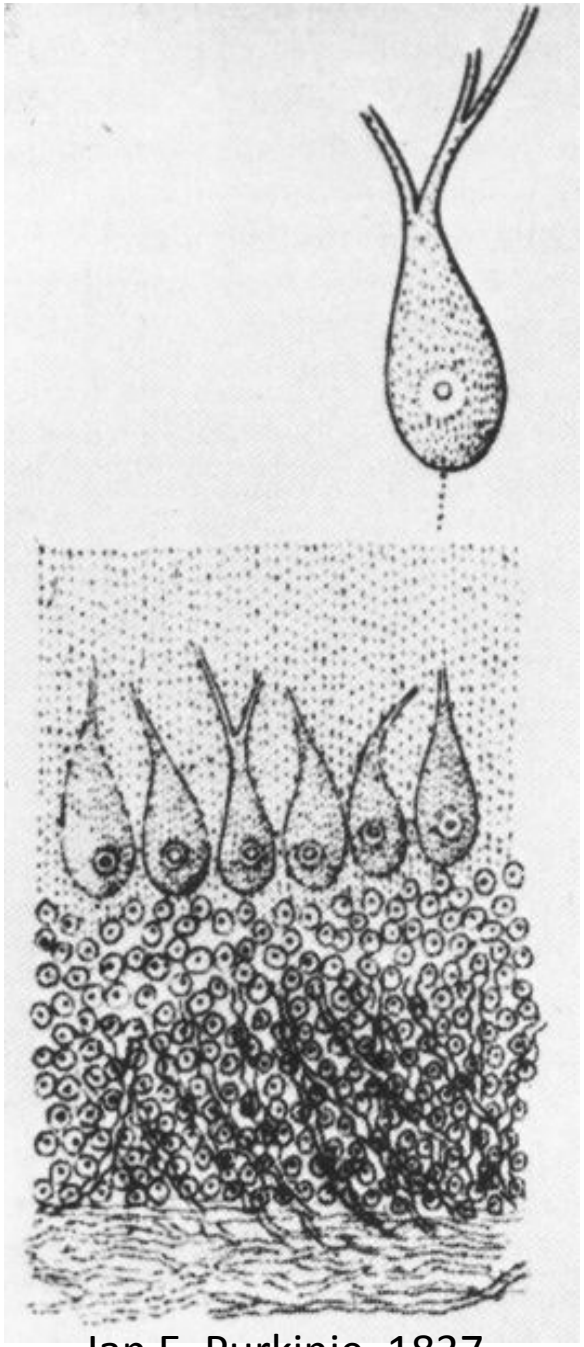
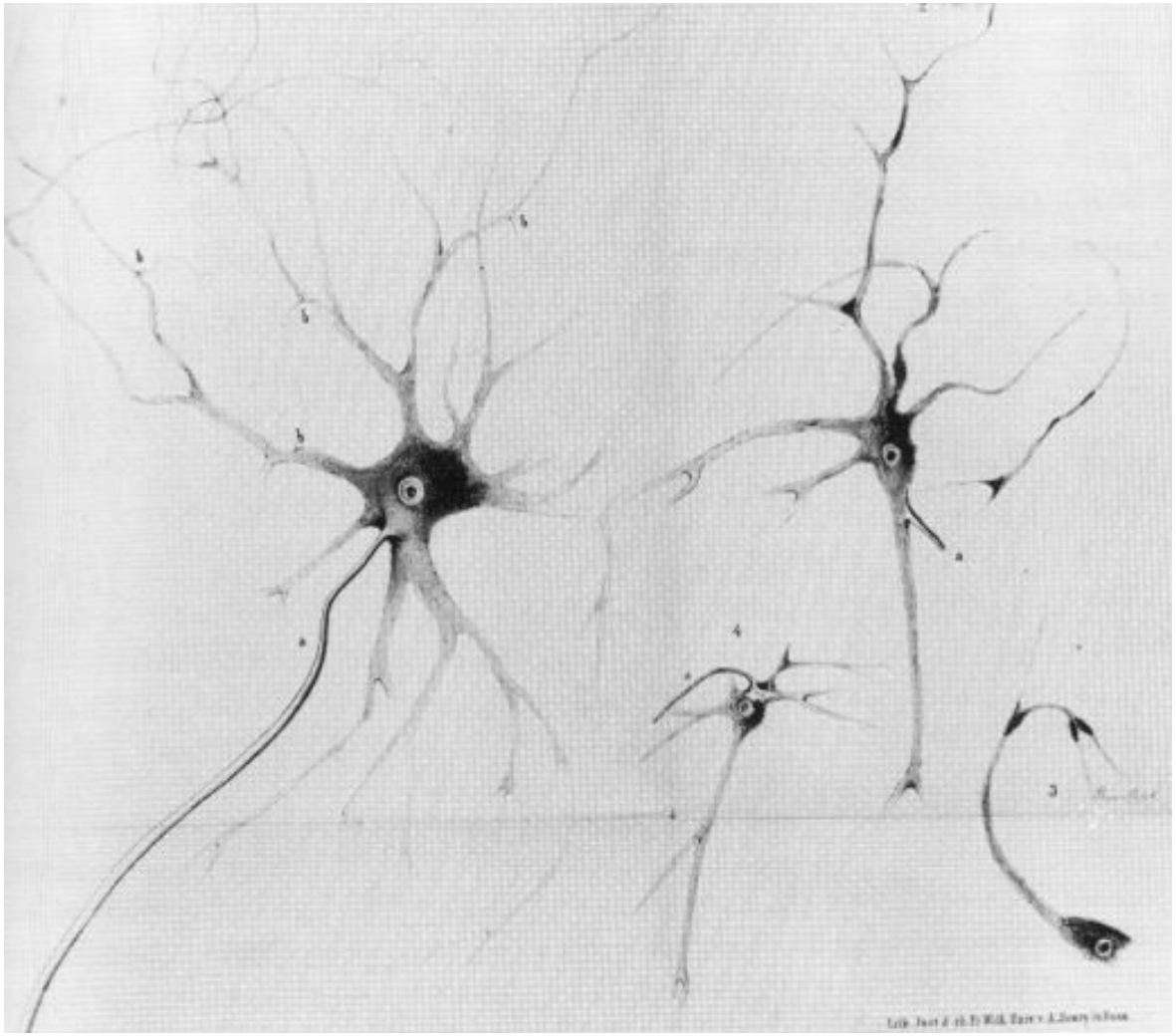
Нормальная гистология головного мозга

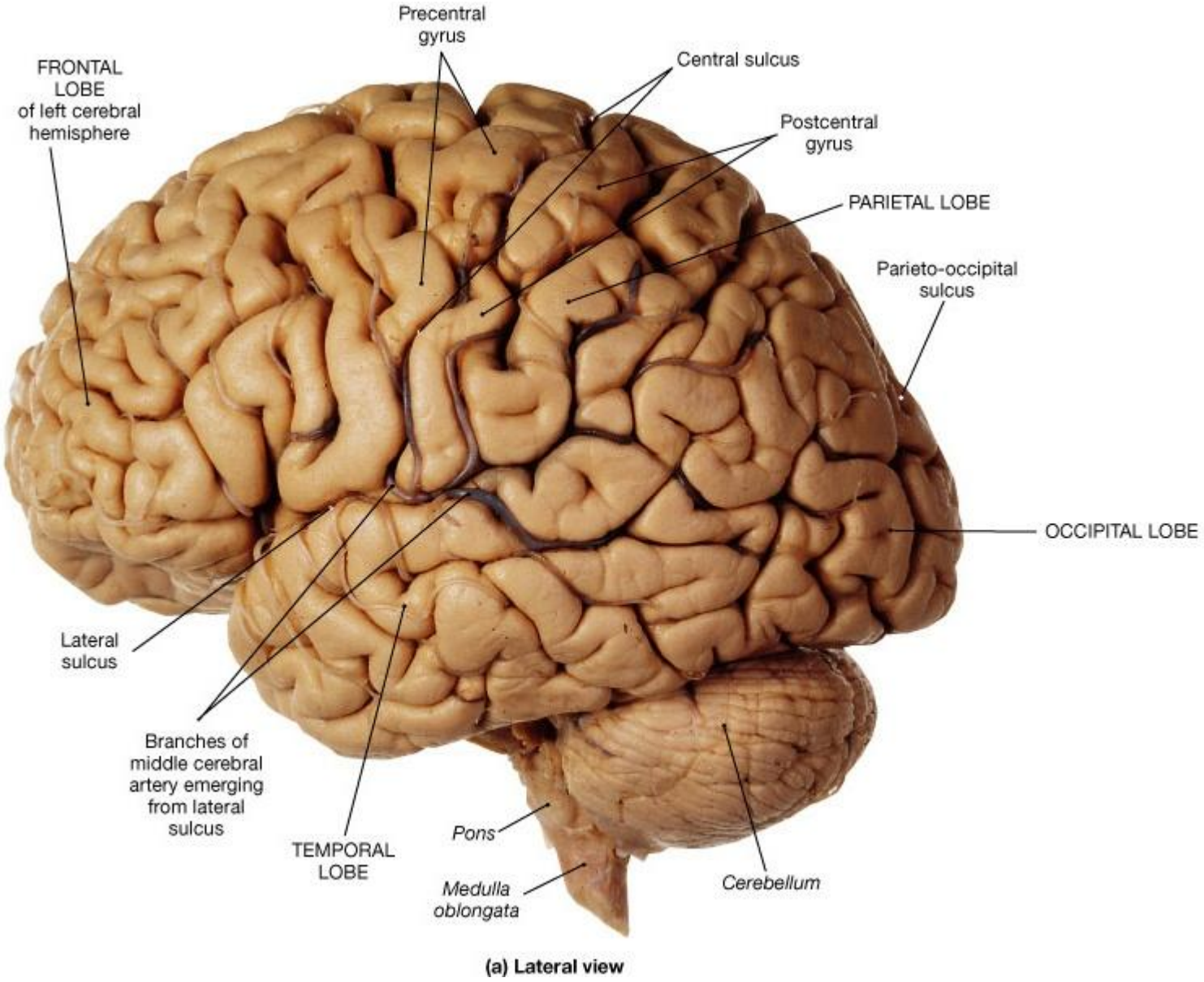
Барановская Вера



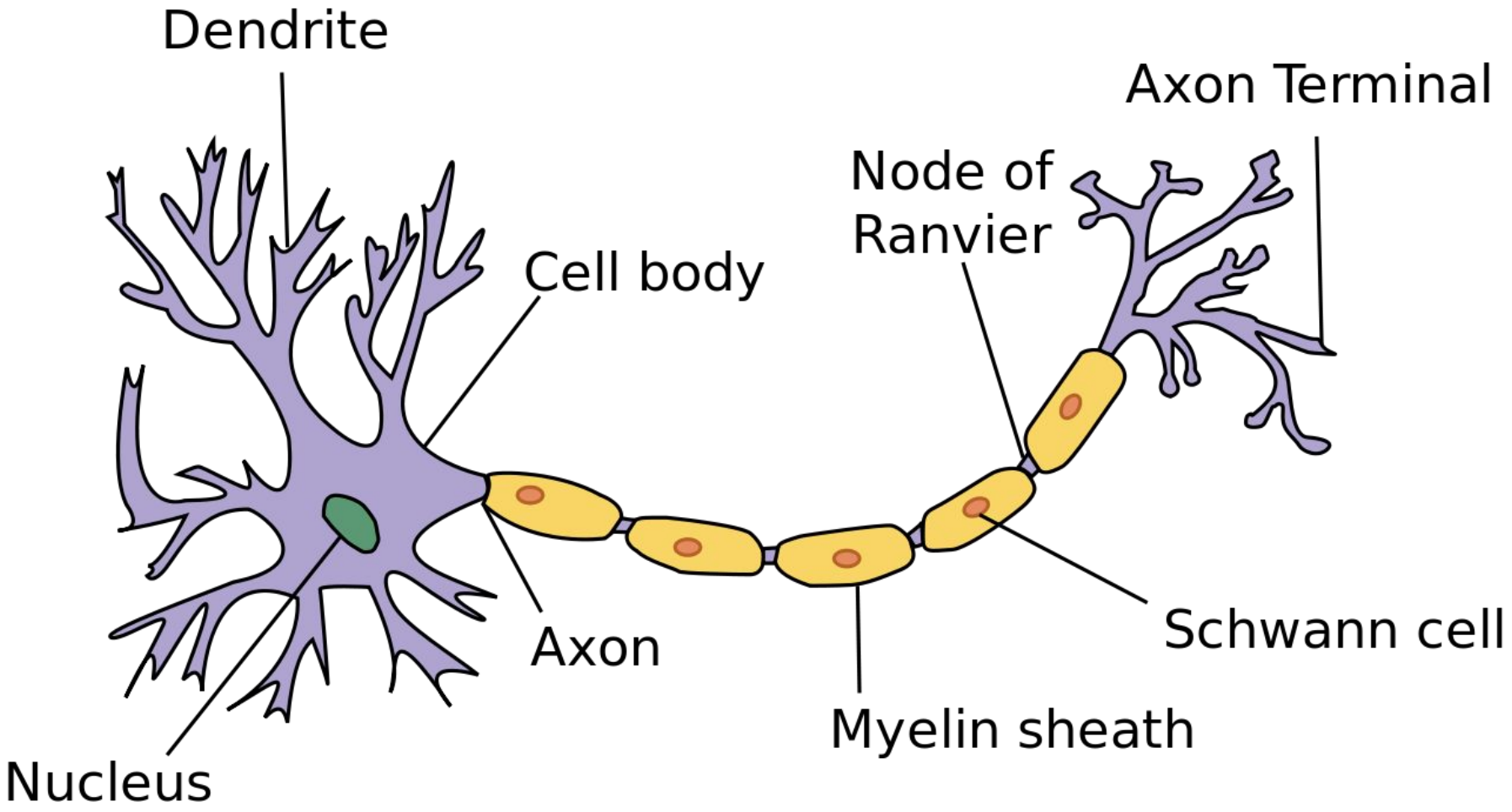
Jan E. Purkinje, 1837.

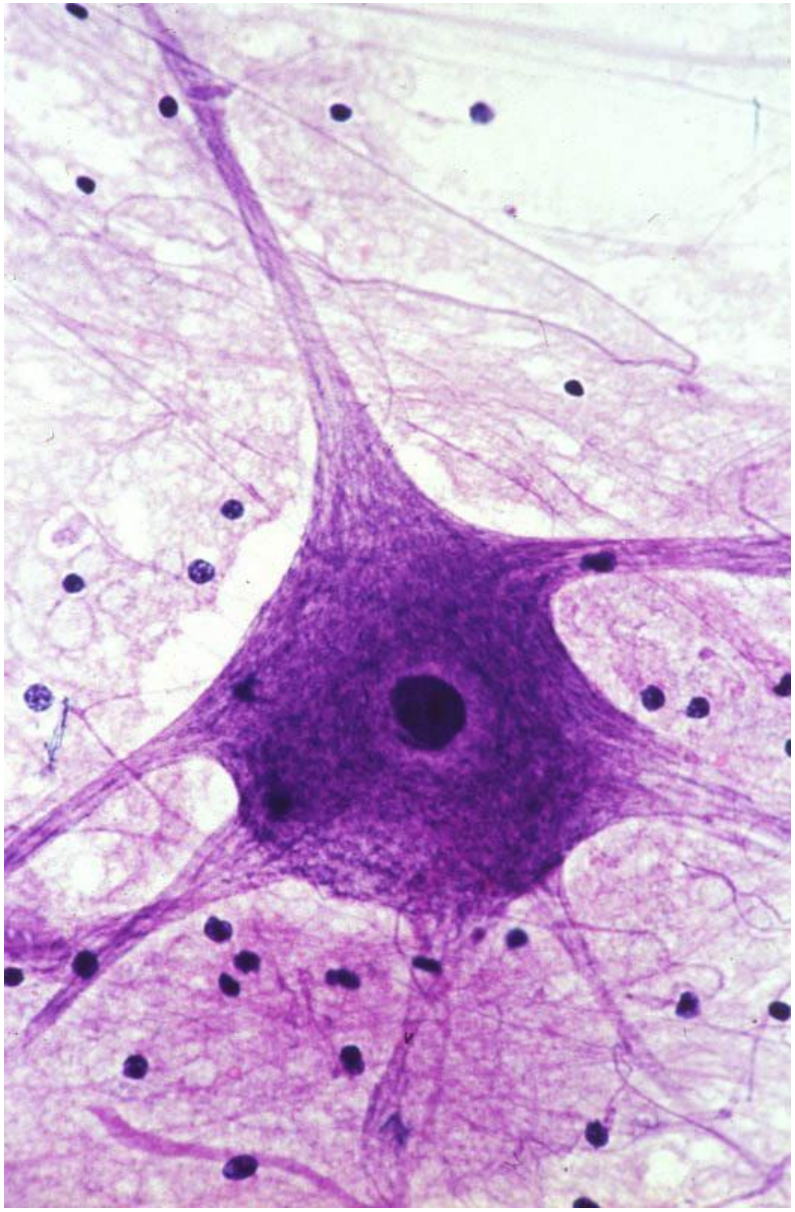


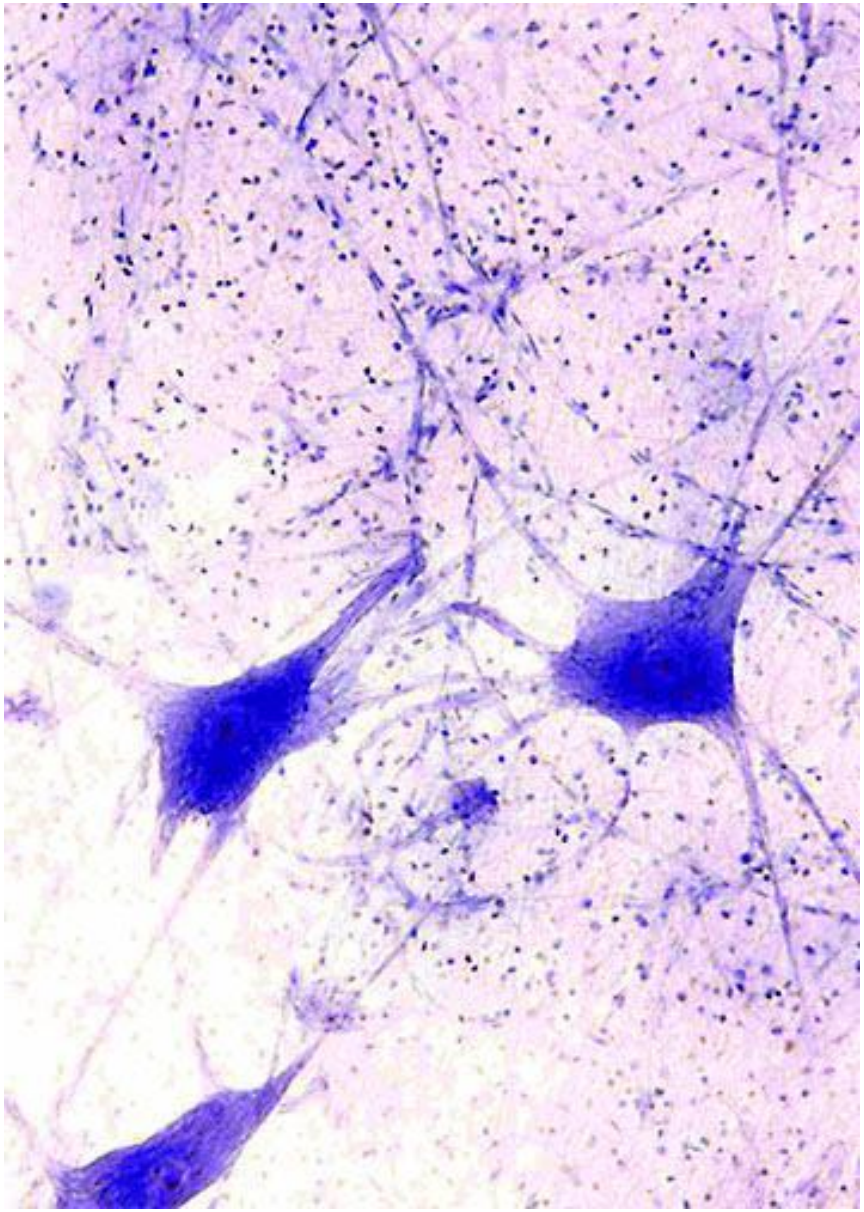
Otto F K. Deiters, 1865.

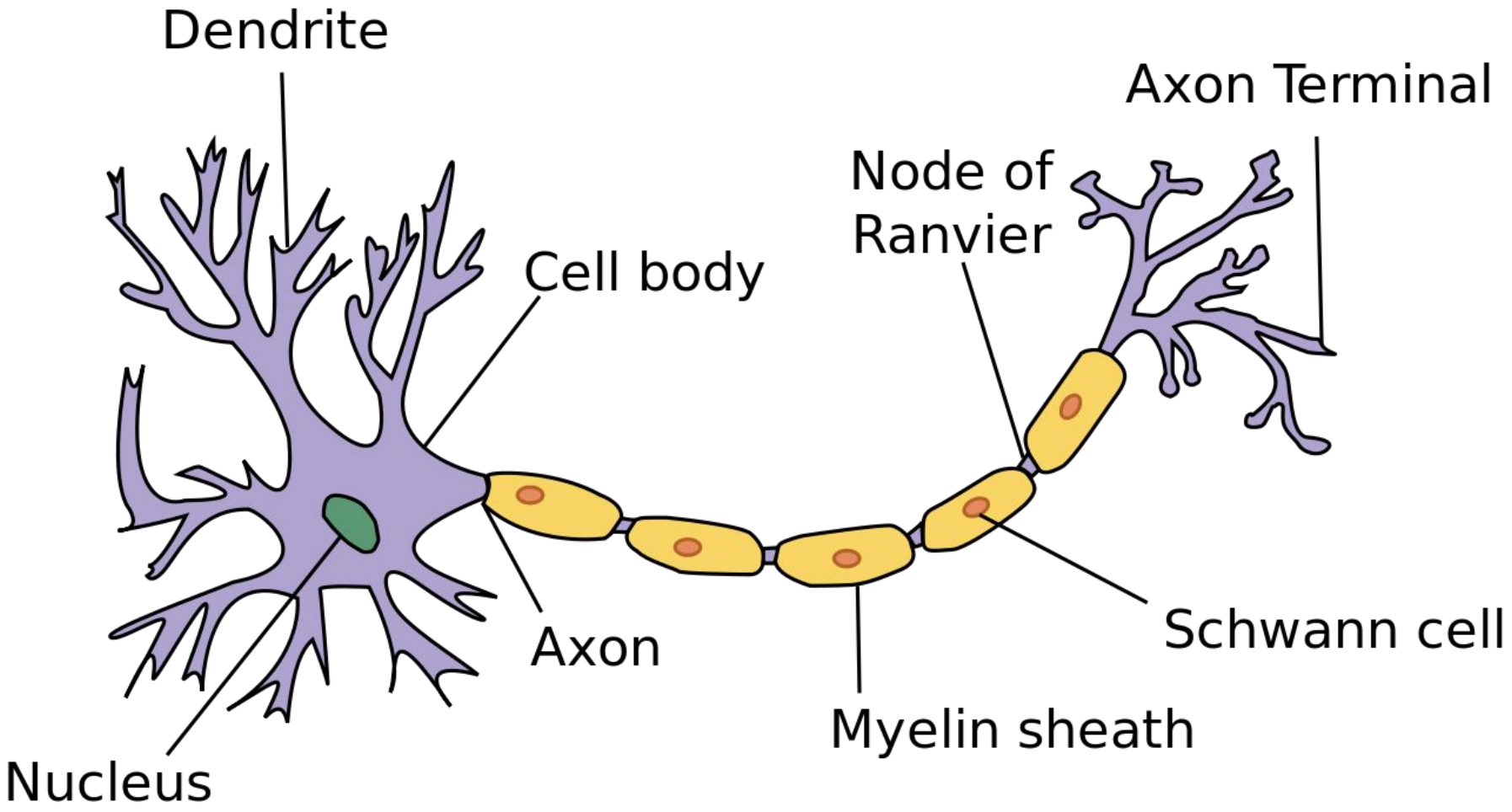


(a) Lateral view


Dendrite
Axon Terminal
Node of
Ranvier
Cell body
Axon
Schwann cell
Myelin sheath
Nucleus






Dendrite
Axon Terminal
Node of
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Cell body
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Myelin sheath
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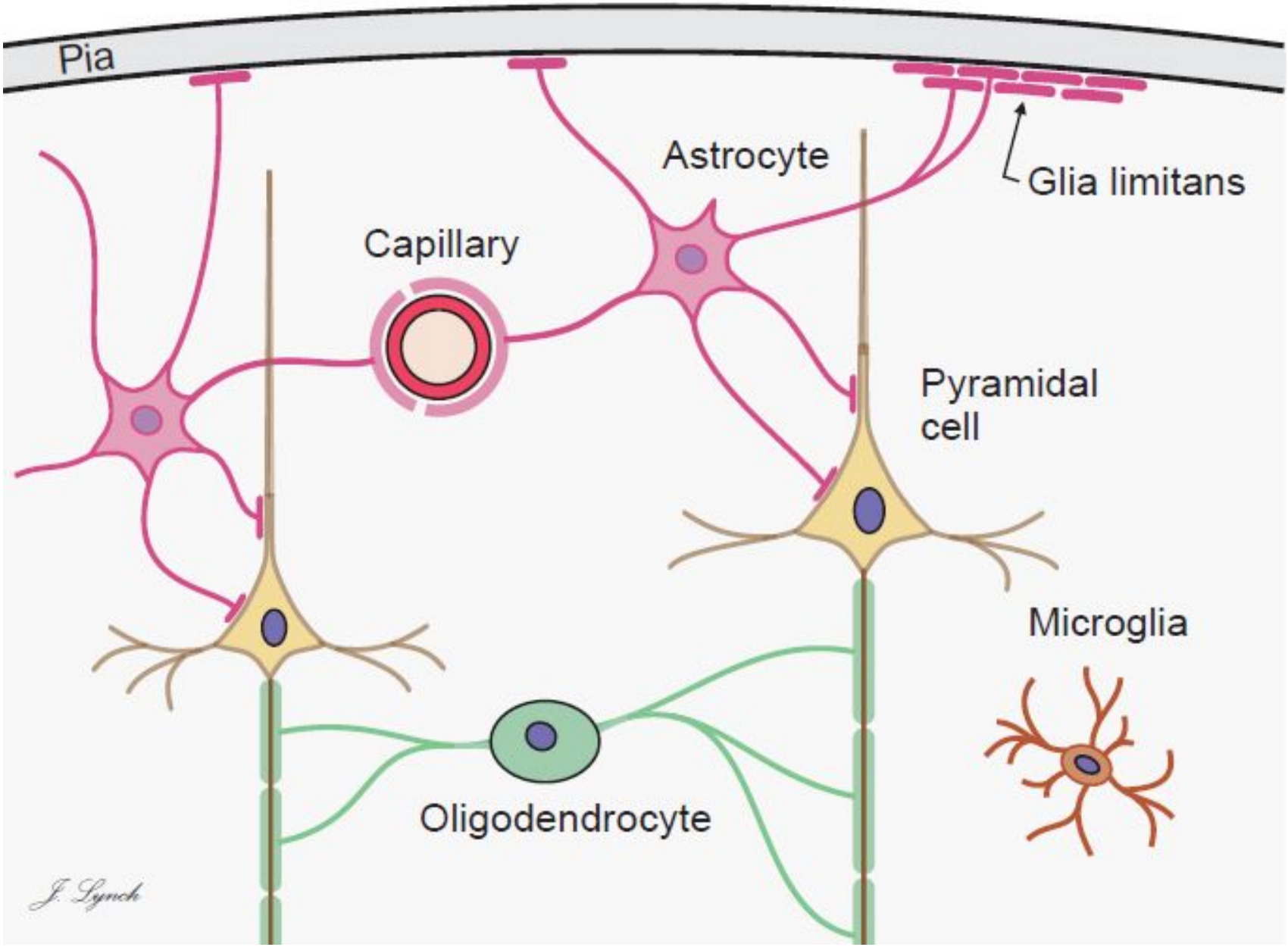
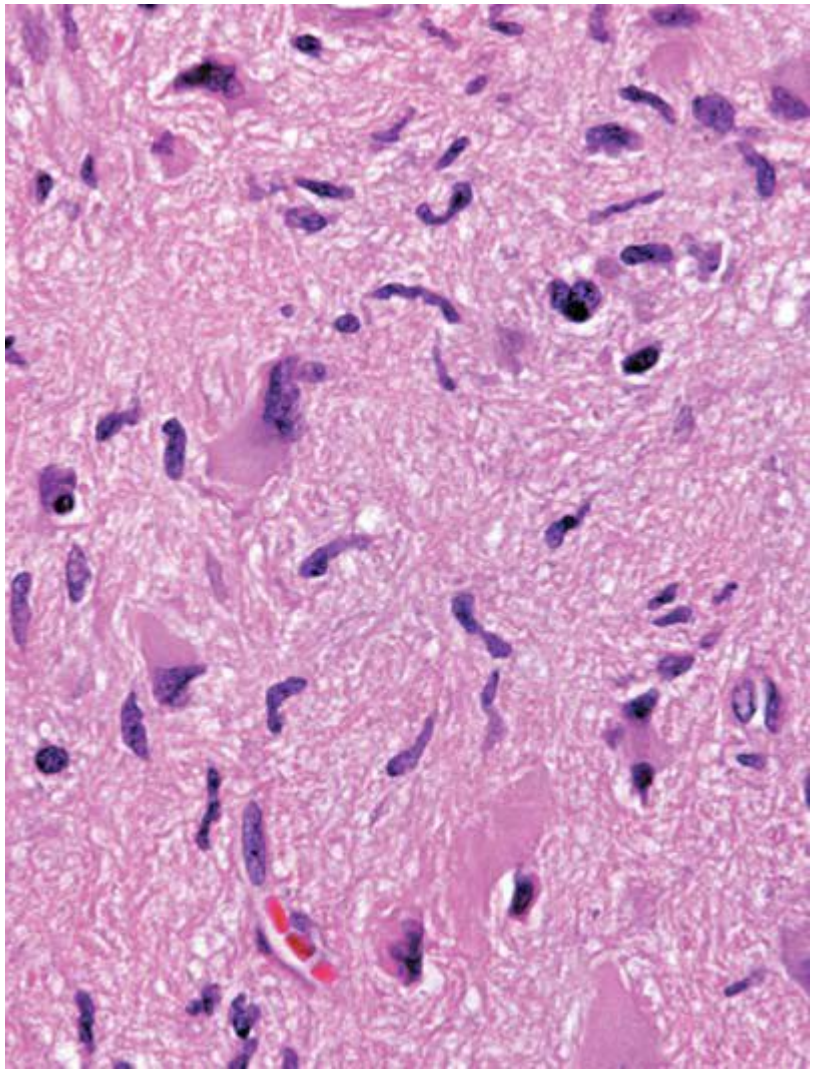
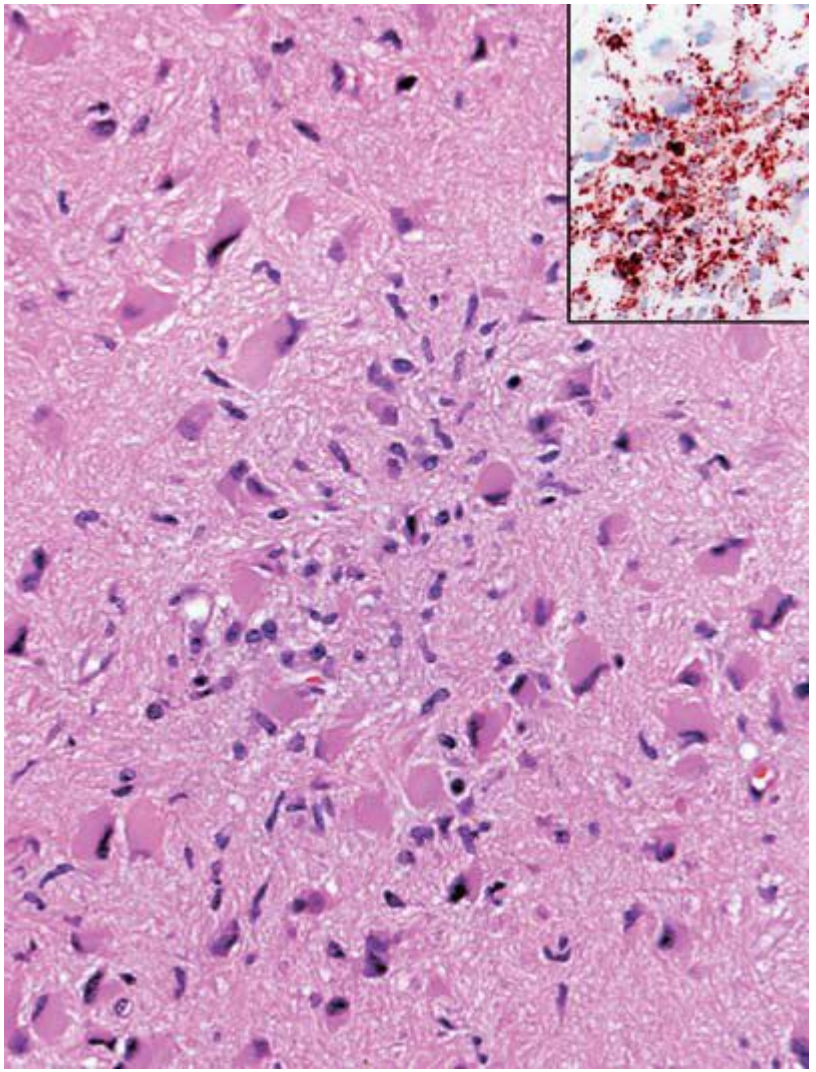


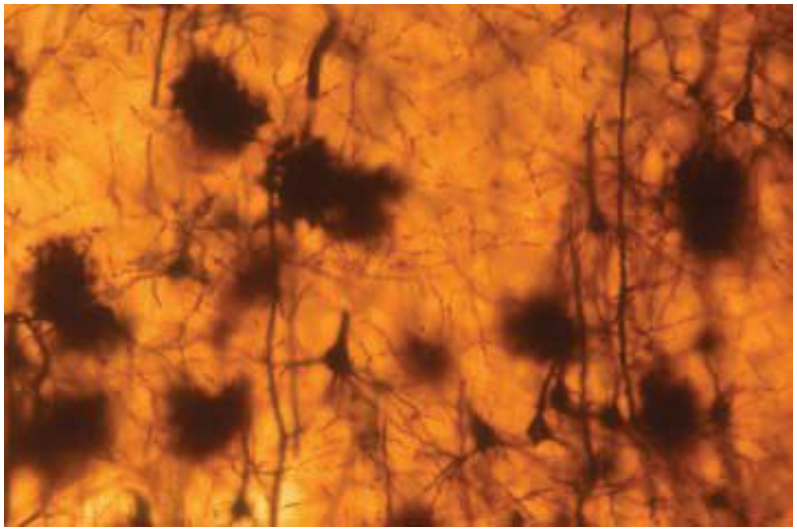
Cui, D. (2011). *Atlas of histology*. 1st ed. Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins.

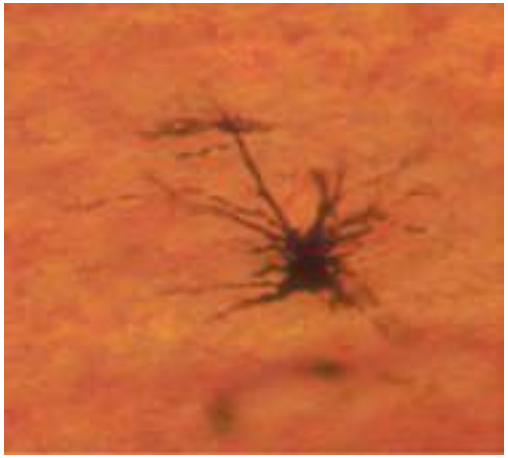
Микроглия



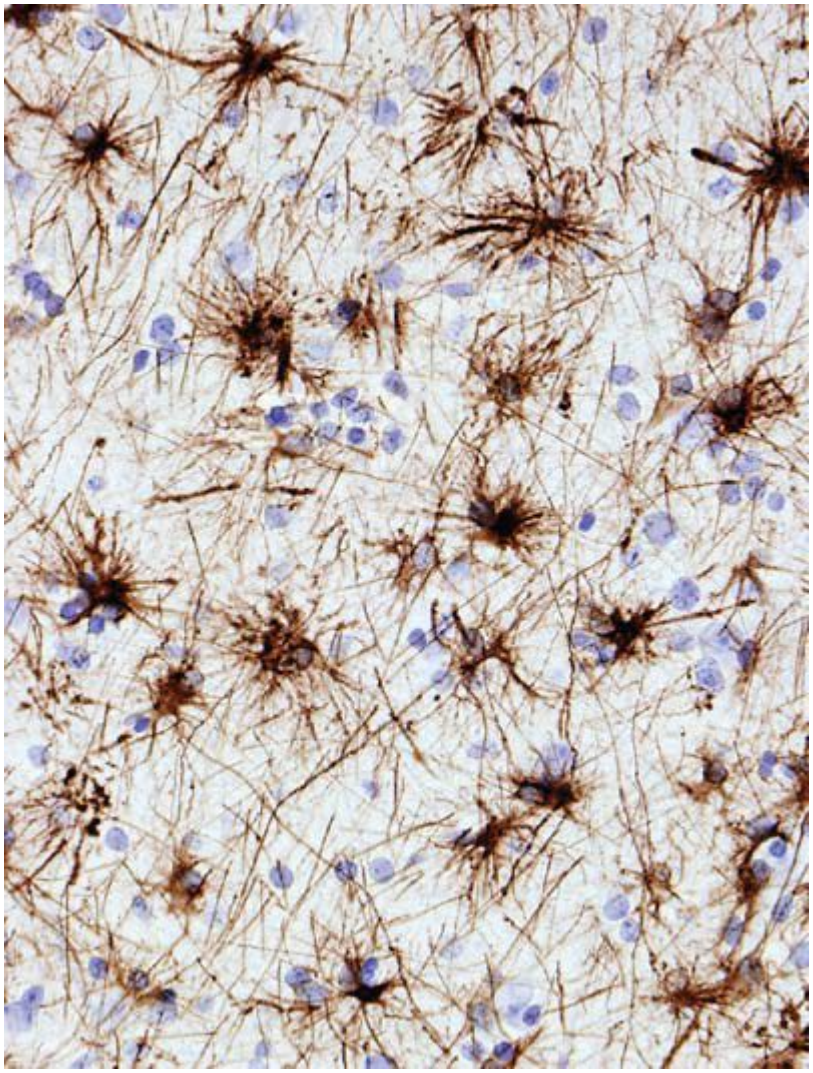


Астроциты

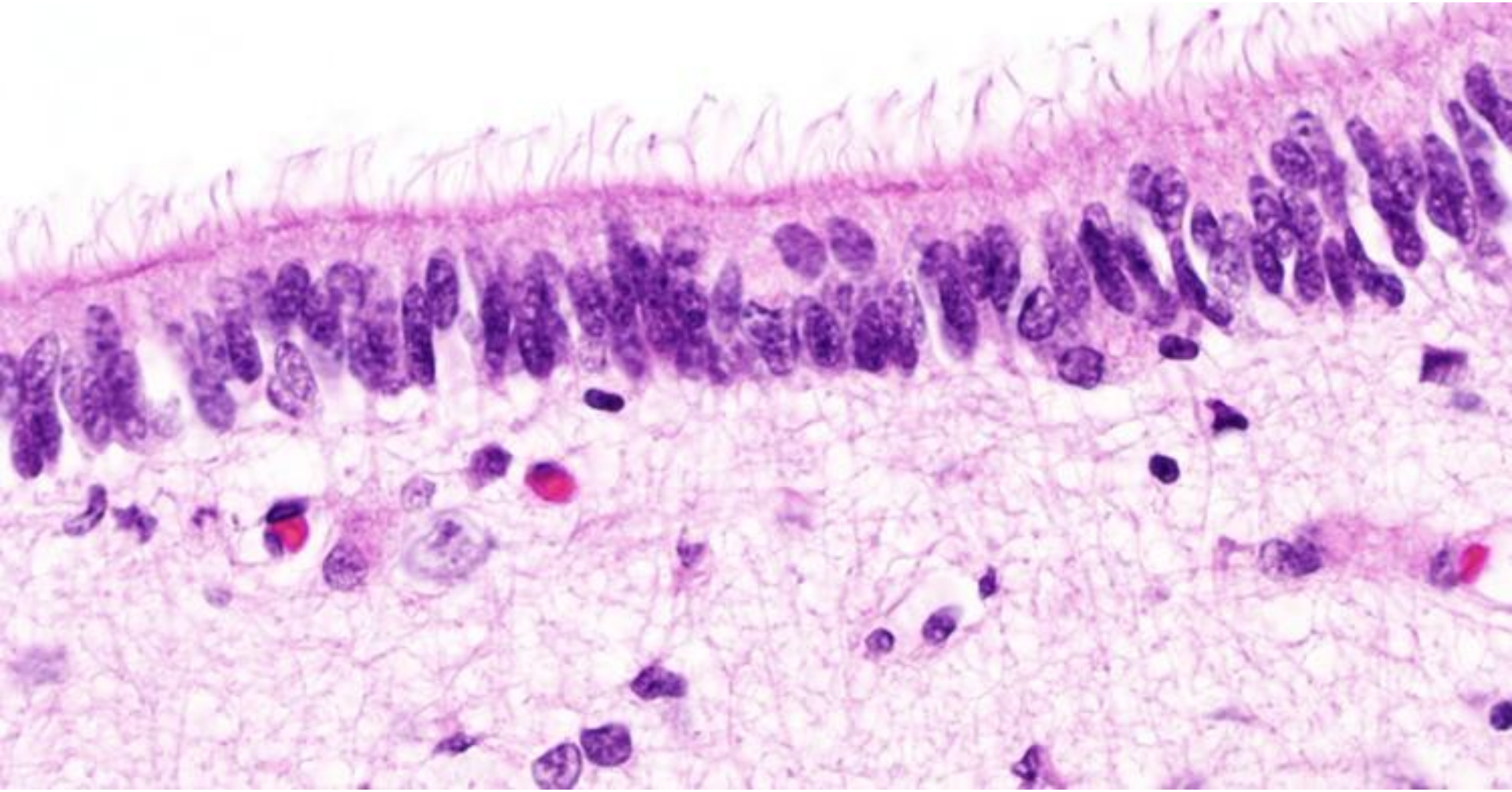




GFAP

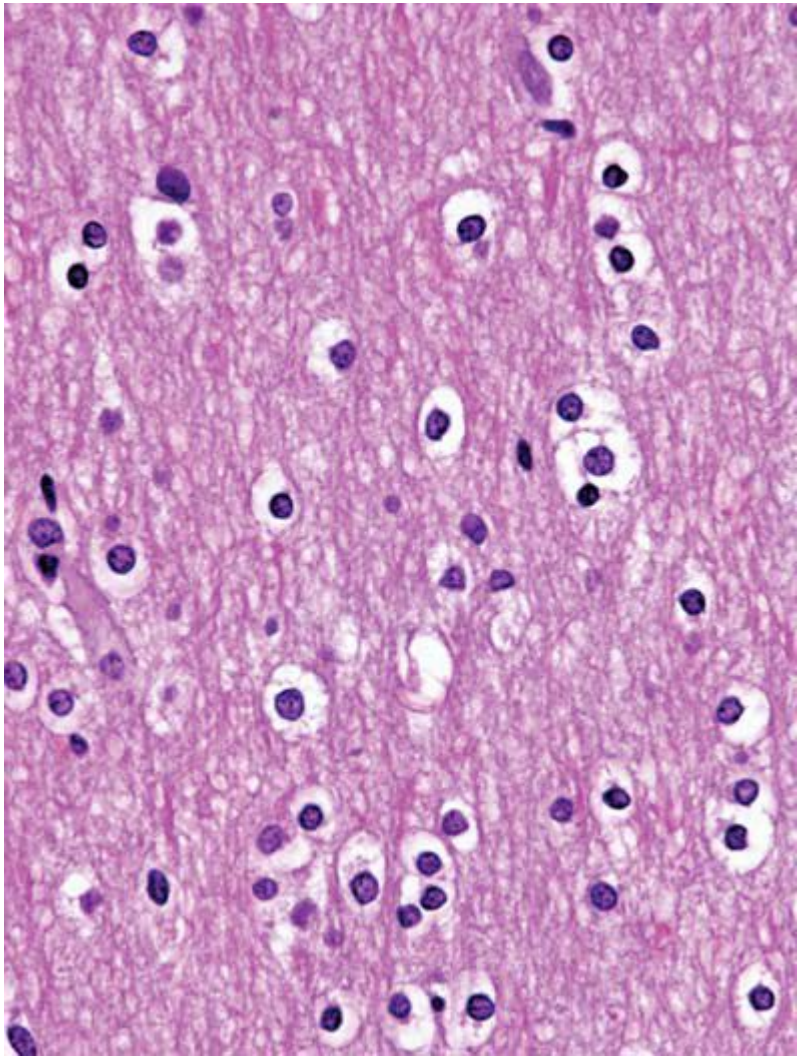


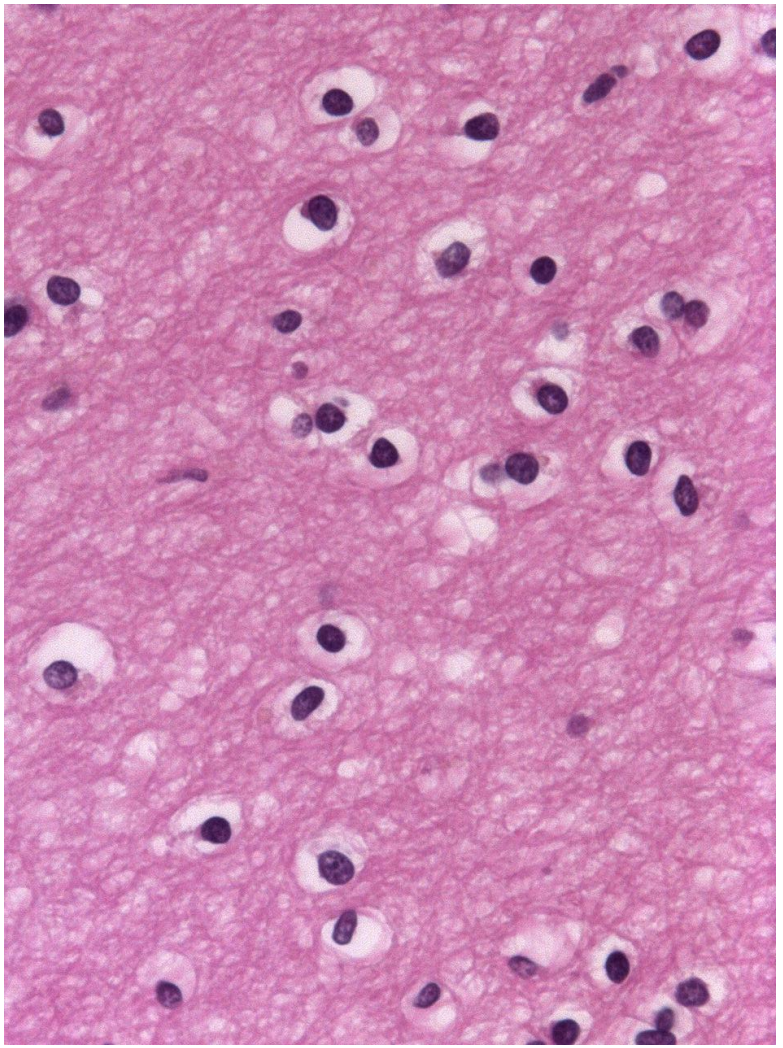
Эпендима



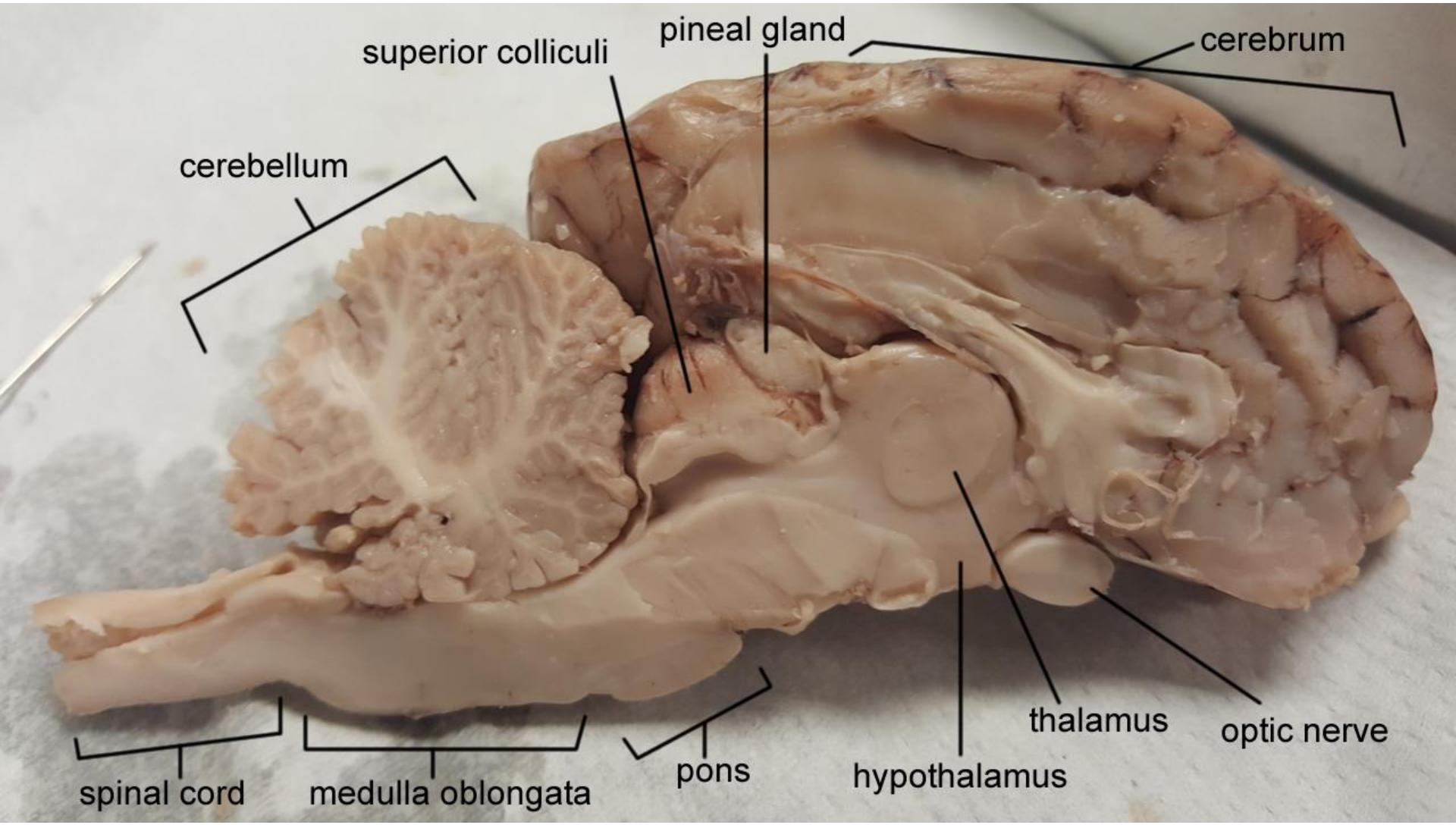
http://missinglink.ucsf.edu/lm/introductionneuropathology/response%20_to_injury/EpendymalCells.htm

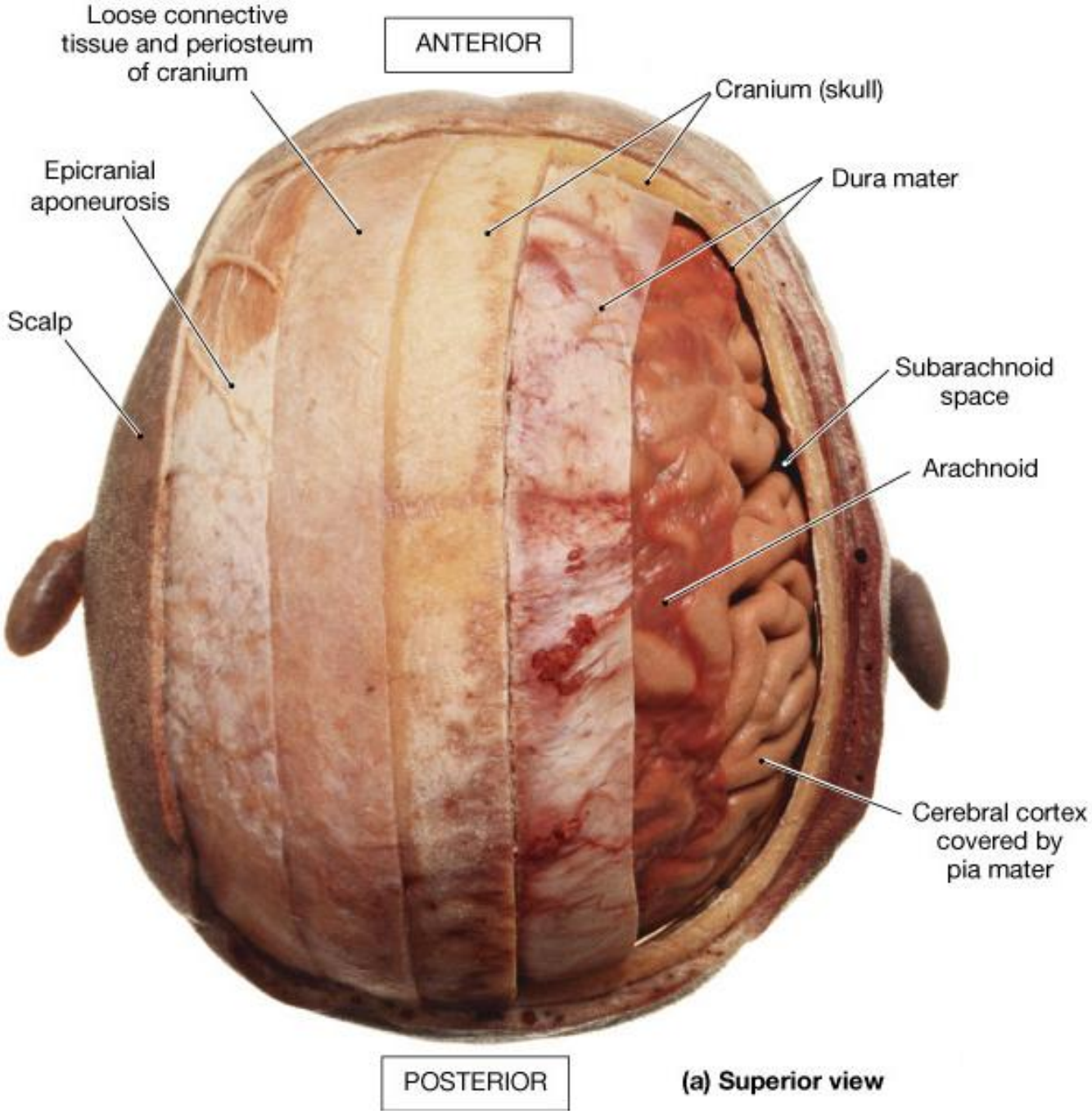
Олигодендроглия

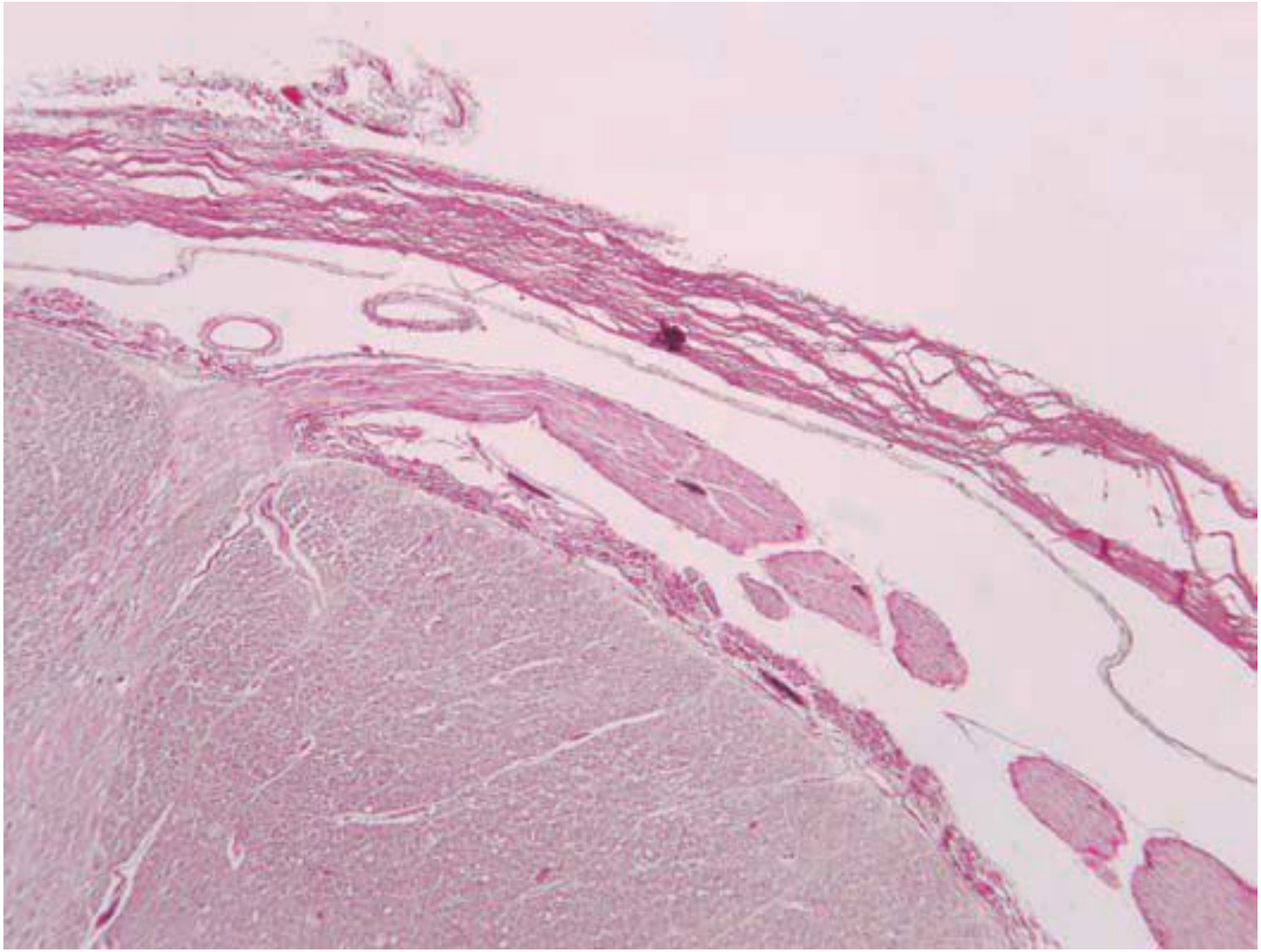




2 - https://commons.wikimedia.org/wiki/File:Oligodendrocyte_HE_stain_high_mag.jpg

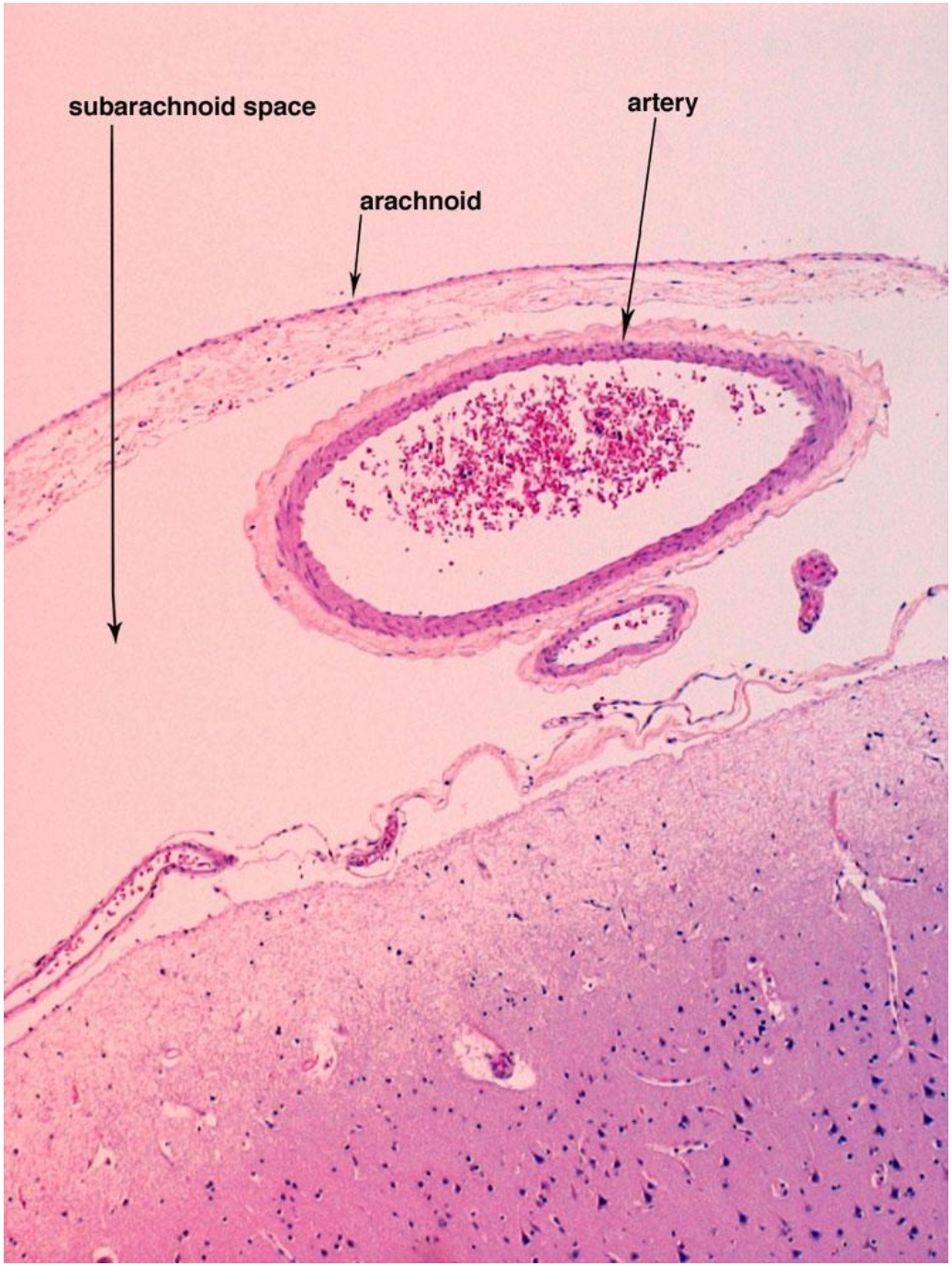

superior colliculi
pineal gland
cerebrum
cerebellum
spinal cord
medulla oblongata
pons
hypothalamus
thalamus
optic nerve



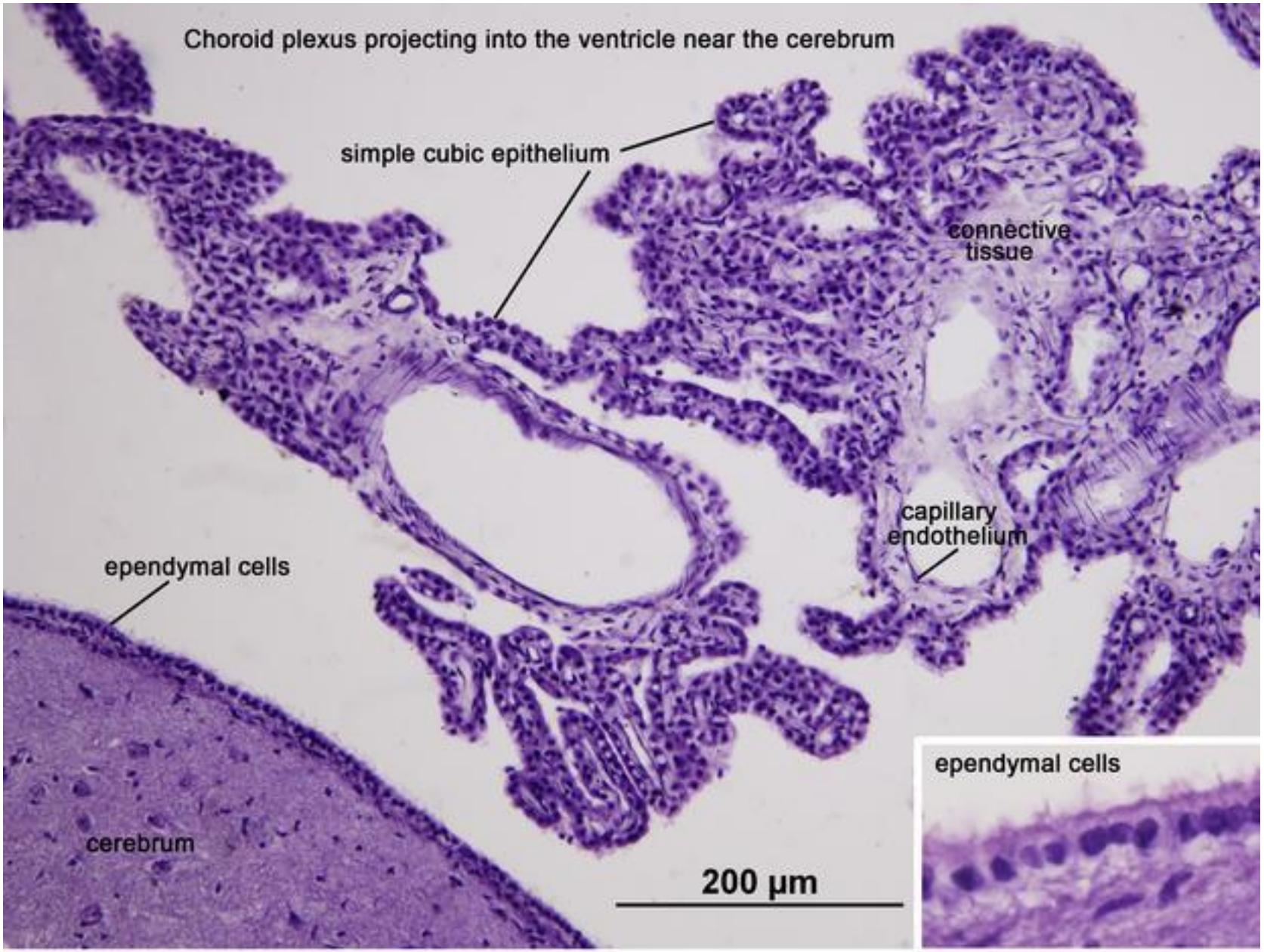


Cui, D. (2011). *Atlas of histology*. 1st ed. Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins.

https://medicine.stonybrookmedicine.edu/pathology/neuropathology/chapter1

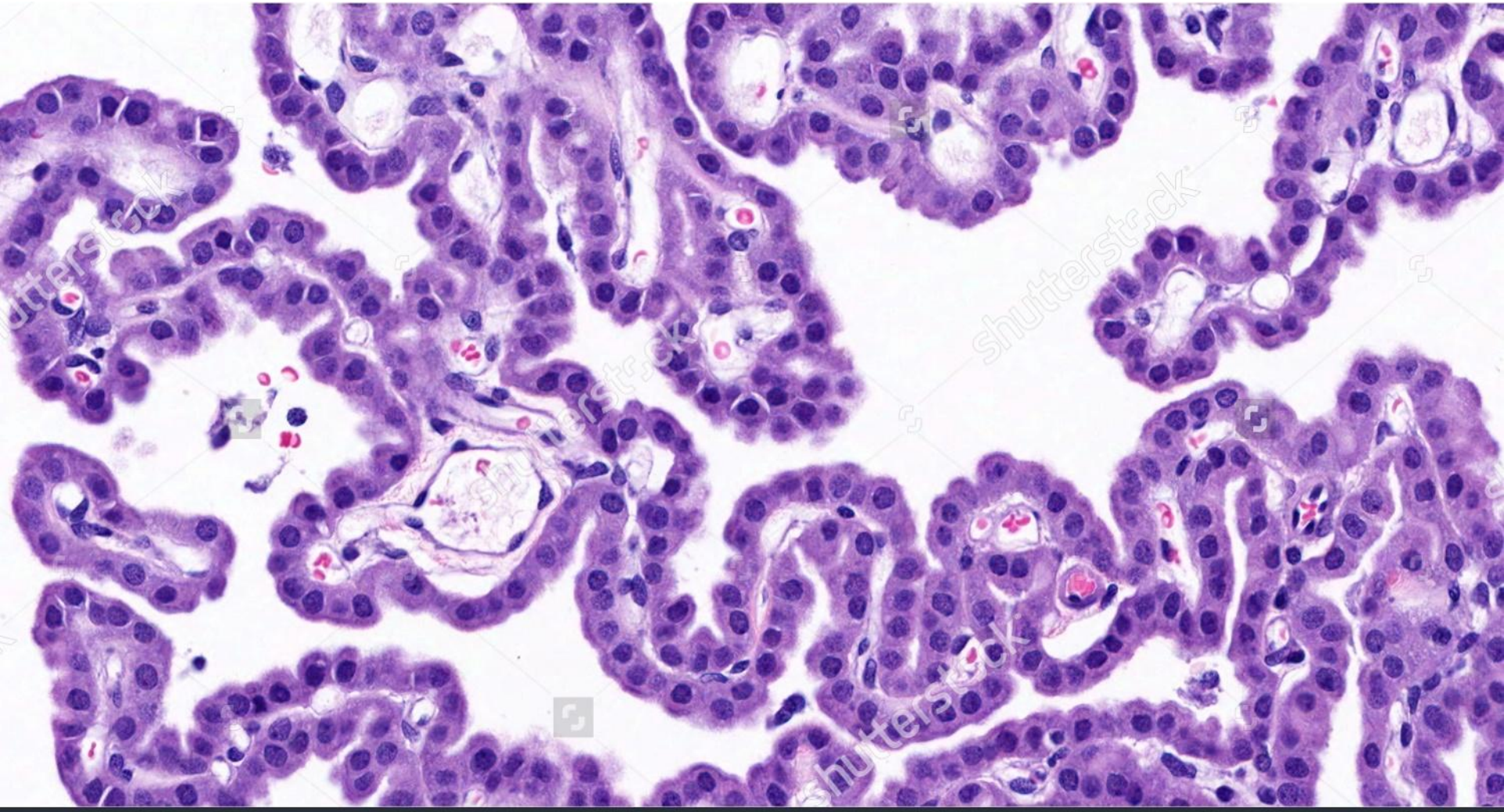


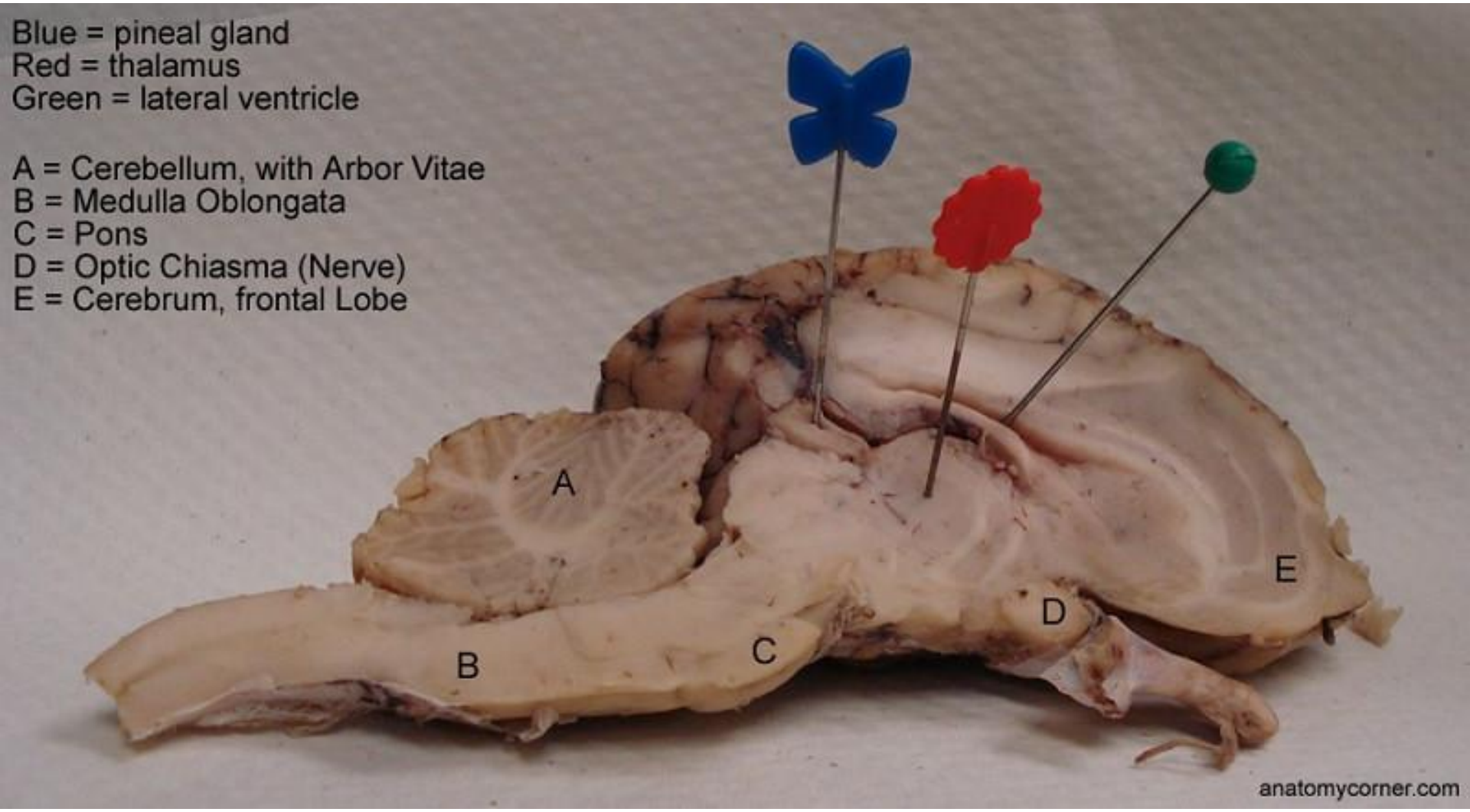
https://medicine.stonybrookmedicine.edu/sbumcfiles/images/223-002.JPG

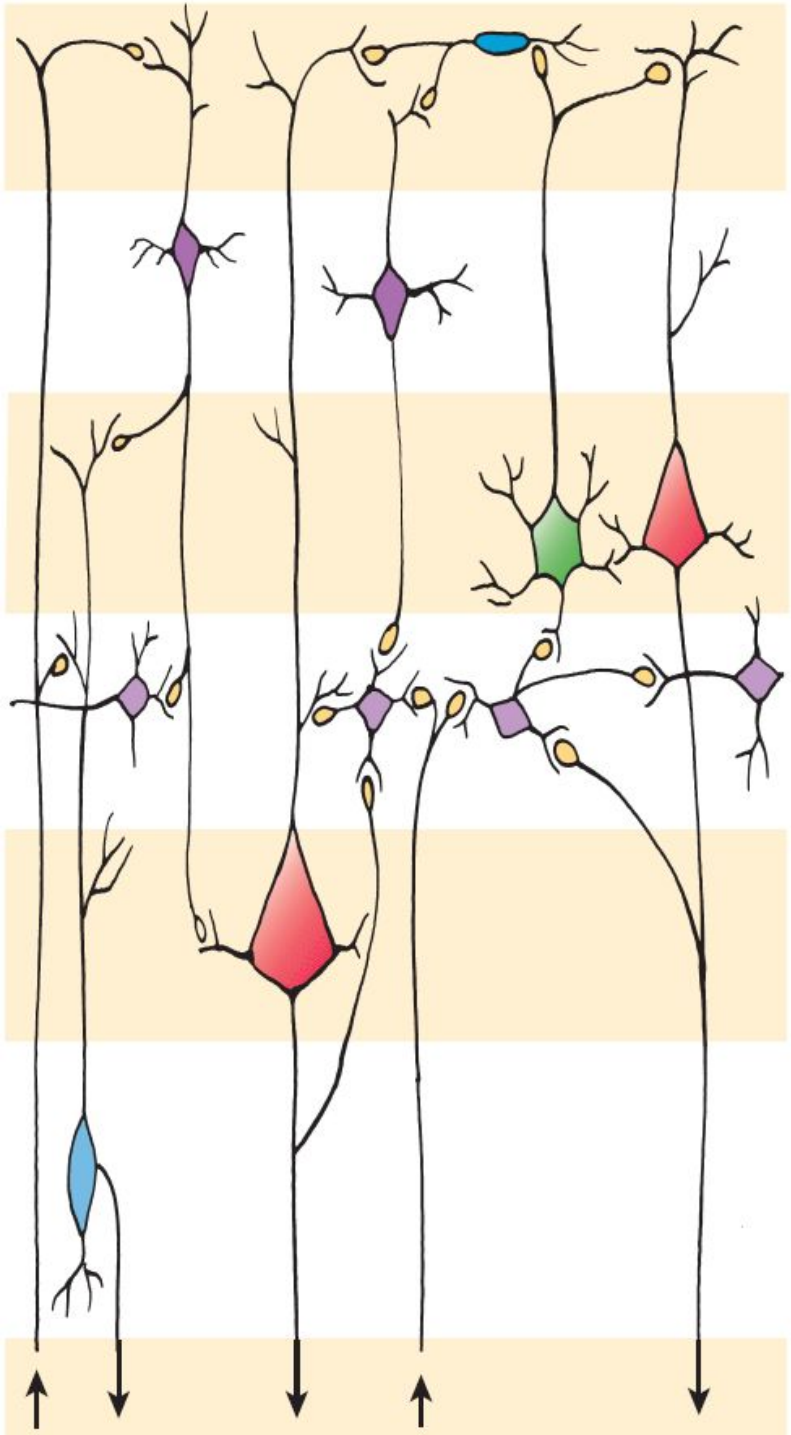


Choroid Plexus, Stain: hematoxylin - eosin

https://www.lfp.cuni.cz/histologie/Preparaty/preparaty2E.php?SYSTEM=Nervoustissue&PREPARAT=11




Blue = pineal gland
Red = thalamus
Green = lateral ventricle
A = Cerebellum, with Arbor Vitae
B = Medulla Oblongata
C = Pons
D = Optic Chiasma (Nerve)
E = Cerebrum, frontal Lobe
A
B
C
D
E
anatomycorner.com



I molecular layer

II external granular layer

III external pyramidal cell layer

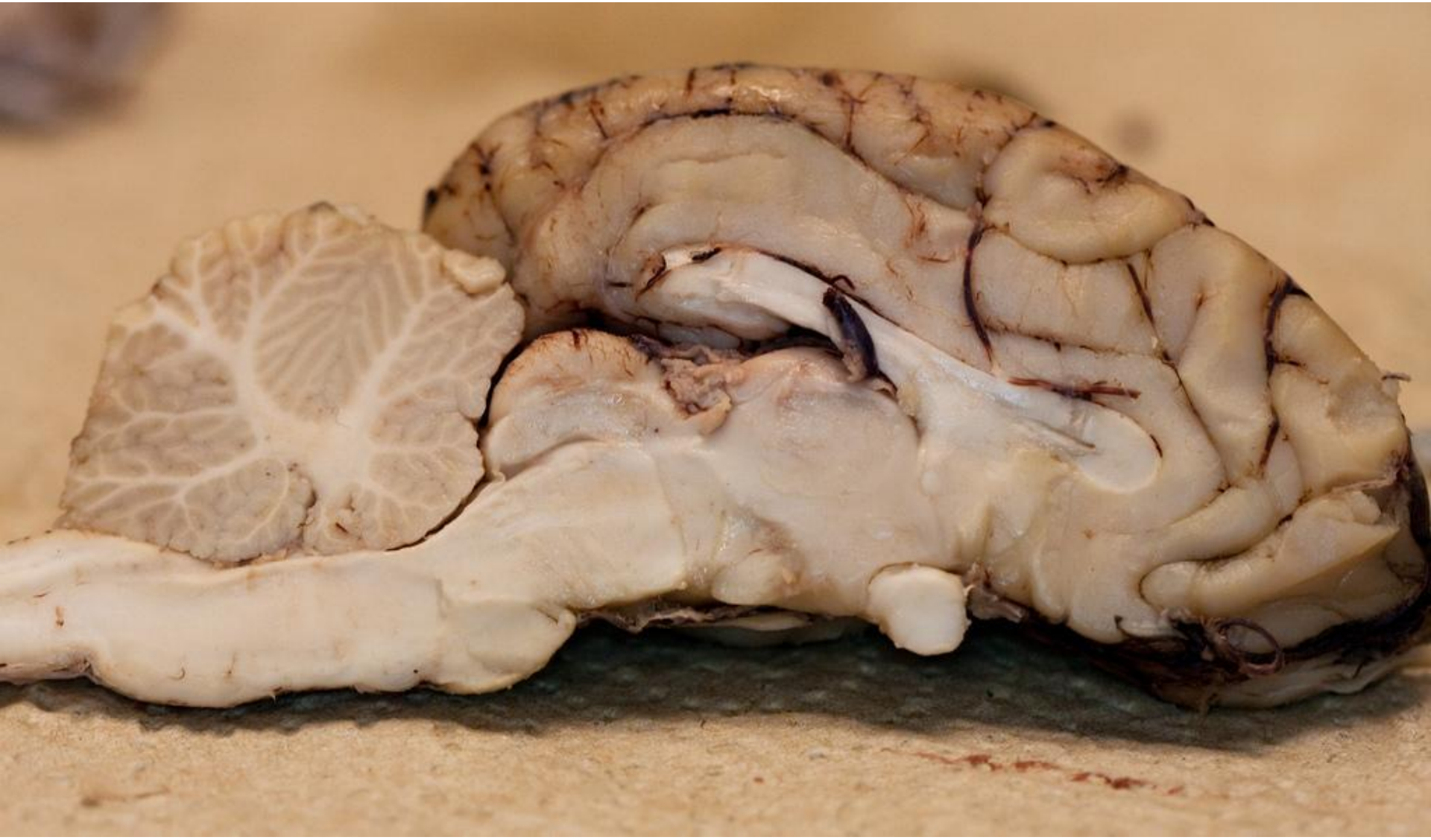
IV internal granular layer

V ganglionic layer (internal pyramidal cells)

VI multiform (polymorphic) cell layer

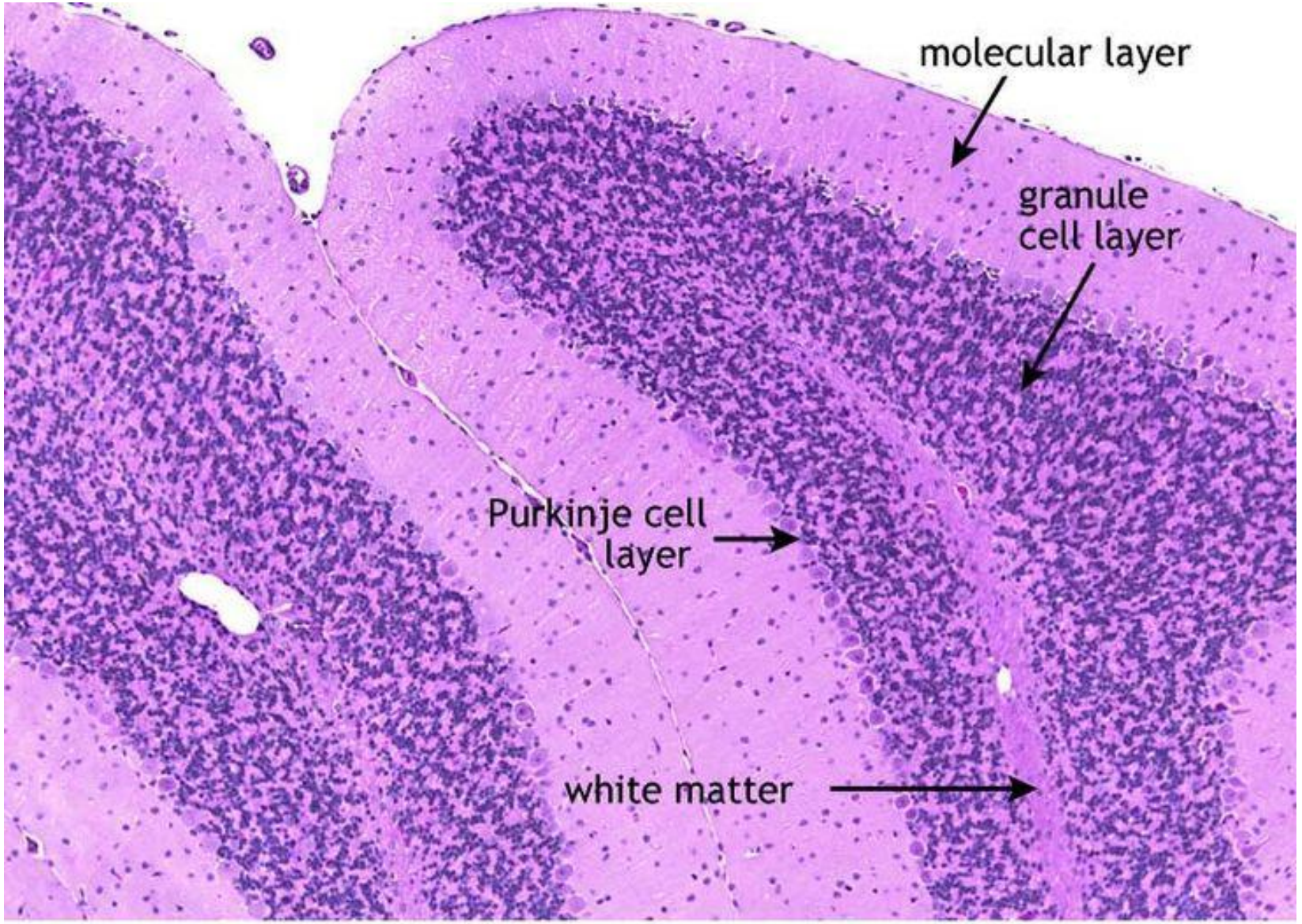
http://histology.medicine.umich.edu/sites/default/files/cerebrumTB%26E.jpg

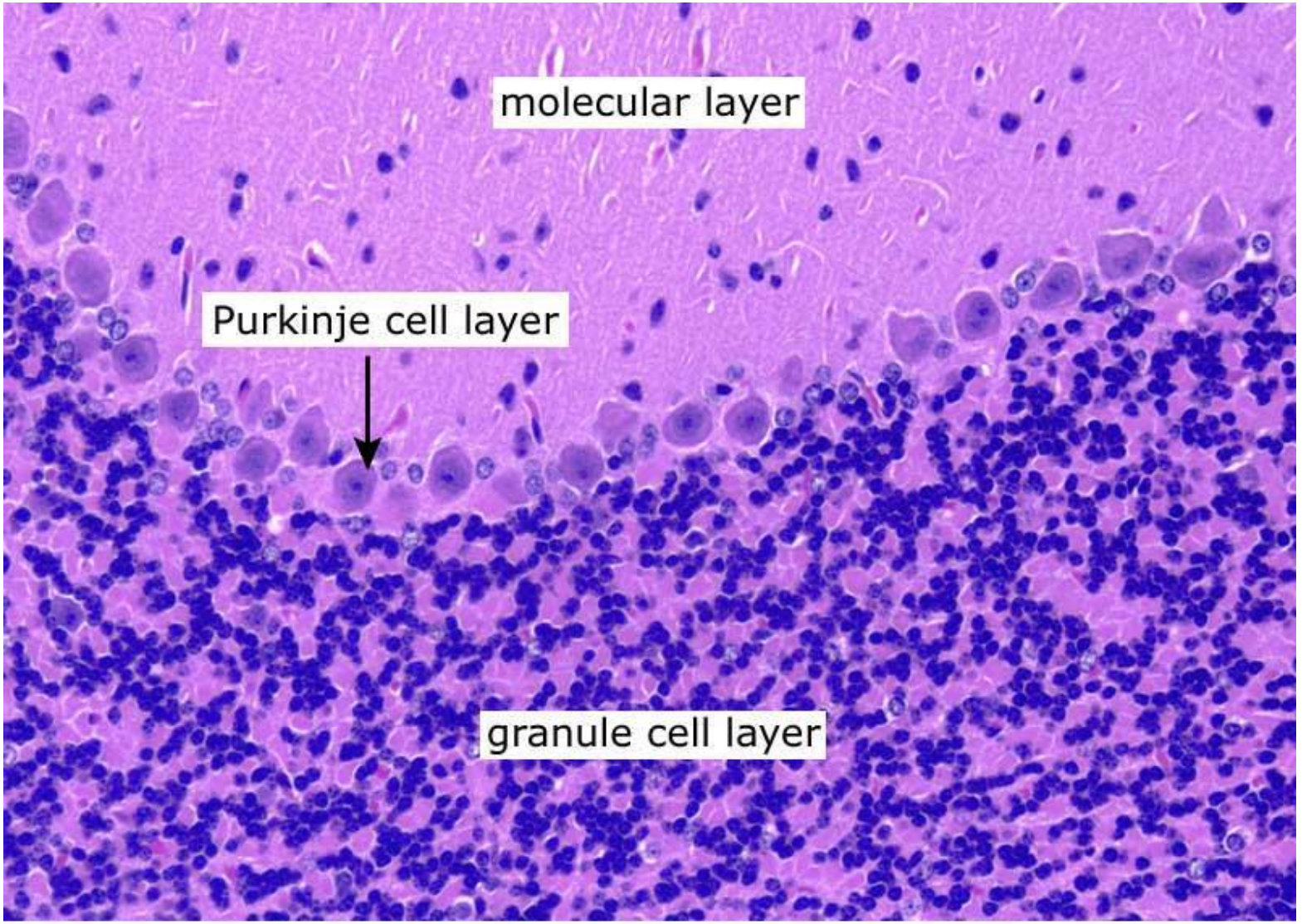
Cerebellum

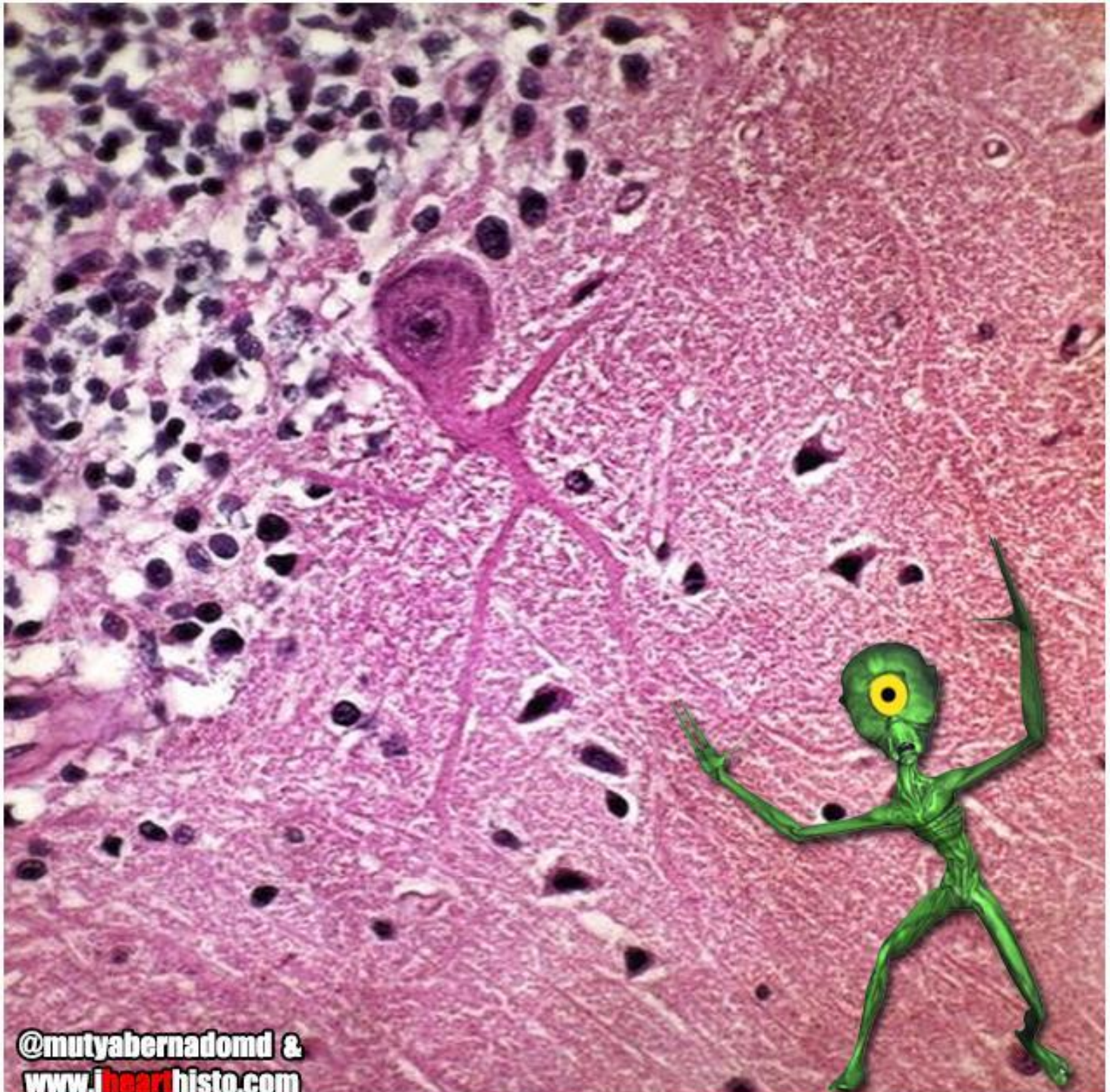


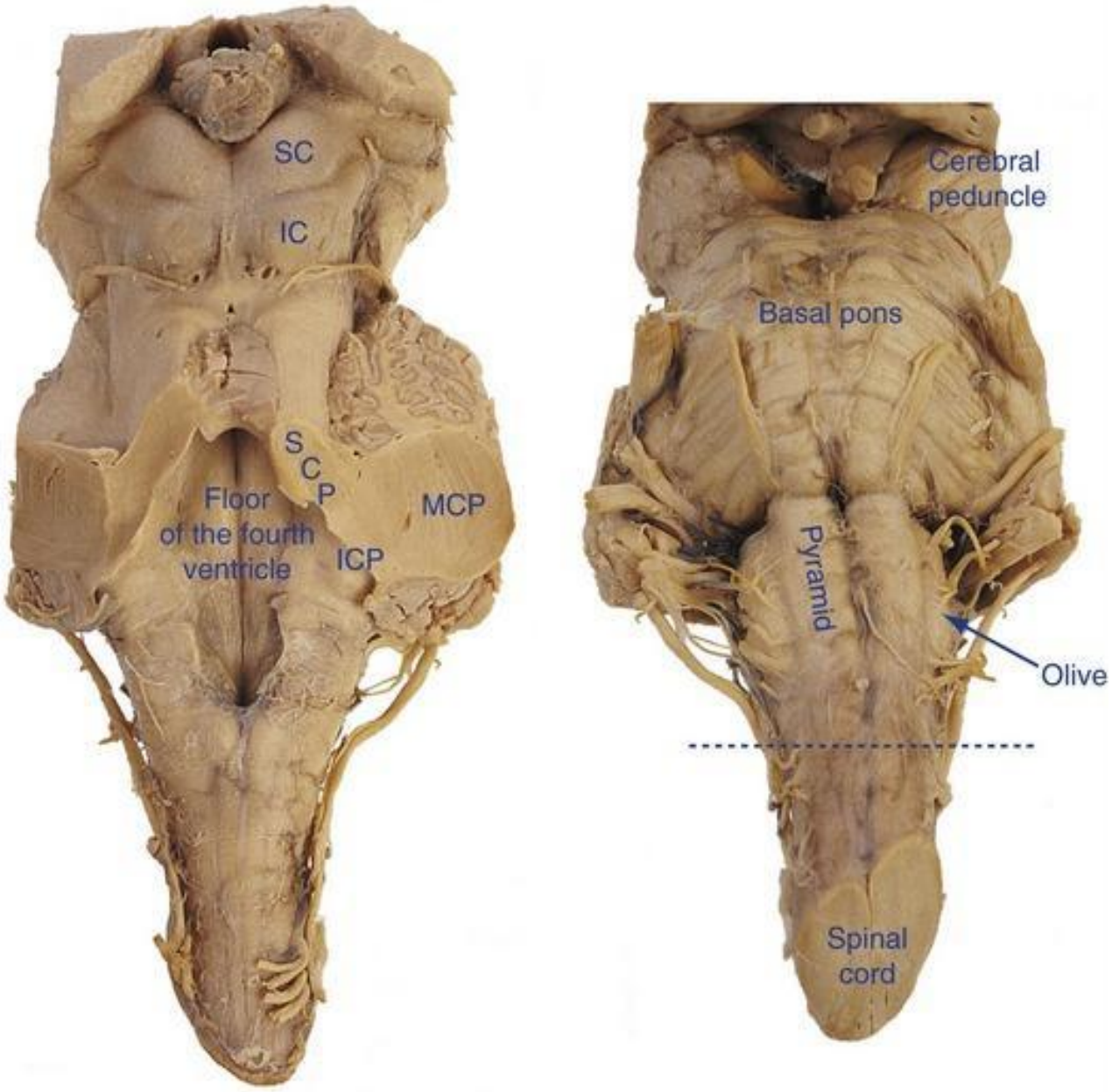
https://hiveminer.com/Tags/cerebellum,macro/Interesting

https://hiveminer.com/Tags/cerebellum,macro/Interesting

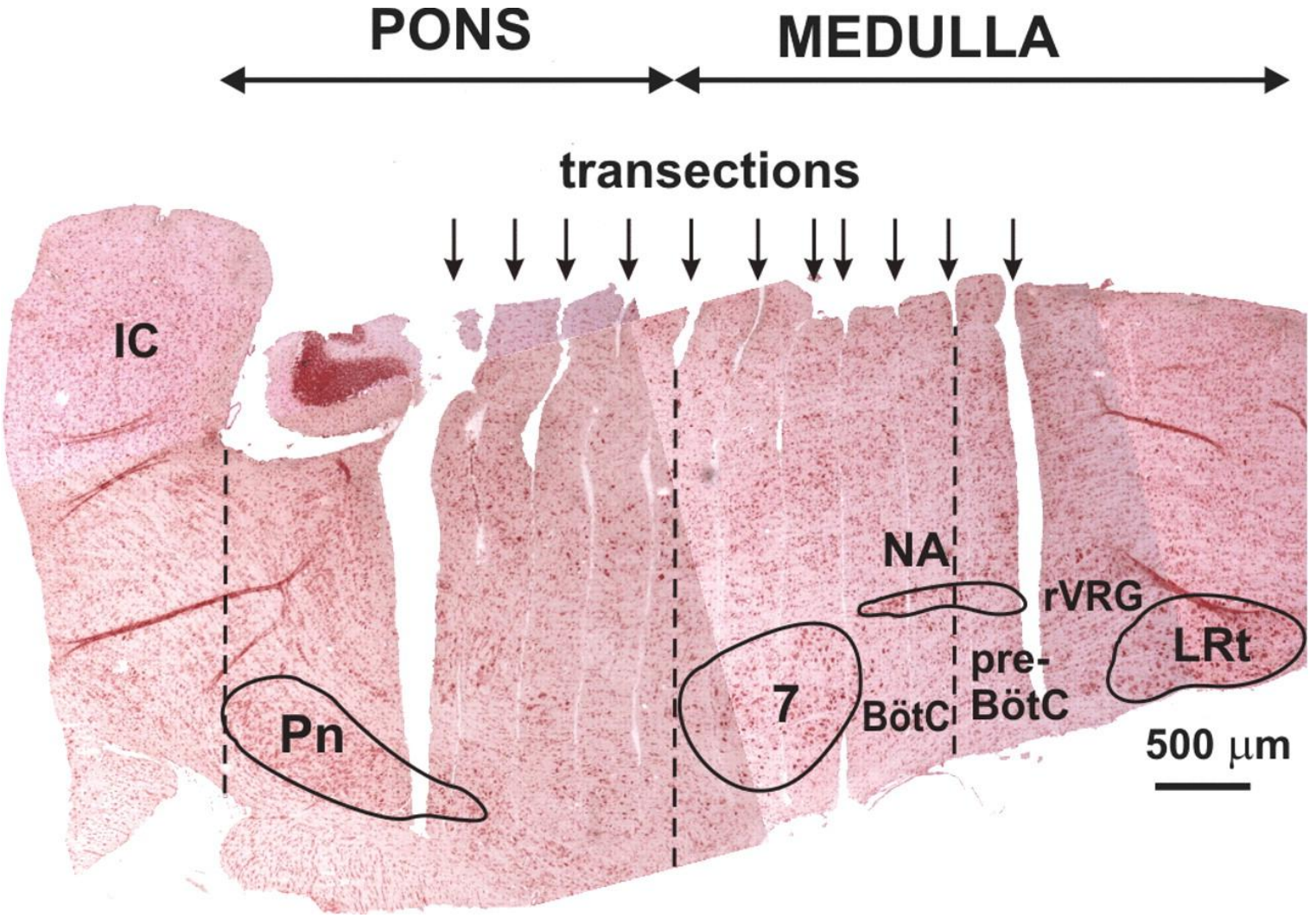


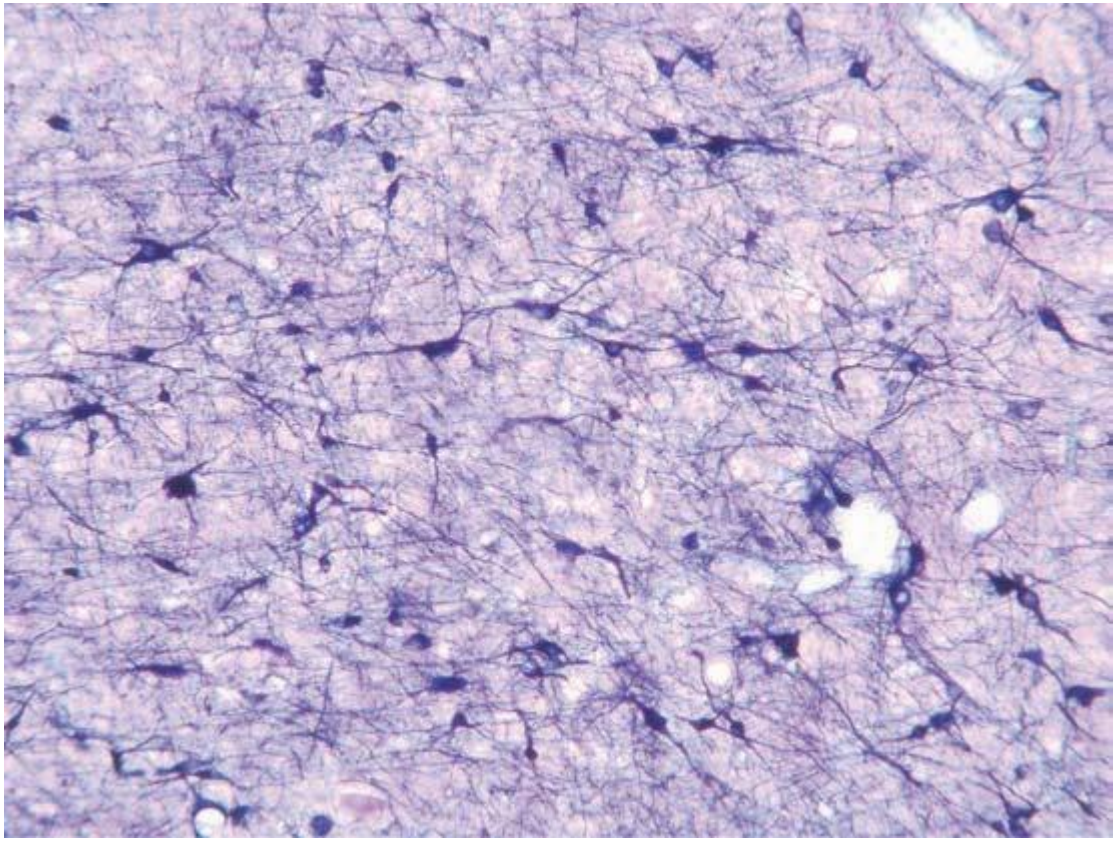



@mutyabernadomd &
www.iheartbisto.com



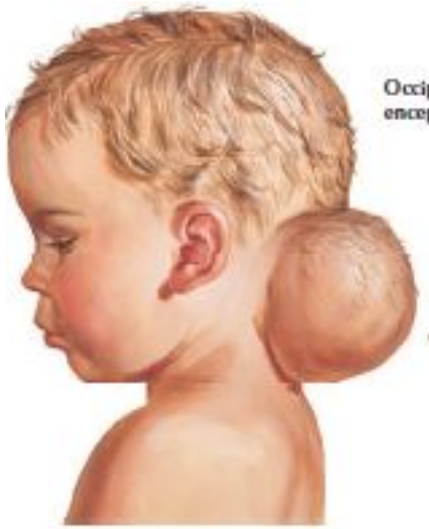
http://clinicalgate.com/wp-content/uploads/2015/03/B9780323045704000111_gr1.jpg


PONS
MEDULLA
transections
IC
Pn
7
NA
rVRG
LRt
pre-
BötC
BötC
500 μm

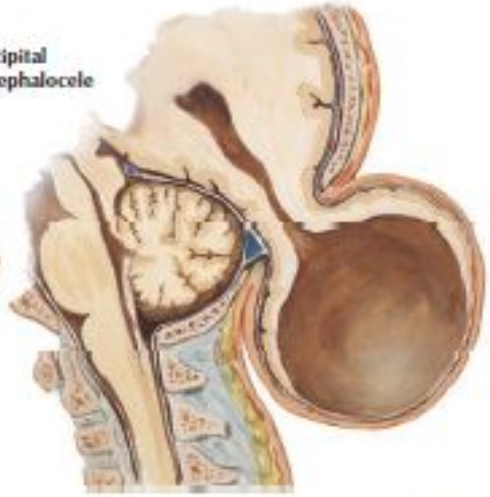


Ретикулярная формация ствола головного мозга; гематоксилин + эозин

Мальформации головного мозга (ГМ)



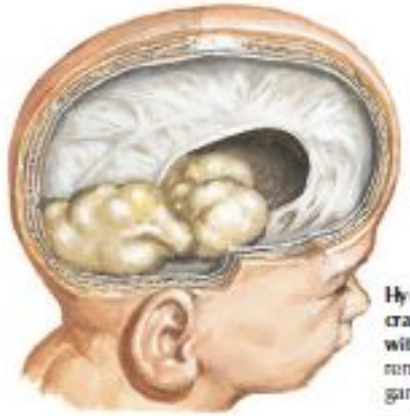
Occipital encephalocele



Frontal encephalocele

Lissencephalia (agyria)

Microgyria. Of occipital and posterior temporal lobes

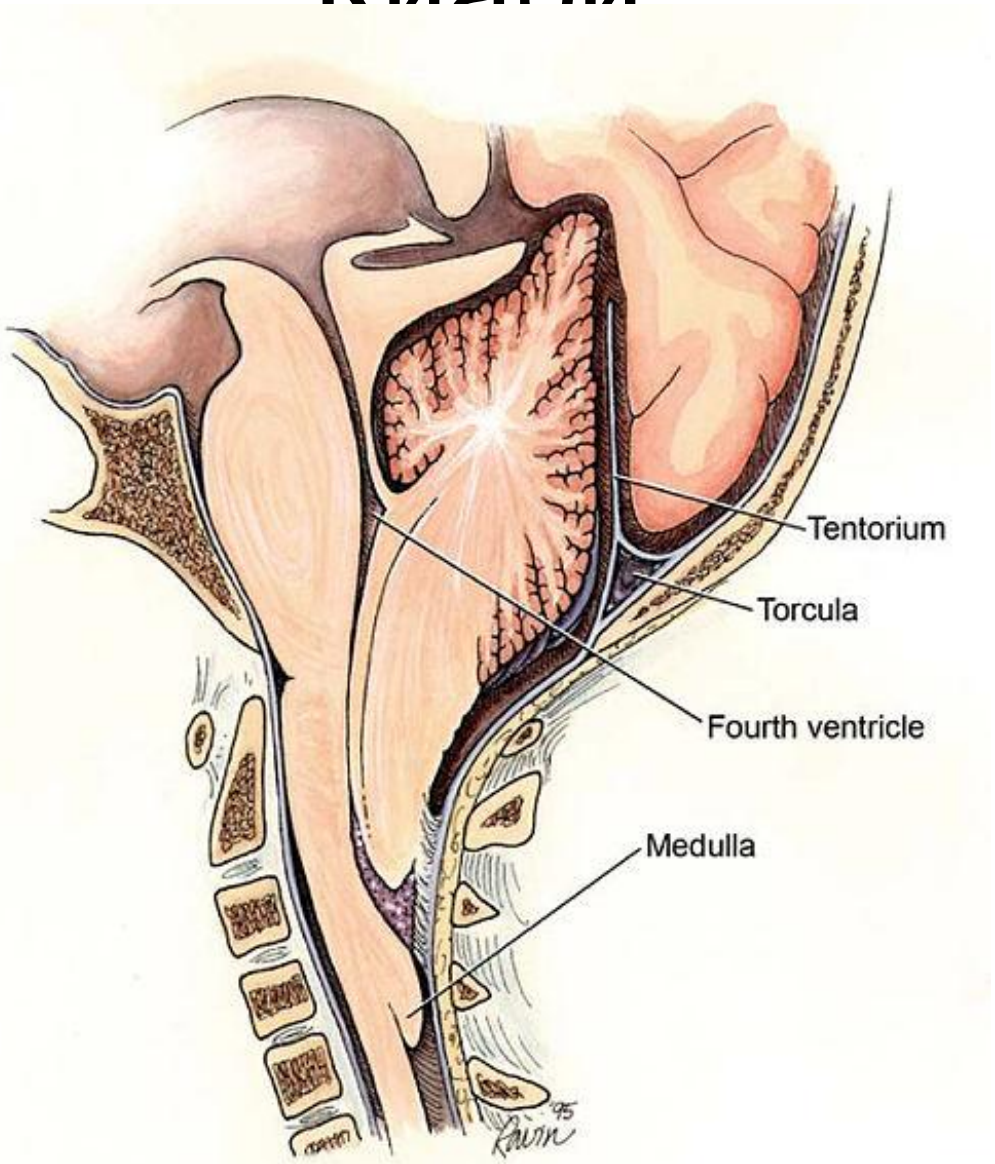


Hydranencephaly cranial cavity filled with cystic sac. Only remnants of basal ganglia and posterior lobe

Anencephaly

F. Netter M.D.

Мальформация Арнольда-Киари



https://commons.wikimedia.org/wiki/File:Chiari2.jpg?uselang=ru

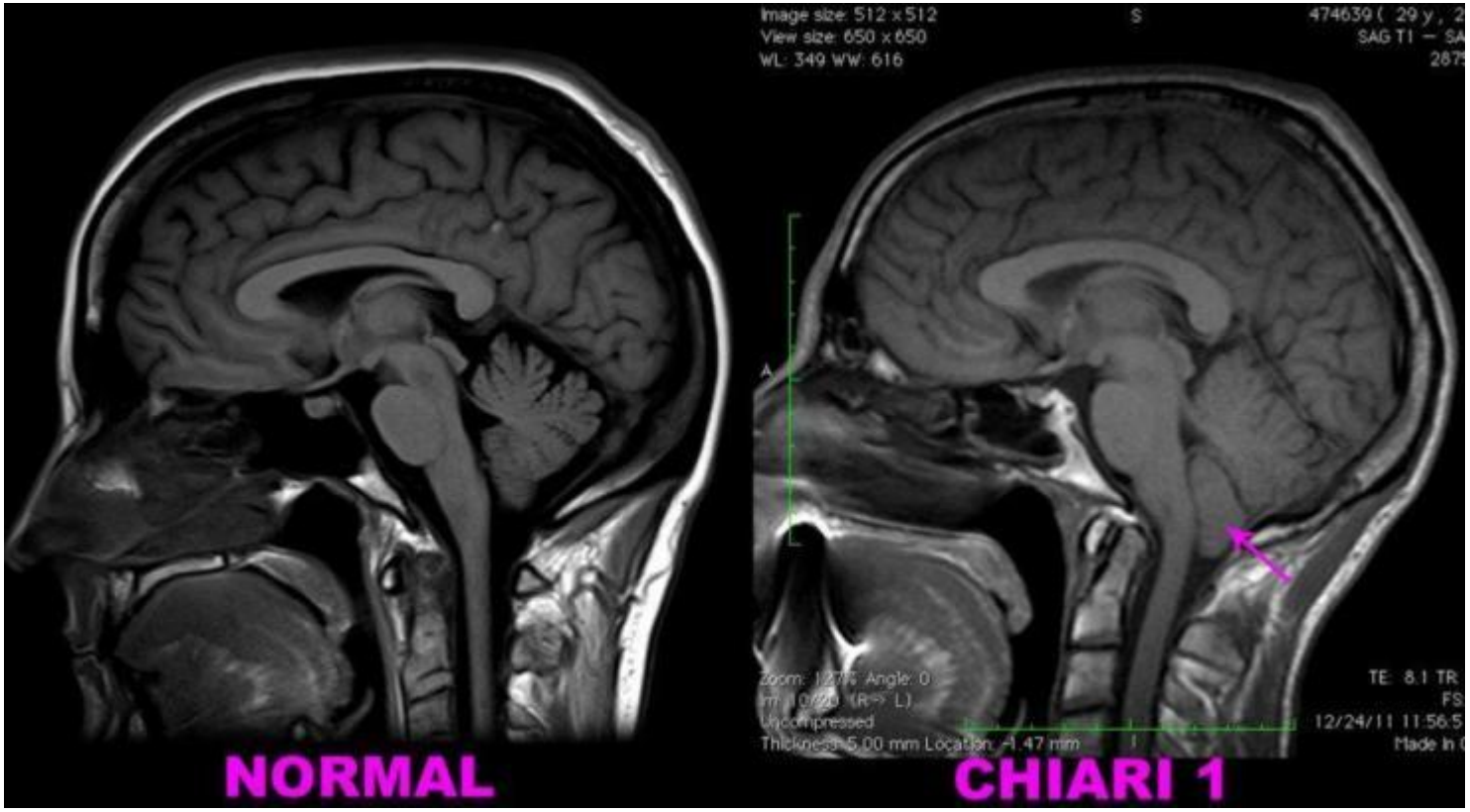
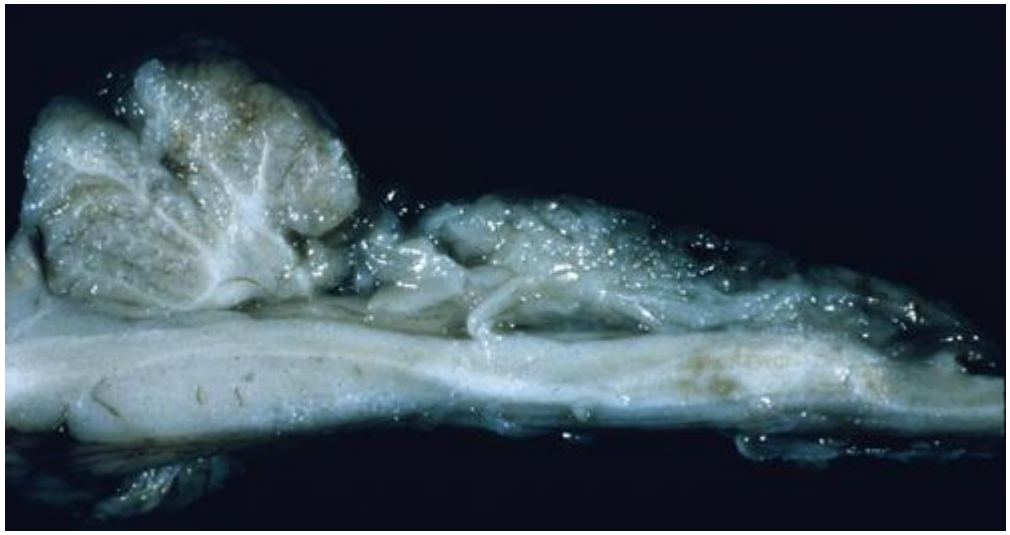
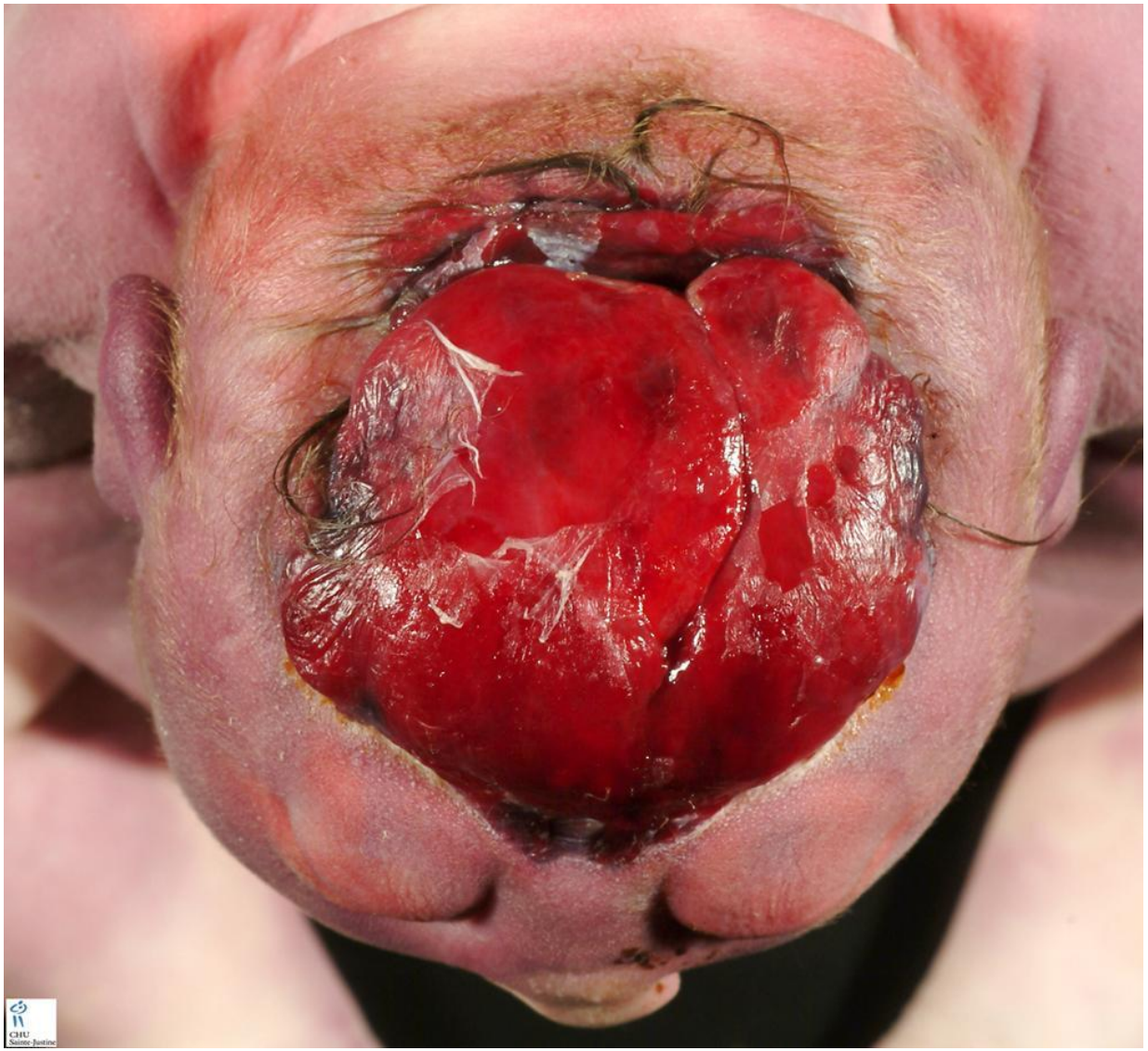


Image size: 512 x 512
View size: 650 x 650
WL: 349 WW: 616
S
474639 (29 y , 2
SAG T1 — SA
Zoom: 1.27 Angle: 0
Uncompressed
Thickness: 5.00 mm Location: -1.47 mm
TE: 8.1 TR
FS
12/24/11 11:56:5
NORMAL
CHIARI 1

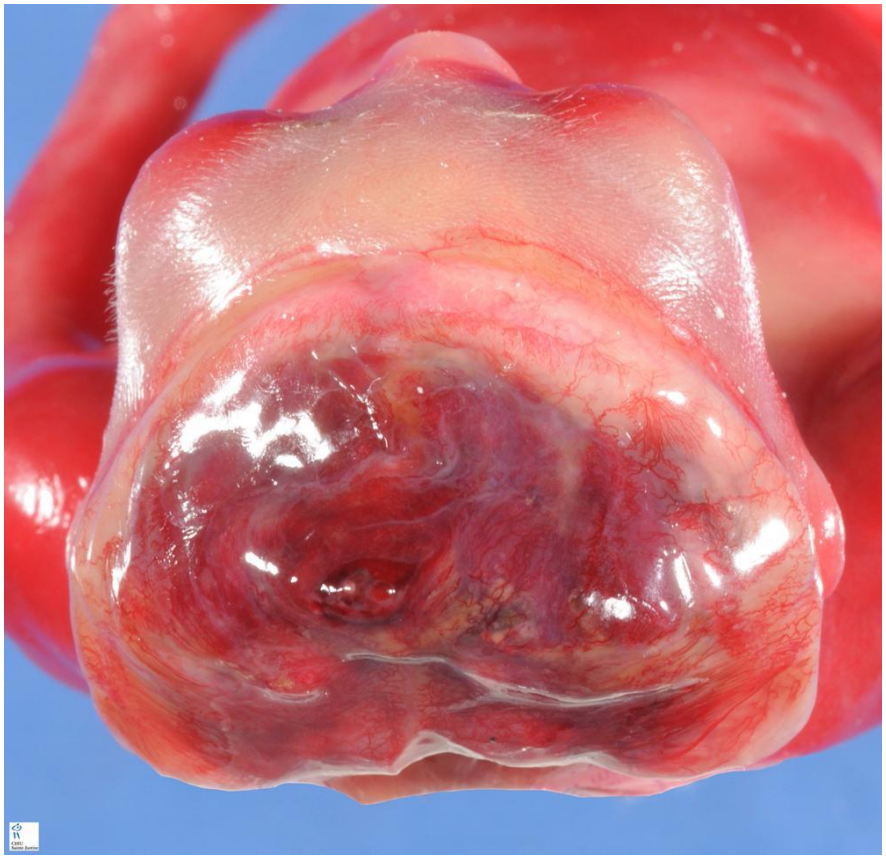


Анэнцефалия (40 недель)



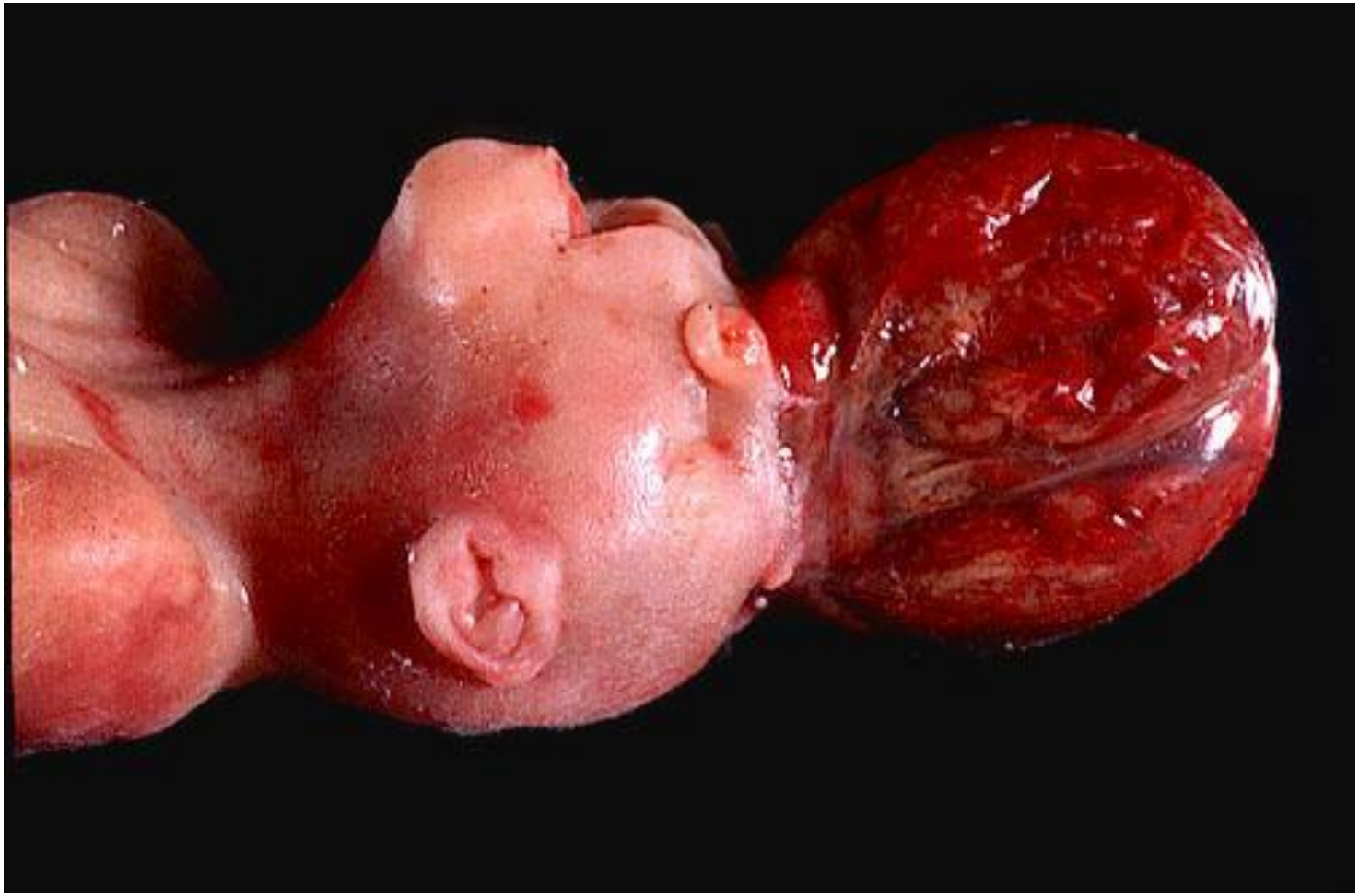
http://www.humpath.com/spip.php?article3410

Анэнцефалия (19 недель)



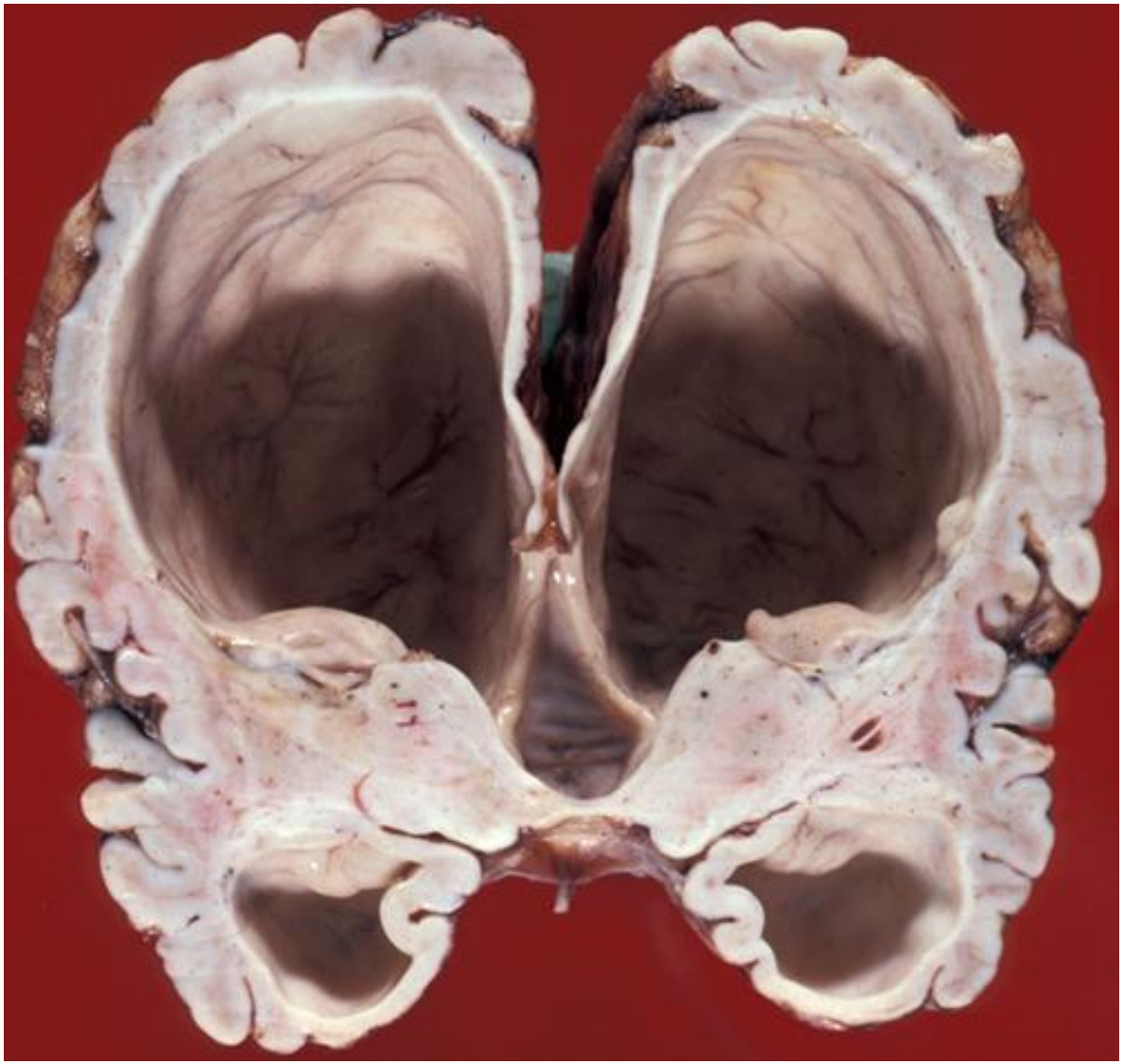
http://www.humpath.com/spip.php?article3410

Экзэнцефалия

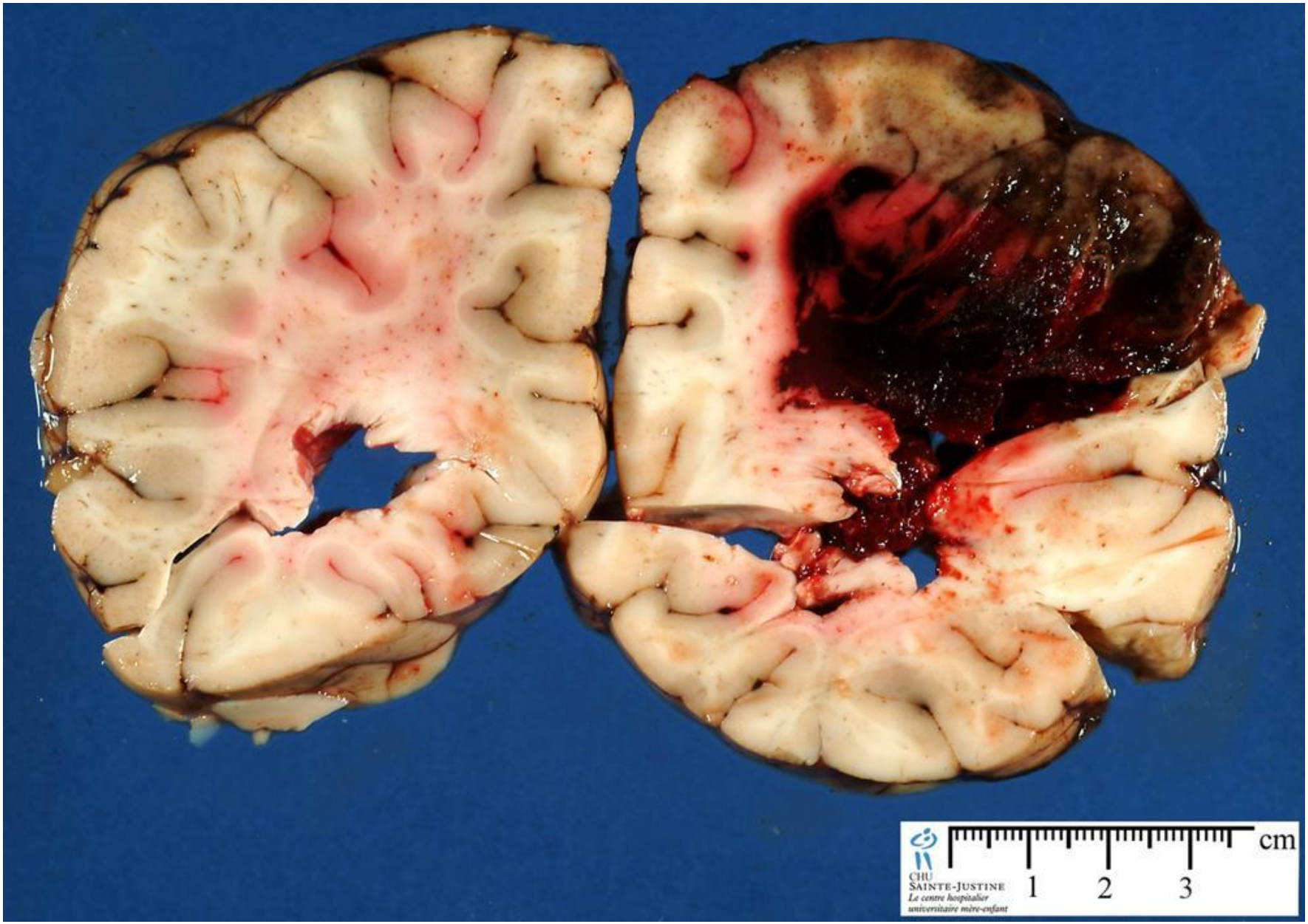


Гидроцефалия (21 неделя)

Гидроцефалия



Энцефалоцеле

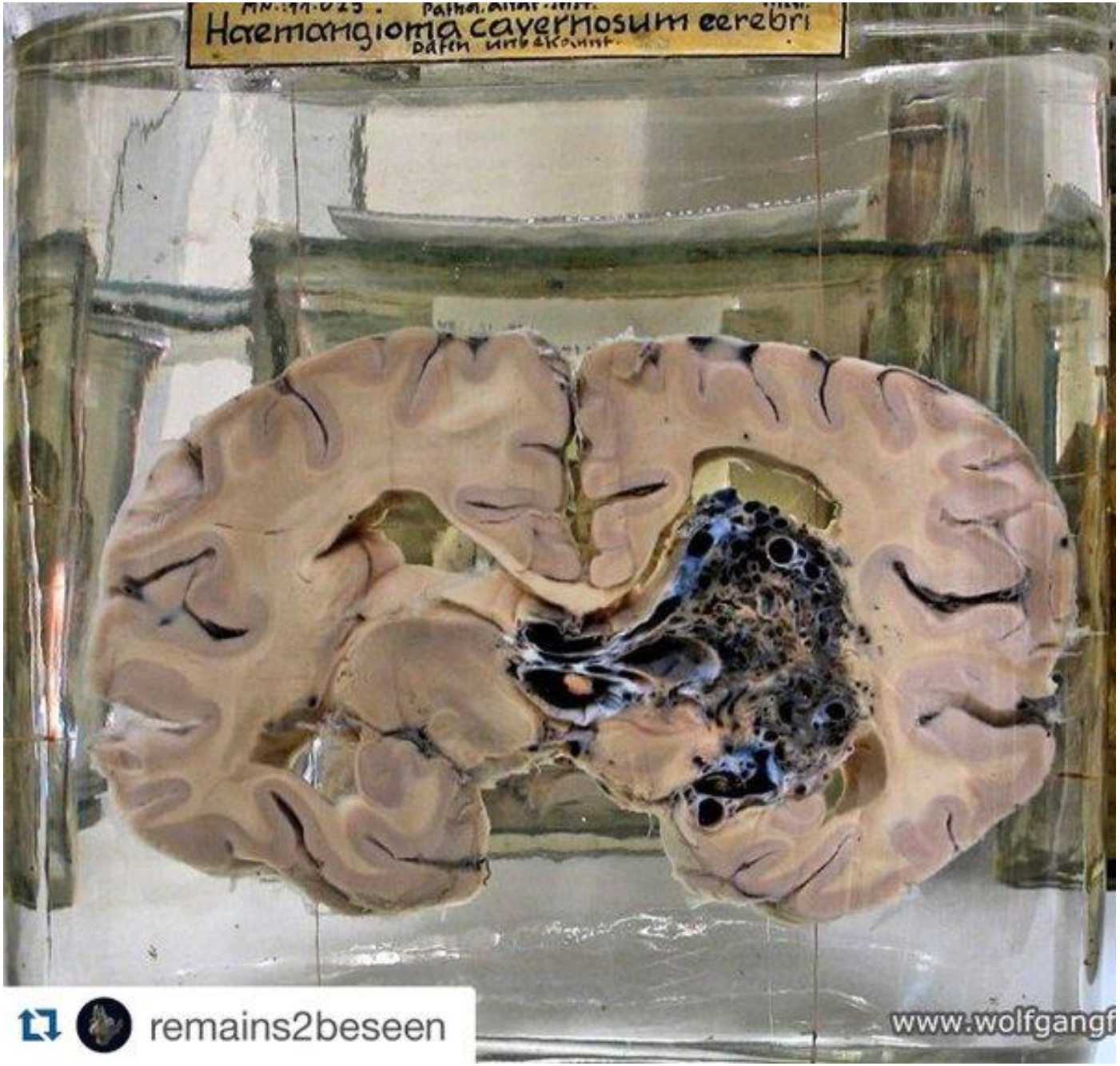

CHU
SAINTE-JUSTINE
Le centre hospitalier
universitaire mère-enfant
1
2
3
cm

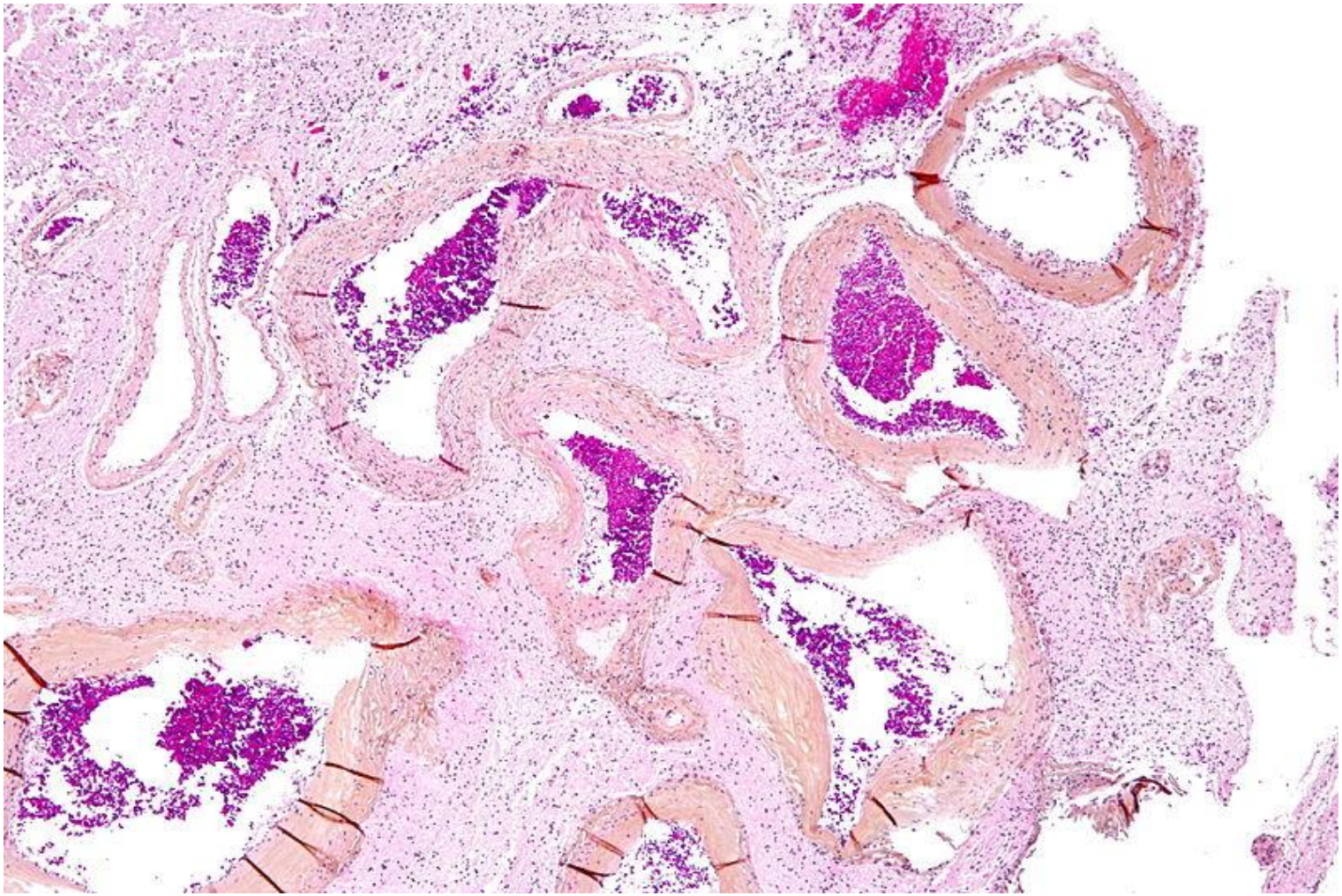
INTERNATIONAL SOCIETY FOR THE STUDY OF VASCULAR ANOMALIES

VASCULAR ANOMALIES				
Vascular Tumors			Vascular Malformations	
Benign	**Locally Aggressive**	**Malignant**	**Simple**	**Combined**
Infantile Hemangioma	Kaposiform hemangioendothelioma	Angiosarcoma	Capillary Malformation (C)	CVM, CLM
Congenital Hemangioma	Retiform hemangioendothelioma	Epitheloid hemangioendothelioma	Lymphatic Malformation (LM)	LVM, CLVM
Tufted Hemangioma	PILA, Dabska tumor		Venous Malformation (VM)	CAVM
Spindle-cell Hemangioma	Composite hemanigoendothioma		Arteriovenous Malformation (AVM)	CLAVM
Epithelioid Hemangioma	Kaposi Sarcoma		Arteriovenous Fistula	
Pyogenic Granuloma				

Артериовенозные мальформации

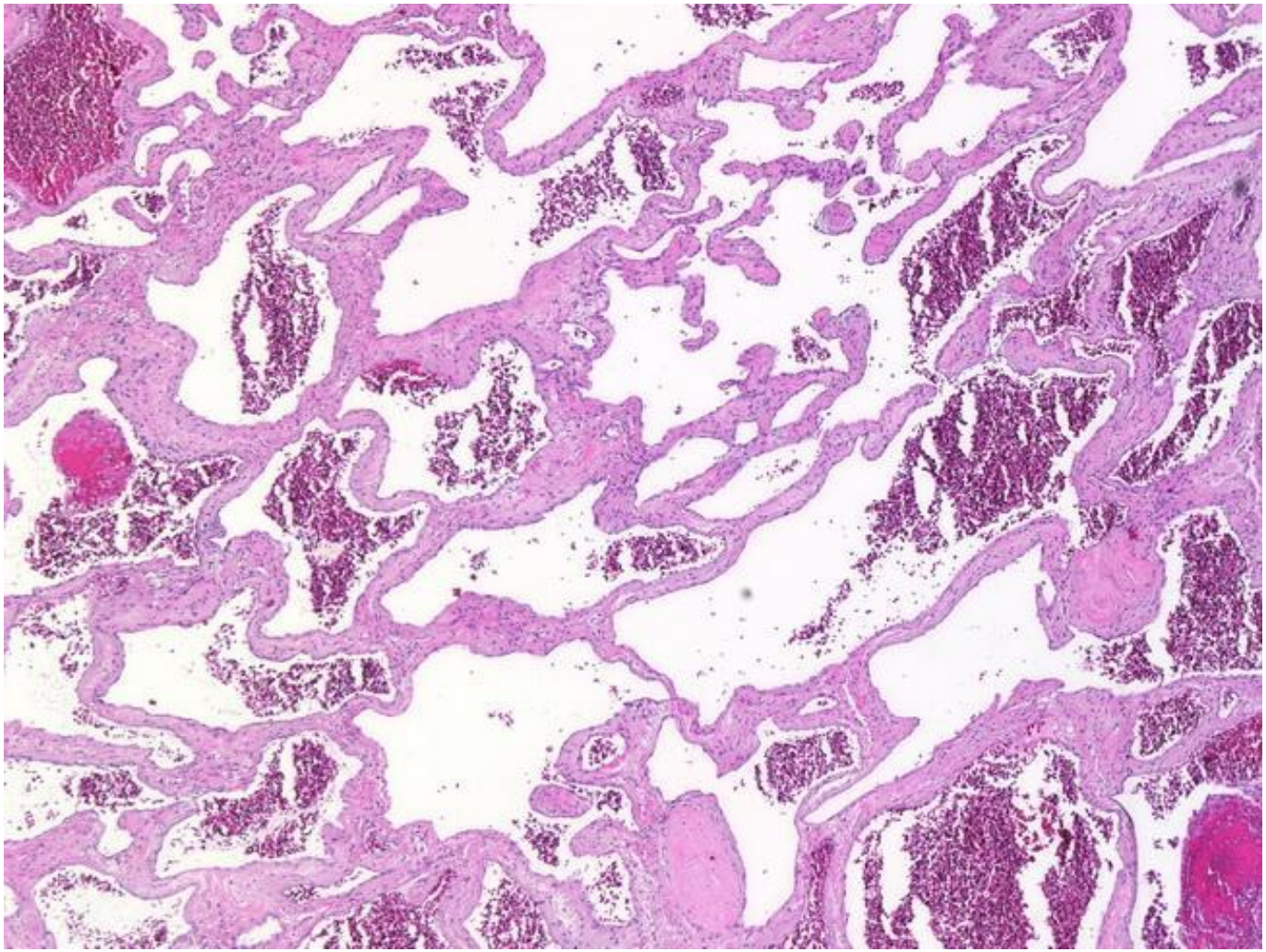
- Наблюдаются у 4% популяции, но только у 12% наблюдаются клинические проявления
- 38-70% манифестируют в виде кровоизлияний
- Другие симптомы: обмороки, головная боль, эпилепсия, неврологический дефицит

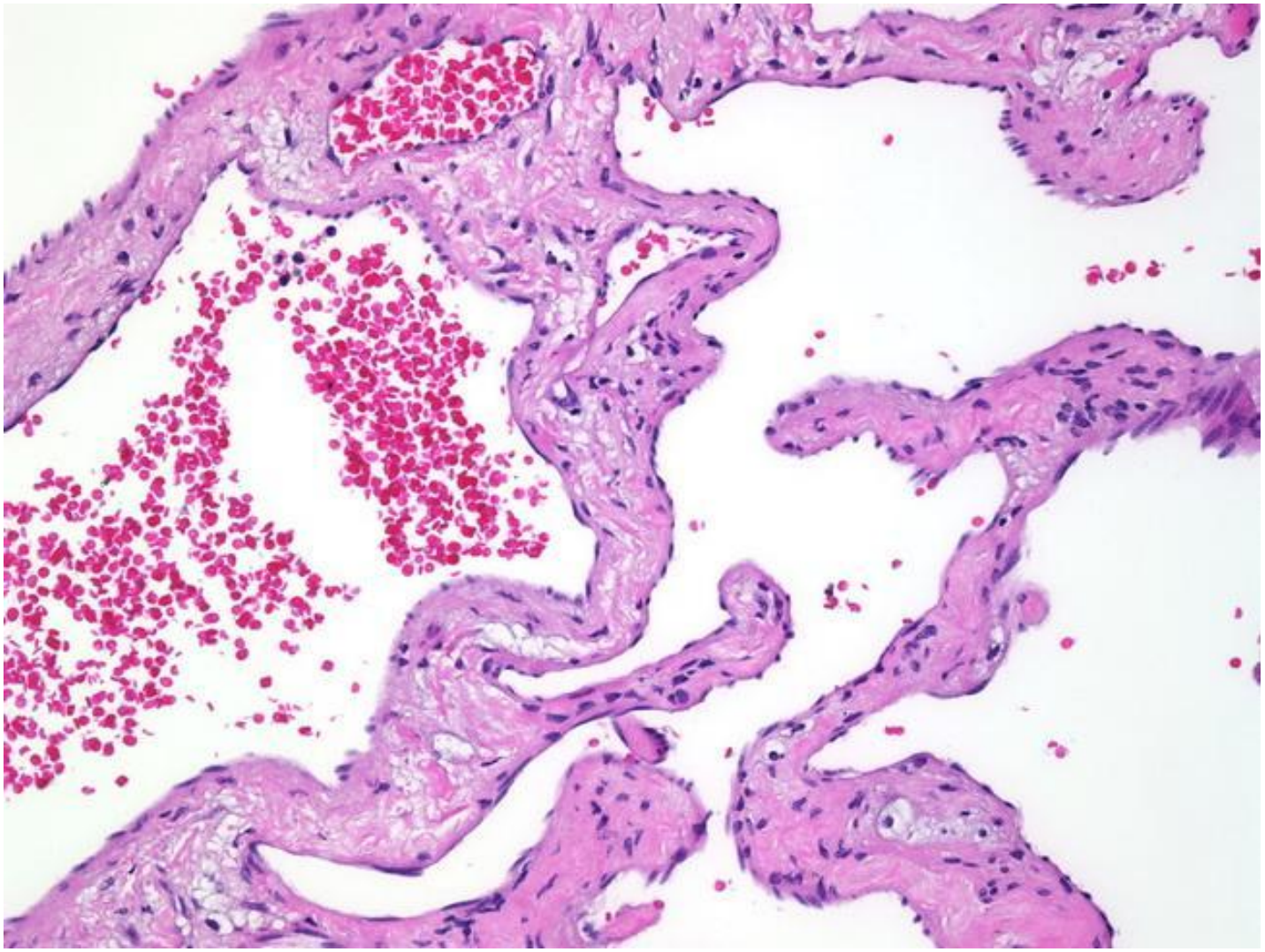

Haemangioma cavernosum cerebri
remains2beseen
www.wolfgangf



Церебральная кавернозная венозная мальформация (кавернозная гемангиома)

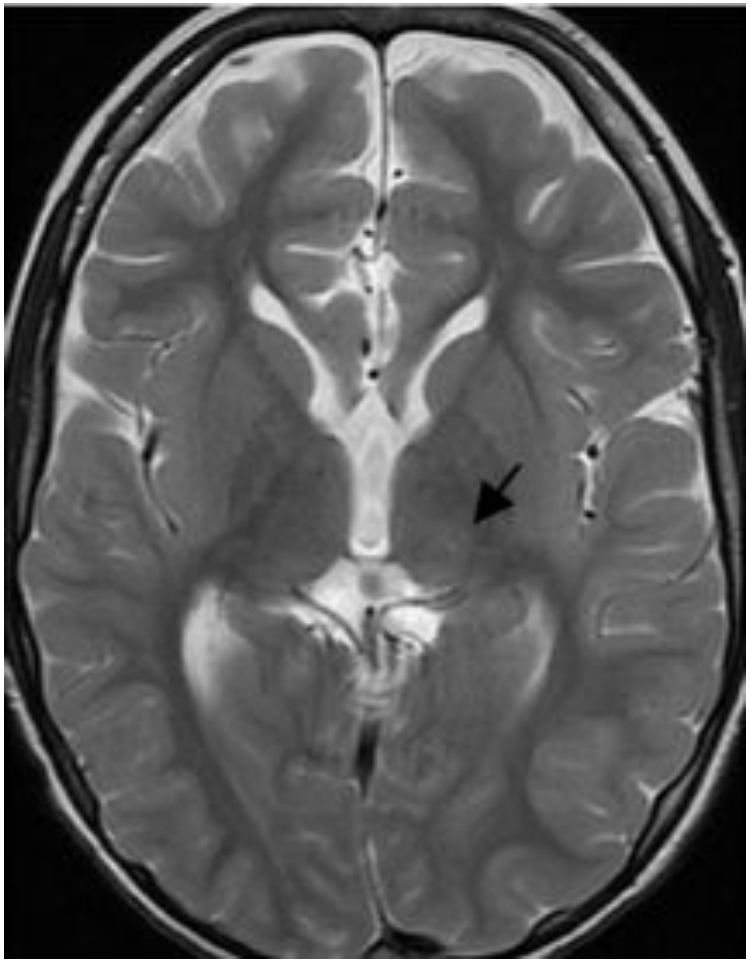
- 48 – 86% - в полушариях
- 5 – 13% сосудистых мальформаций ЦНС
- Манифестирует в 40-60 лет
- Клиническая картина: обмороки (60%), неврологический дефицит (50%), кровоизлияния (20%), гидроцефалия (50%)

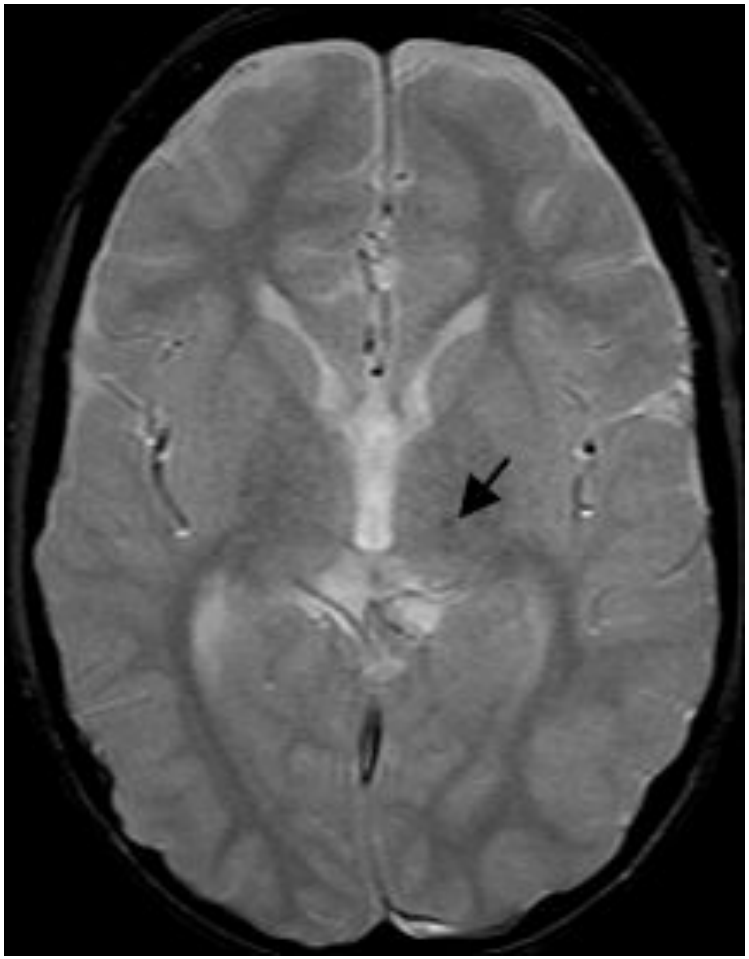


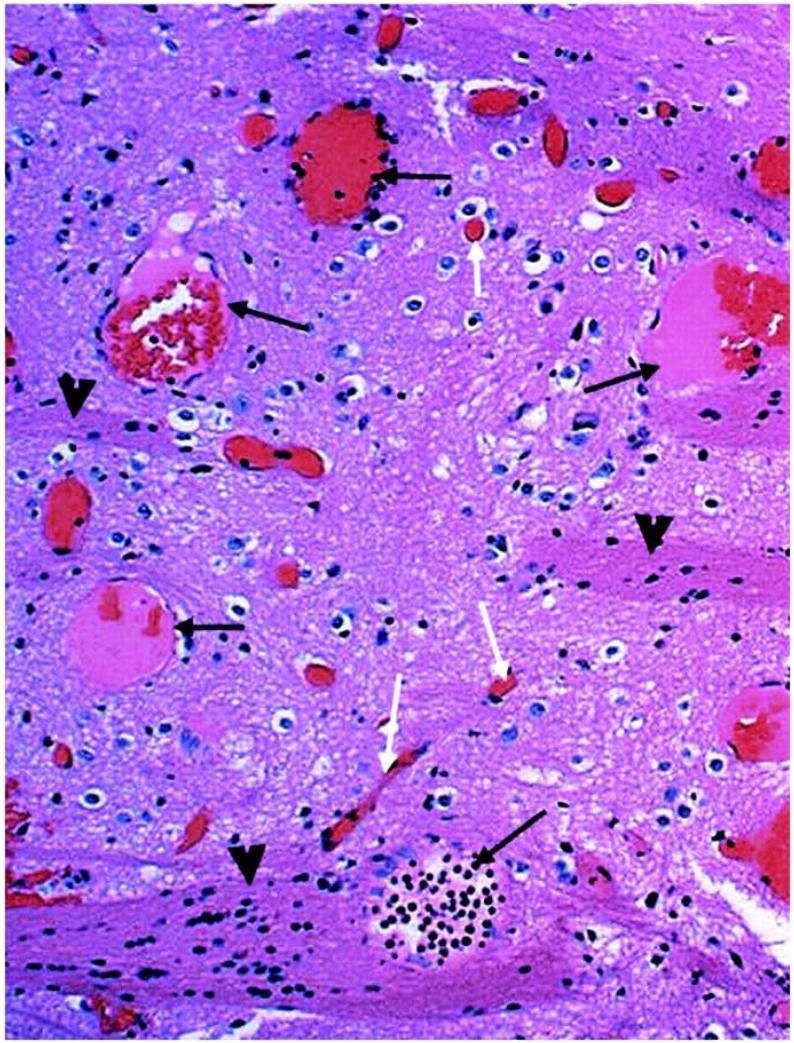


Капиллярная телеангиэктазия

- 20% сосудистых мальформаций ГМ, обнаруженных на аутопсиях
- Локализация: мост, мозжечок, спинной мозг

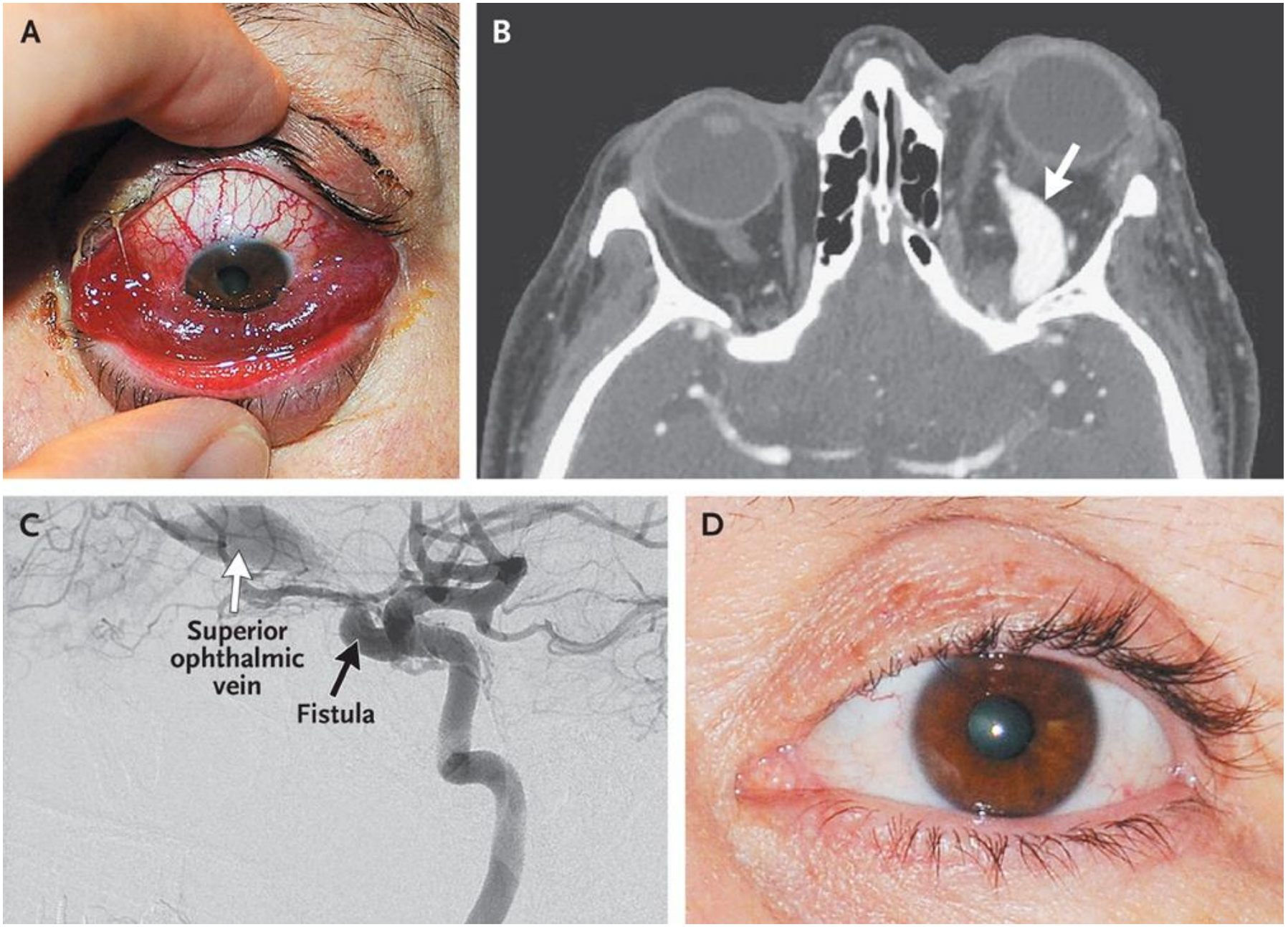






Артериовенозные фистулы

- Дуральная артериовенозная мальформация
- Кавернозно-каротидная фистула
- Мальформация вены Галена



http://snc.md/cavernous-malformation-cavernoma/

Спасибо за внимание!