus cavernosus,
a.meningea media,
synchondrosis sphenopetrosa

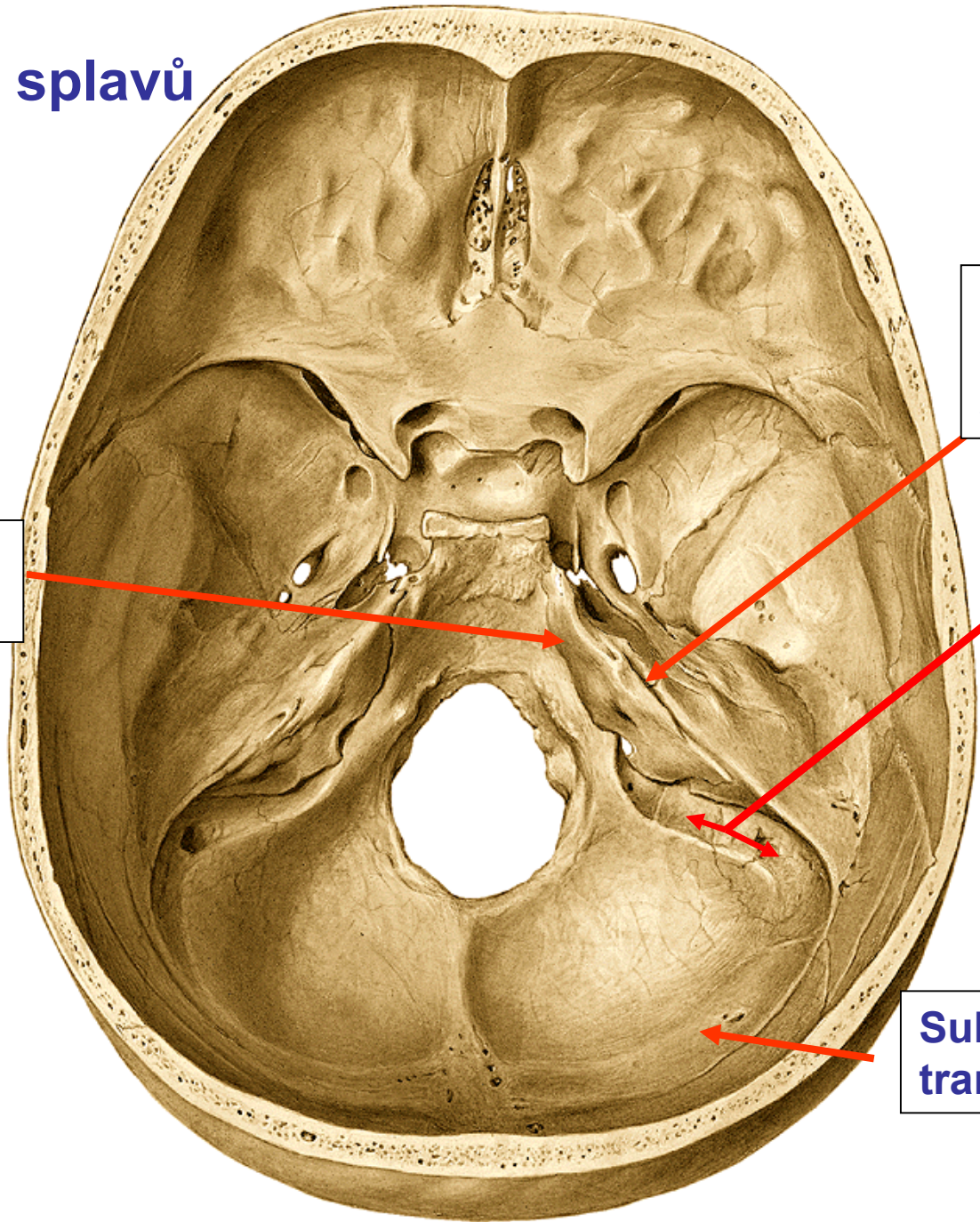
Crista pyramidis, dorsum sellae

Fossa cranii posterior

mozkový kmen, mozeček, lobi
occipitales, otisky žilních splavů,
emissaria, n.VII a n.VIII, ductus
endolymphaticus, nn.IX,X a XI,
mícha a n.XI a aa. vertebrales,
n.XII



Otisky žilních splavů

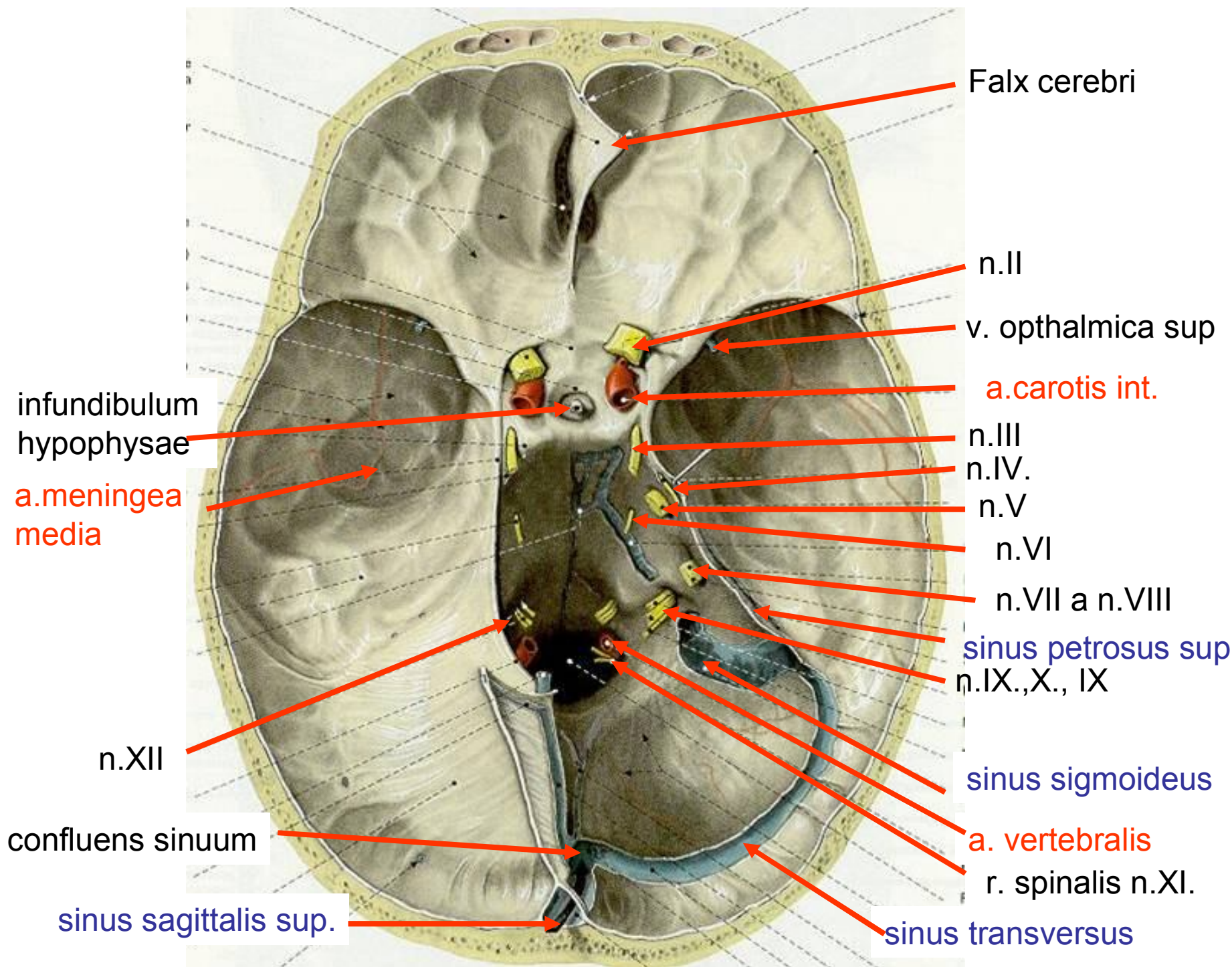


Sulcus sinus petrosi superioris

Sulcus sinus sigmoidei

Sulcus sinus transversi

Sulcus sinus petrosi inferioris



Falx cerebri

n.II

v. ophthalmica sup

a.carotis int.

n.III

n.IV.

n.V

n.VI

n.VII a n.VIII

sinus petrosus sup

n.IX.,X., IX

sinus sigmoideus

a. vertebralis

r. spinalis n.XI.

sinus transversus

infundibulum hypophysae

a.meningea media

n.XII

confluens sinuum

sinus sagittalis sup.

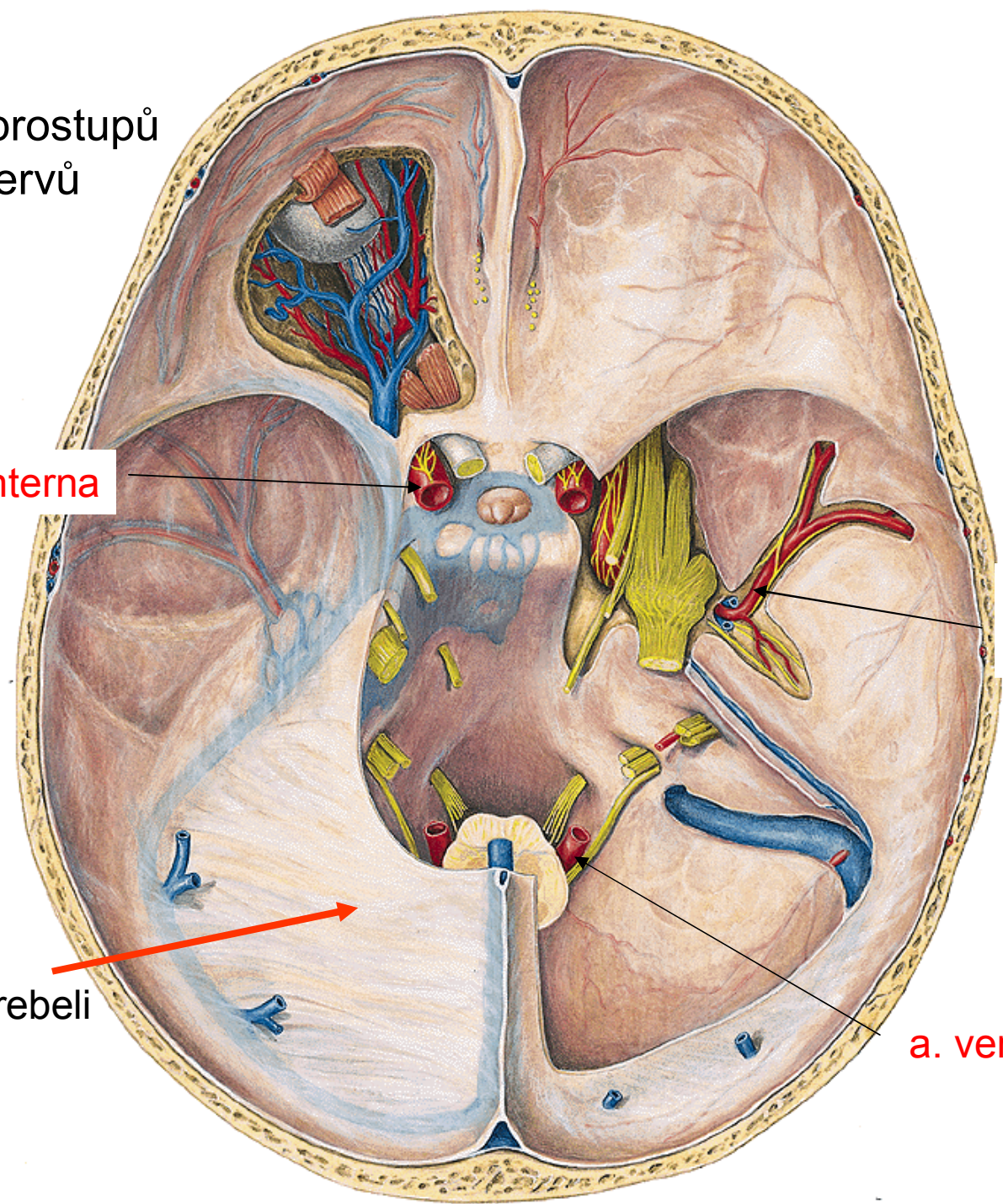
Opakování prostupů
hlavových nervů

a. carotis interna

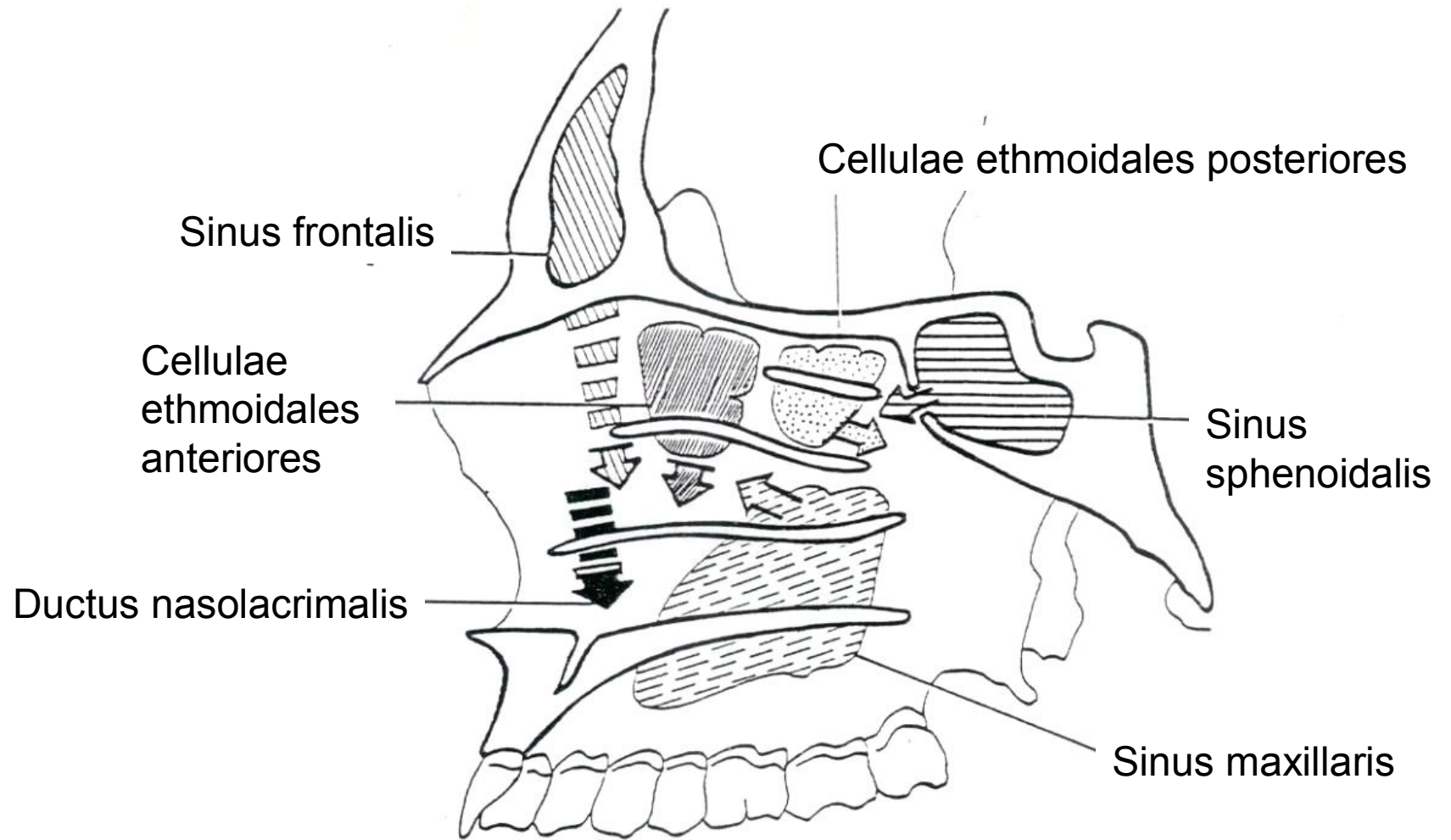
a. meningea
media

Tentorium cerebelli

a. vertebralis



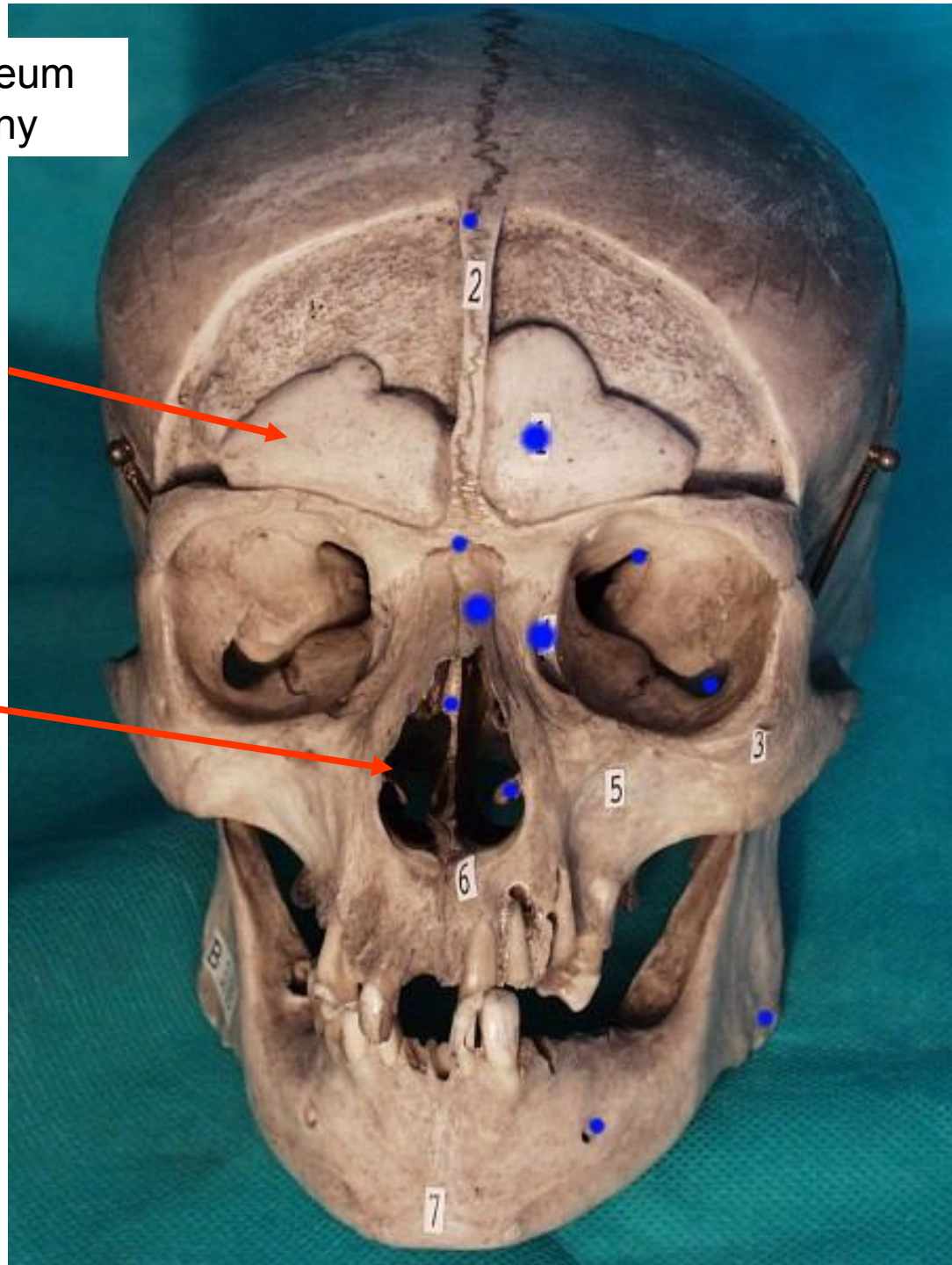
Cavum nasi osseum paranasální dutiny



Cavum nasi osseum
paranasální dutiny

Sinus frontalis

Apertura
piriformis nasi



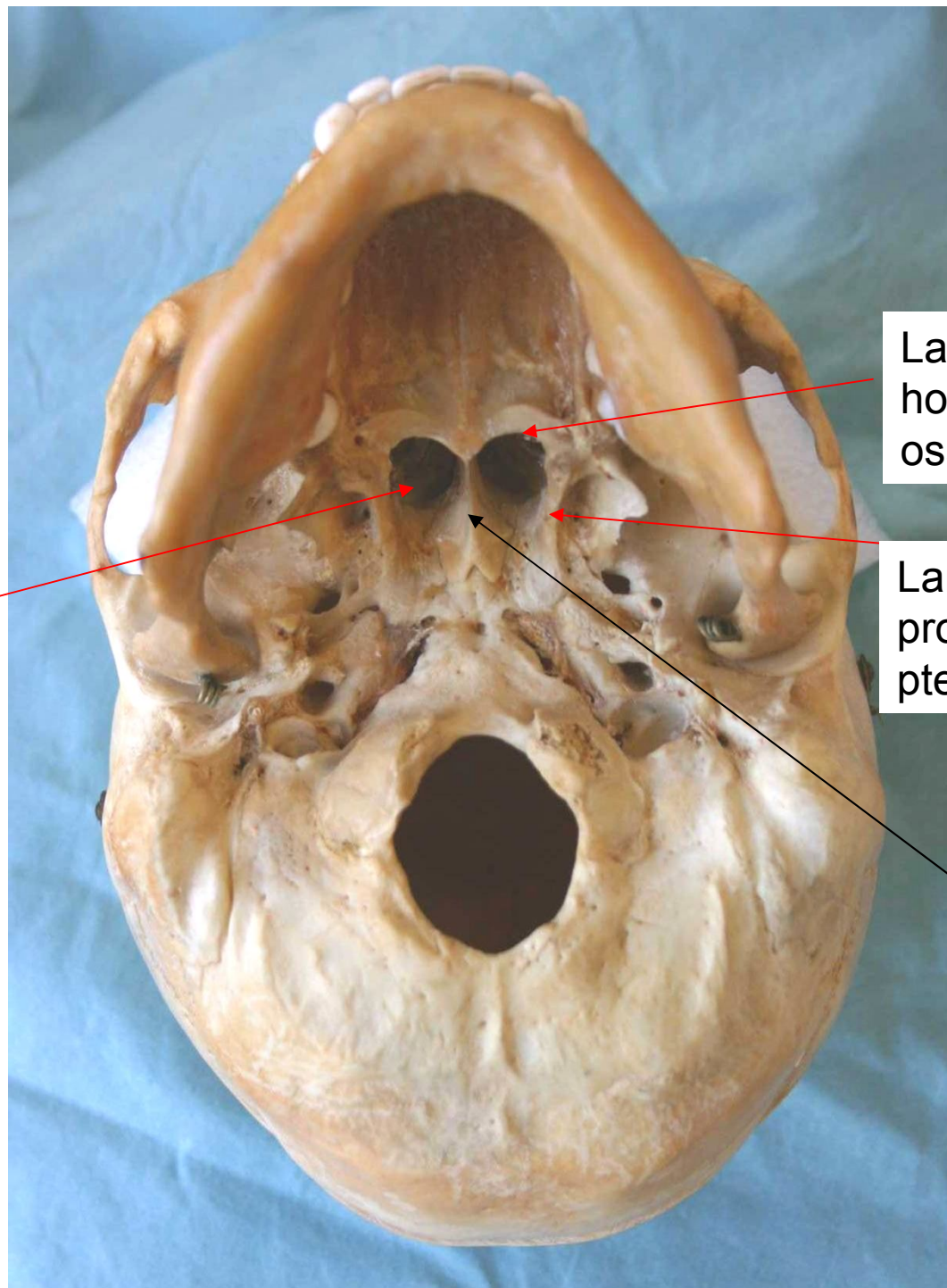
Ohraničení choan

choana

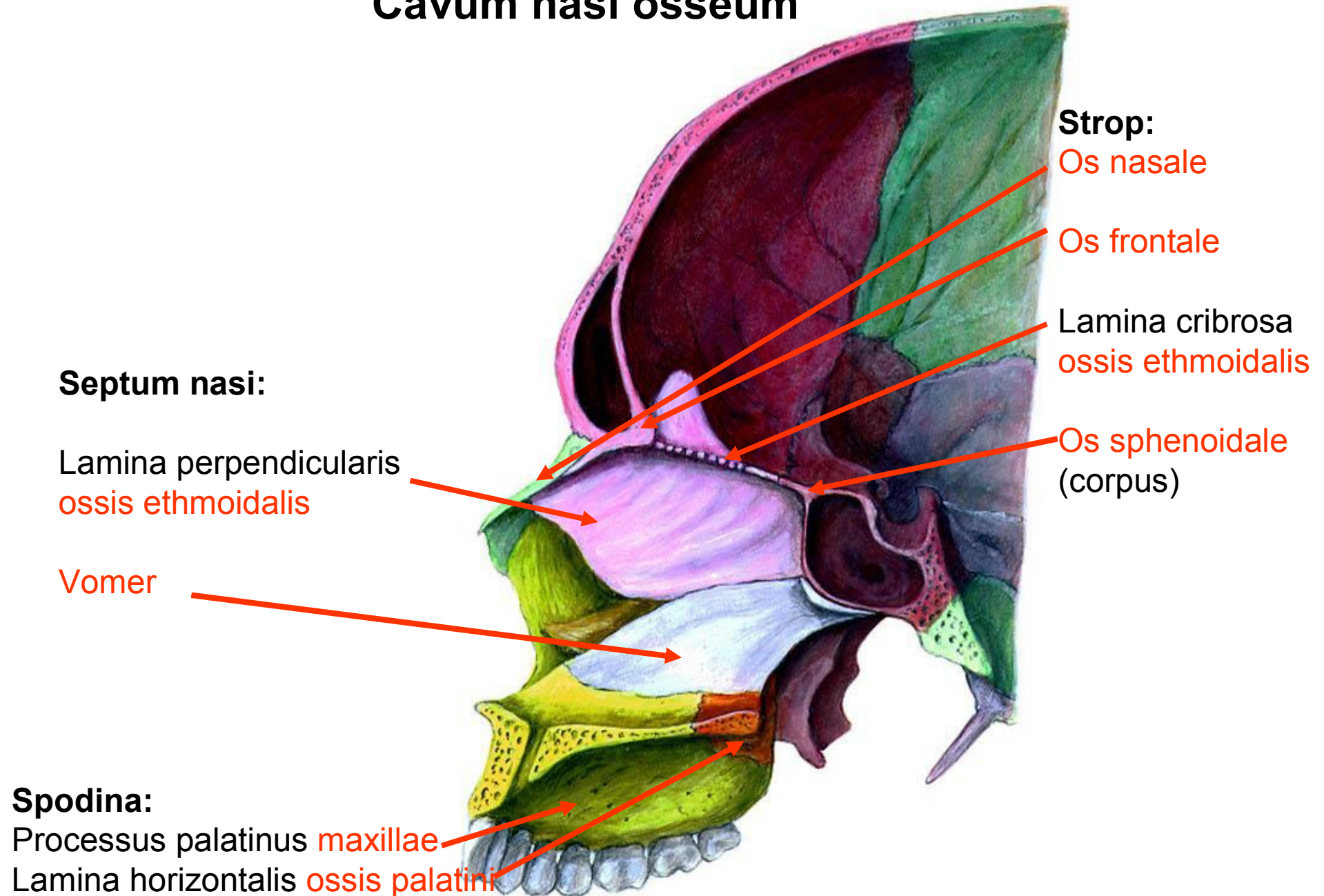
Lamina
horizontalis
ossis palatini

Lamina medialis
processus
pterygoidei

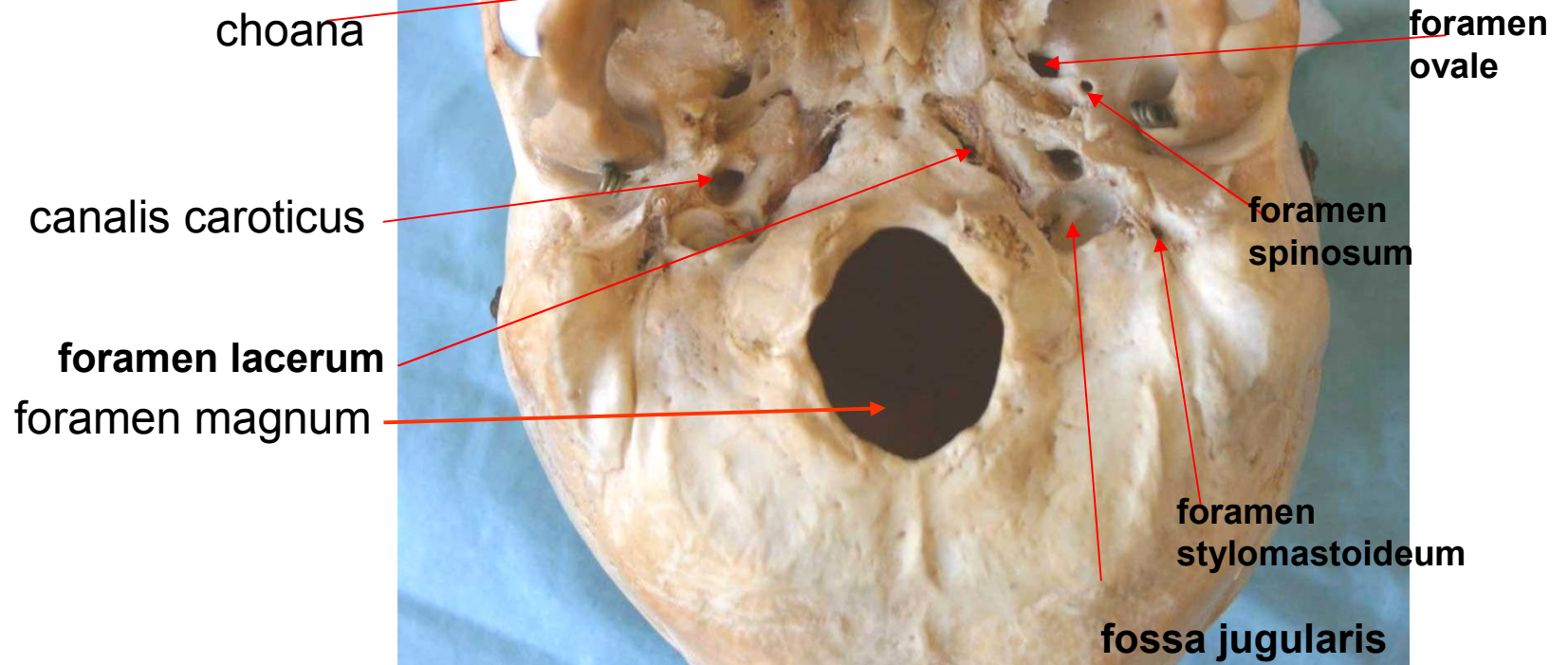
vomer



Cavum nasi osseum



Otvory na basis cranii externa



Boční stěna cavum nasi

Processus frontalis et
corpus maxillae

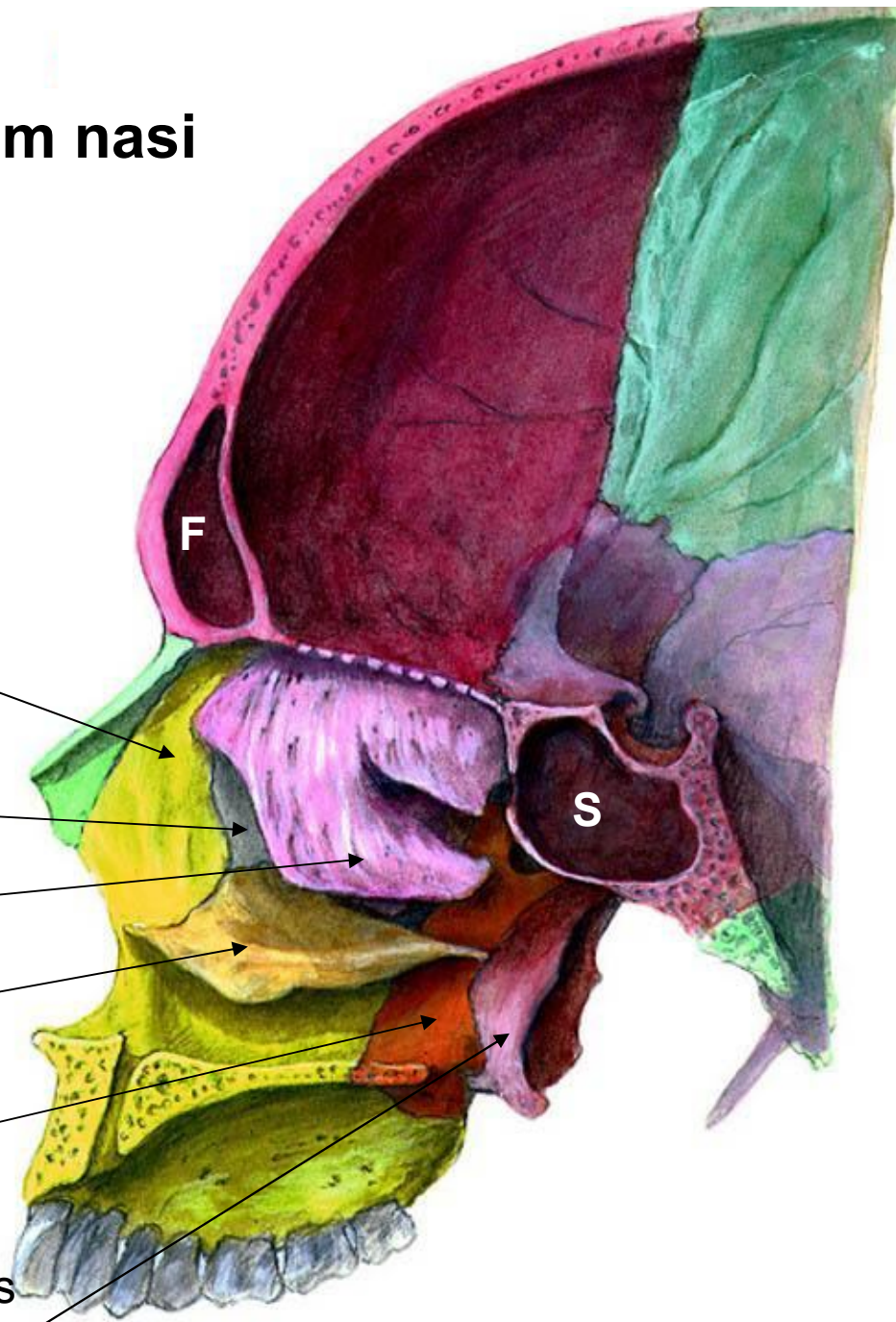
os lacrimale

os ethmoidale

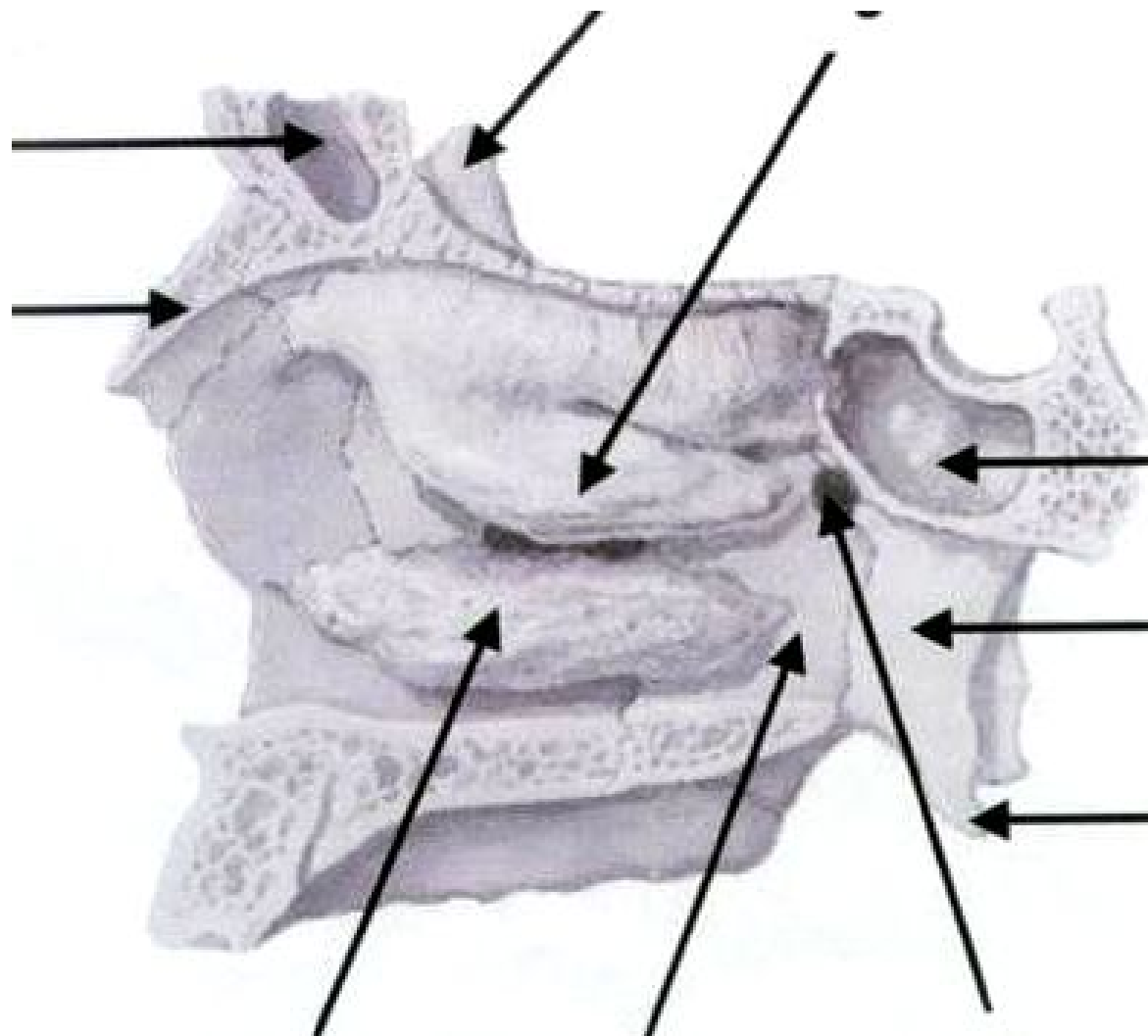
concha nasalis inferior

Lamina perpendicularis
ossis palatini

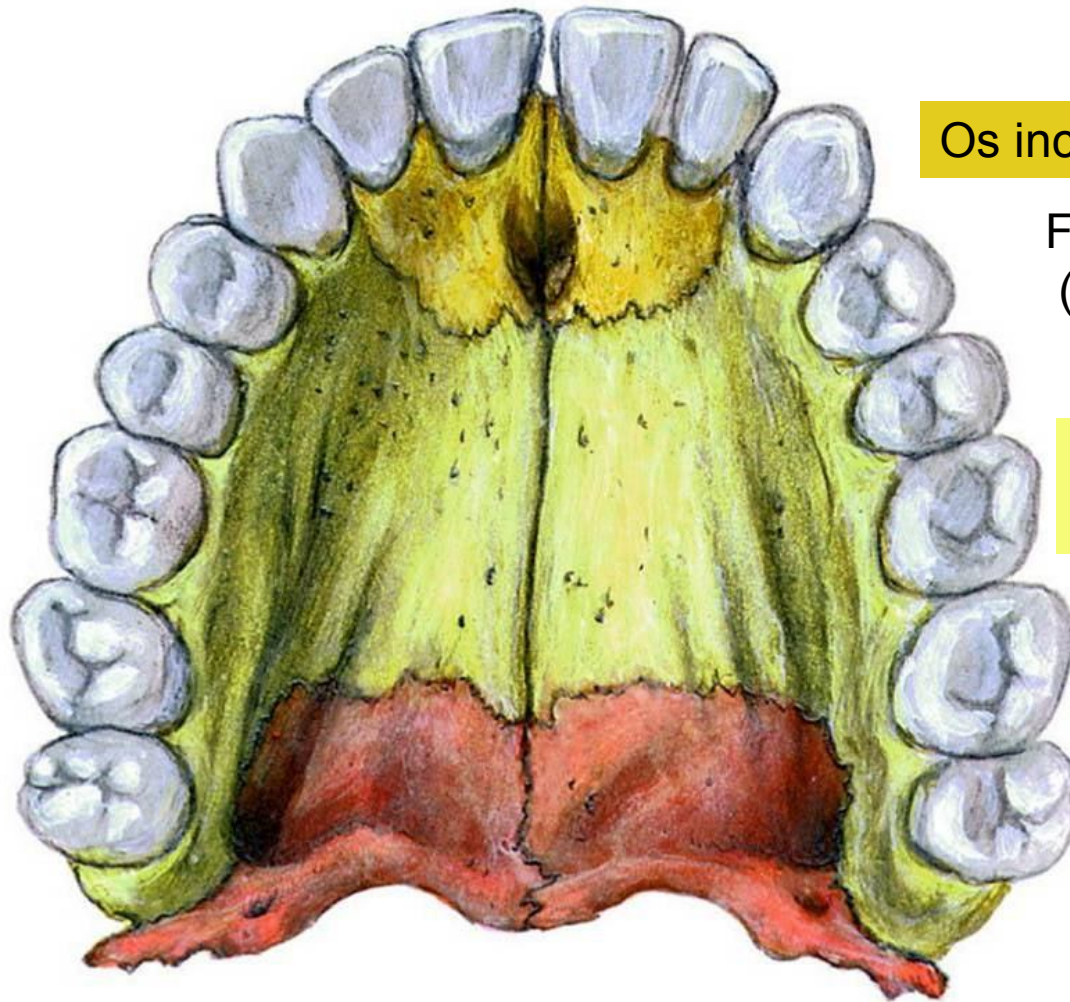
Lamina medialis processus
pterygoidei



Cavum nasi osseum - opakování



Palatum durum



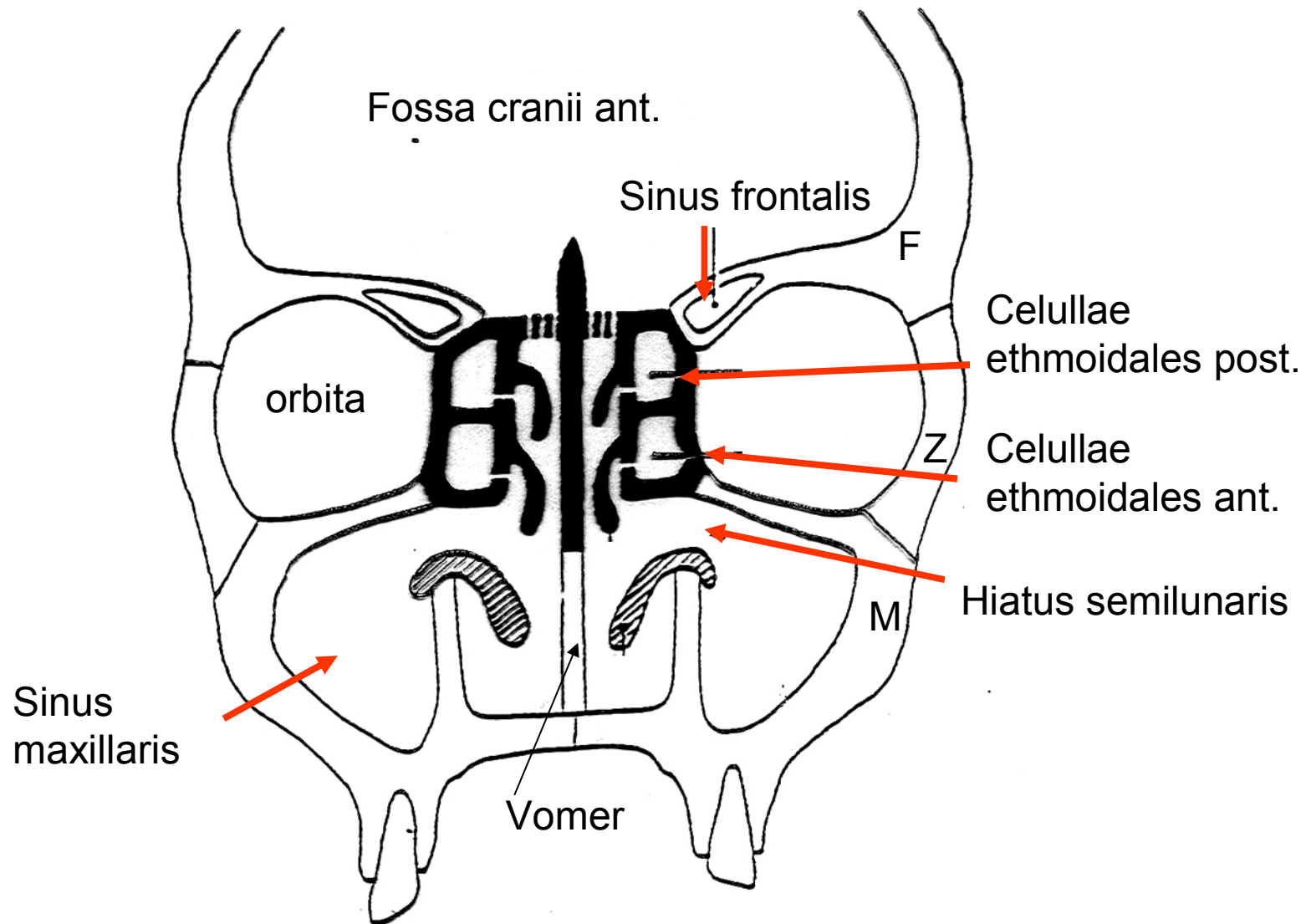
Os incisivum

Foramen incisivum
(nervus nasopalatinus)

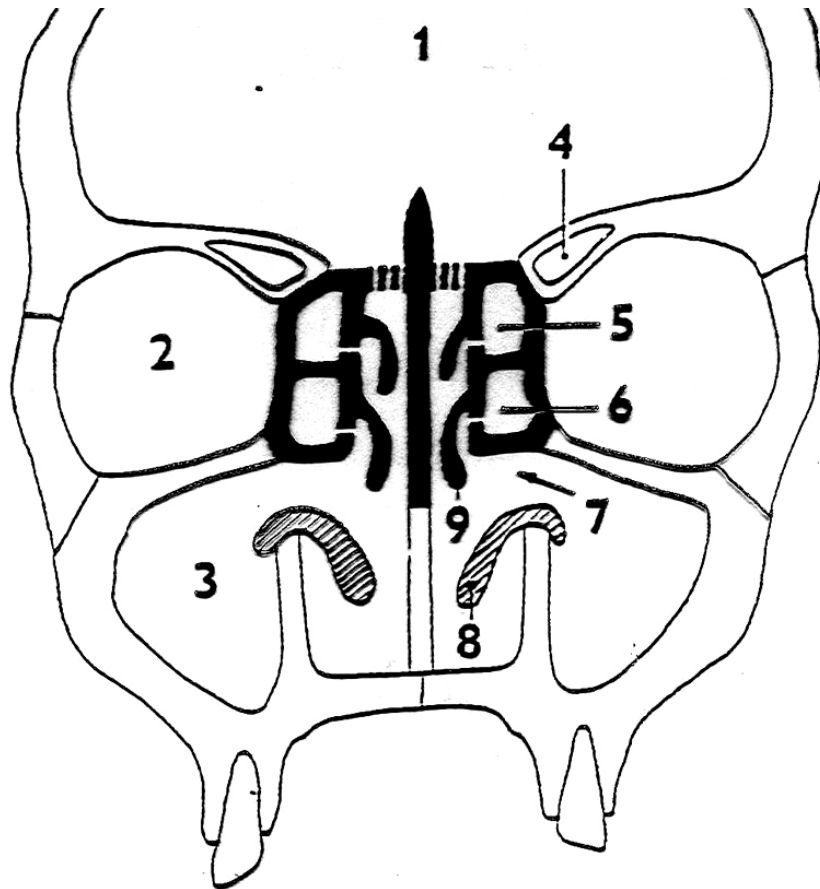
Processus palatinus
maxillae

Lamina horizontalis
ossis palatini

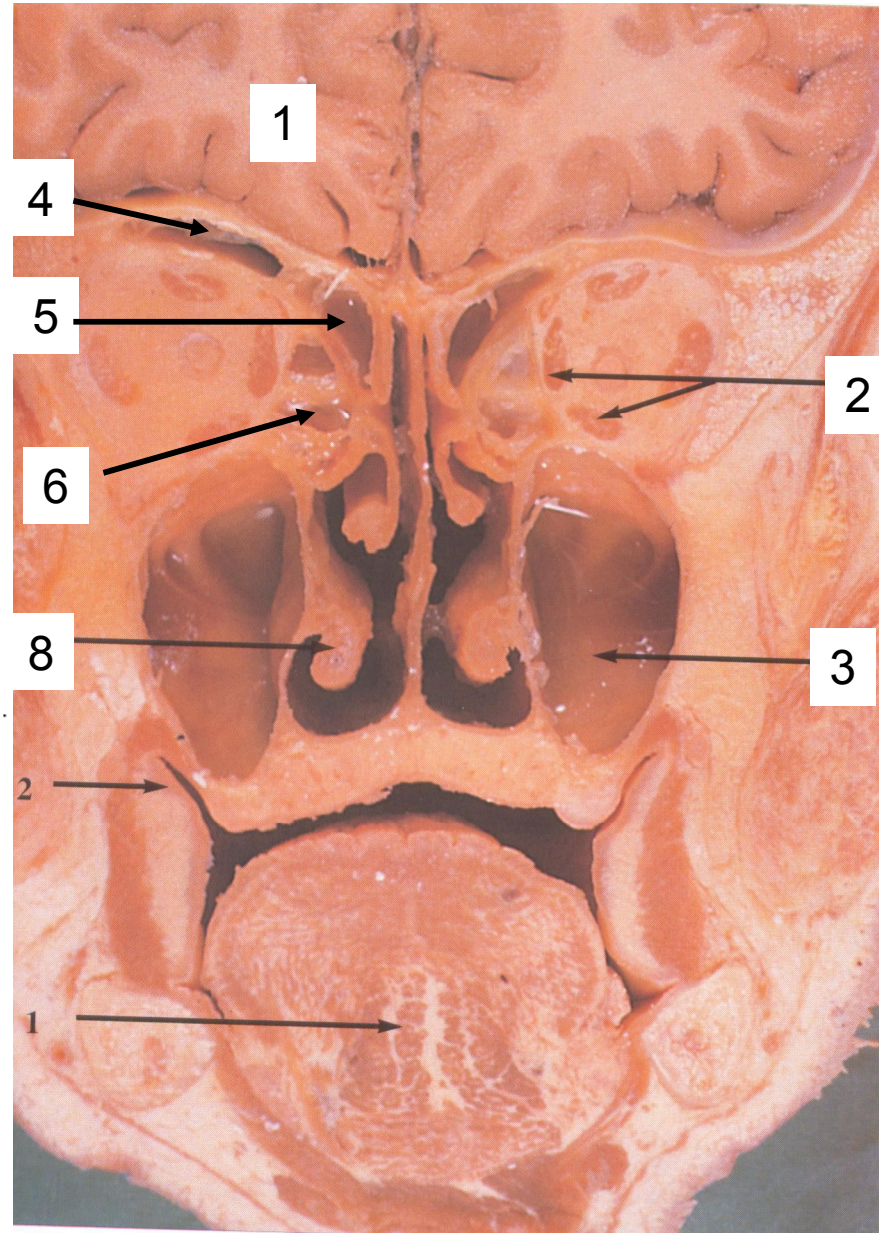
Frontální řez přes sinus maxillaris



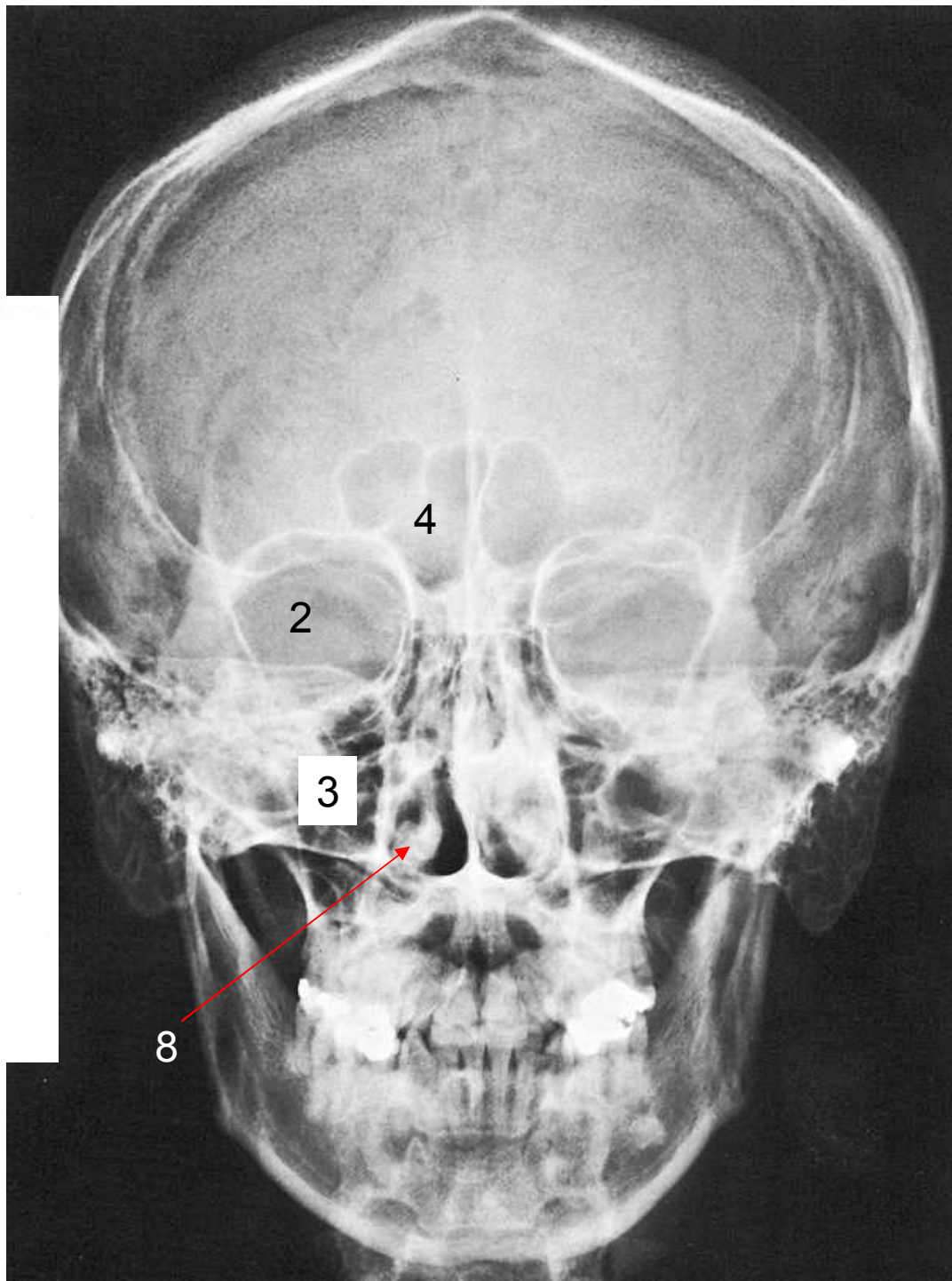
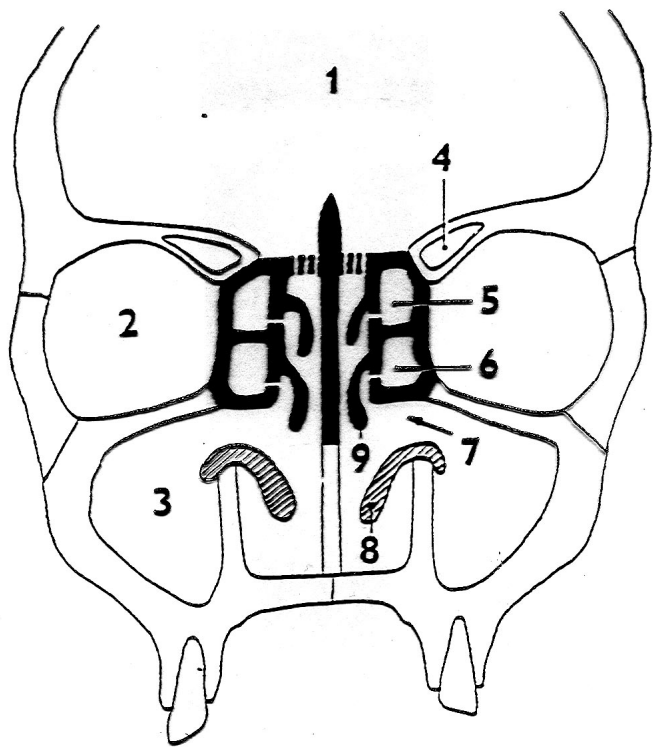
Frontální řez přes sinus maxillaris



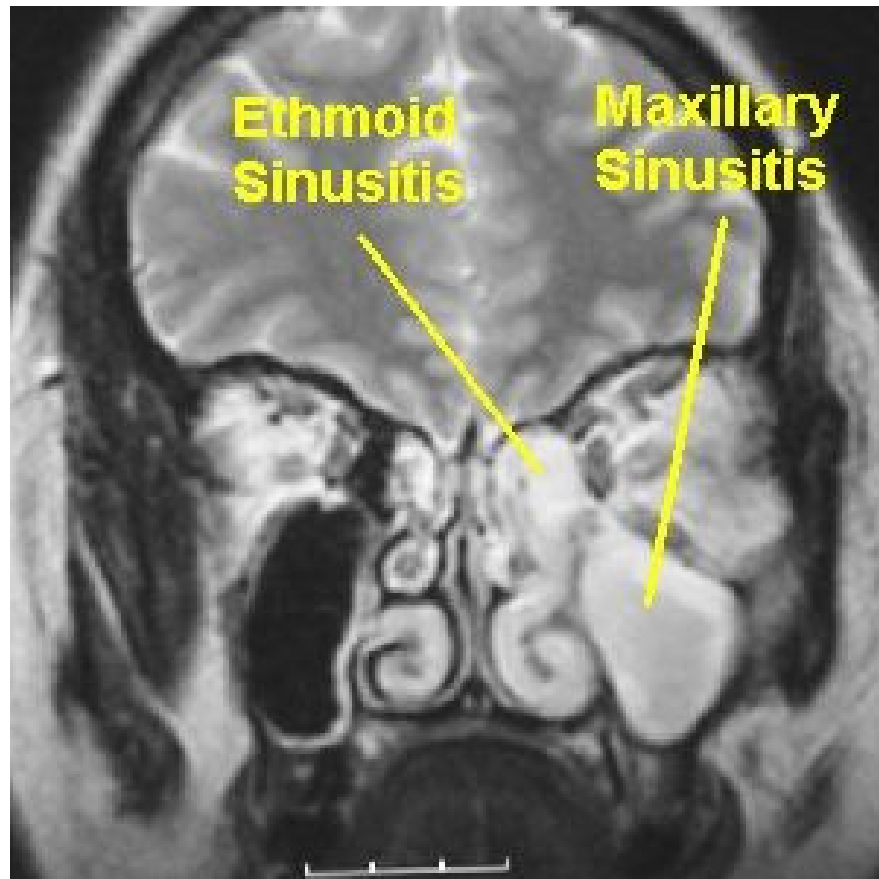
- 1-cavum cranii
- 2-orbita
- 3-sinus maxillaris
- 4-sinus frontalis
- 5-celullae ethmoidales posteriores
- 6-celullae ethmoidales anteriores
- 7-hiatus semilunaris
- 8-concha nasalis inferior



RTG lebky -sinusy



CT - sinusitis

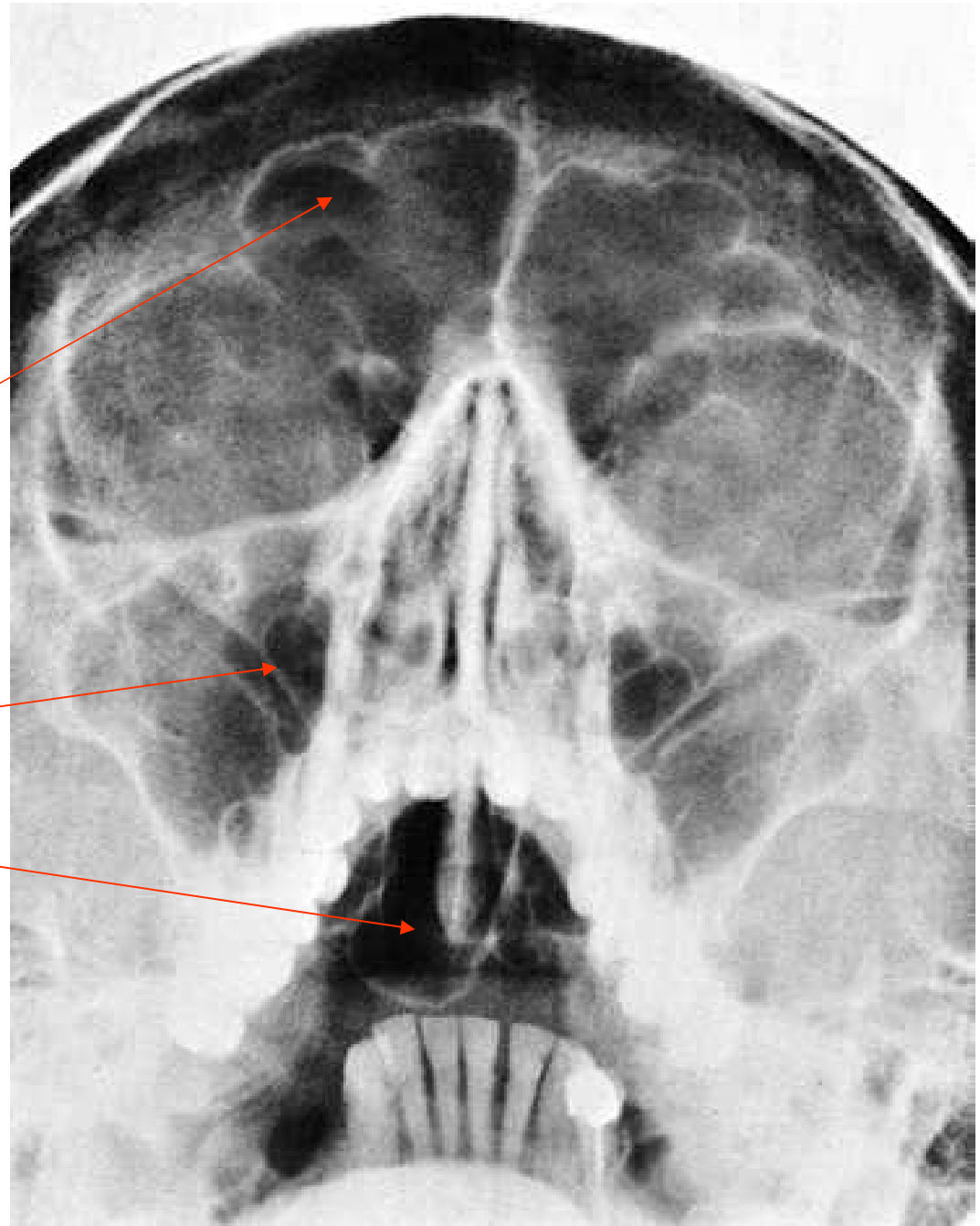


Rtg paranasálních dutin (Watersova projekce)

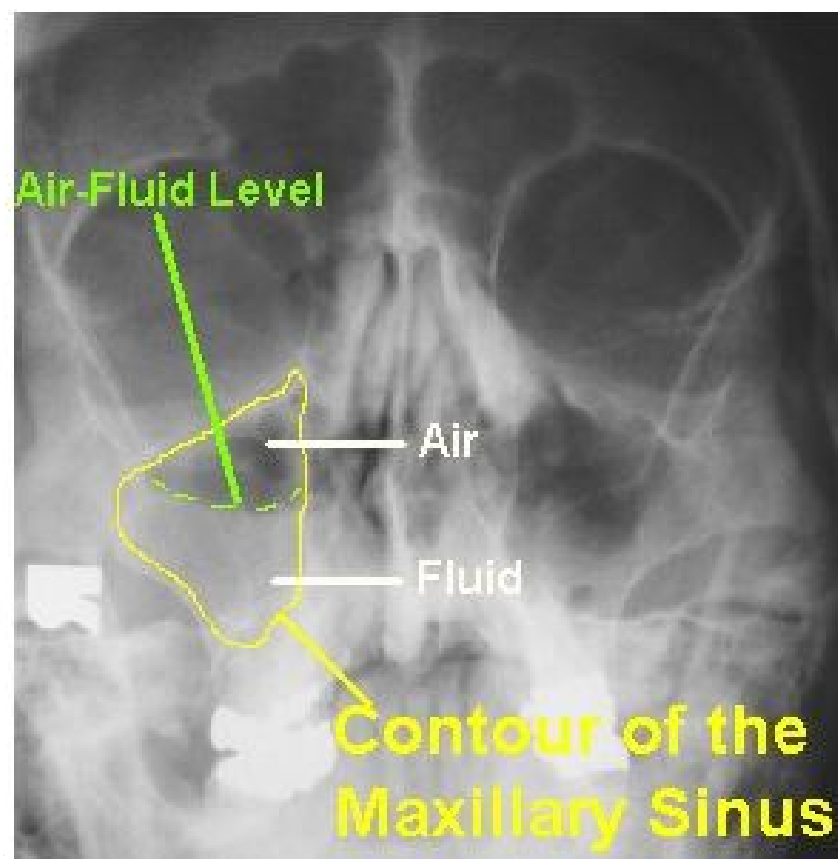
Sinus frontalis

Sinus maxillaris

Sinus sphenoidalis



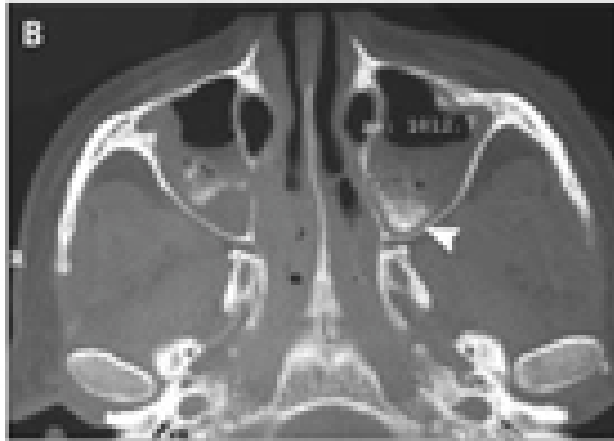
RTG Watersova projekce sinusitis maxillaris vpravo



Pansinusitis po tsunami



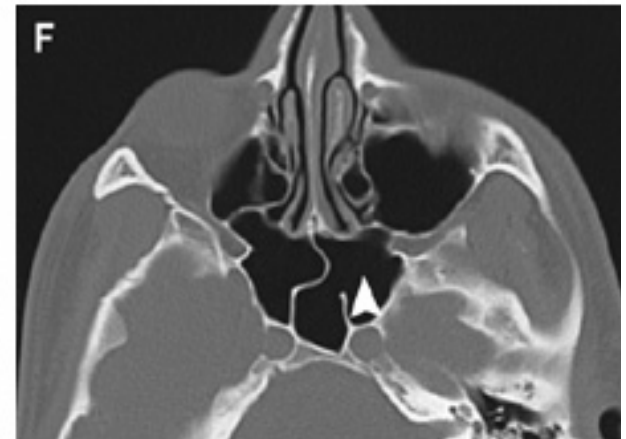
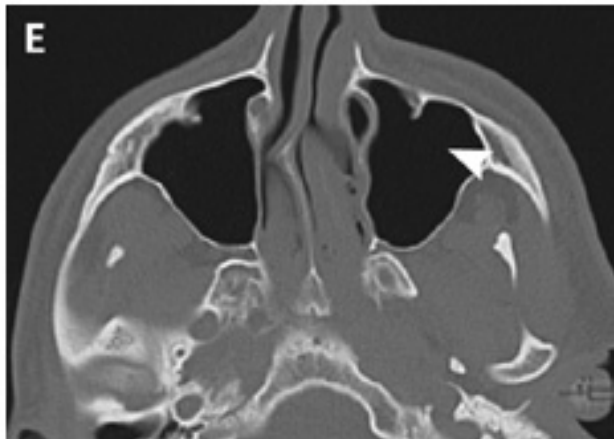
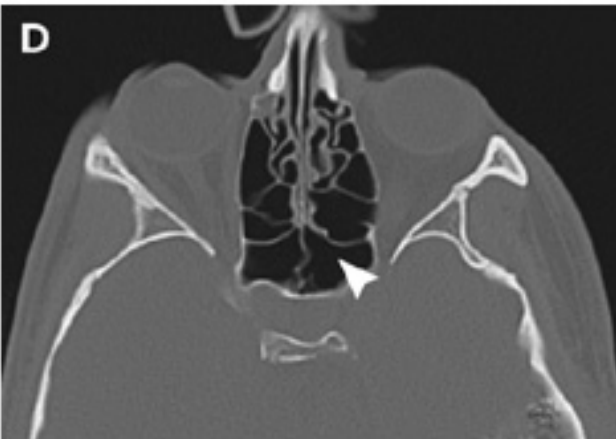
Celulae ethmoidales



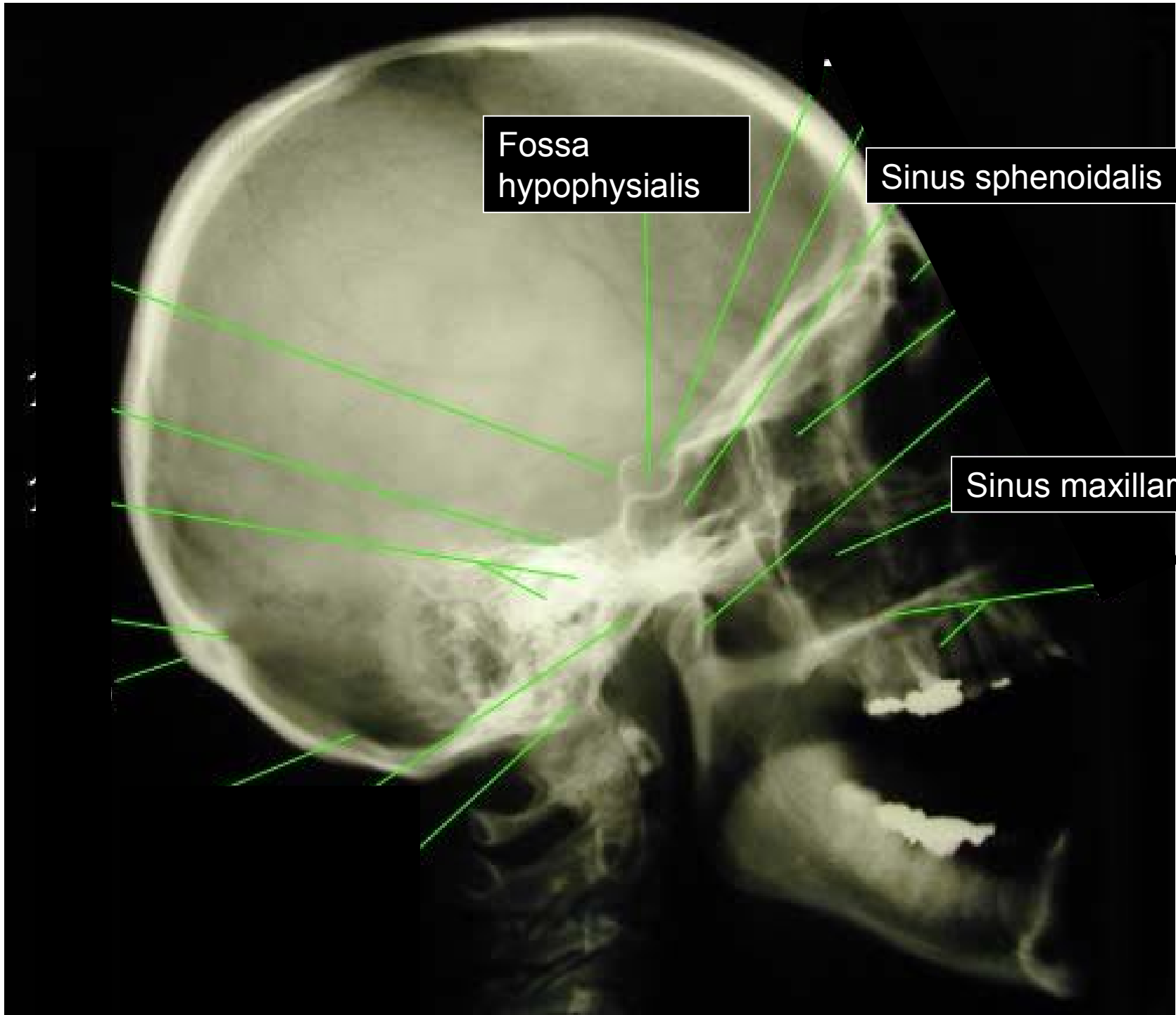
Sinus maxillaris



Sinus sphenoidalis



Normální CT obraz paranasálních dutin ve stejných úrovních

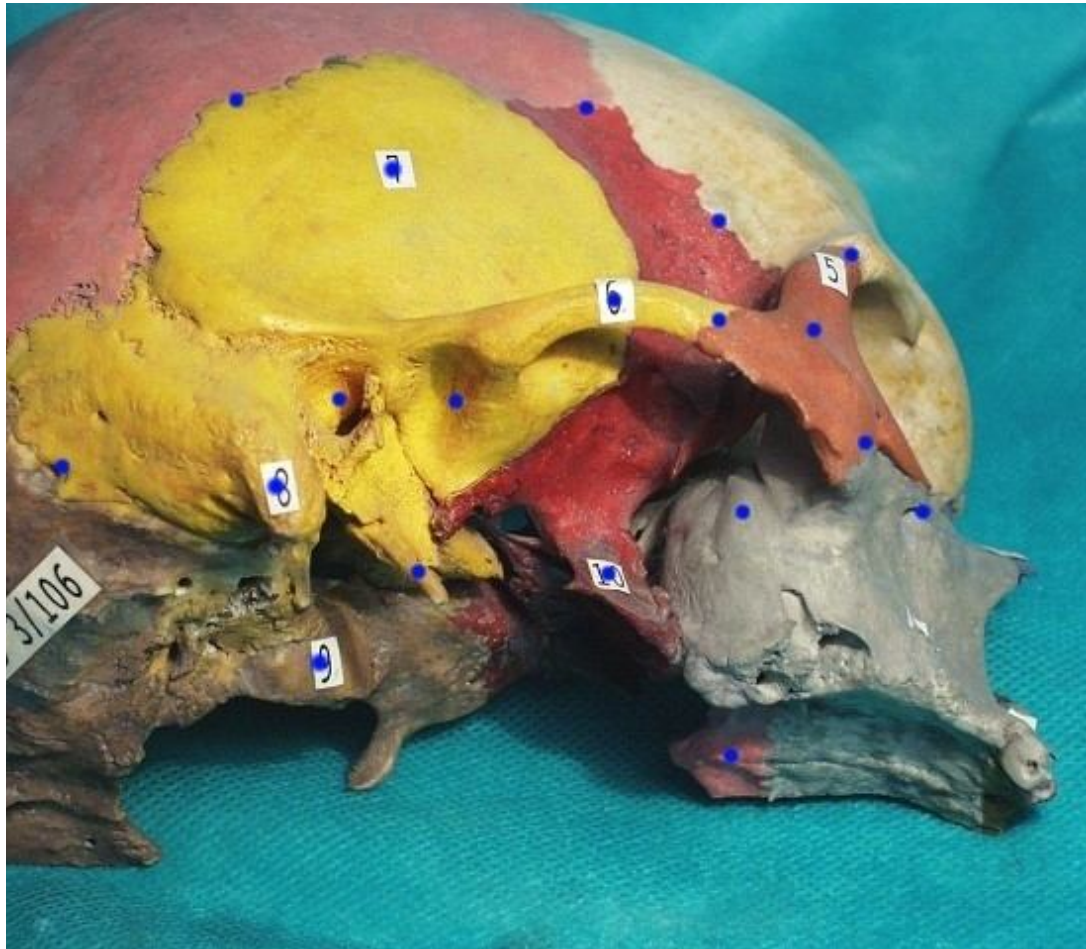


Fossa
hypophysialis

Sinus sphenoidalis

Sinus maxillaris

Fossa infratemporalis



Hranice:

Horní: crista infratemporalis

Přední: tuber maxillae

Zevní: ramus mandibulae

Vnitřní: lamina lat. proc. pterygoidei

Obsah:

mm. pterygoidei

plexus pterygoideus

a. maxillaris

větve n. mandibularis

ganglion oticum

corpus adiposum buccae

Fossa infratemporalis
průchody

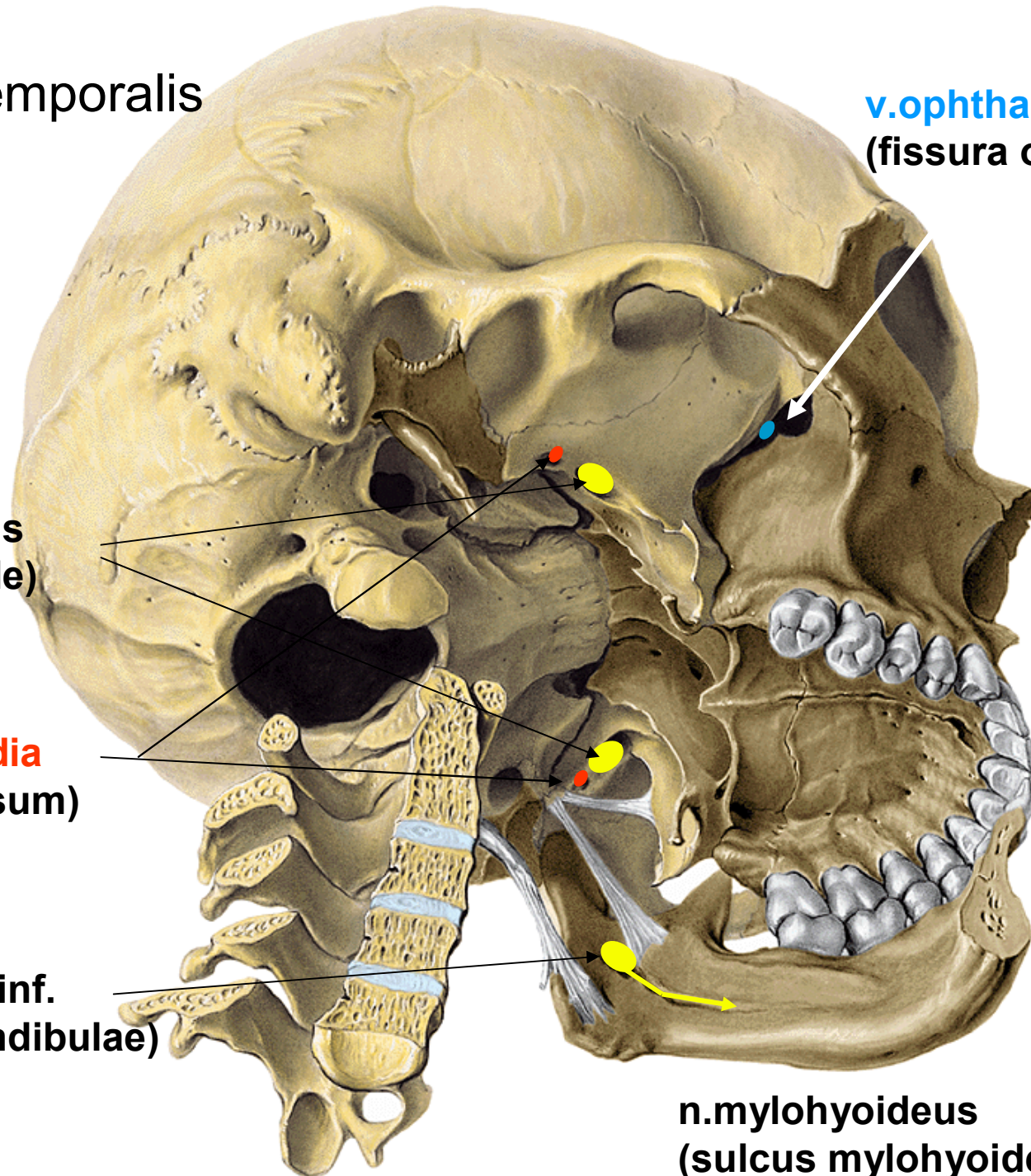
v.ophthalmica inf.
(fissura orbitalis inf.)

n.mandibularis
(foramen ovale)

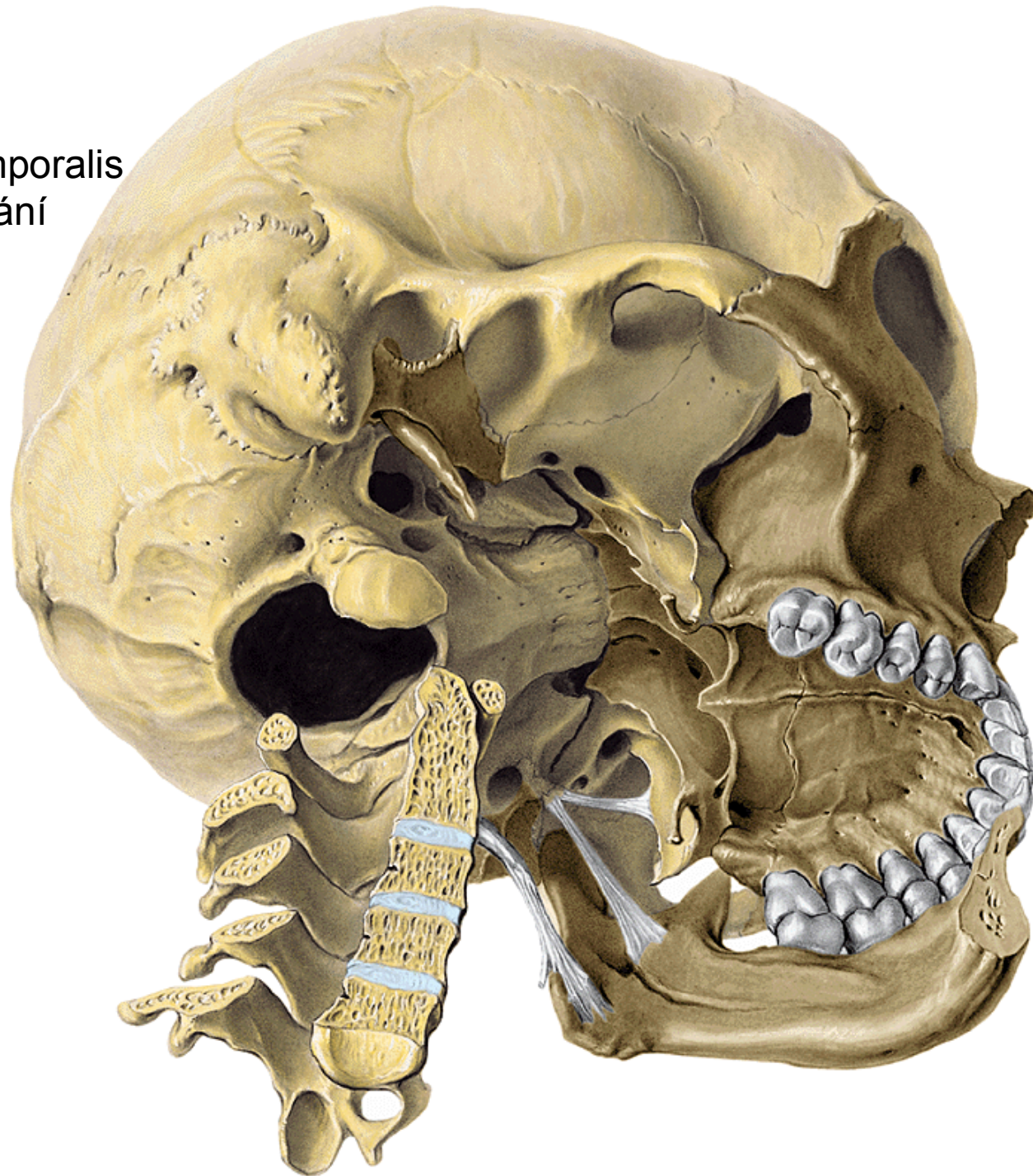
a.meningea media
(foramen spinosum)

n.alveolaris inf.
(canalis mandibulae)

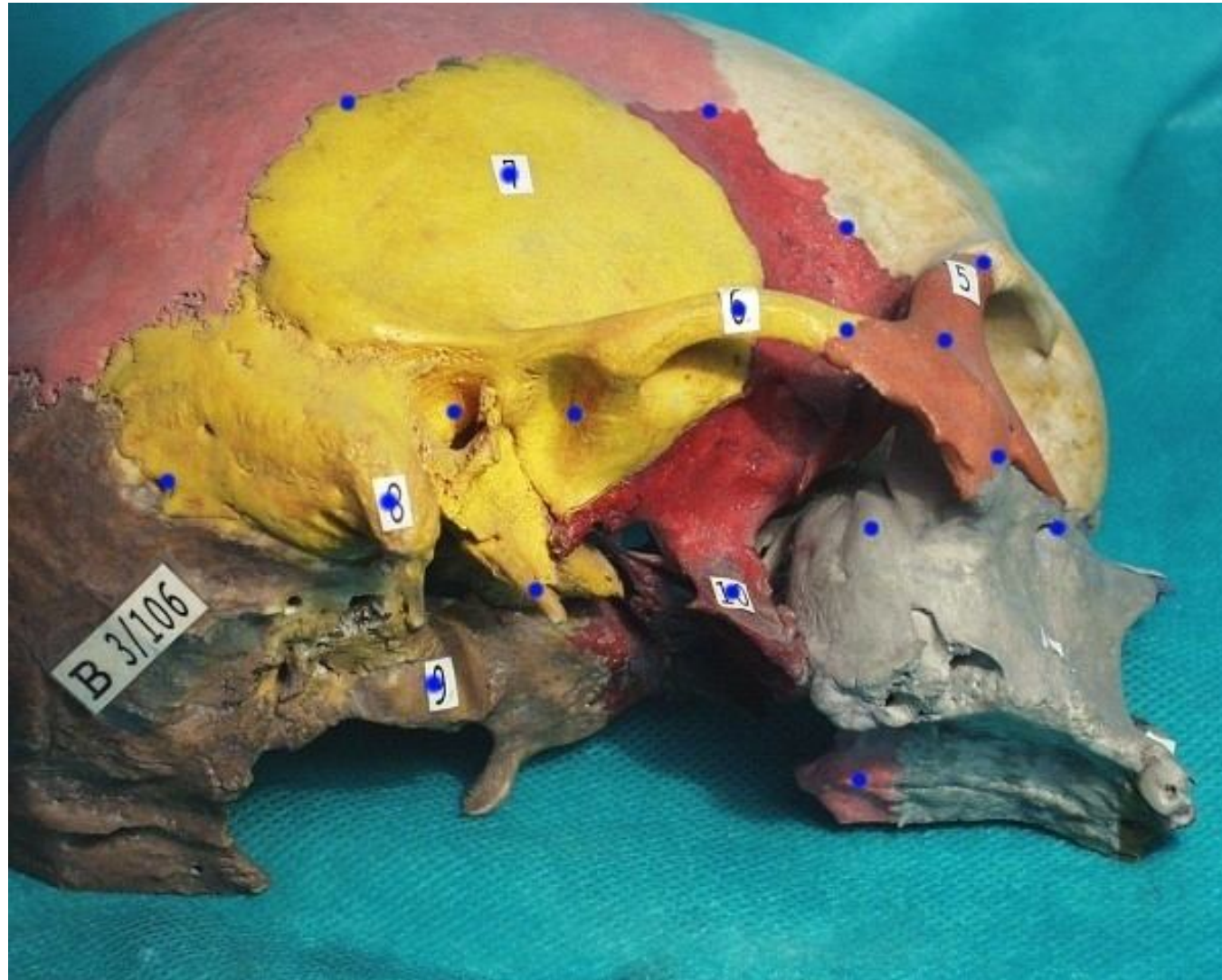
n.mylohyoideus
(sulcus mylohyoideus)

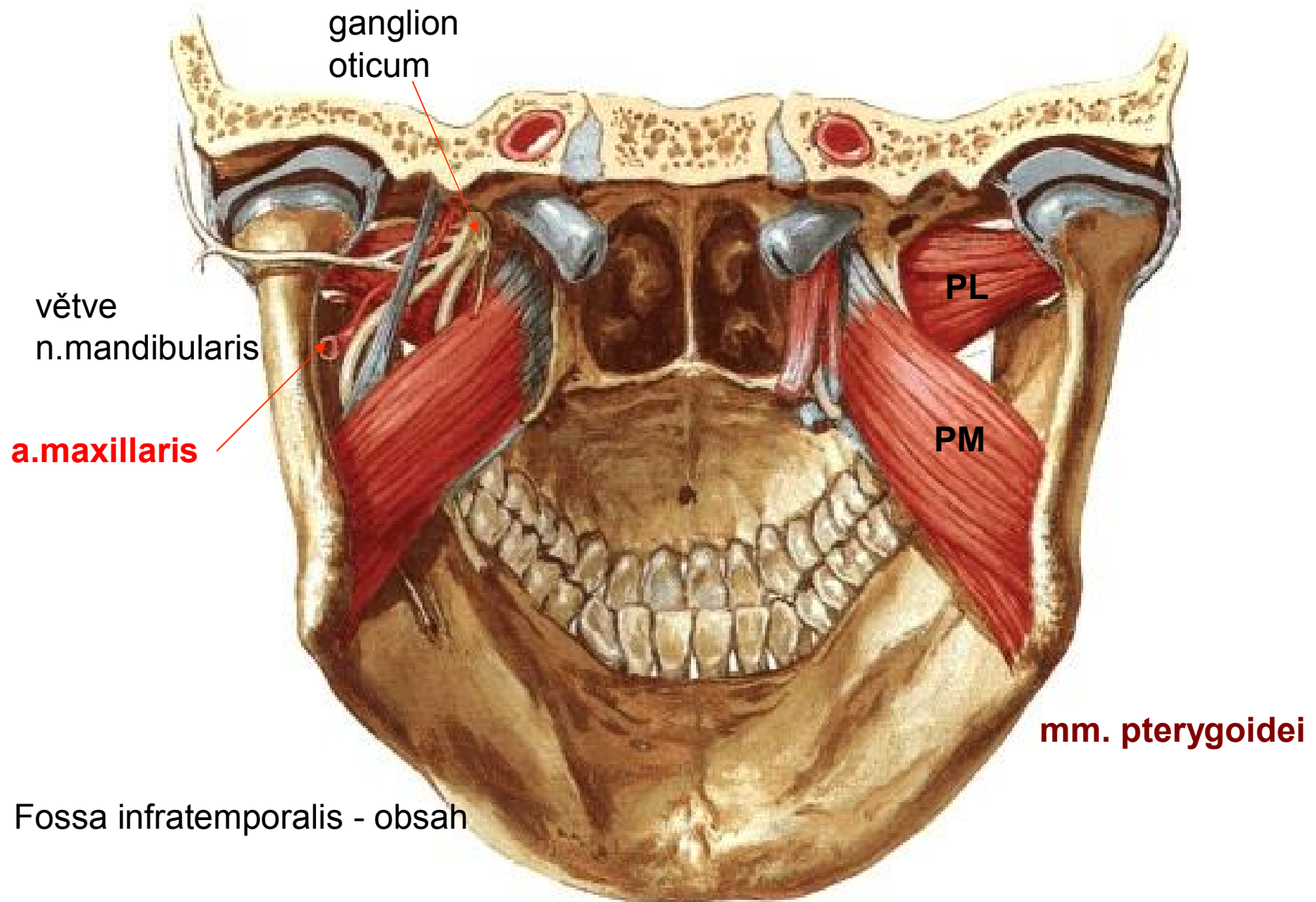


Fossa
infratemporalis
opakování



Fossa infratemporalis





ganglion
oticum

větve
n.mandibularis

a.maxillaris

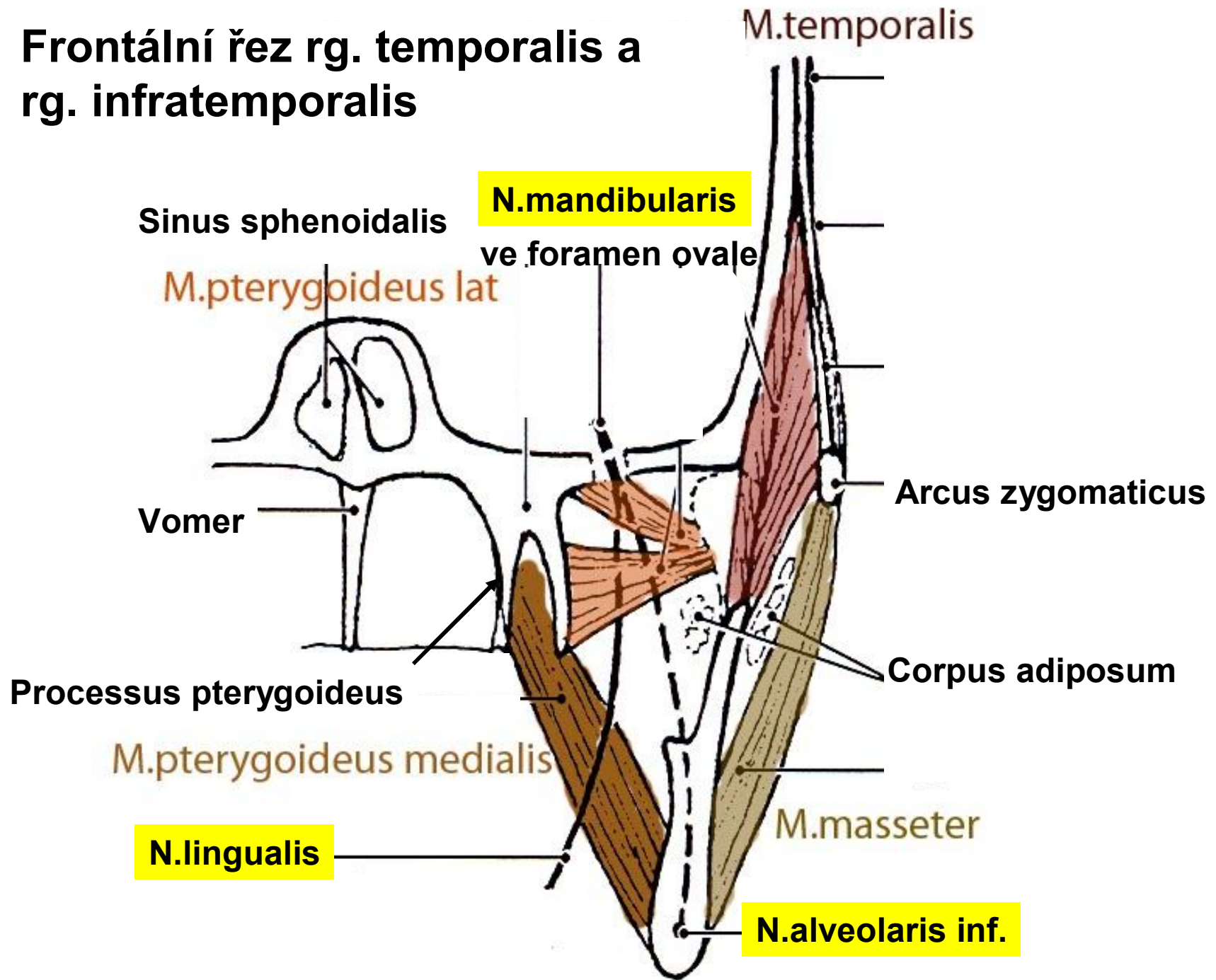
PL

PM

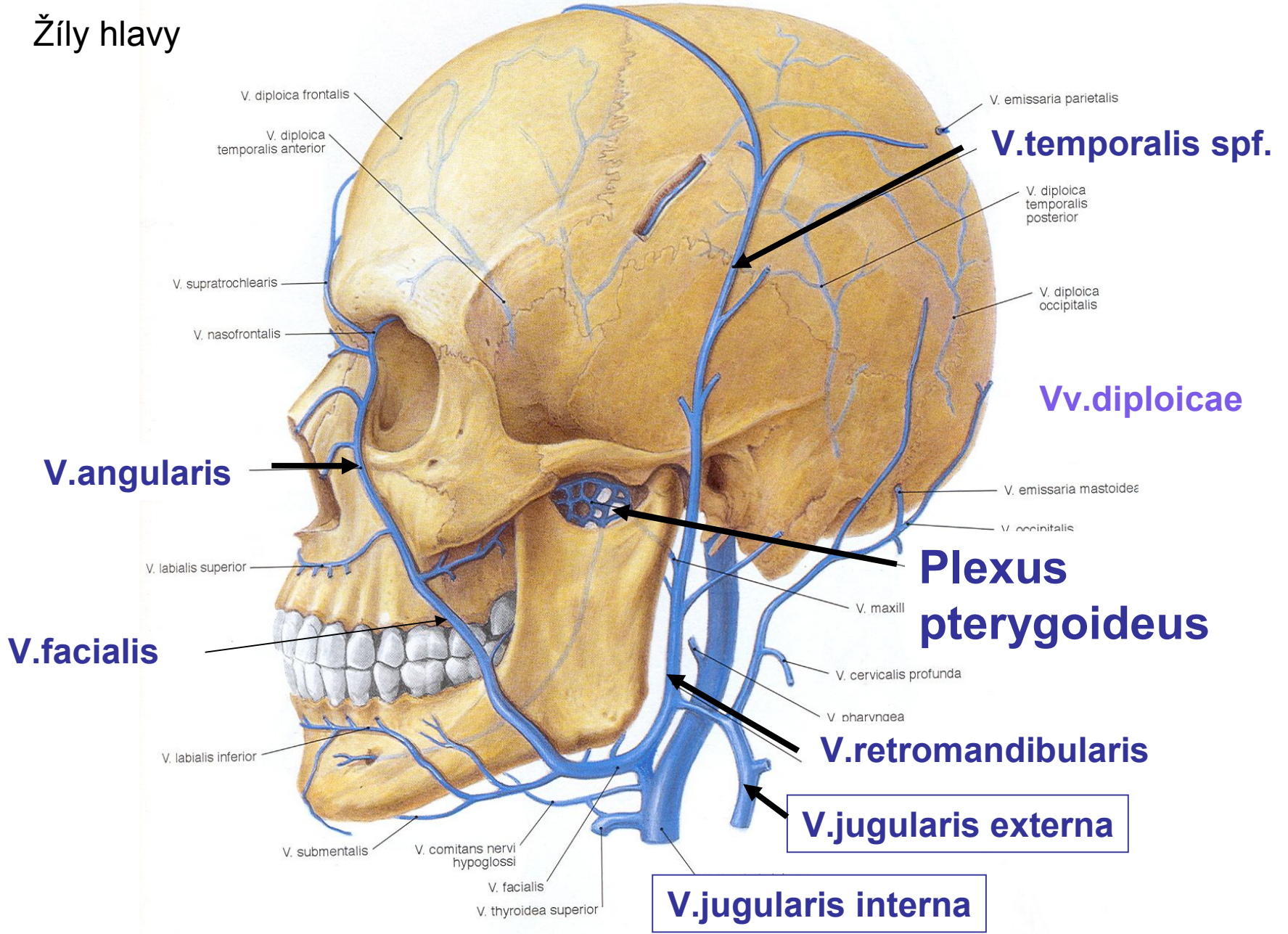
mm. pterygoidei

Fossa infratemporalis - obsah

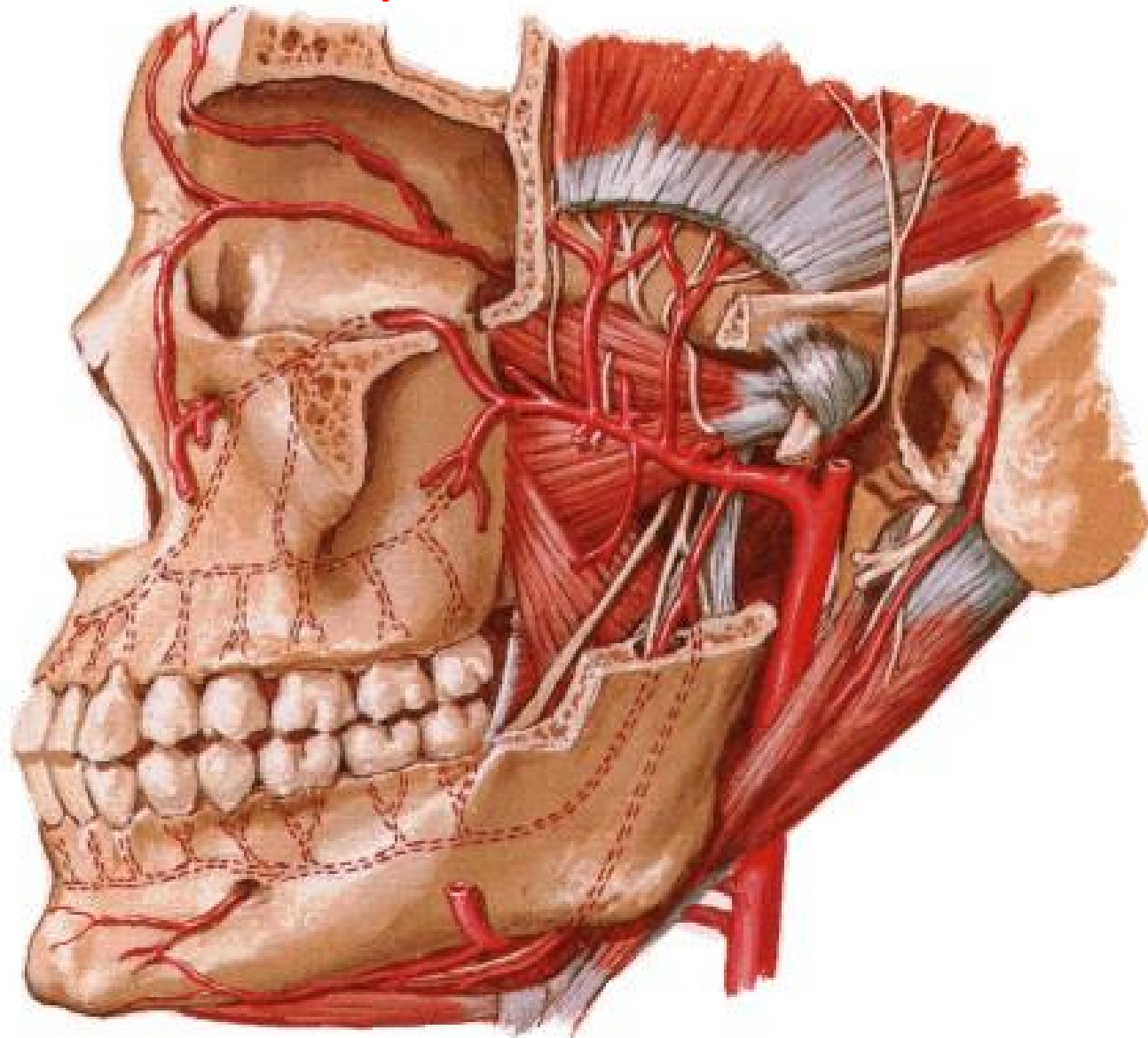
Frontální řez rg. temporalis a rg. infratemporalis



Žíly hlavy

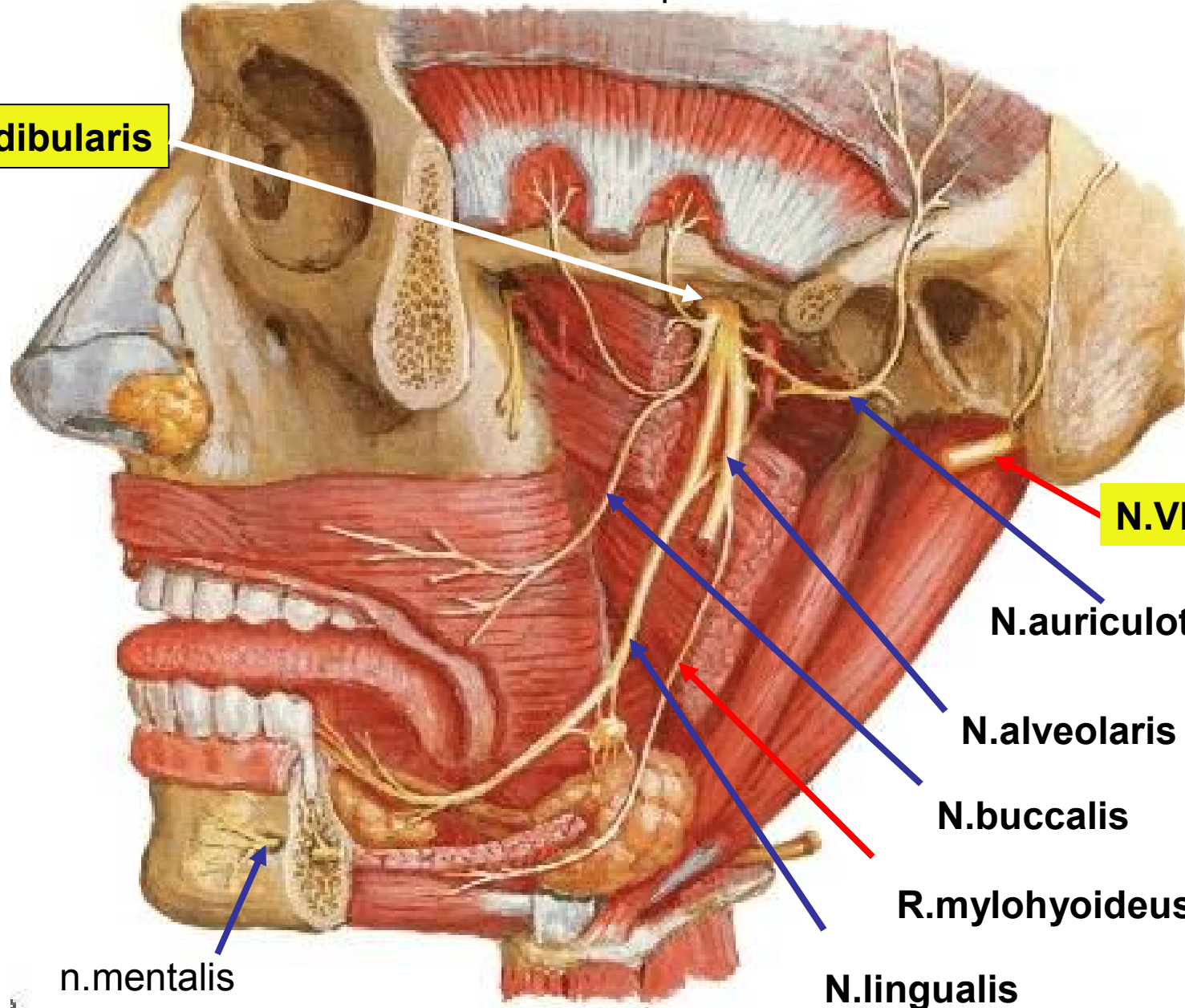


A.Maxillaris ve fossa infratemporalis



Větve n. mandibularis ve fossa infratemporalis

N. mandibularis



N.VII

N.auriculotemporalis

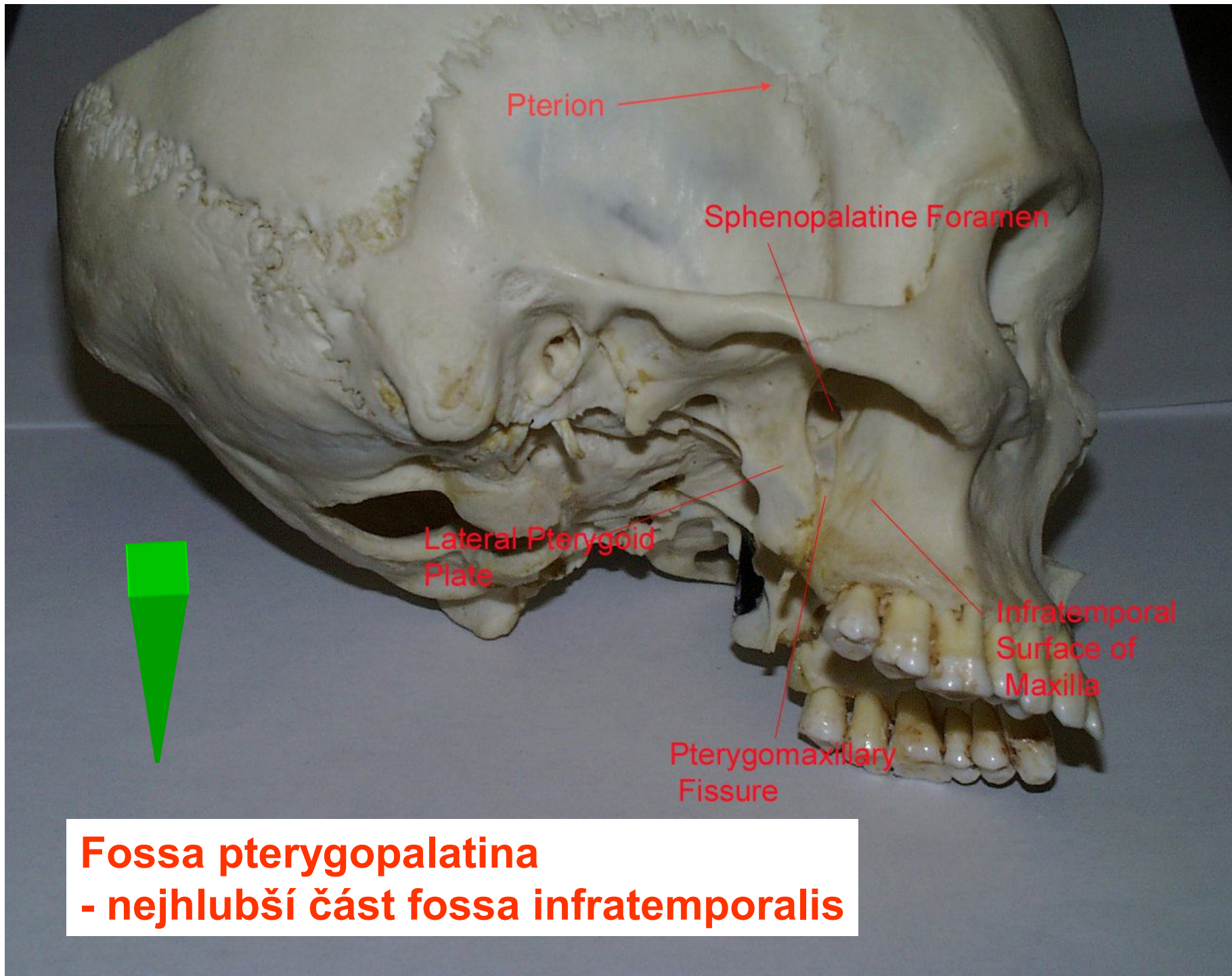
N.alveolaris inf.

N.buccalis

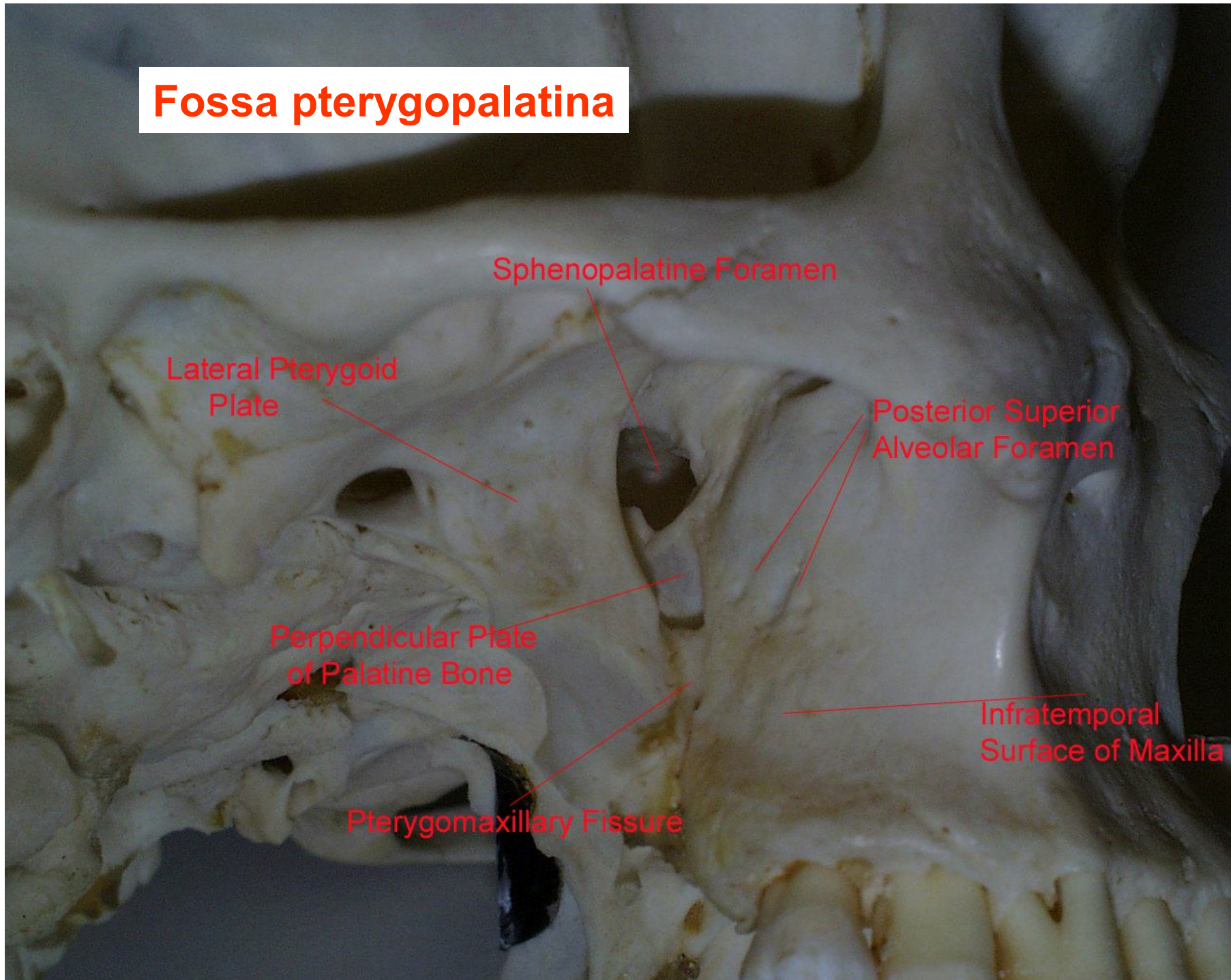
R.mylohyoideus

N.lingualis

n.mentalis



Fossa pterygopalatina



Fossa pterygopalatina

Hranice:

Ant. - maxilla

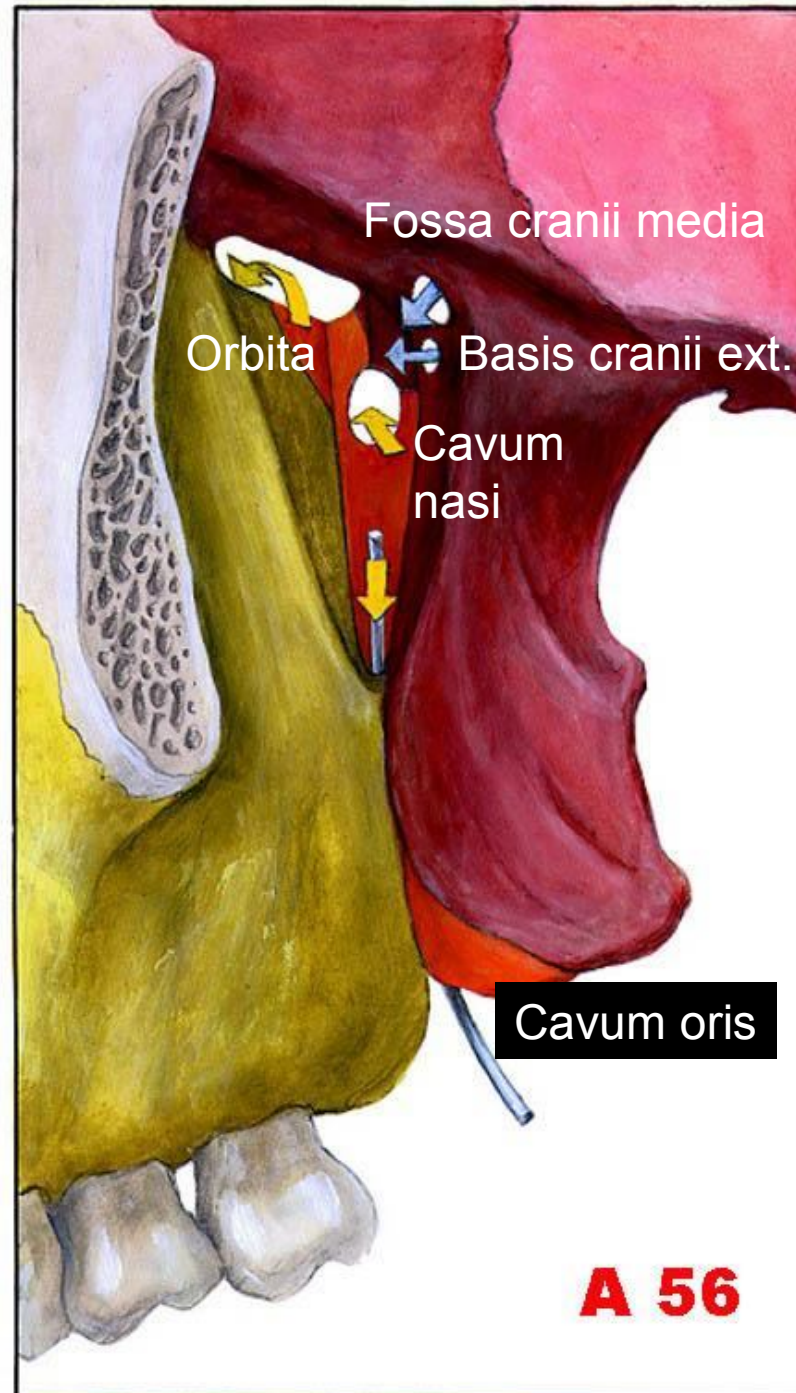
Post. - proc. pterygoideus

Med.- lamina perpendicularis ossis platini

Lat.- fossa infratemporalis

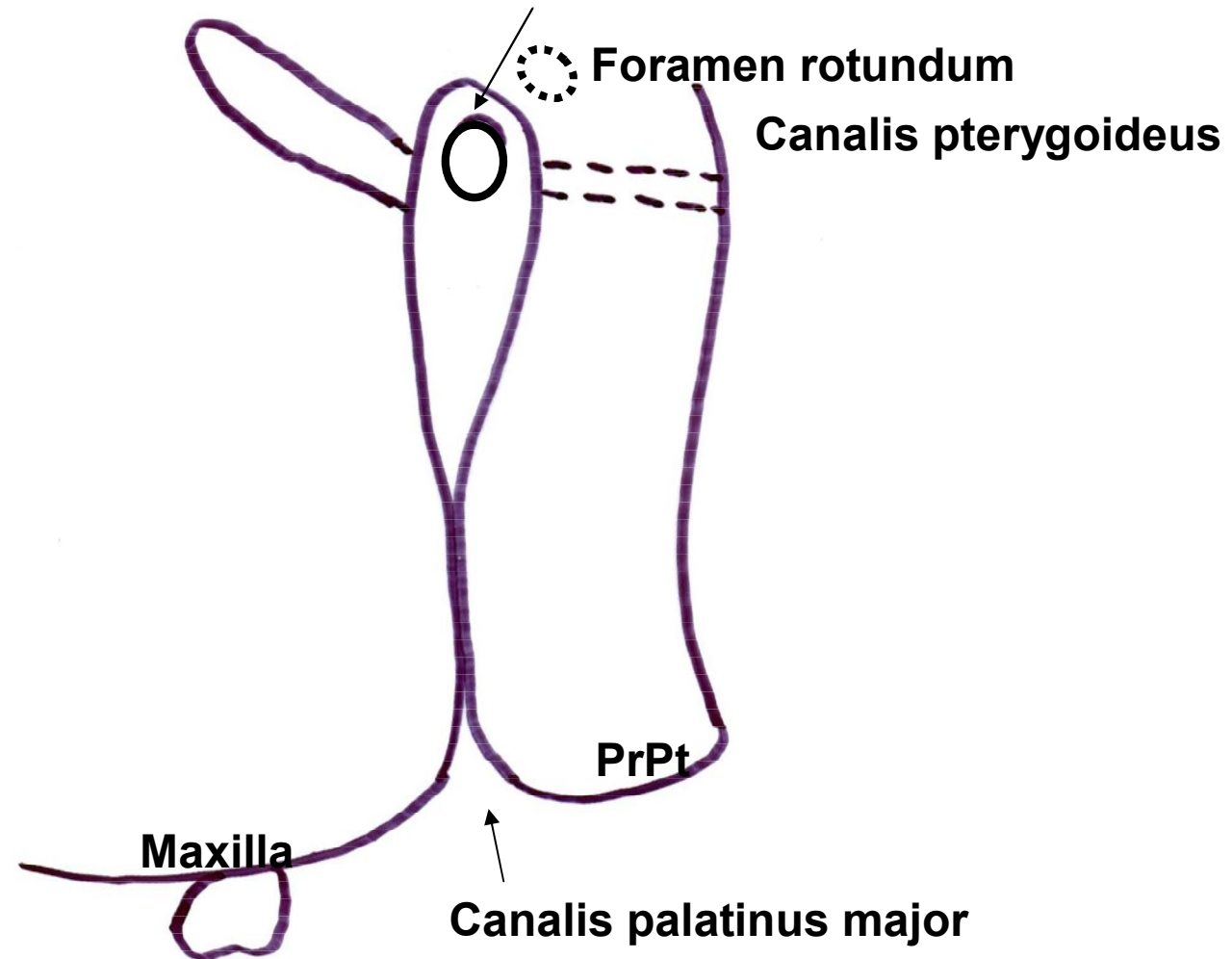
Sup.- ala major

Inf. – foramen palatinum majus

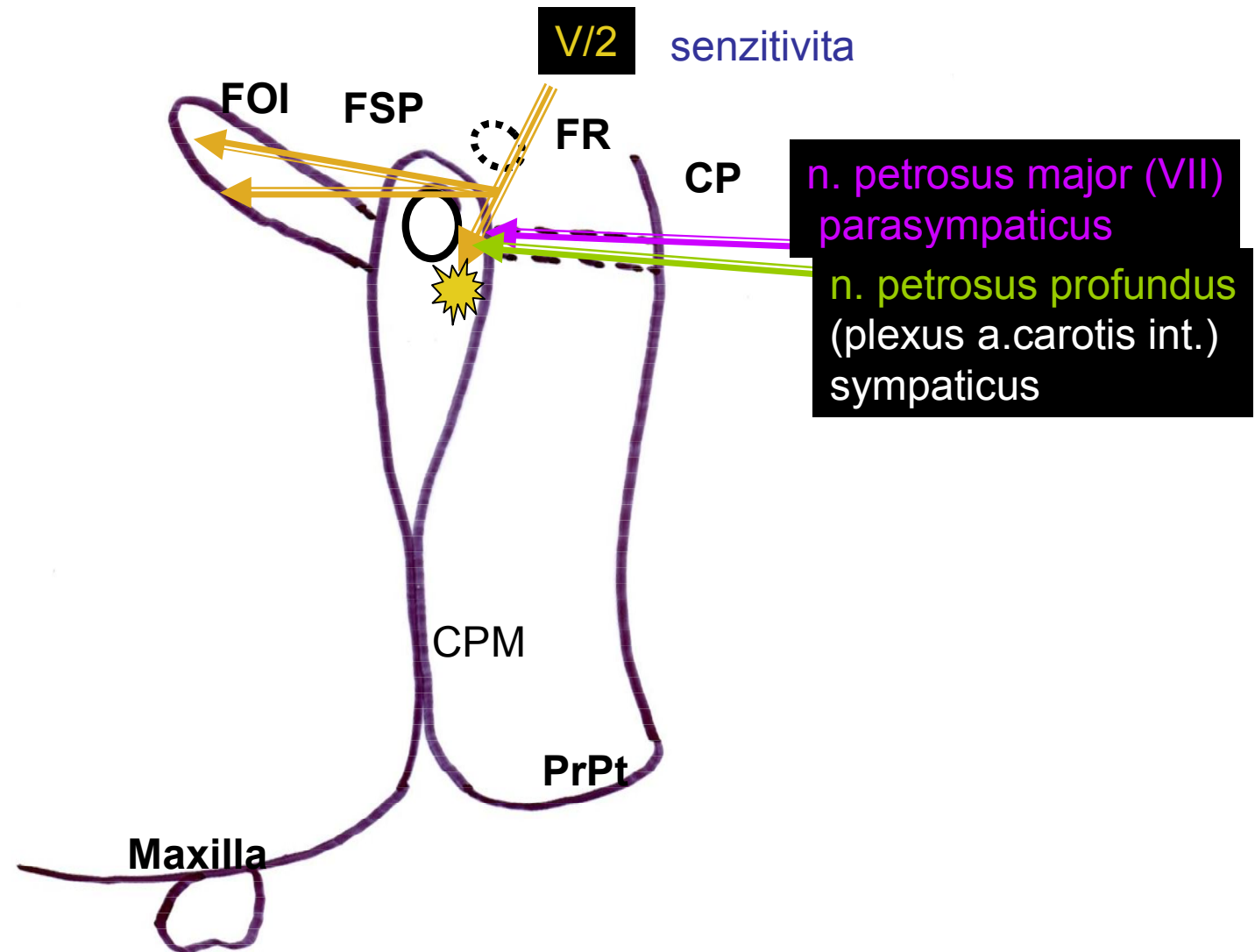


Pohled na fossa pterygopalatina z boku

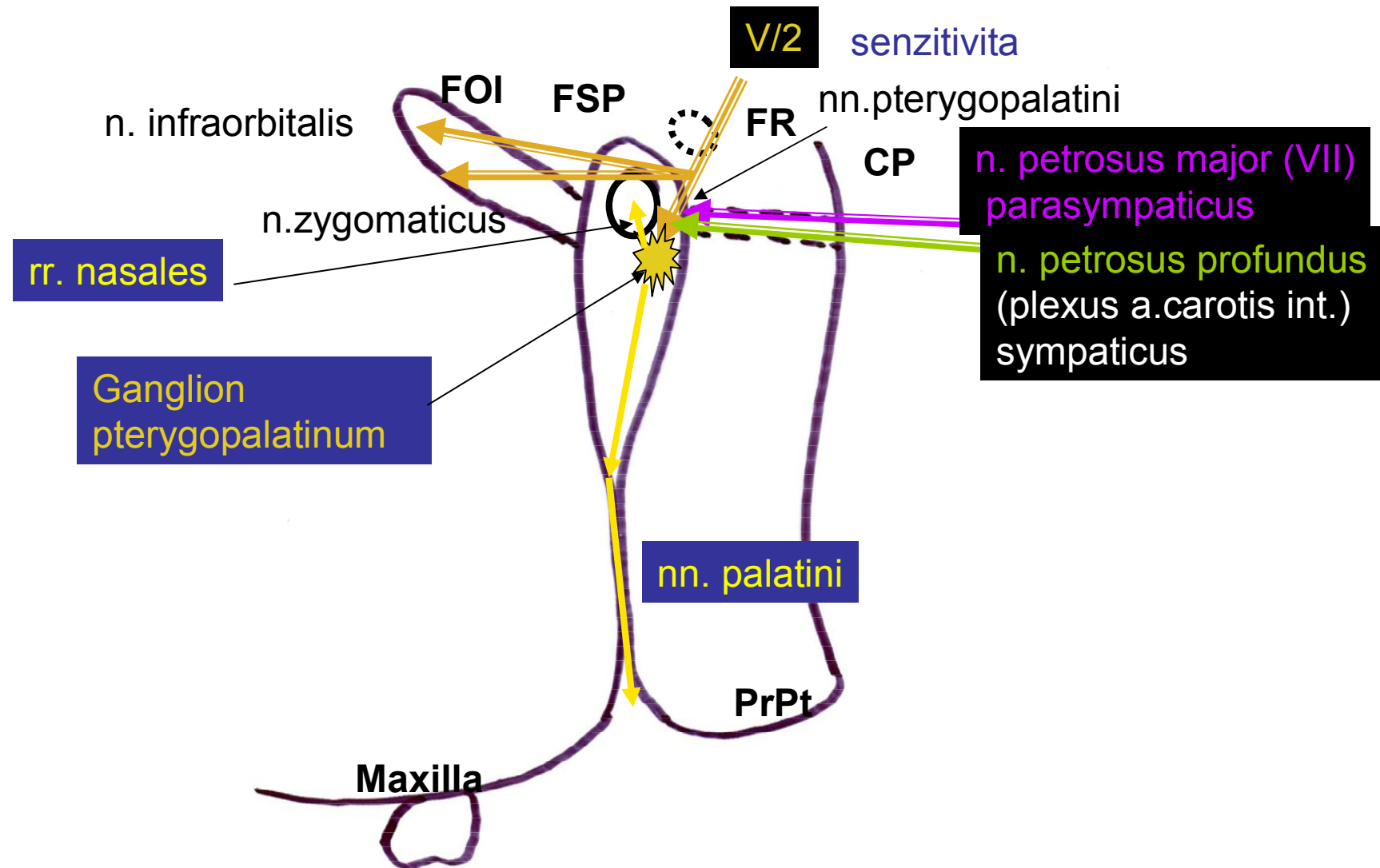
Fissura orbitalis inferior Foramen sphenopalatinum



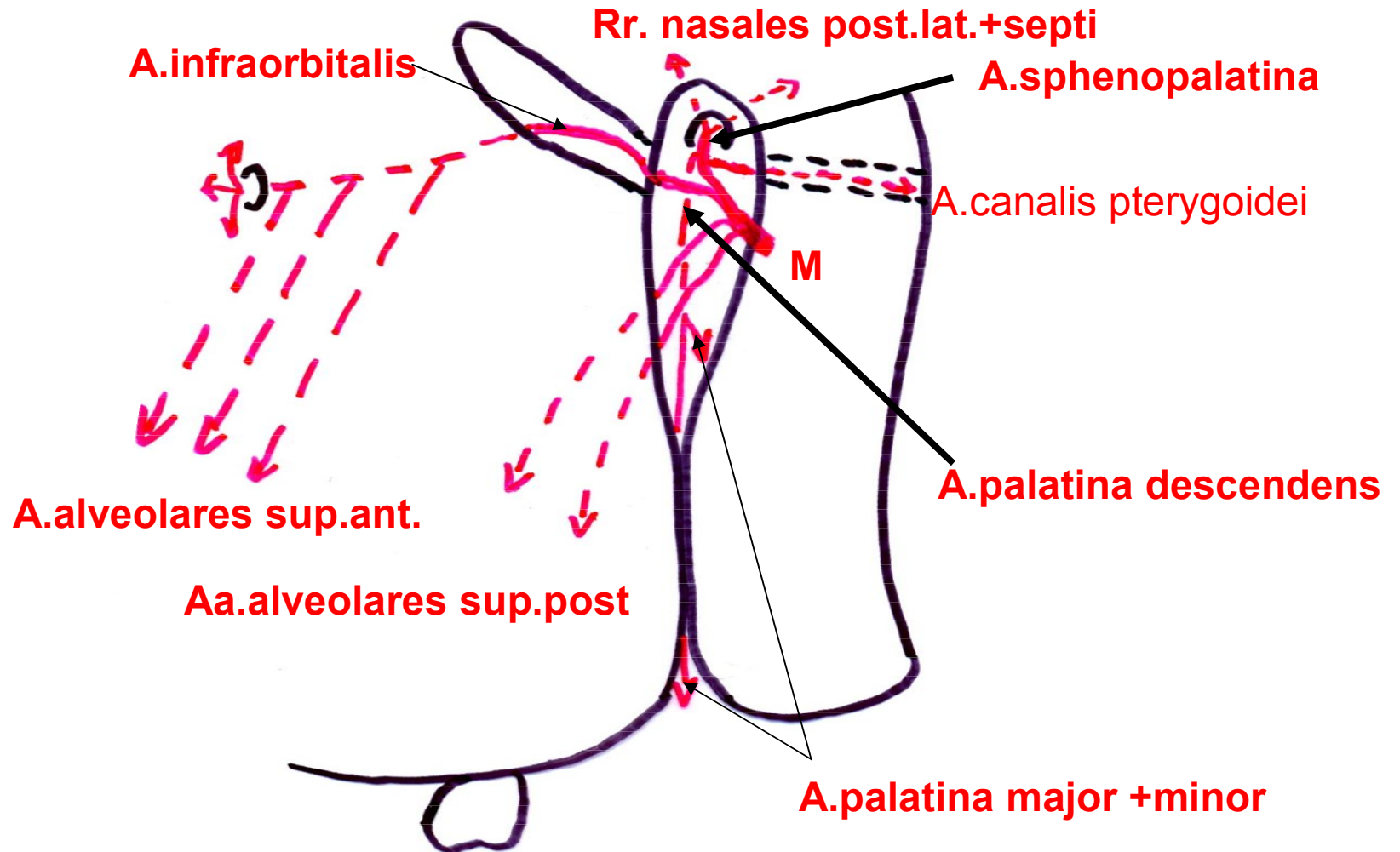
Pohled na fossa pterygopalatina z boku (průchody nervů)



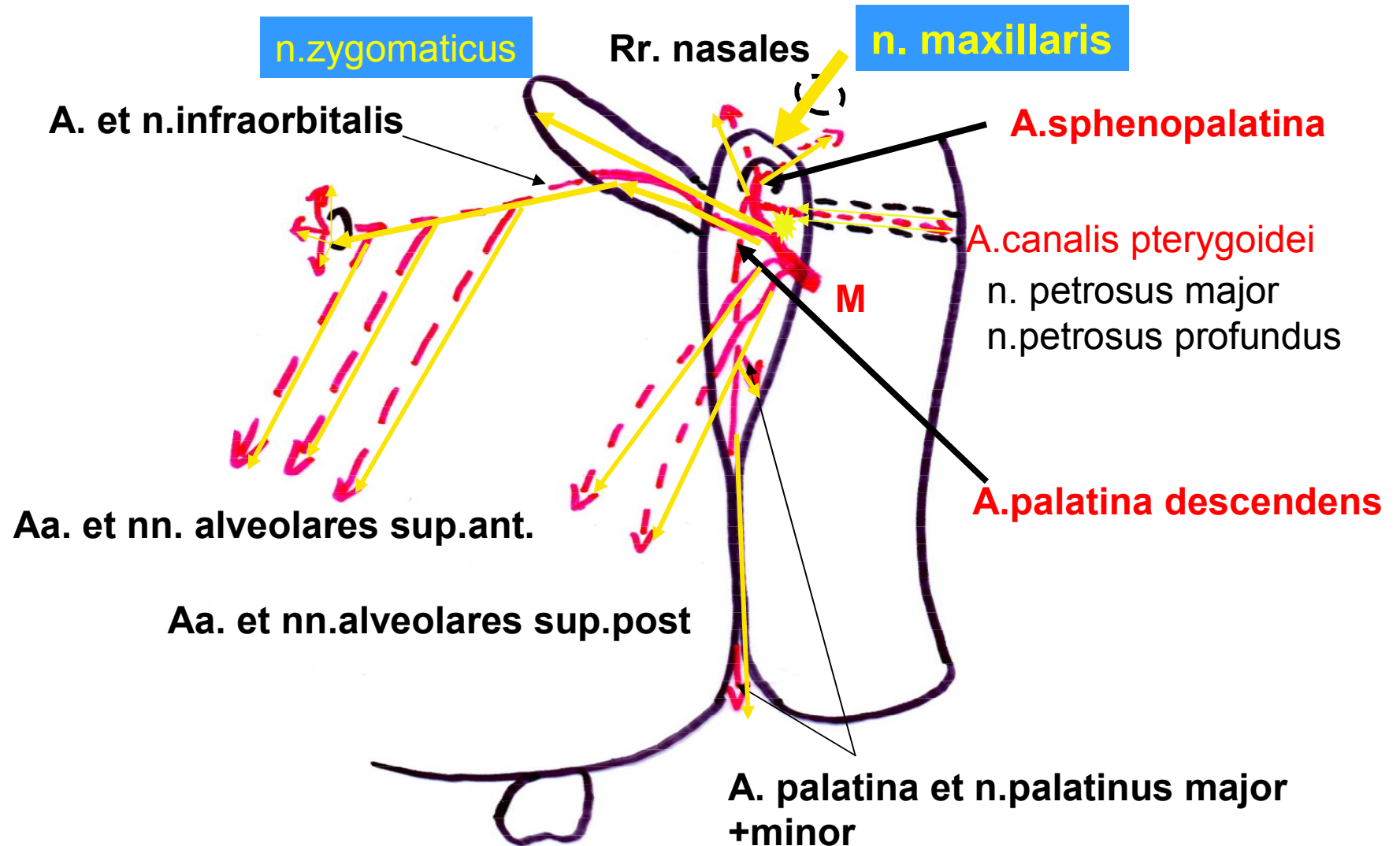
Pohled na fossa pterygopalatina z boku (průchody nervů)



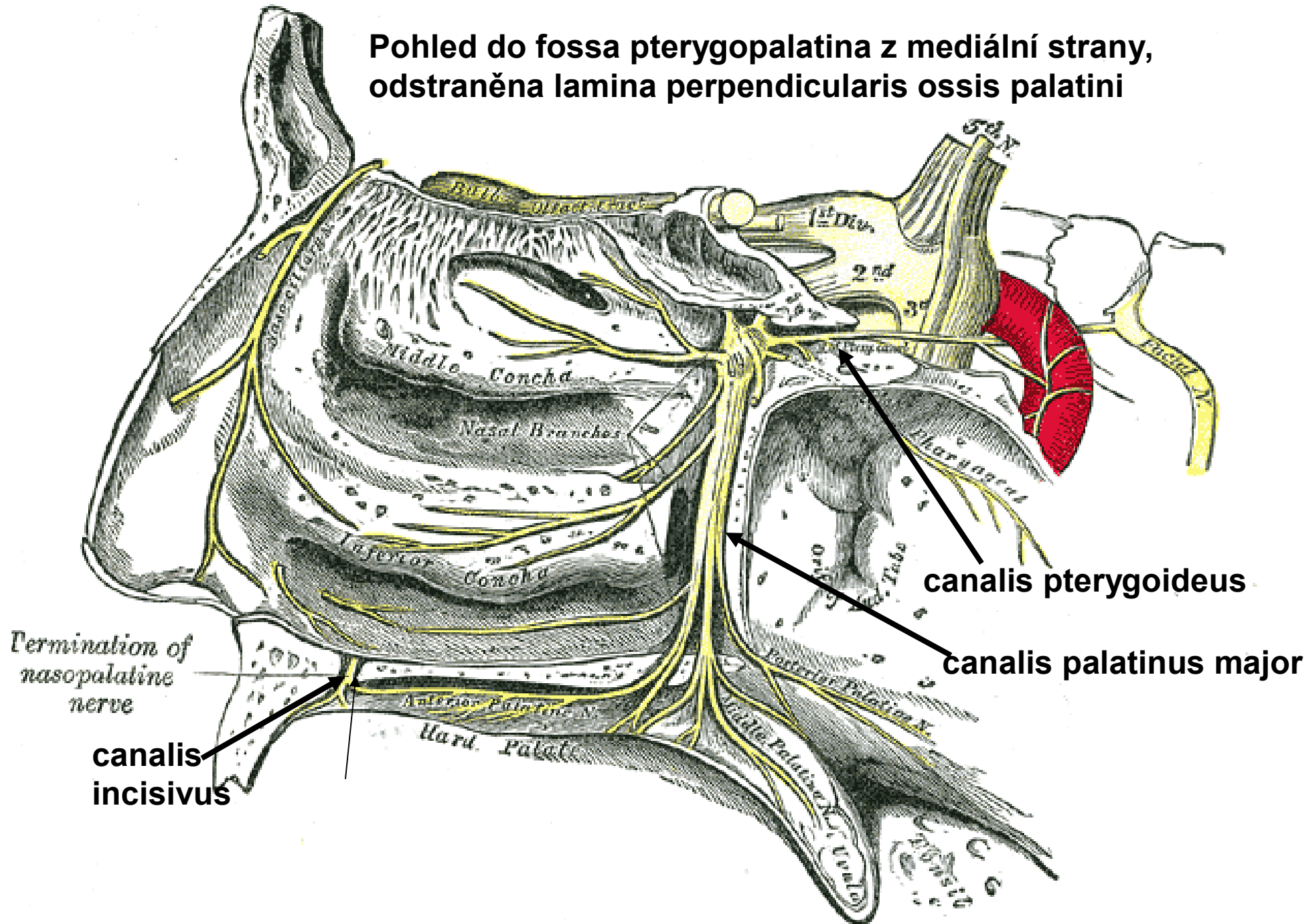
Fossa pterygopalatina průchody větví a. maxillaris



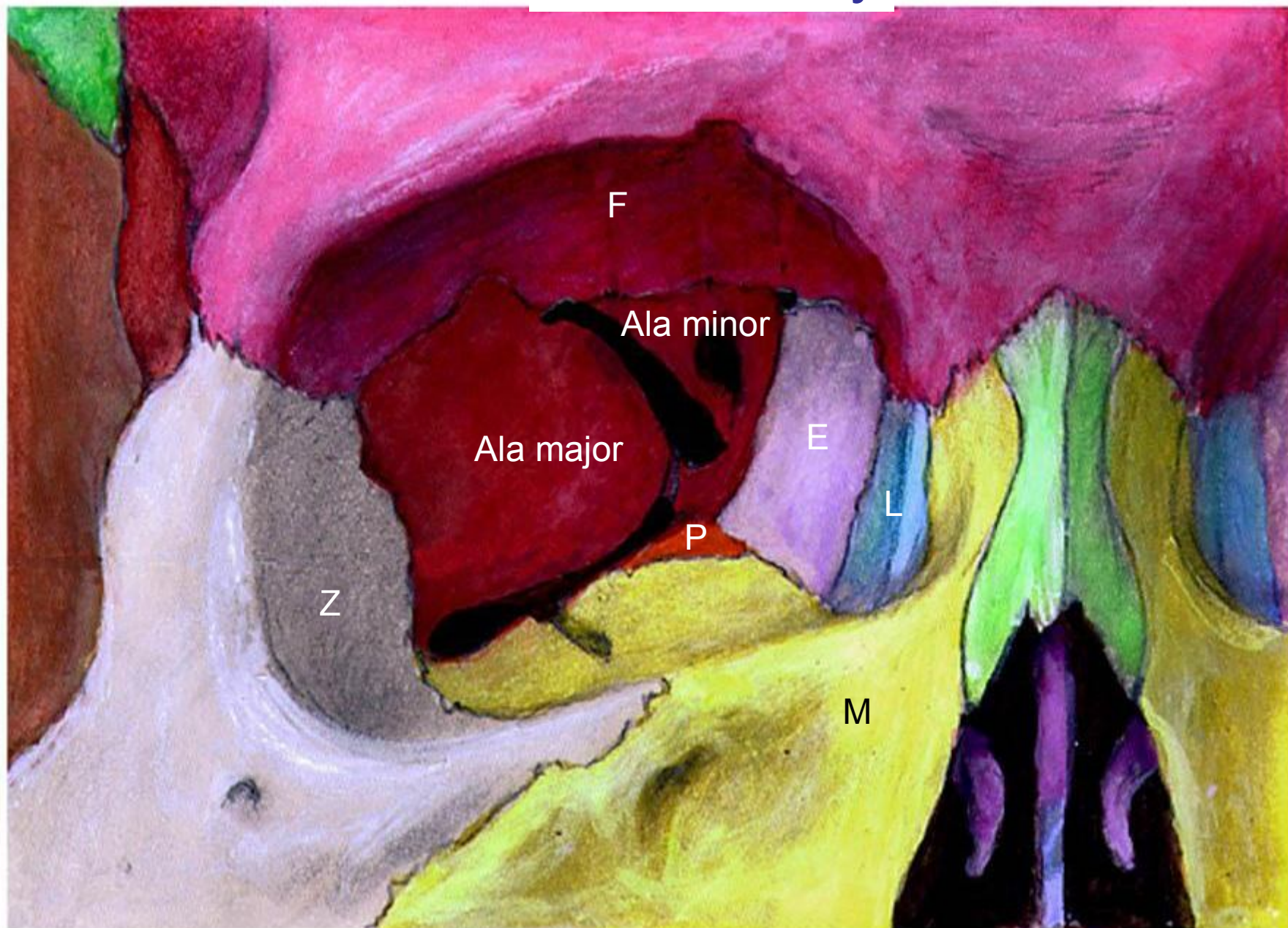
Fossa pterygopalatina průchody tepen a nervů



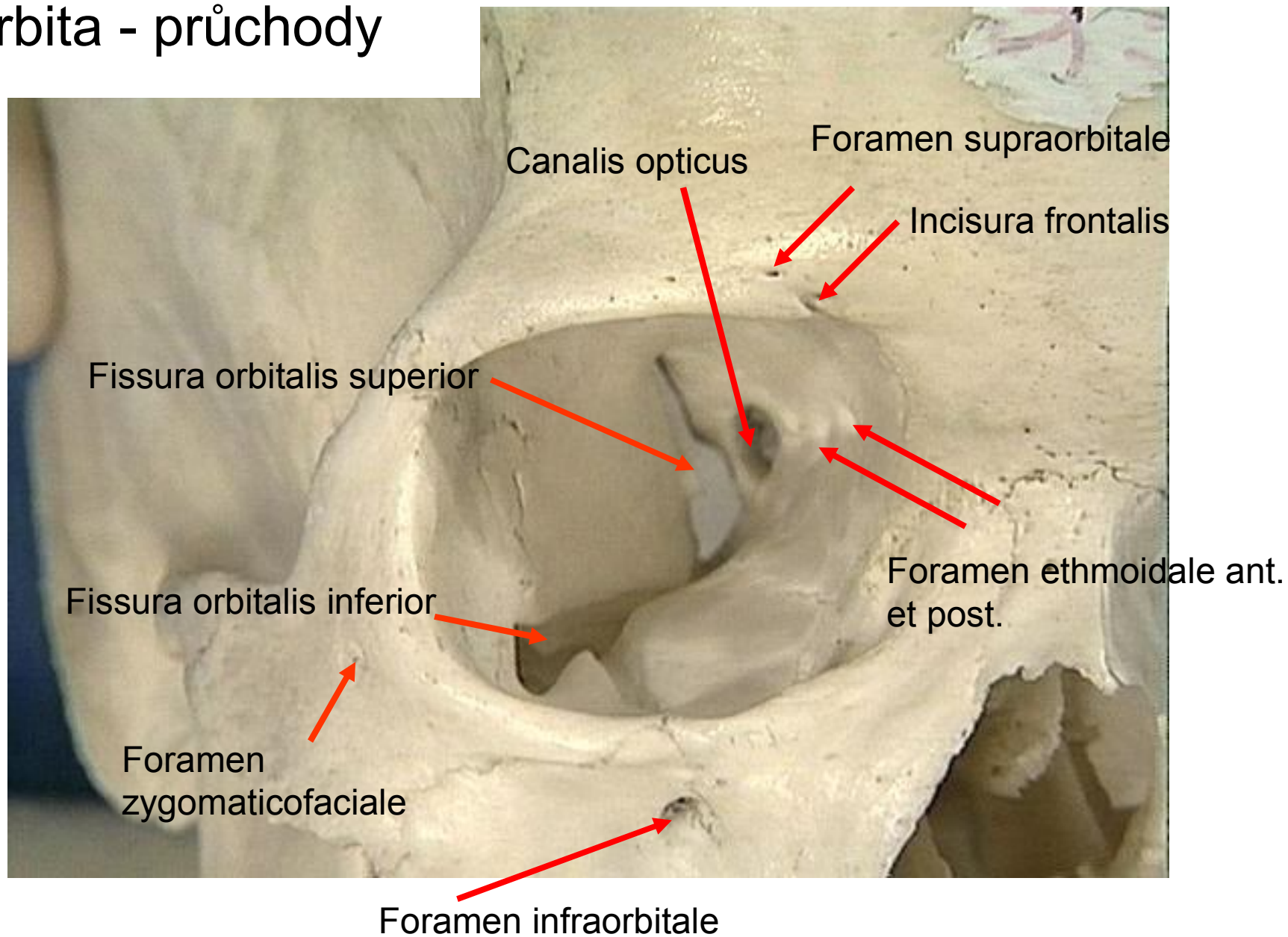
**Pohled do fossa pterygopalatina z mediální strany,
odstraněna lamina perpendicularis ossis palatini**



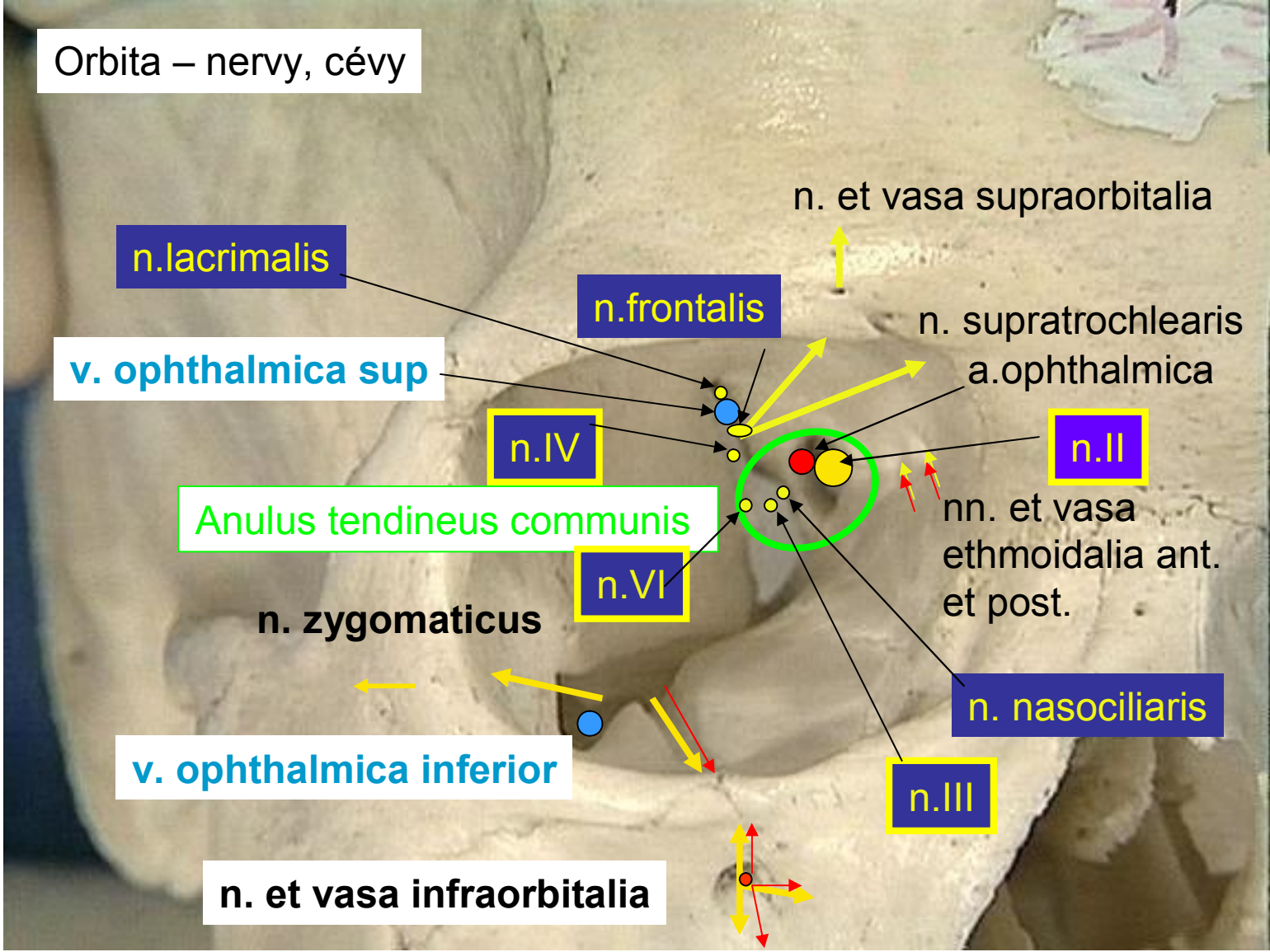
Orbita stěny



Orbita - průchody



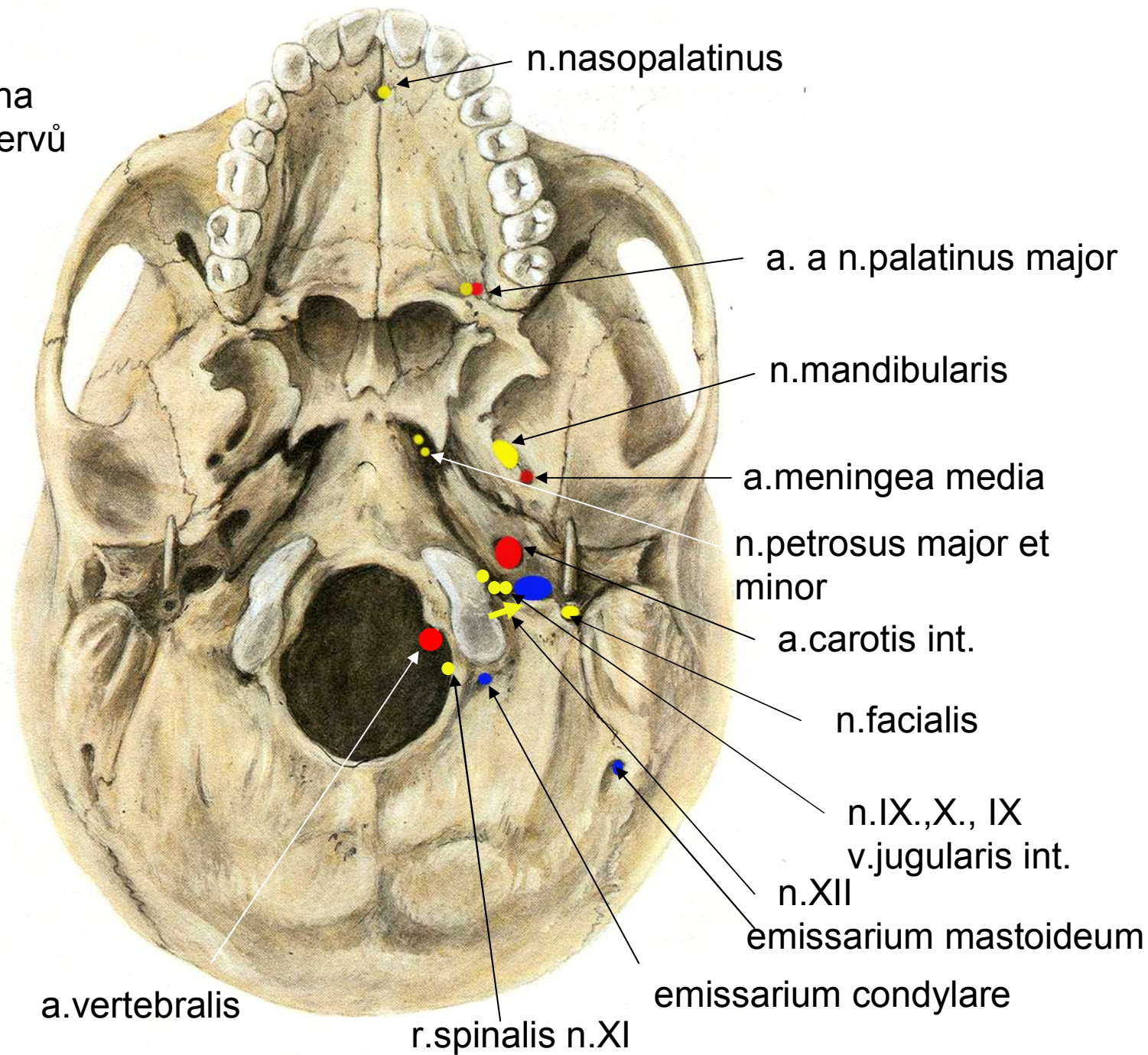
Orbita – nervy, cévy



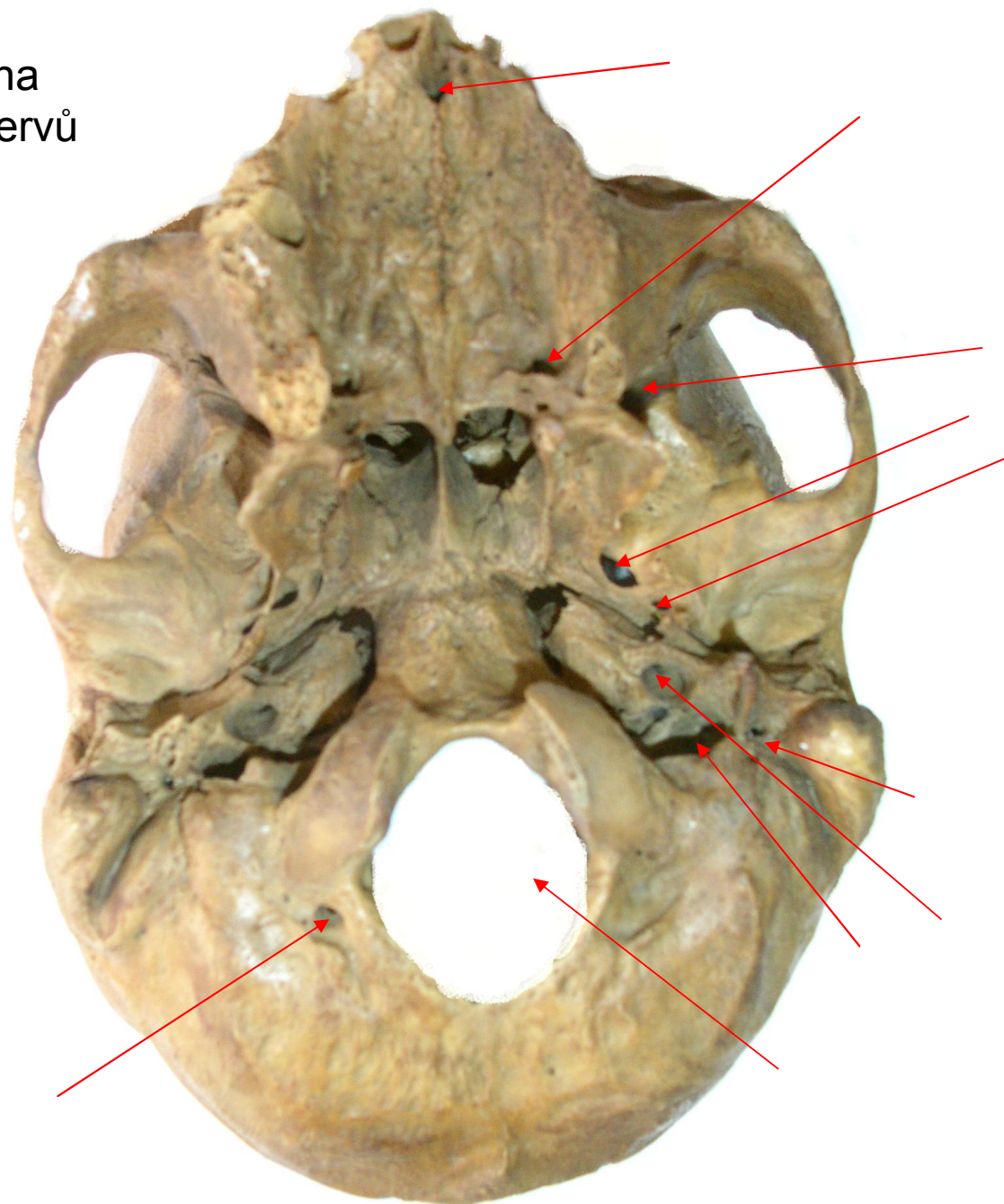
Orbita opakování



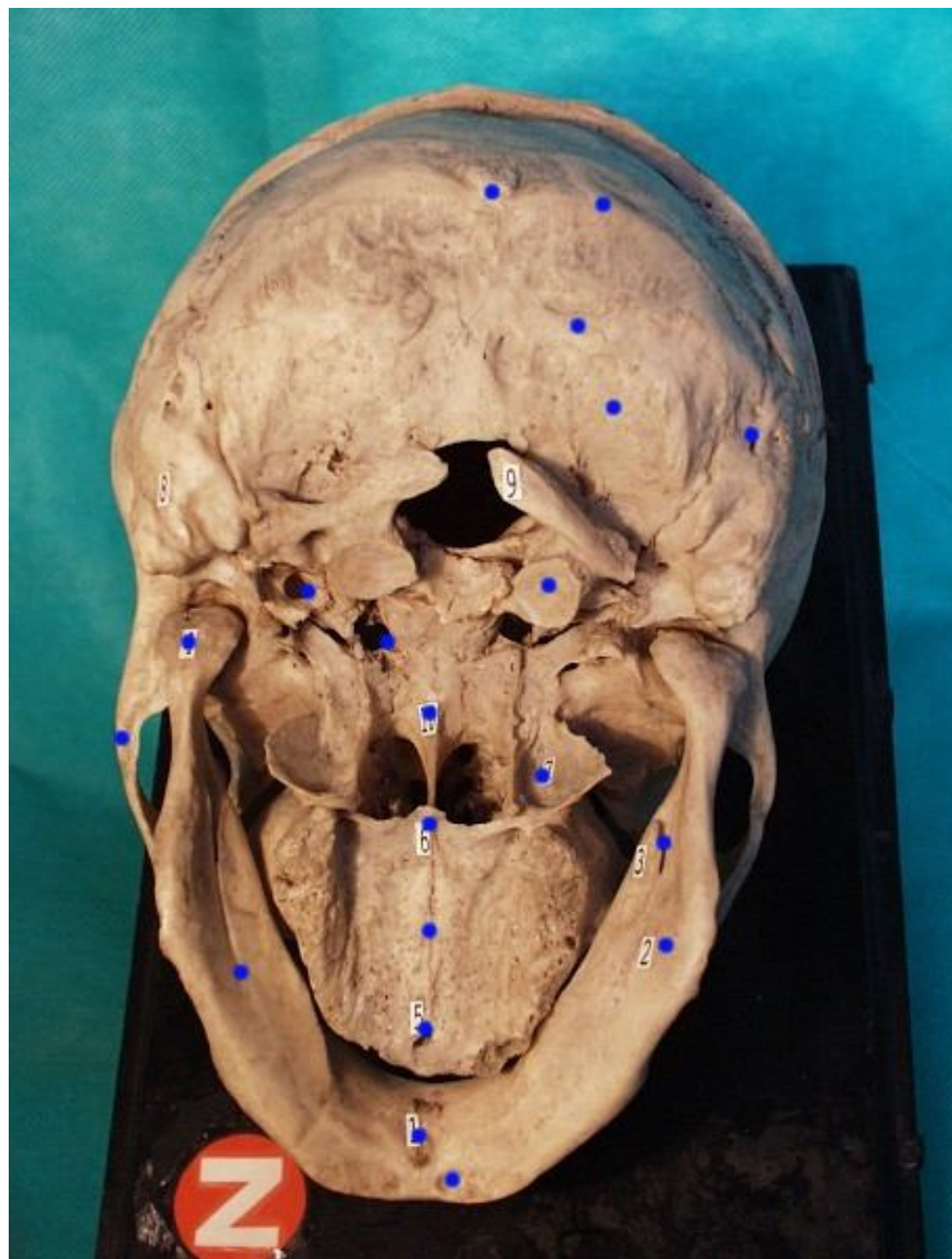
Basis cranii externa
-prostupy cév a nervů



Basis cranii externa
-prostupy cév a nervů
opakování



Basis cranii externa opakování



Použité zdroje

- Čihák, Anatomie 1
- Gray, Anatomy
- Petrovický a spol., Anatomie 1
- Sobotta , Atlas anatomie člověka
- <http://anat.lf1.cuni.cz/muzeum/kranio.html>
- Osobní archiv