

ORGANUM VISUS (VISUAL SYSTEM)

TUNICA FIBROSA BULBI

- **sclera**: posterior 5/6 of eye
- **cornea**: anterior 1/6 of eye

Tunica

- **fibrosa bulbi**
- **vasculosa bulbi**
- **interna bulbi**

Sclera (diameter: 11-12 mm)

lamina cribrosa sclerae

fascia bulbi (Tenoni) → **spatium episclerale**

spatium perichoroideum

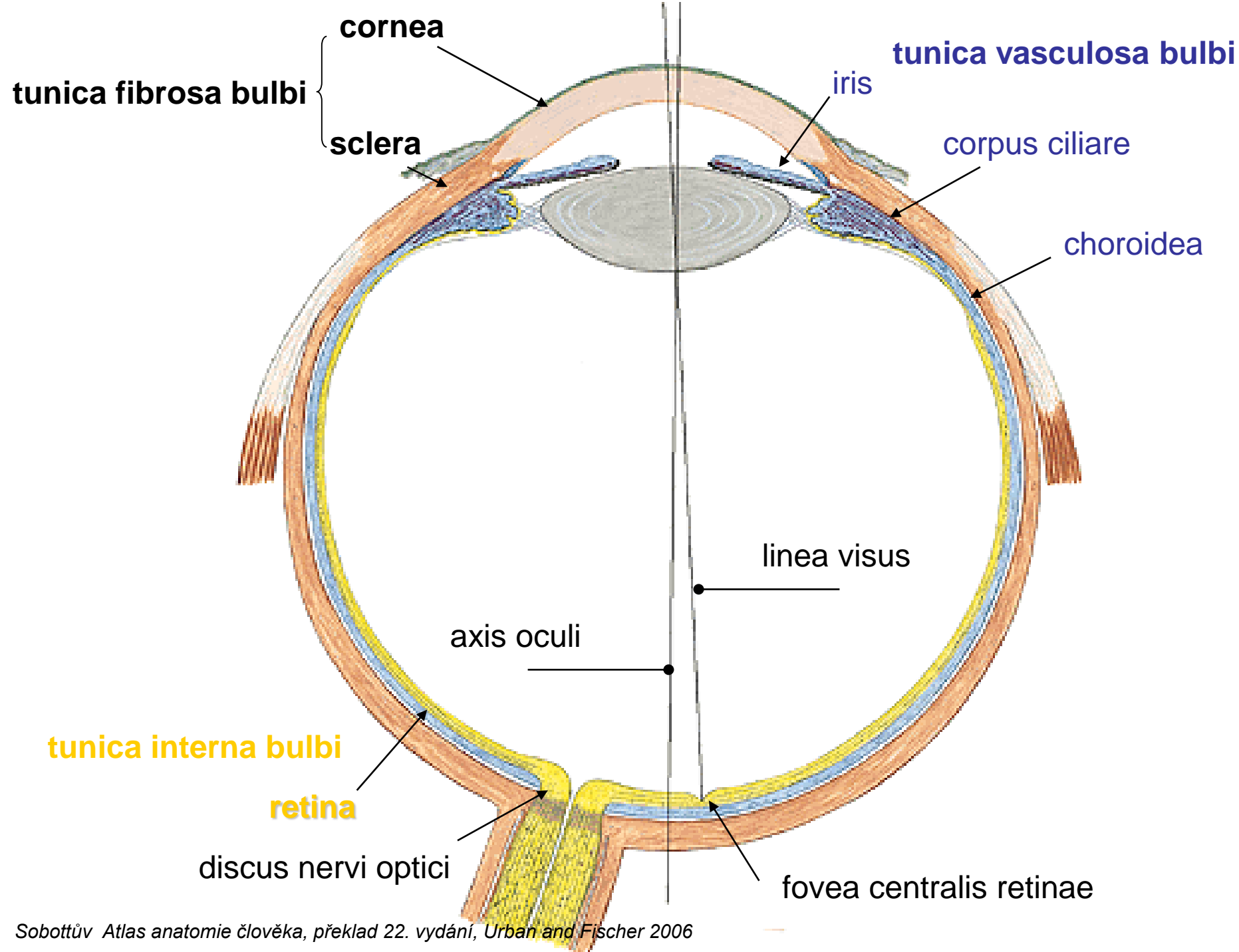
Cornea (diameter: 7-8 mm)

facies anterior et posterior corneae

limbus corneae

sclerocorneal junction - **sulcus sclerae**

- venous sinus **sinus venosus sclerae** (Schlemm's canal)



TUNICA VASCULOSA BULBI

choroidea (choroid)

corpus ciliare (ciliary body)

iris (iris)

CILIARY BODY (CORPUS CILIARE)

m. ciliaris fibrae meridionales
(ciliary m.) fibrae circulares

orbiculus ciliaris

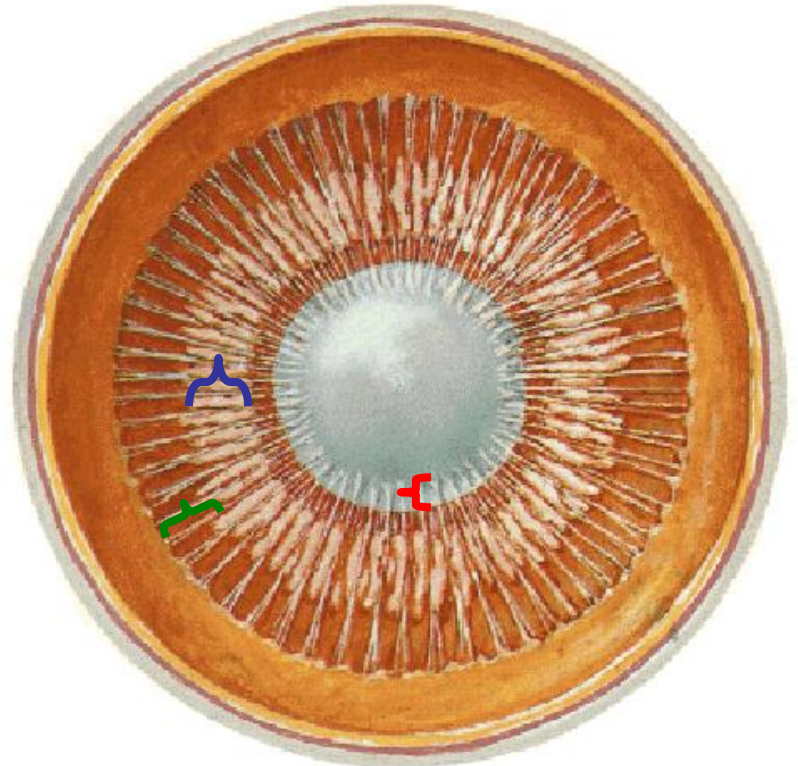
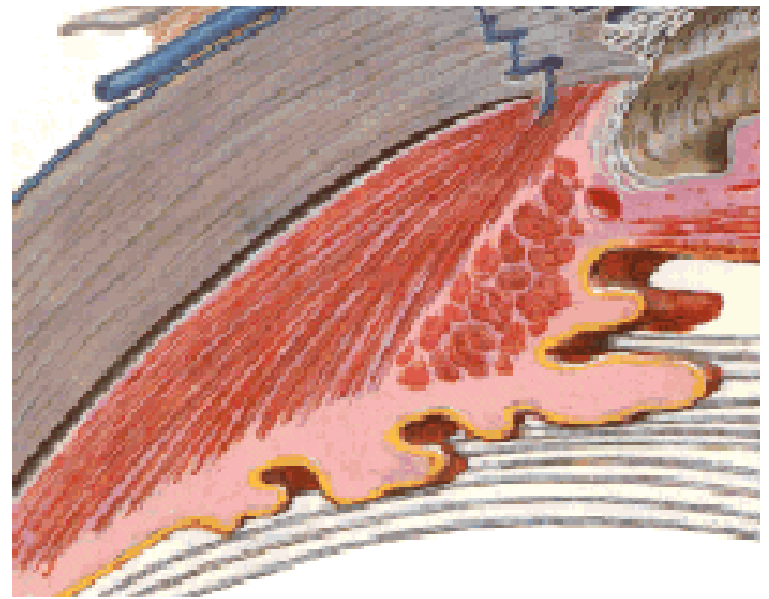
processus ciliares

plicae ciliares

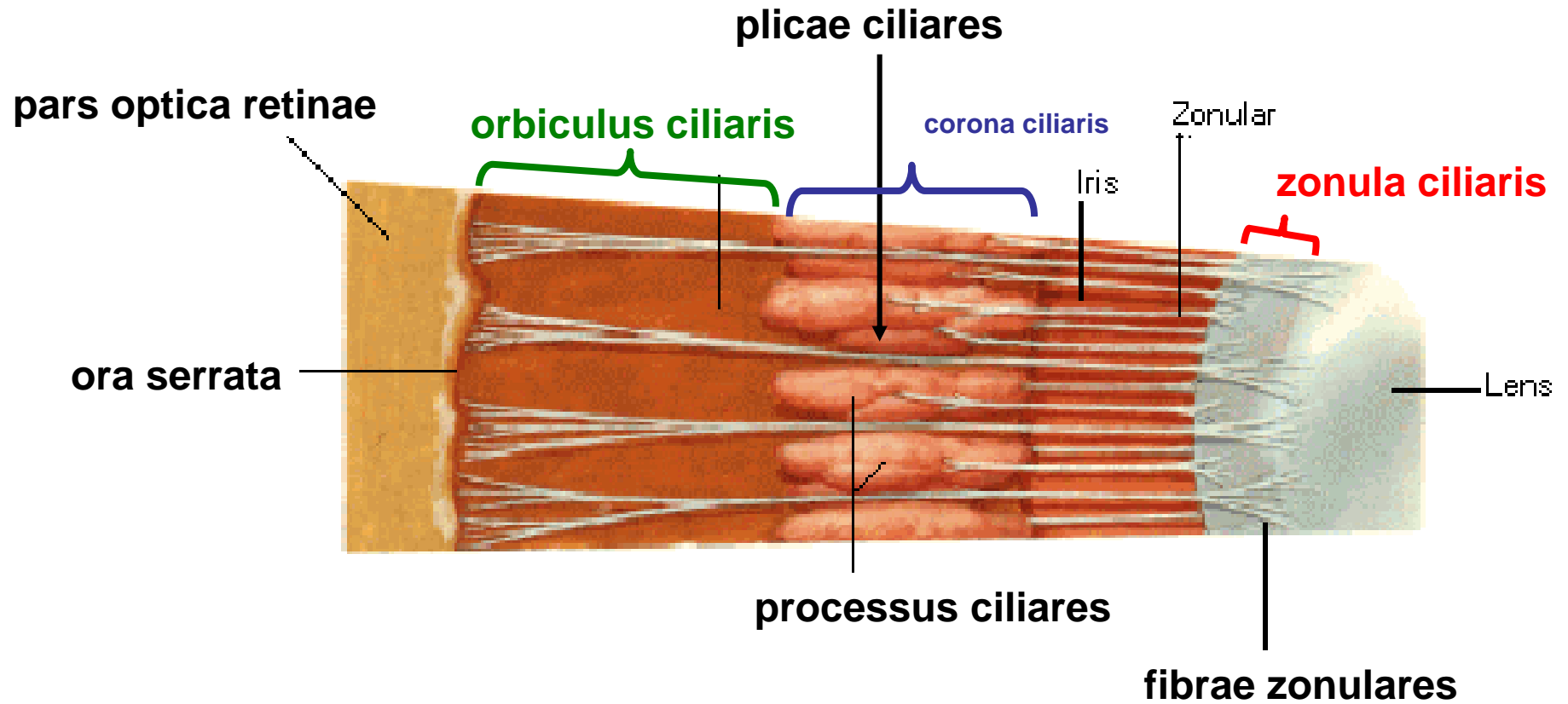
} **corona ciliaris**

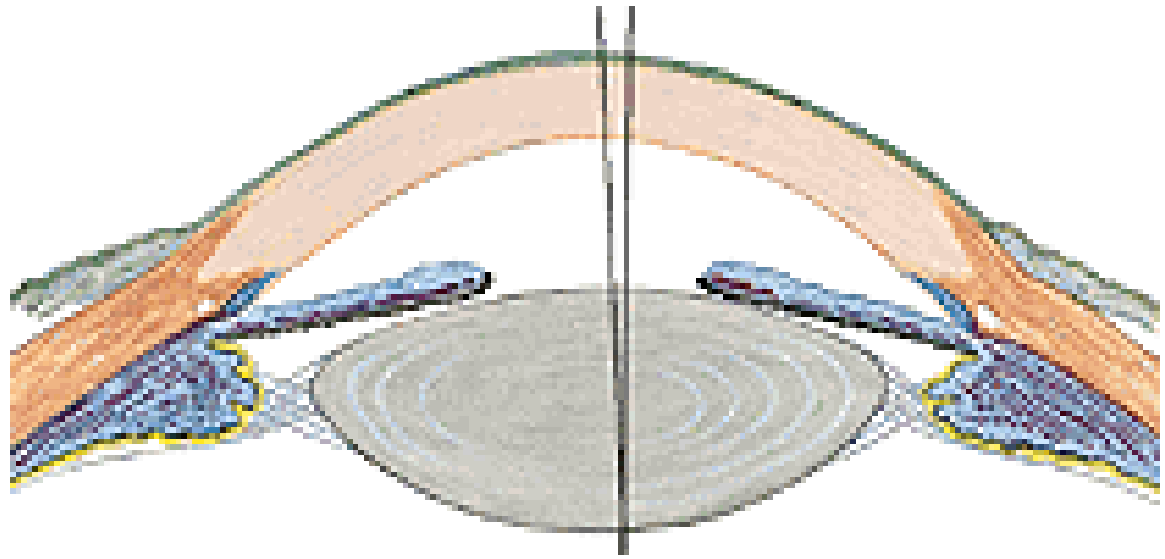
fibrae zonulares

zonula ciliaris



CILIARY BODY (CORPUS CILIARE)





IRIS

margo pupillaris

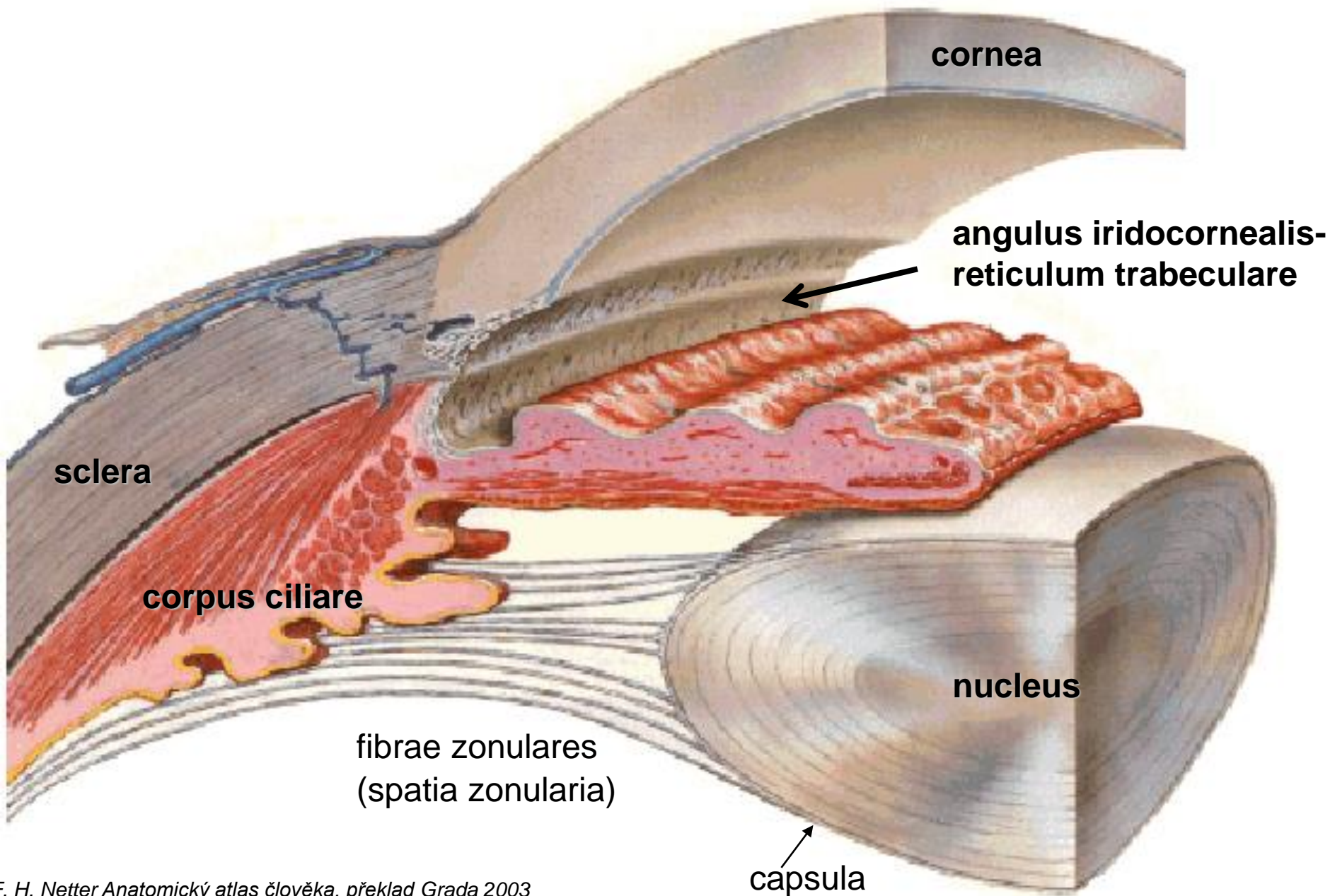
margo ciliaris

facies anterior et posterior iridis

m. sphincter pupillae – parasympathetic fibres - miosis

m. dilatator pupillae – sympathetic fibres - mydriasis

angulus iridocornealis → reticulum trabeculare



TUNICA INTERNA BULBI *RETINA*

pars optica retinae

pars caeca retinae (pars ciliaris retinae, pars iridica retinae)

ora serrata

pars optica retinae

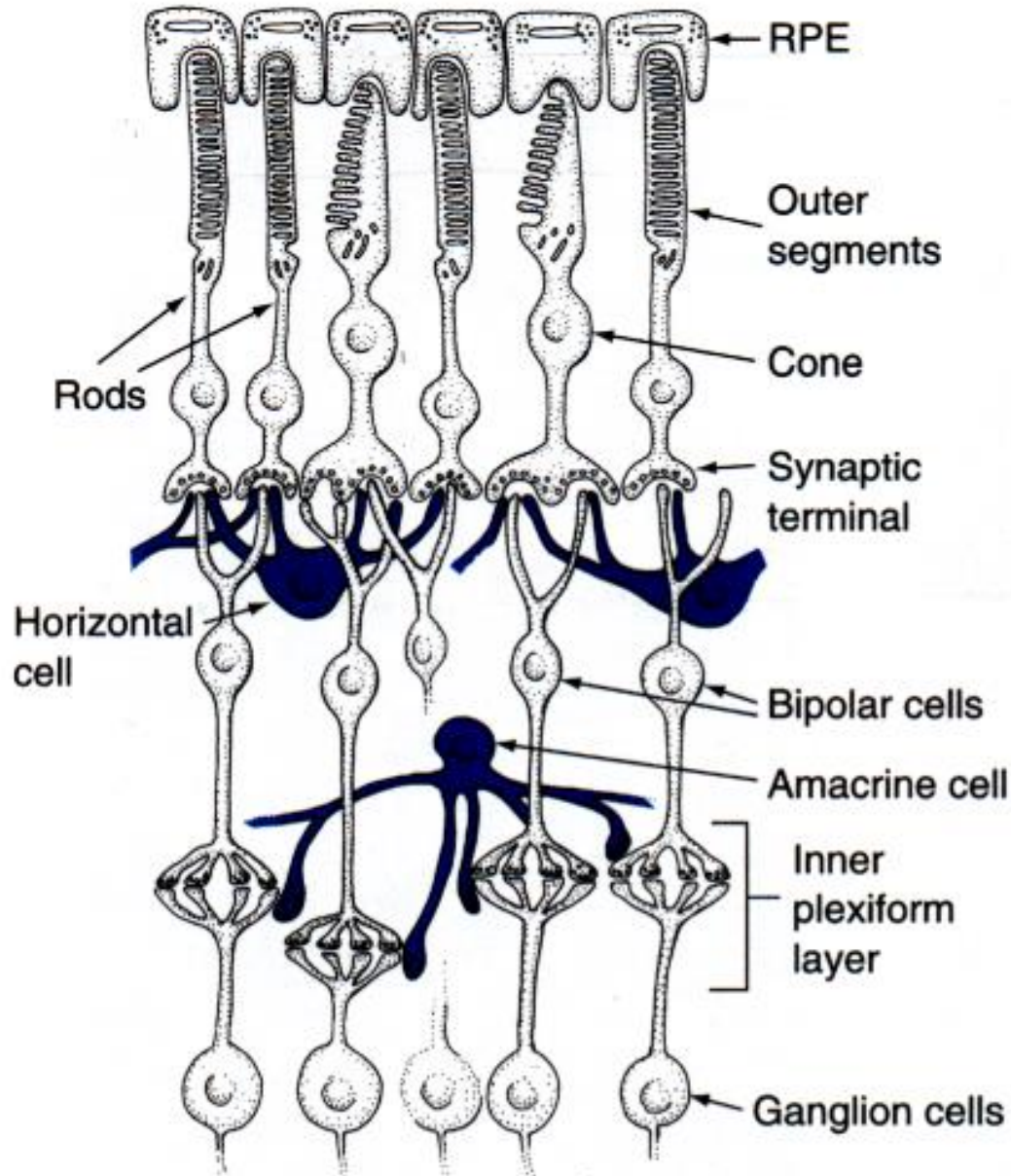
stratum pigmenti retinae (pigmented layer)

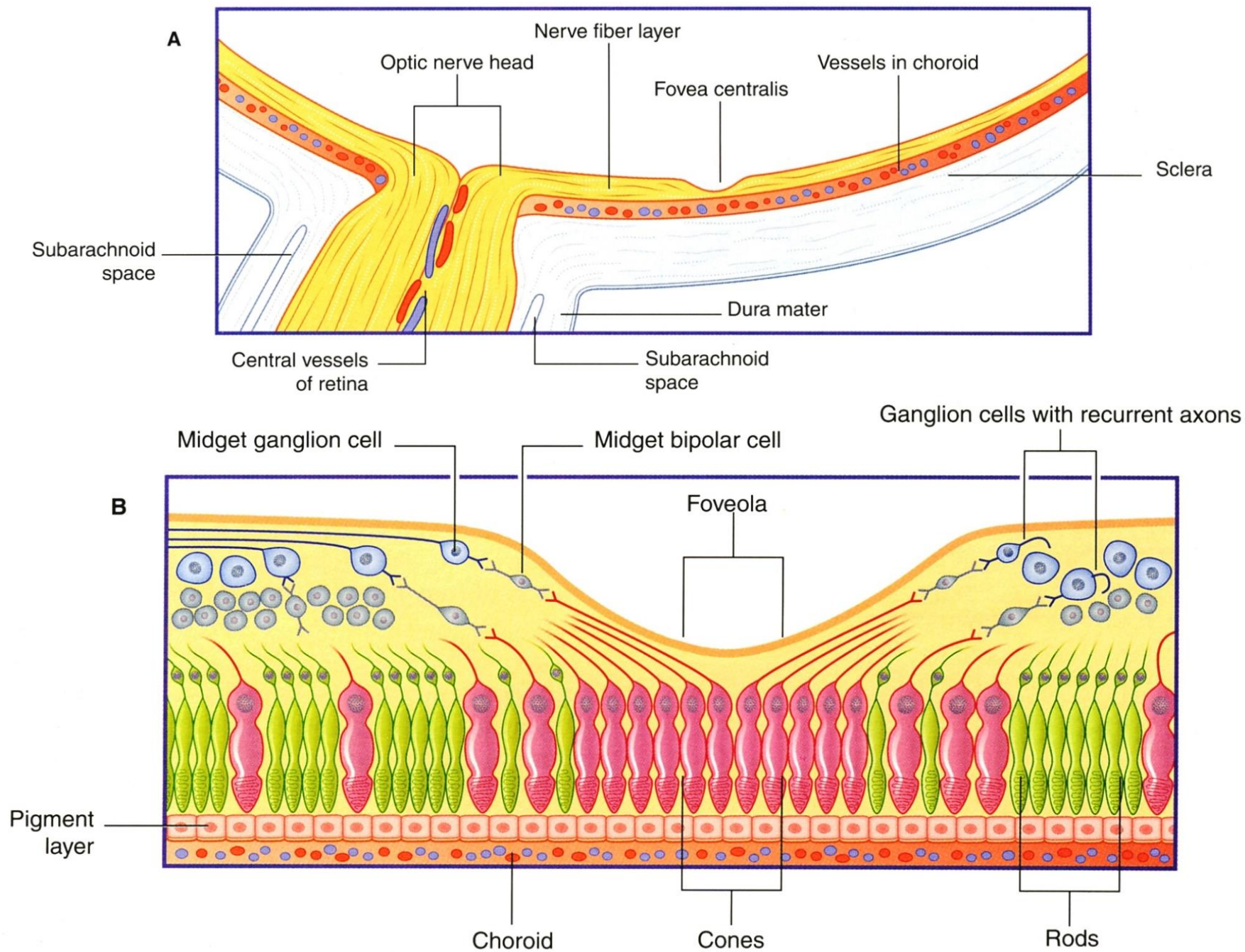
stratum neuroepitheliale (layer of rods and cones)

stratum ganglionare retinae (ganglionic layer of retina)

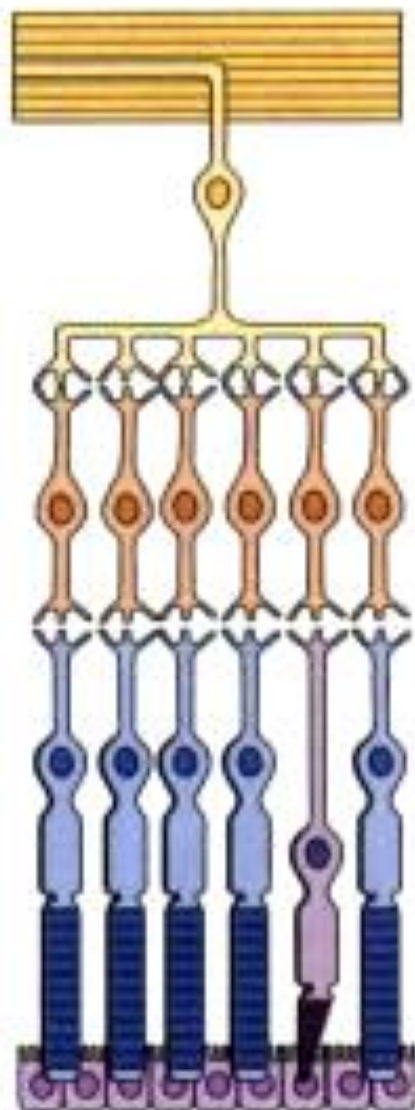
stratum ganglionare nervi optici (ganglionic layer of optic nerve)

NEURONS OF RETINA





Temporal
periphery



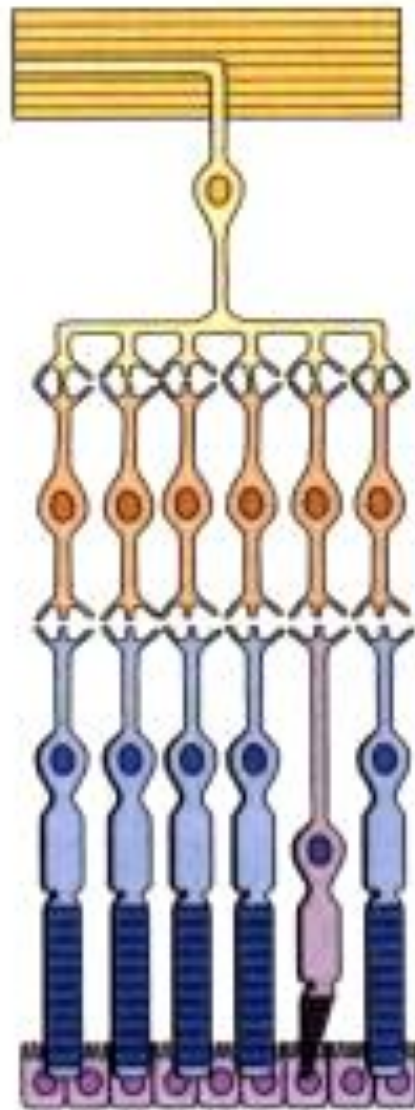
Peripheral retina

Central
retina



Central retina

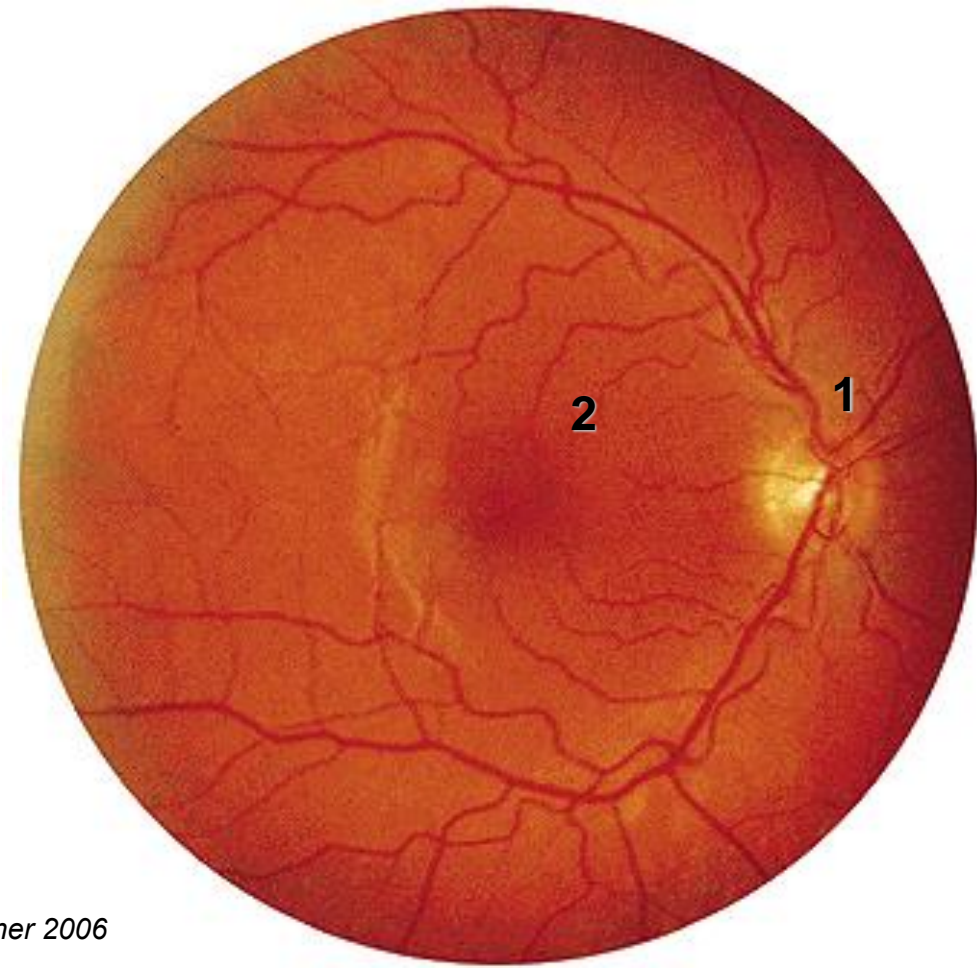
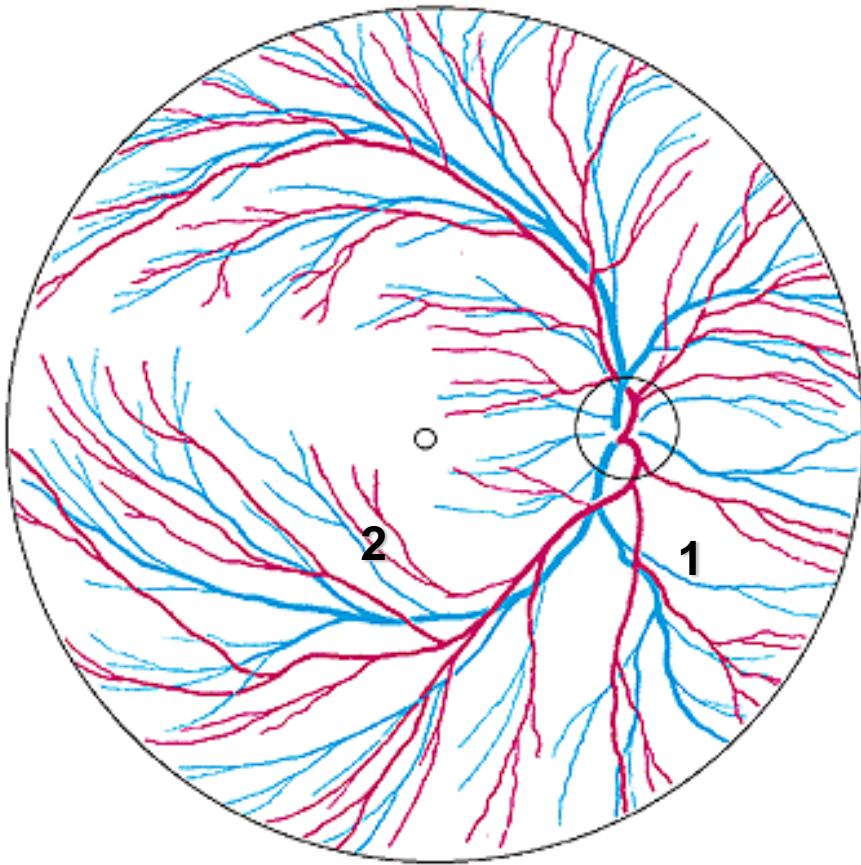
Nasal
periphery



Peripheral retina

Ophthalmoscopic picture to view eye fundus

branches of
a. et v. centralis retinae

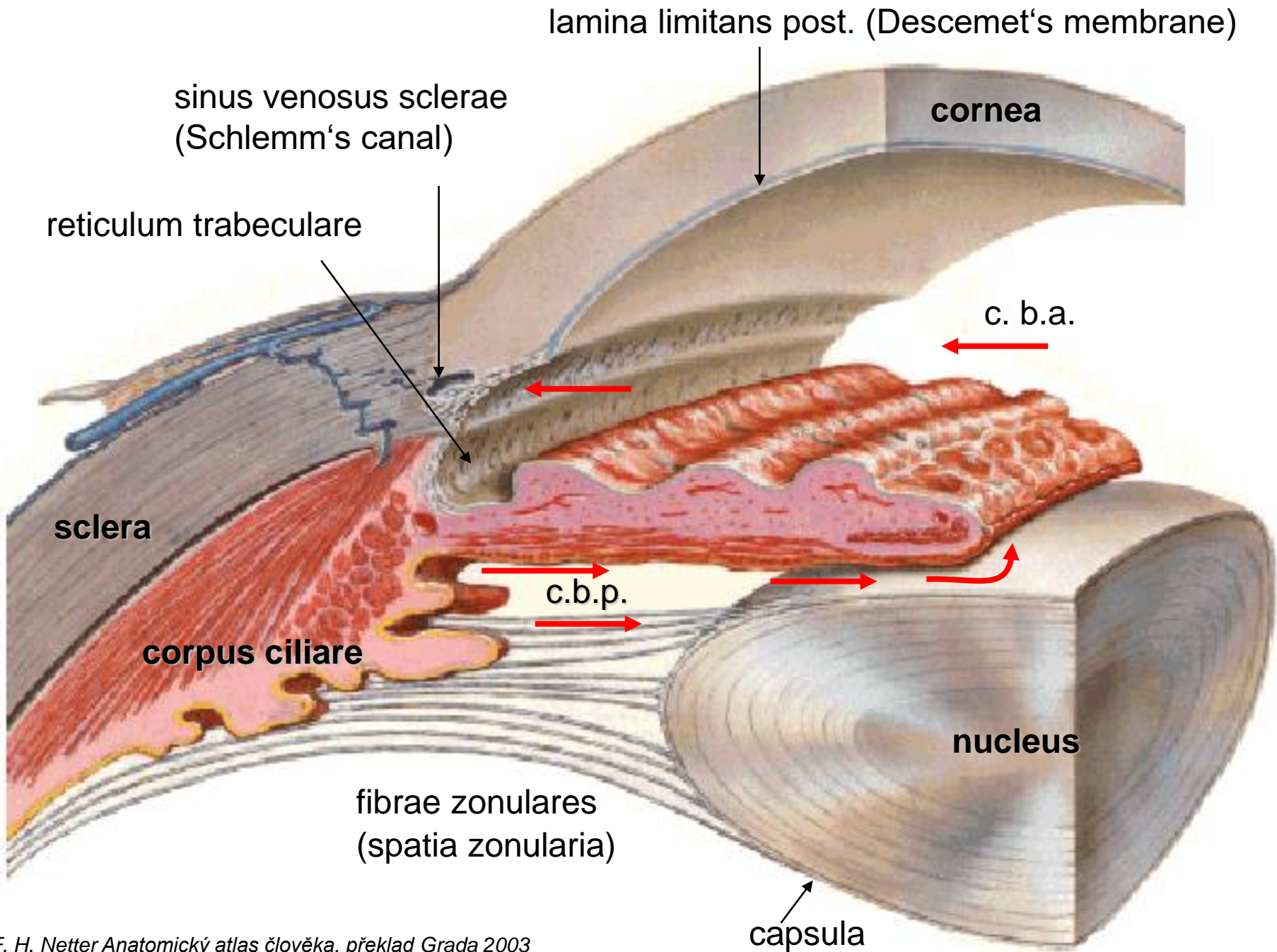


1. discus nervi optici - excavatio disci

2. macula (lutea) - fovea centralis

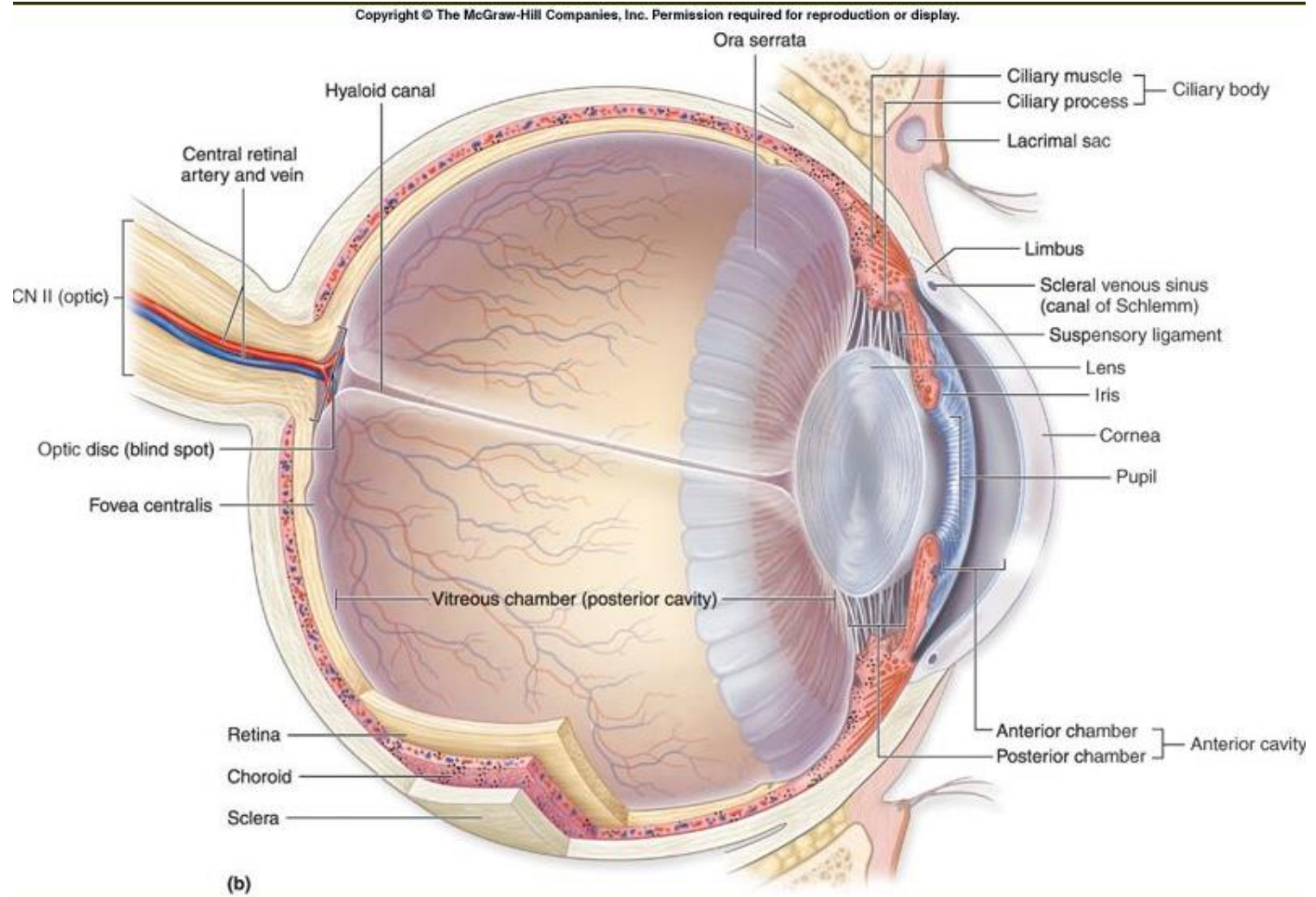
Diabetic retinopathy



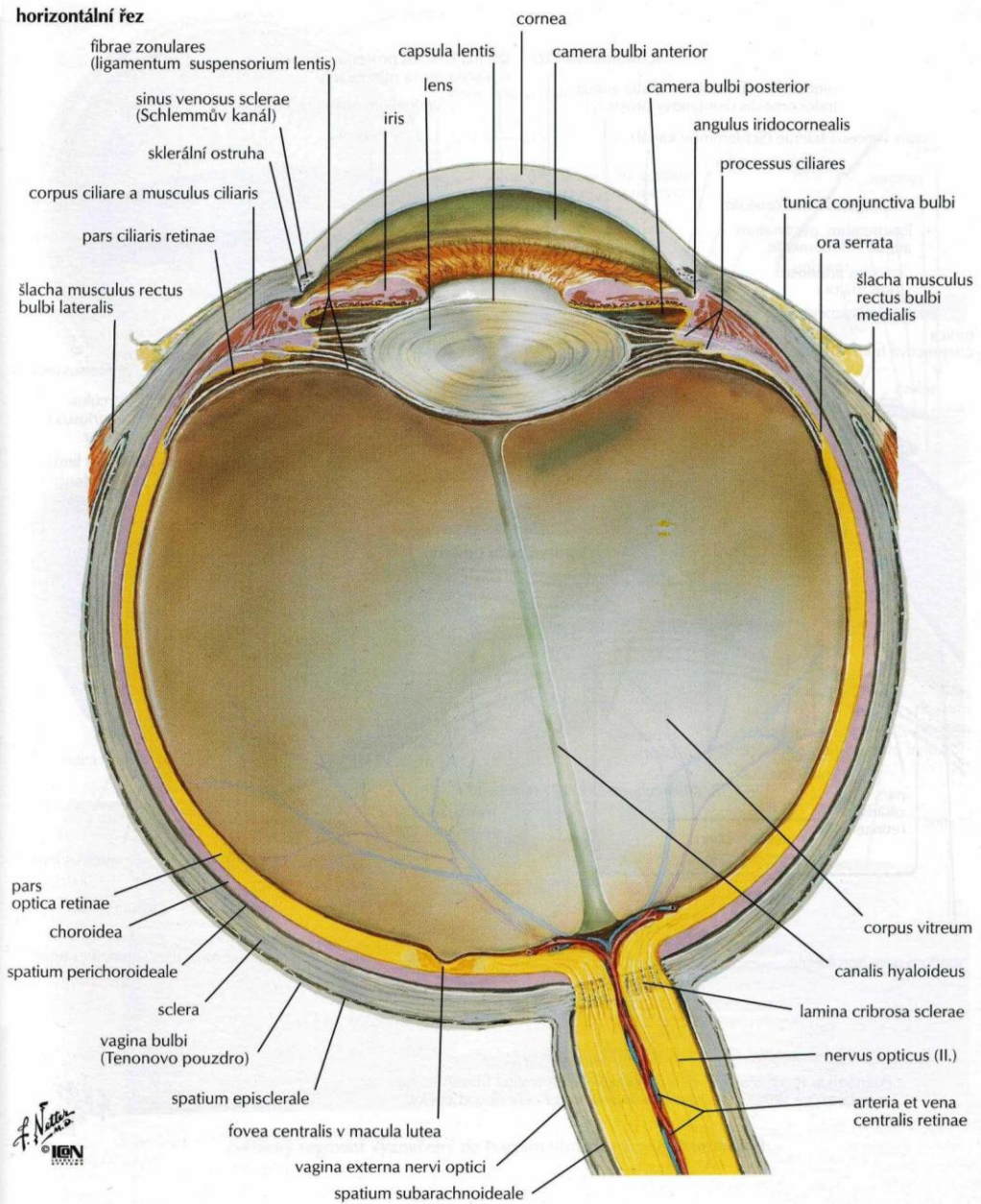


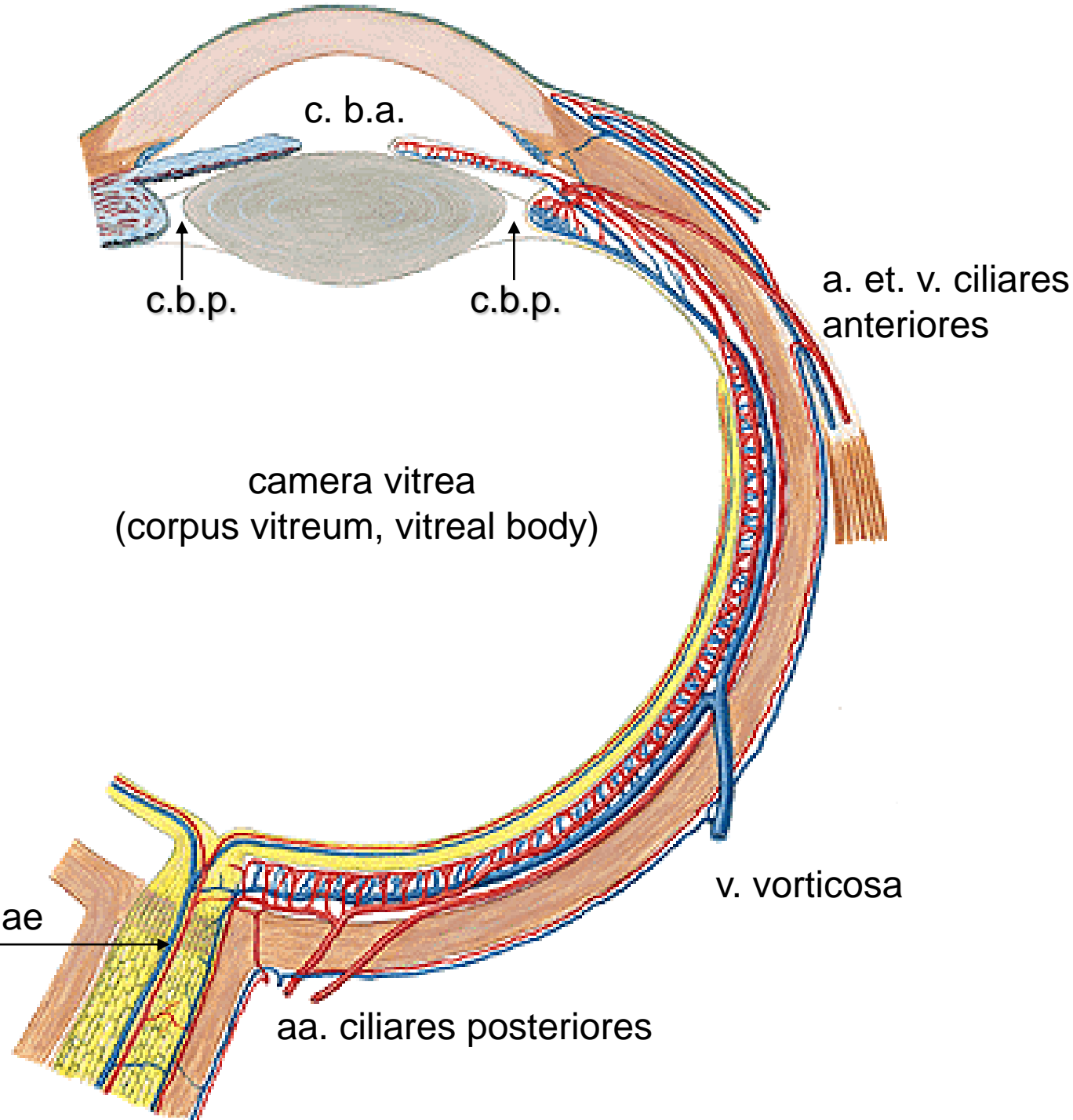
Vitreous chamber – Aqueous humour

embryonic hyaloid a. – hyaloid canal



Camera vitrea – humor aquosus





c. b. a.

c. b. p.

c. b. p.

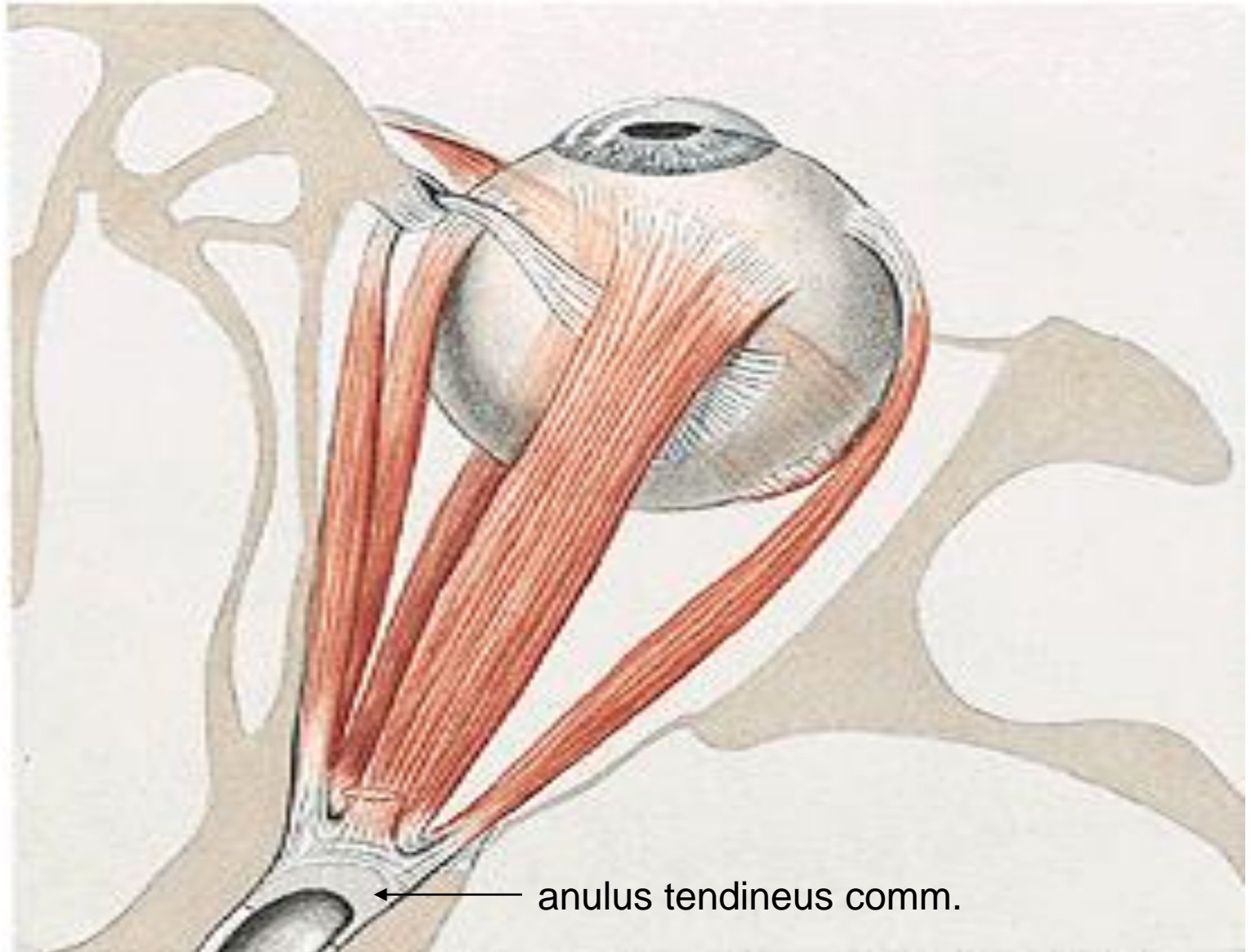
a. et. v. ciliares anteriores

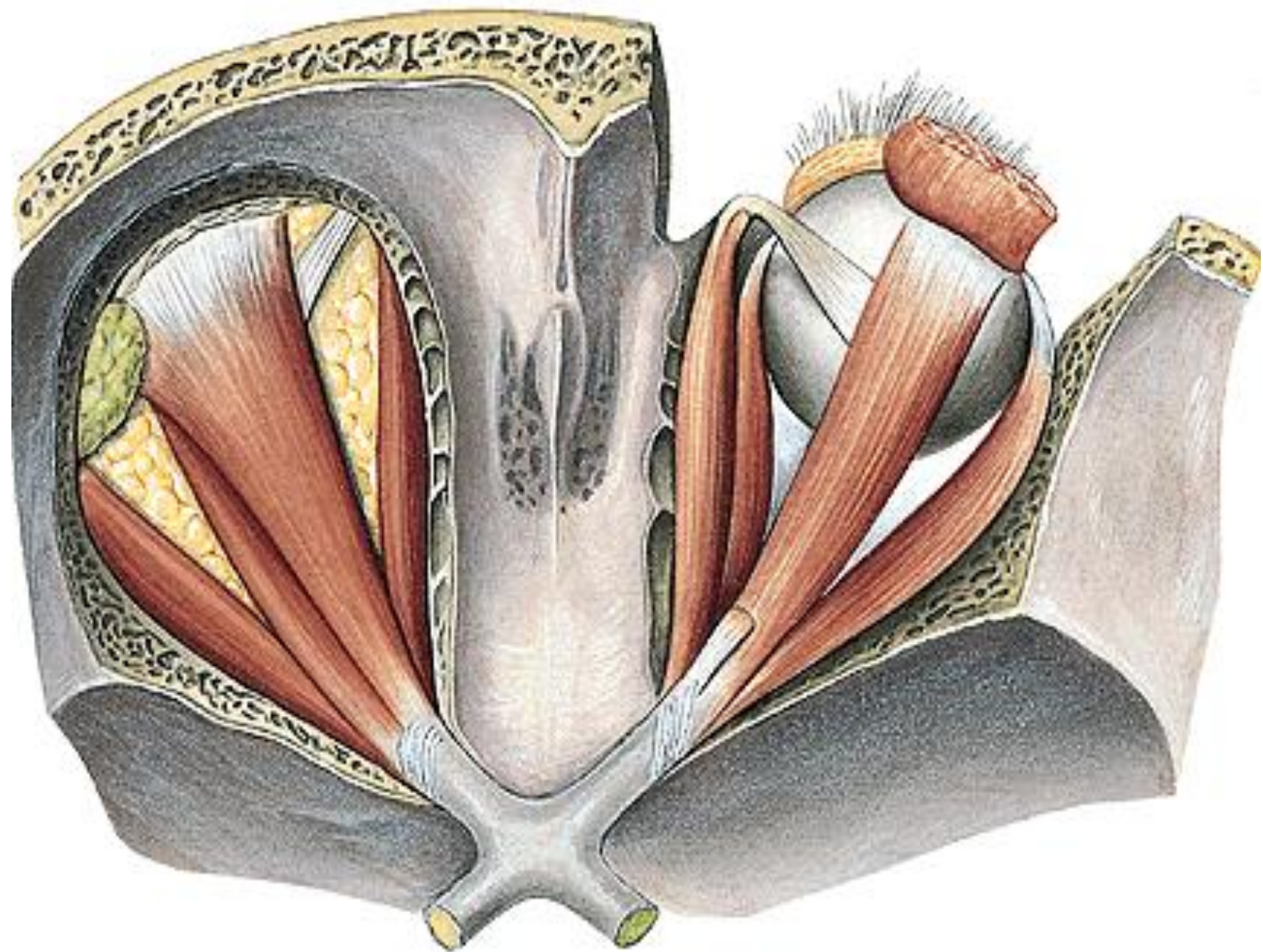
camera vitrea
(corpus vitreum, vitreal body)

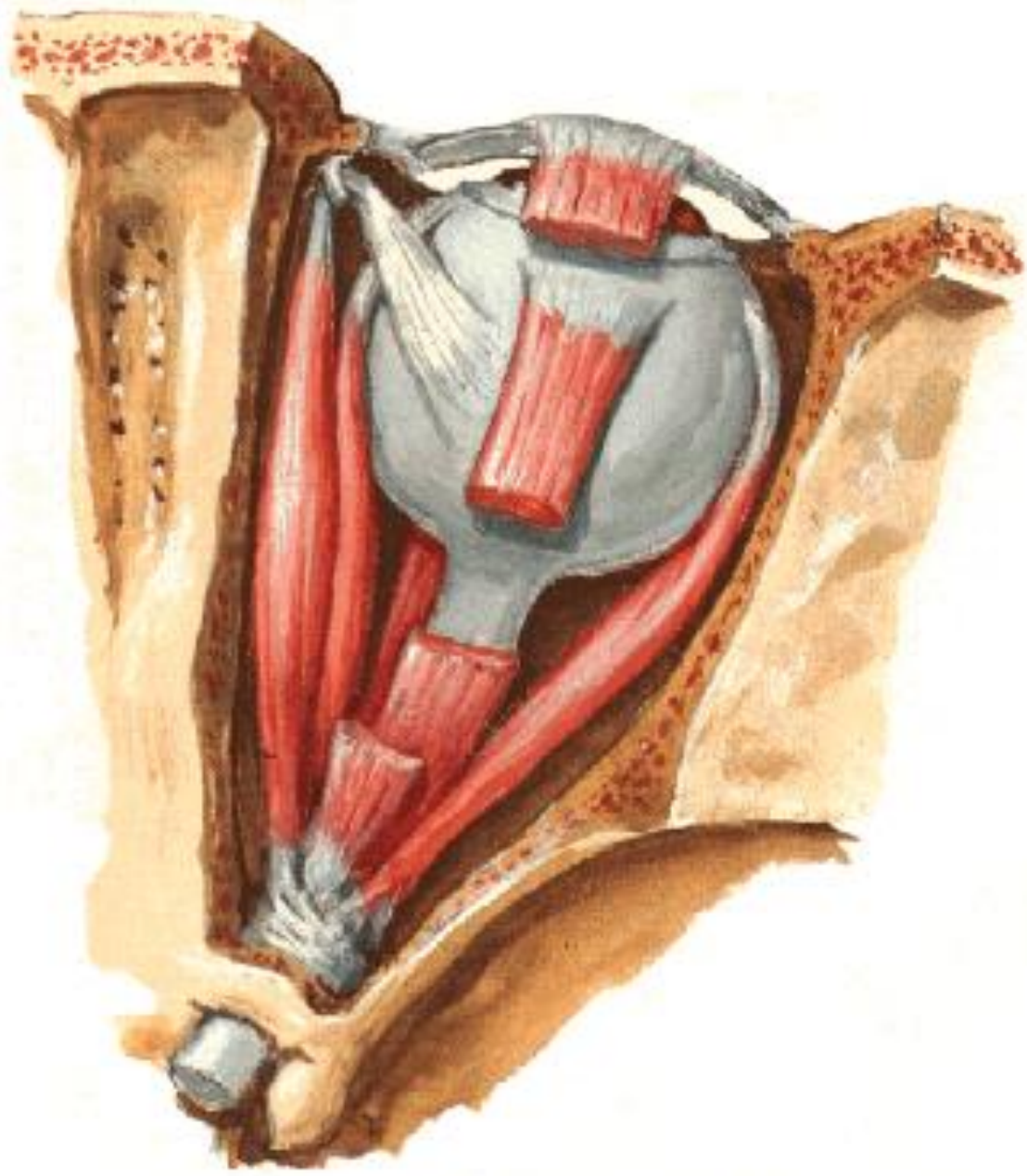
v. vorticosa

a. et v. centralis retinae

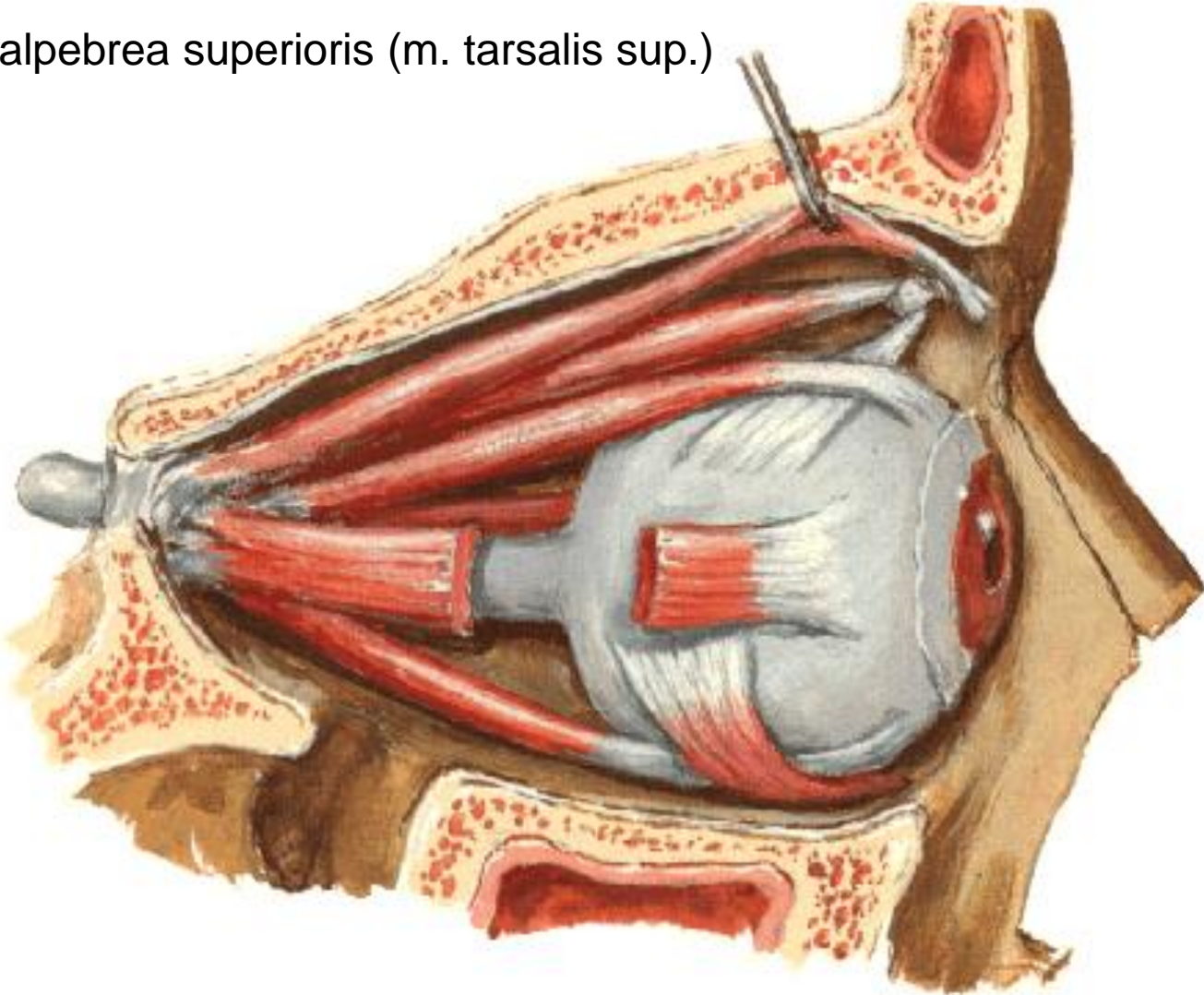
aa. ciliares posteriores





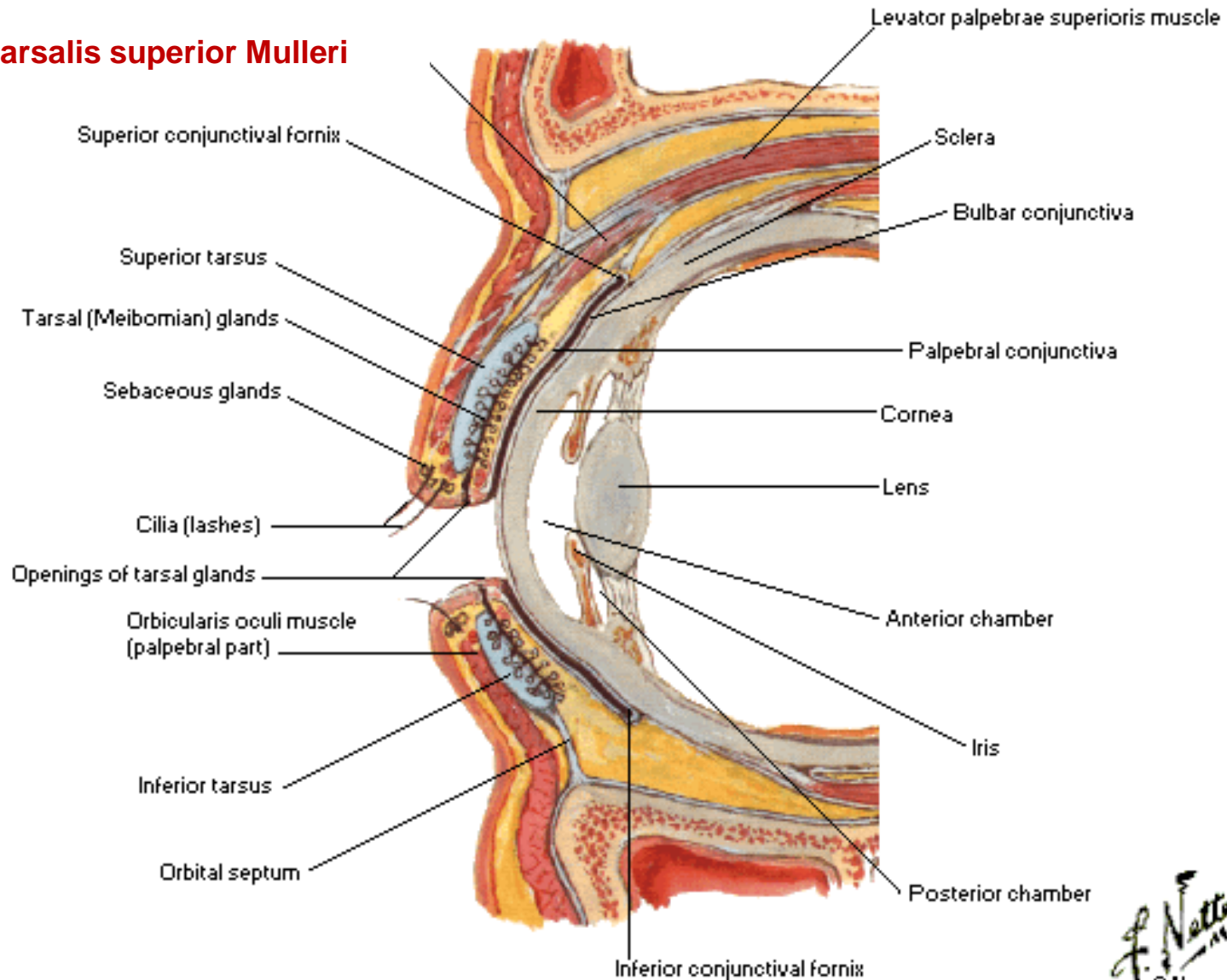


m. levator palpebrae superioris (m. tarsalis sup.)



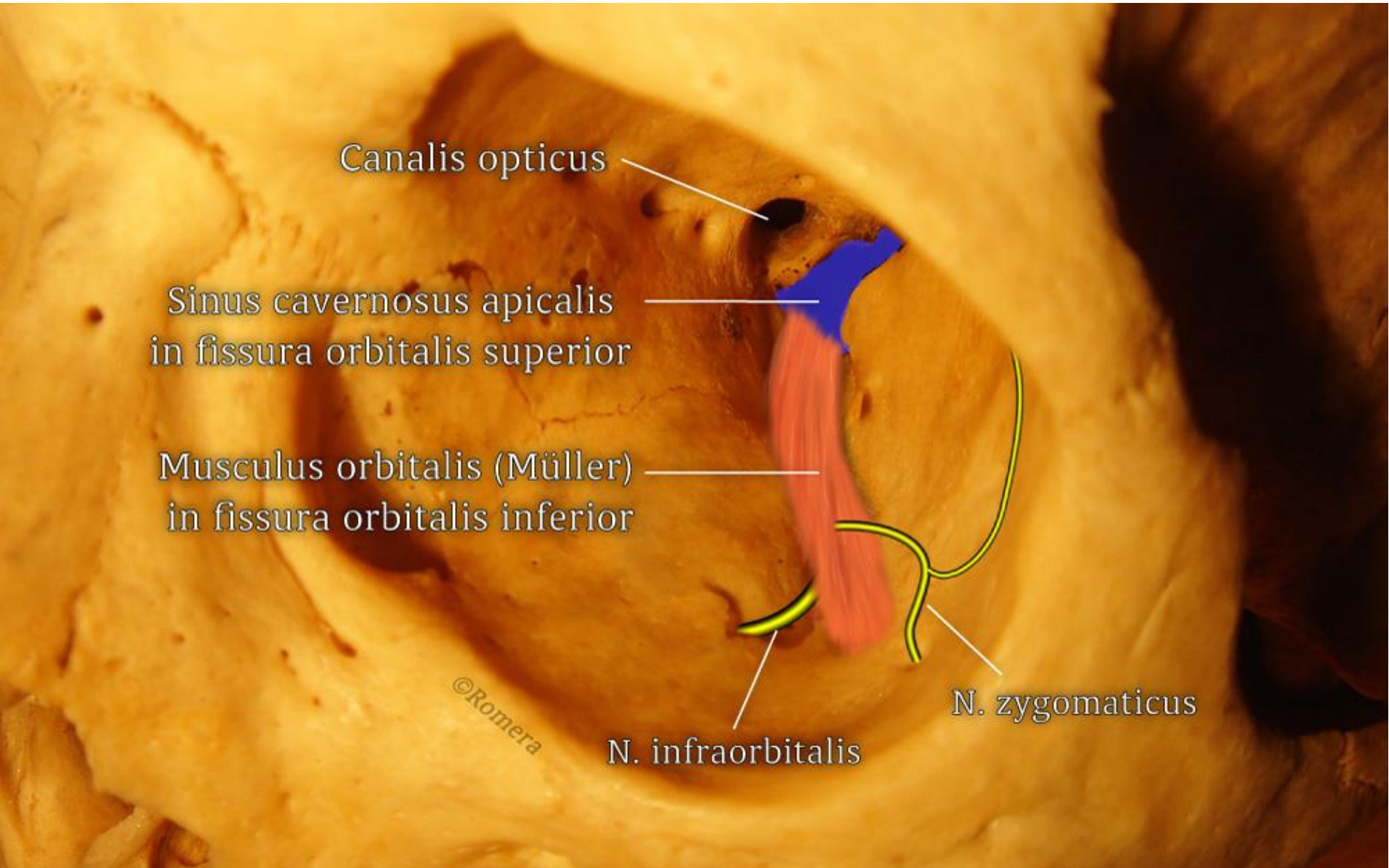
Smooth extraocular muscles

m. tarsalis superior Mulleri



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M. orbitalis



Horner's syndrome

Horner's triad: miosis, ptosis of eyelid, enophthalmus



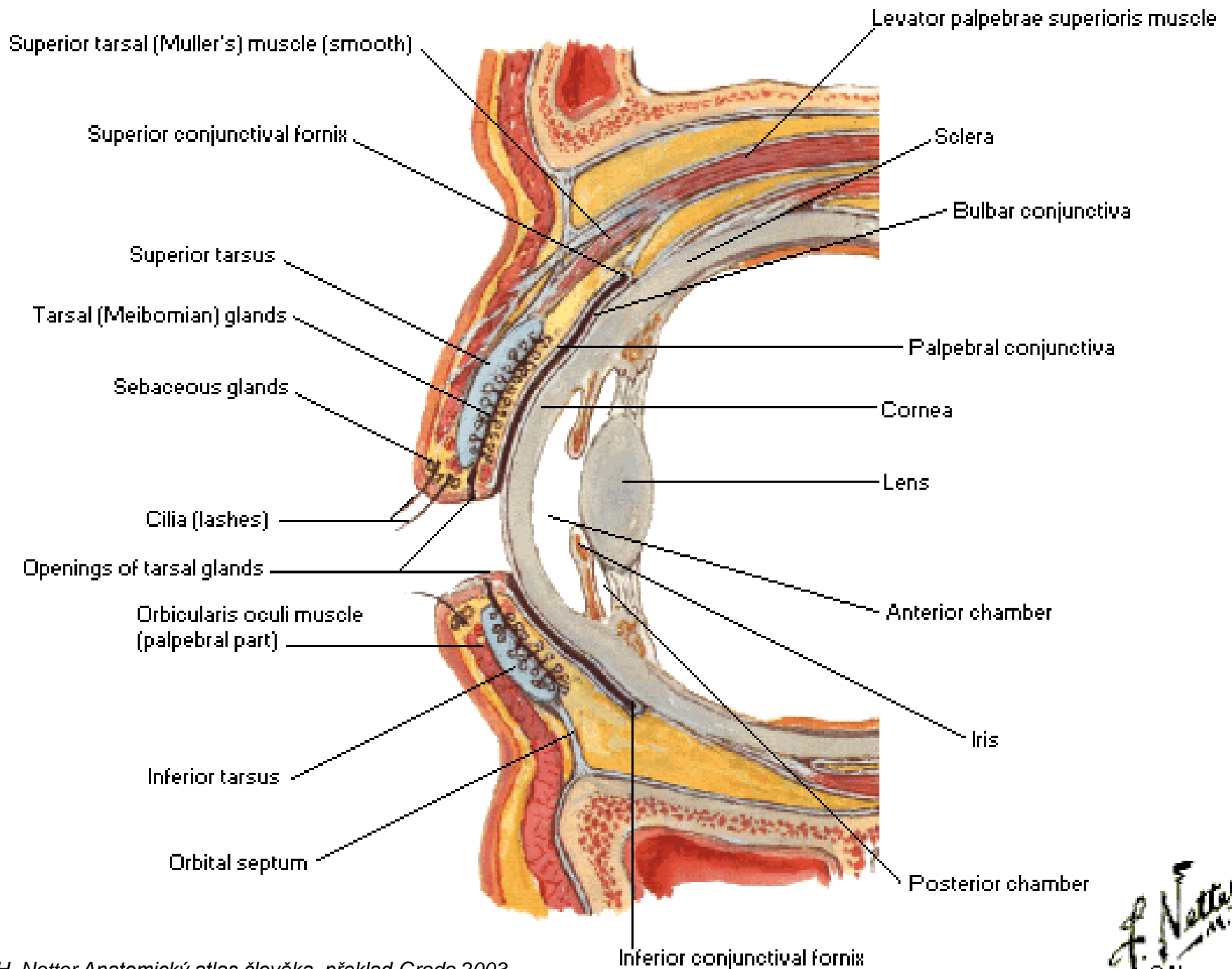
Injury/compression – cervical sympathetic, both preganglionic and postganglionic (plexus caroticus)

Tunica conjunctiva - conjunctiva

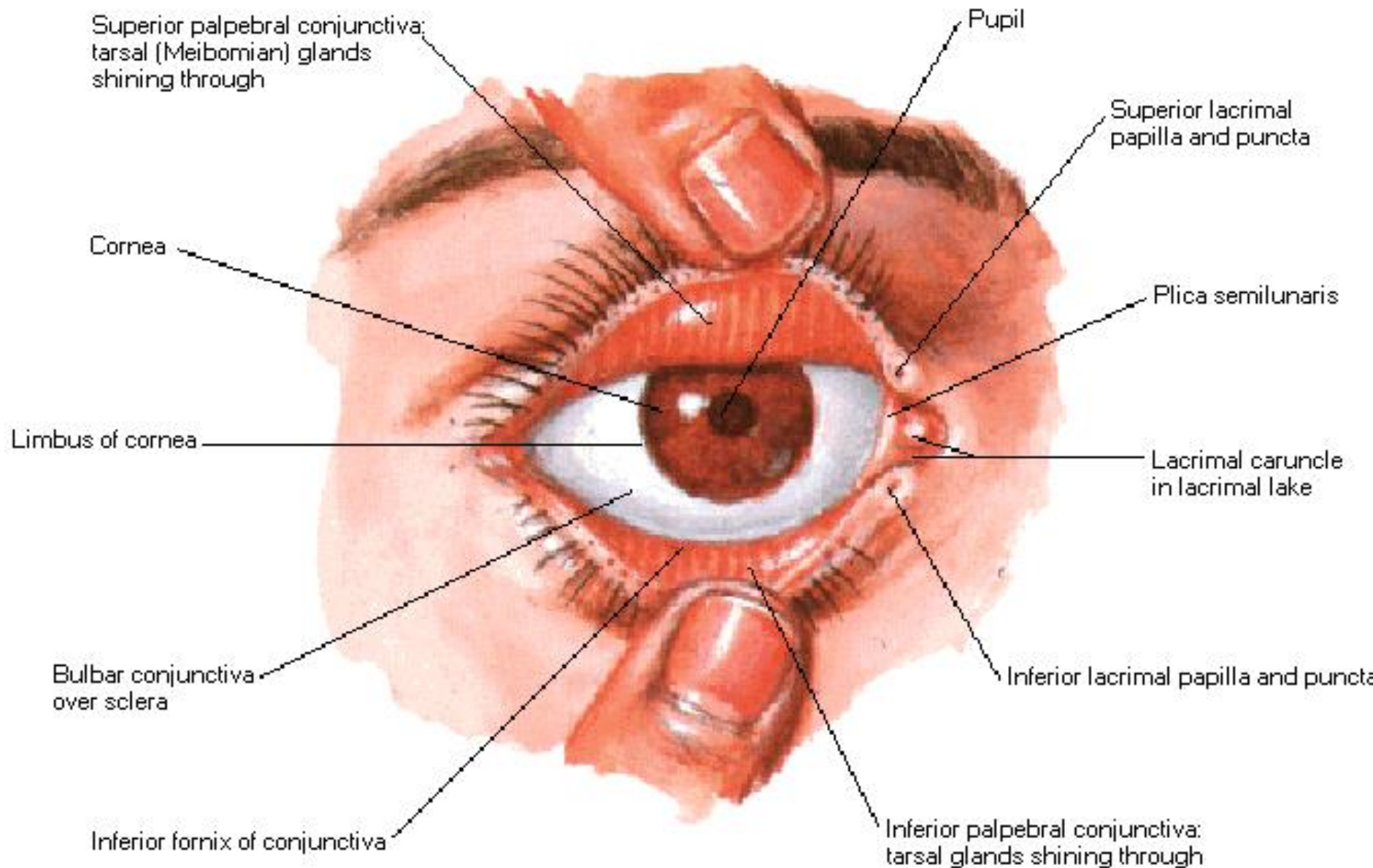
tunica conjunctiva bulbi et palpebrarum **conjunctiva of eyeball and eye lids**
fornix conjunctivae sup. et inf.

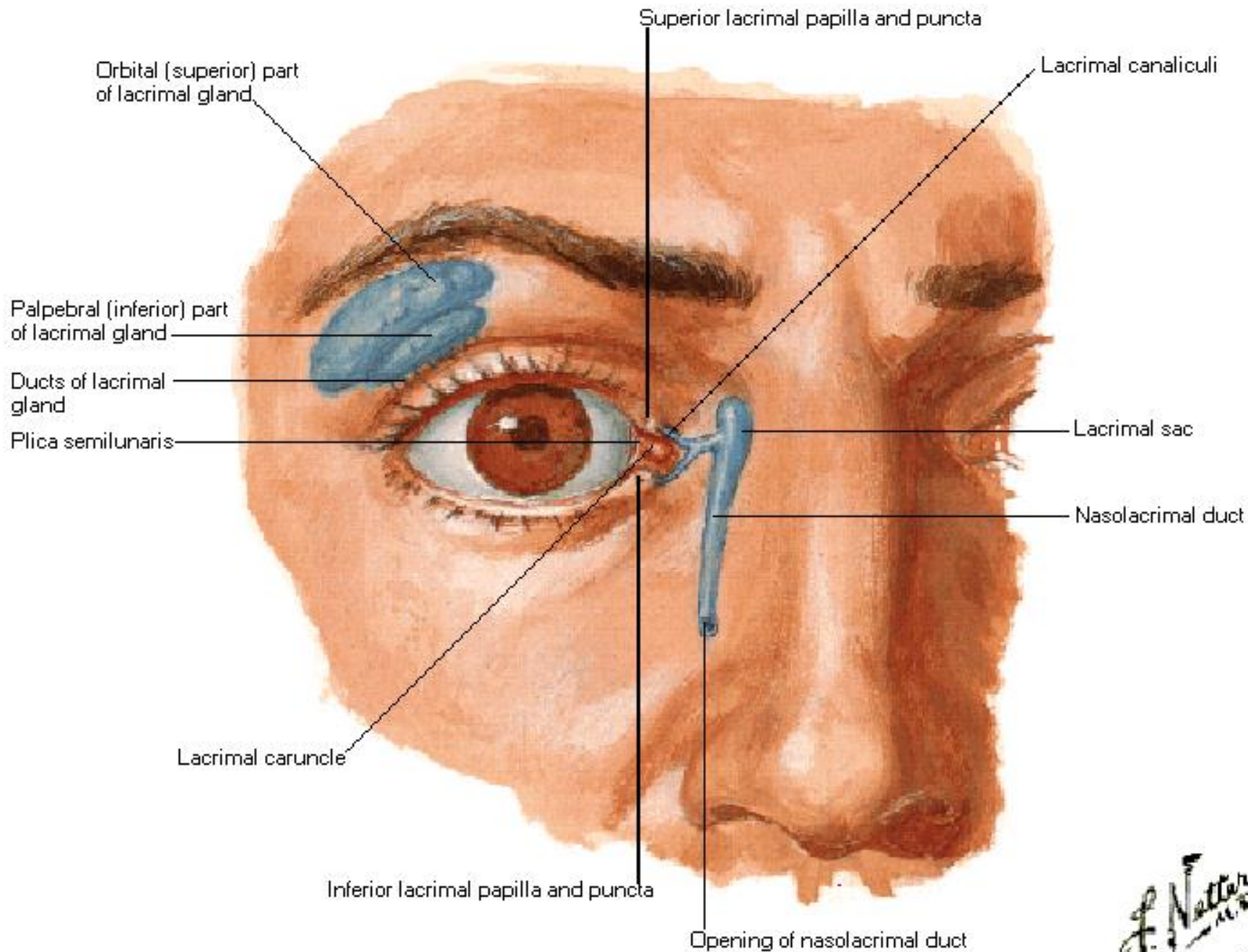
Palpebrae – eye lids

- tarsus sup. et inf.
- lig. palpebrale med. et lat.
- rima palpebrarum
- rivus lacrimalis
- angulus oculi medialis et lateralis
- gll. tarsales (Meibomi) – flow into rima (sebaceous)
- gll. ciliares (Molli) – openings are related with rima et cilie (apocrine sudorific)
- gll. sebaceae (Zeisi) – openings are related with cilie (holocrine sebaceous)
- hordeolum

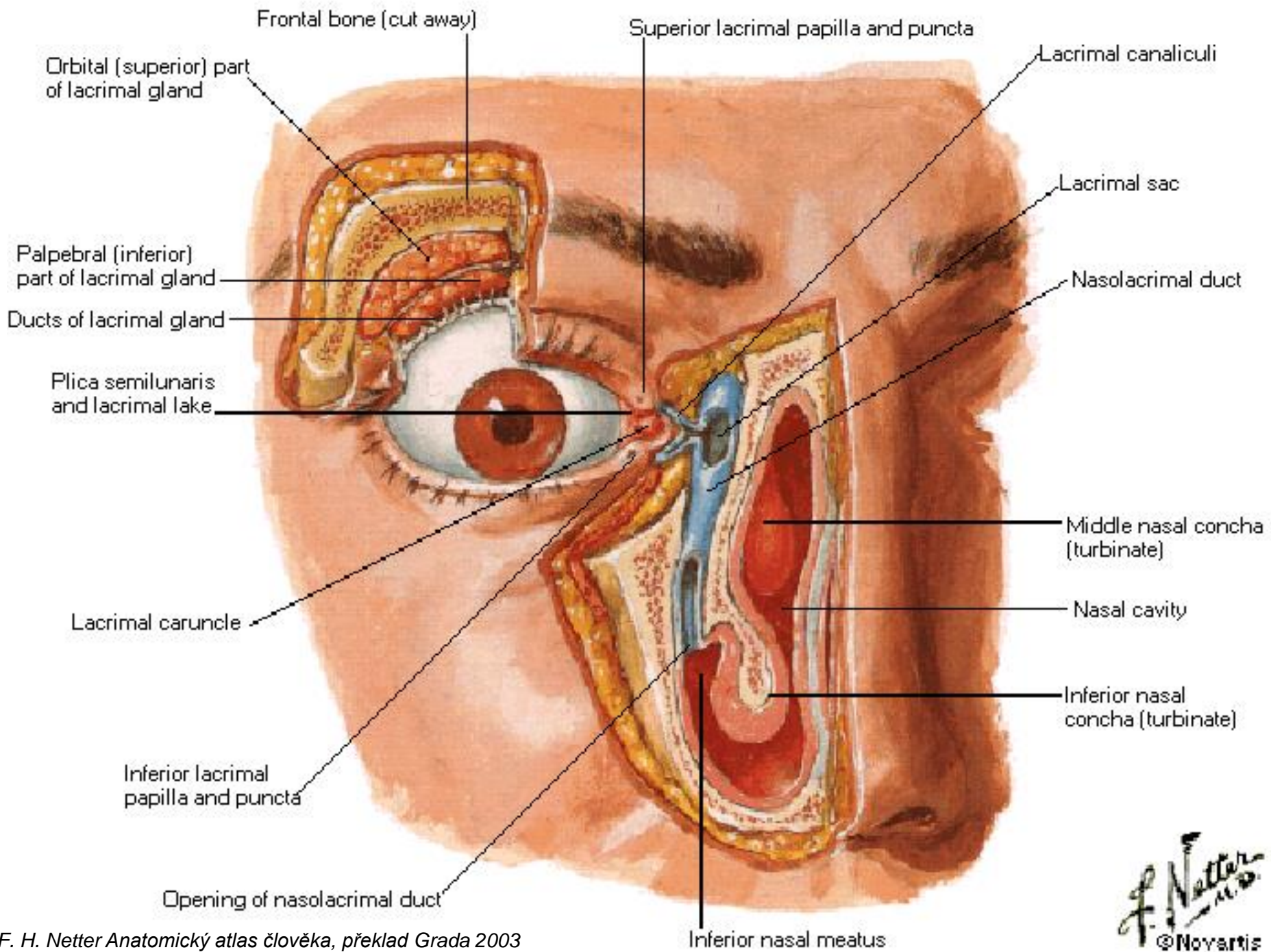


Lacrimal apparatus





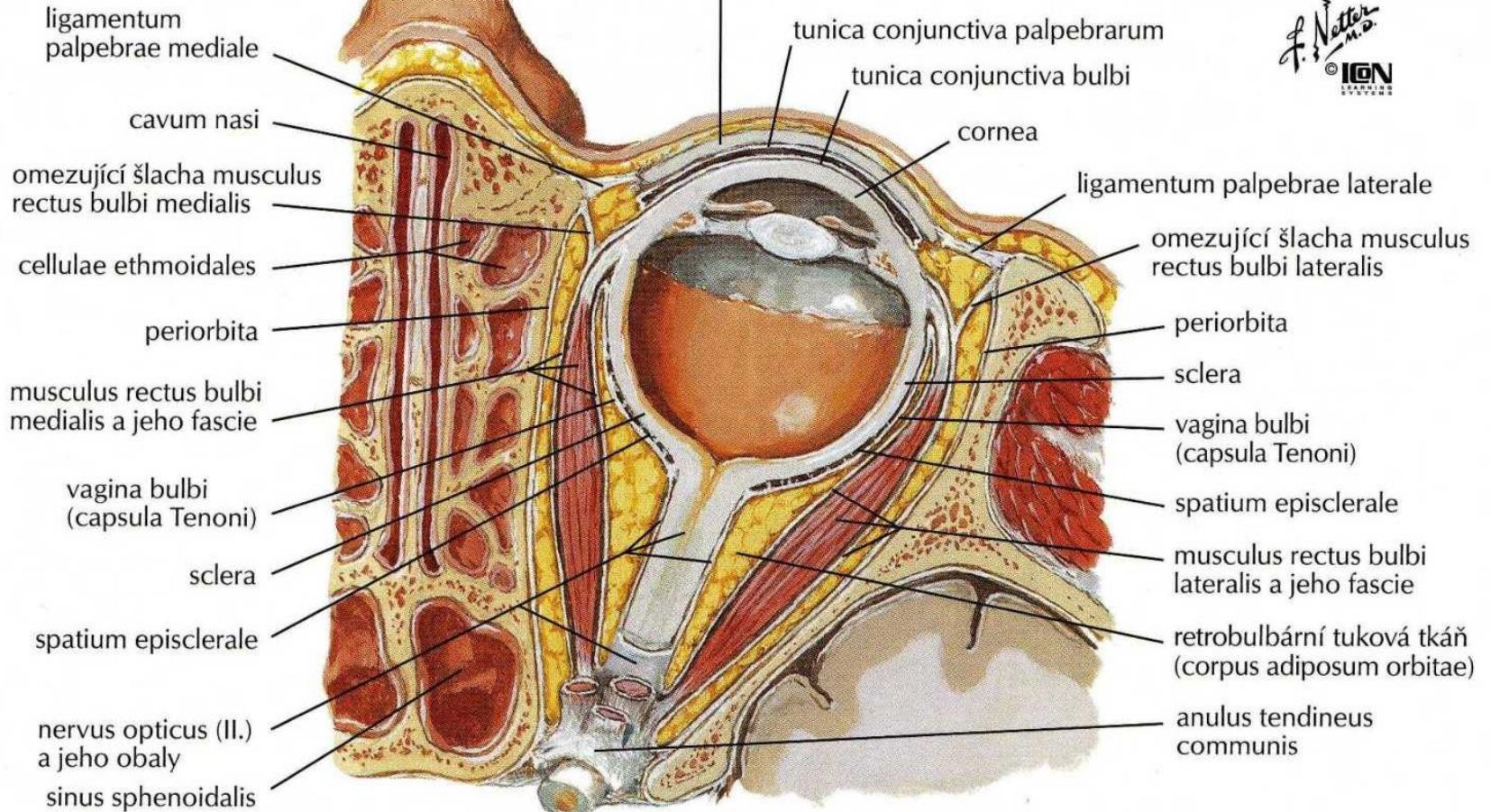
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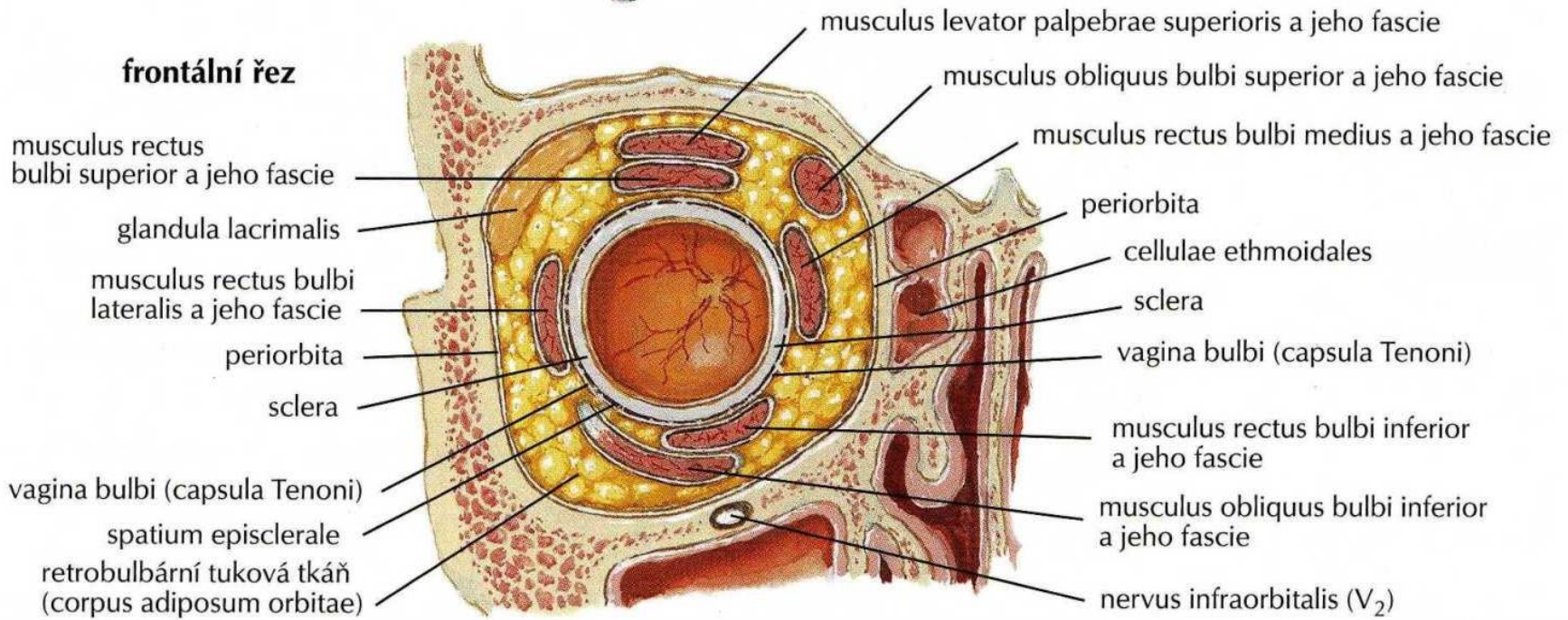
Orbit

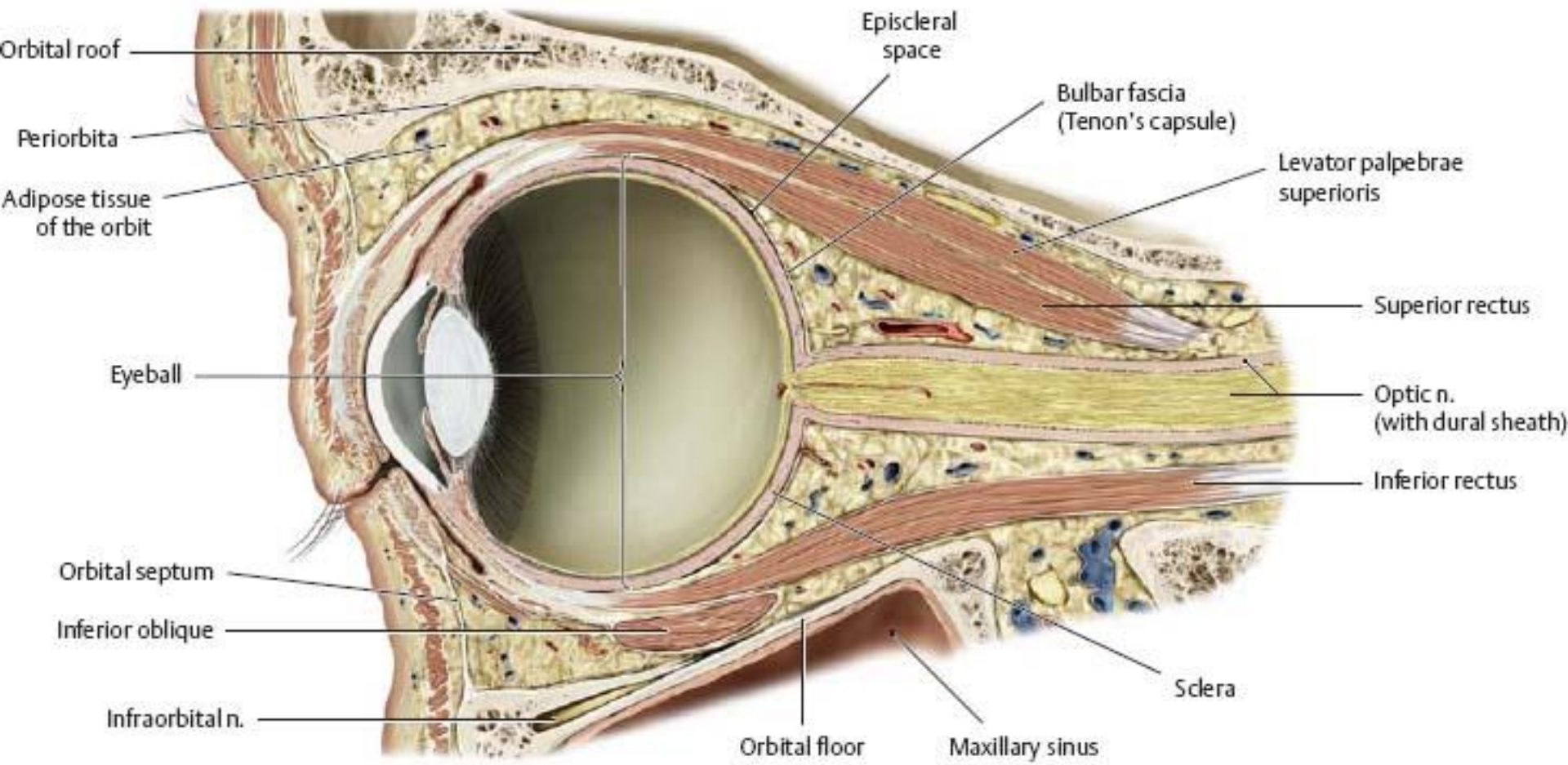
Walls of orbit – periorbita
Vagina (fascia) bulbi (Tenoni)
Corpus adiposum orbitae

horizontální řez



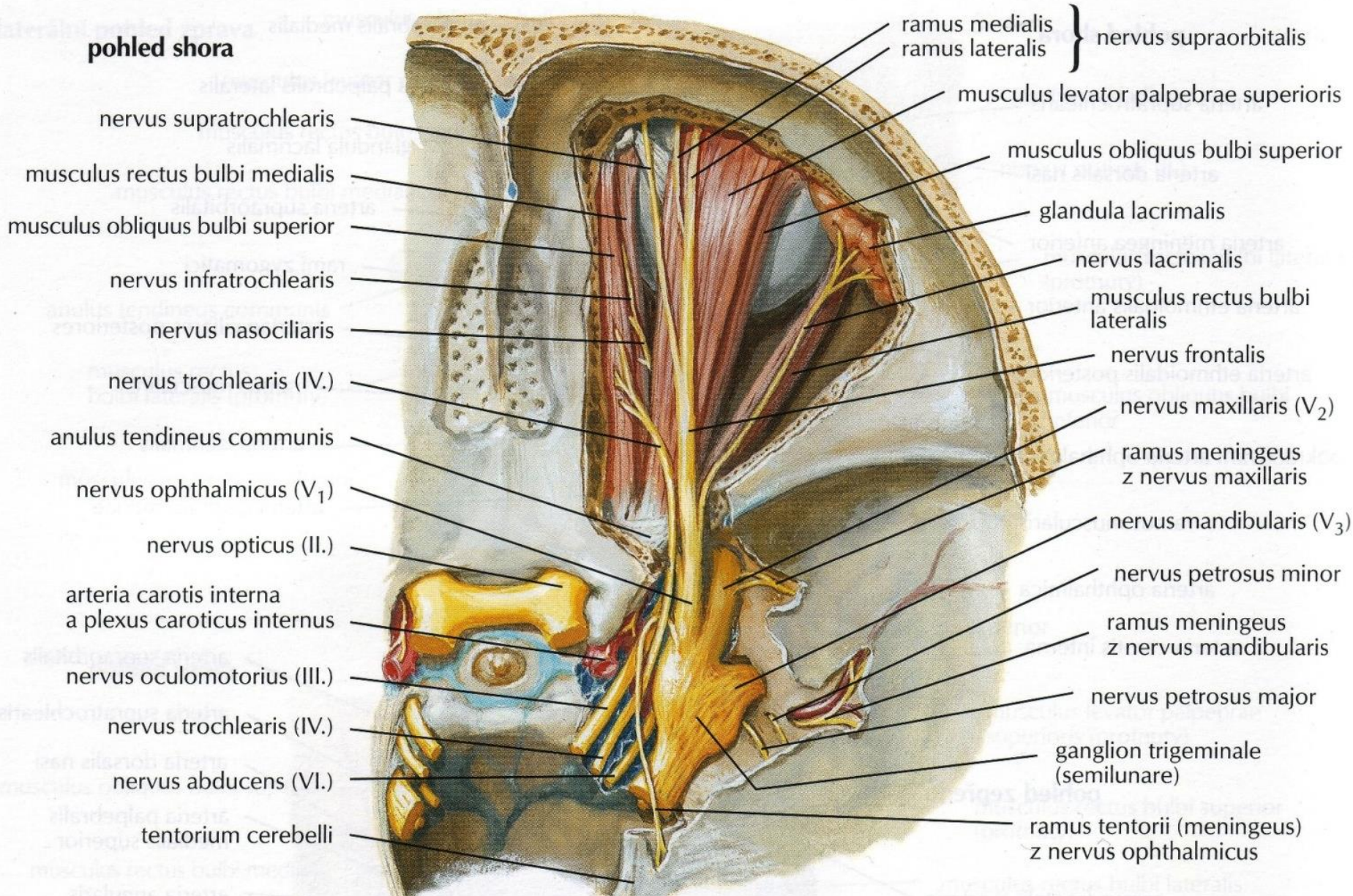
frontální řez





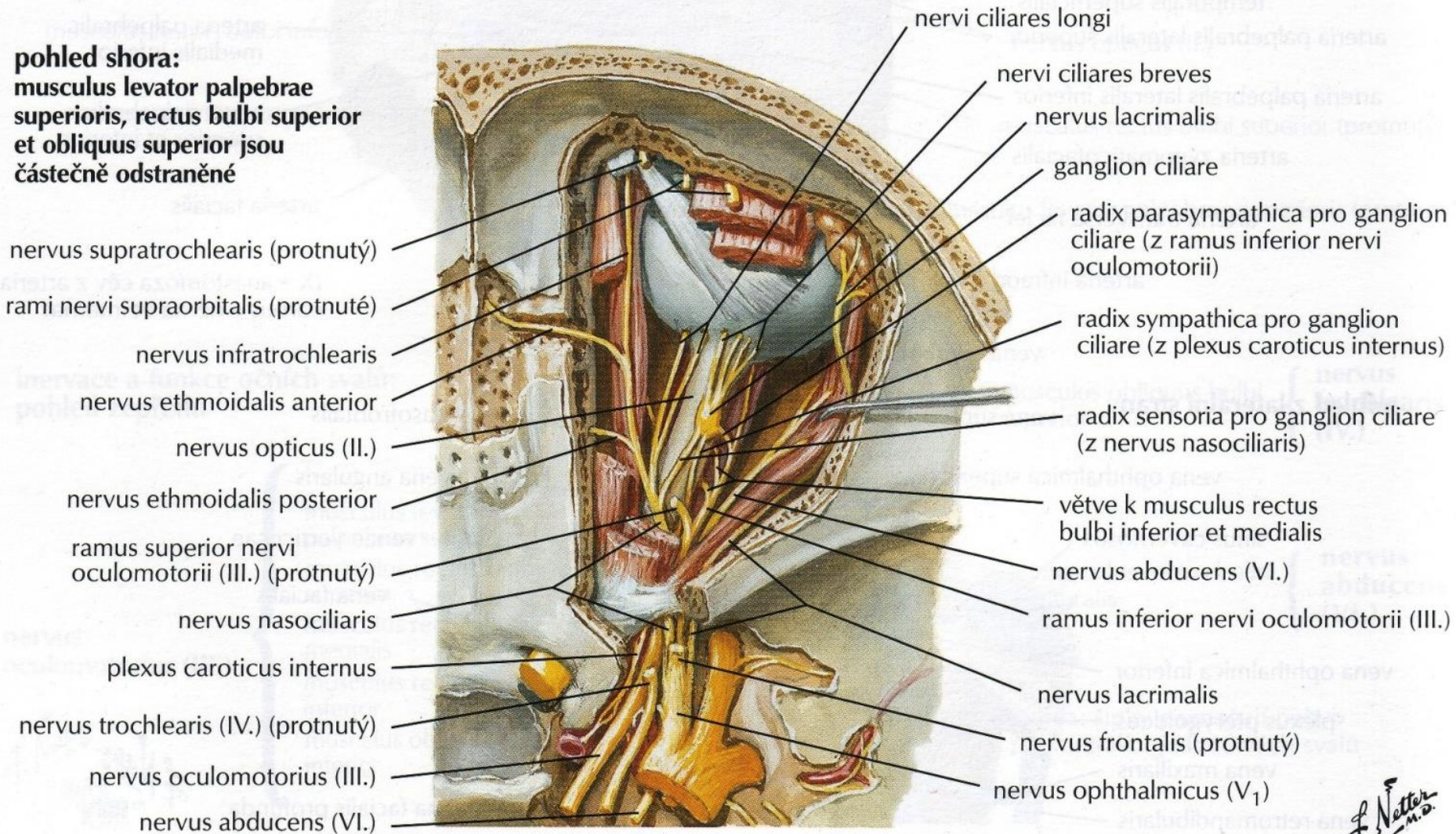
Orbit – upper floor

pohled shora

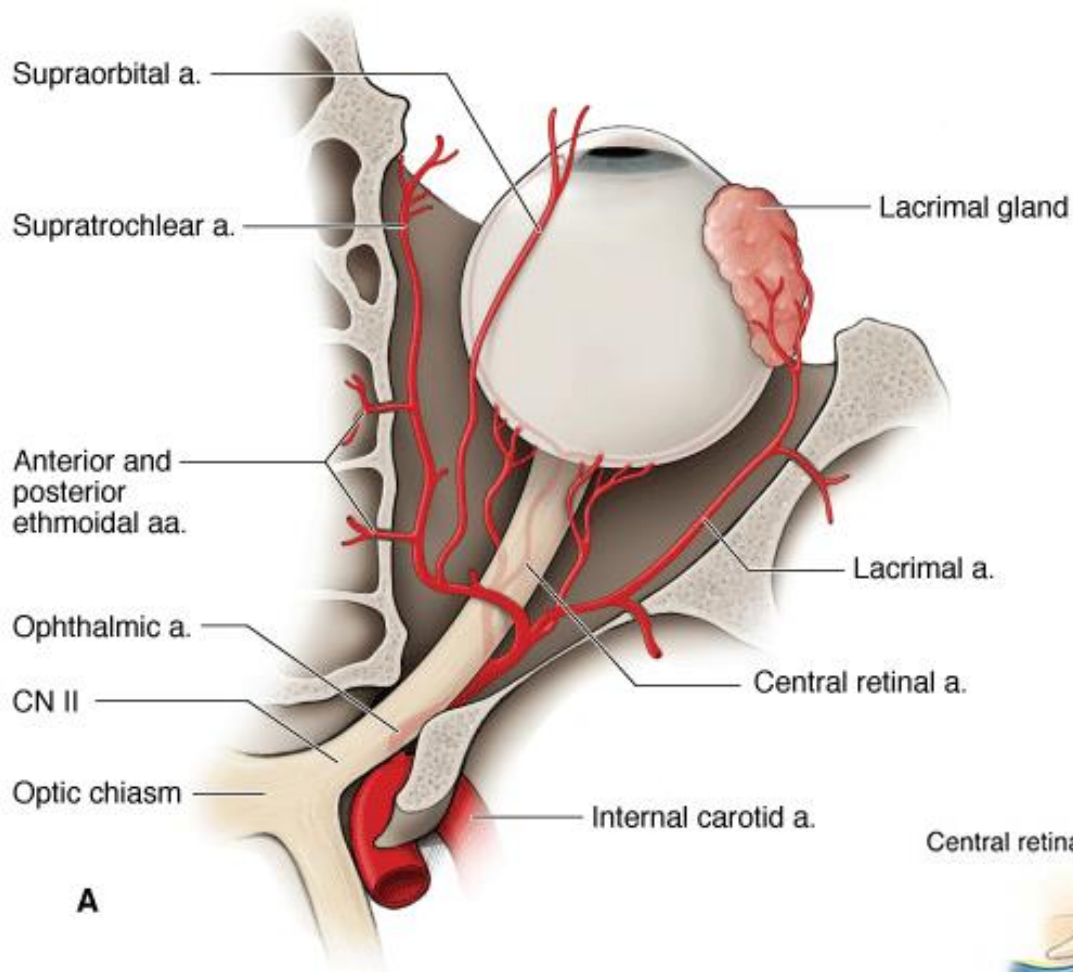


Orbit – midle floor

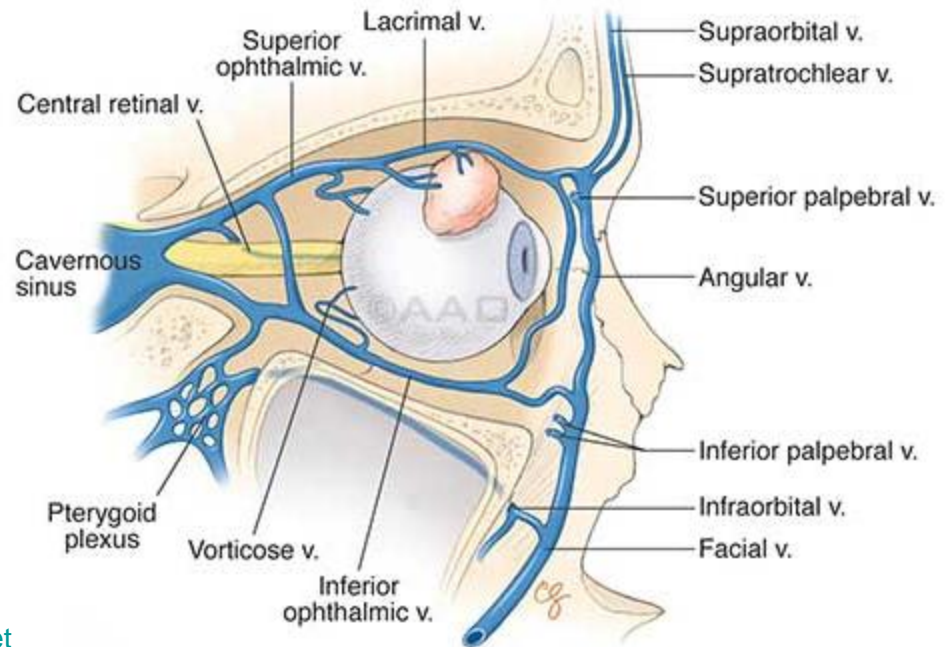
pohled shora:
musculus levator palpebrae superioris, rectus bulbi superior et obliquus superior jsou částečně odstraněné



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<https://www.medizin-kompakt.de/ophthalmica>



<https://www.aao.org/eyenet>