

Brain Stem & Cranial Nerves

Anatomy Practical (Part 2)

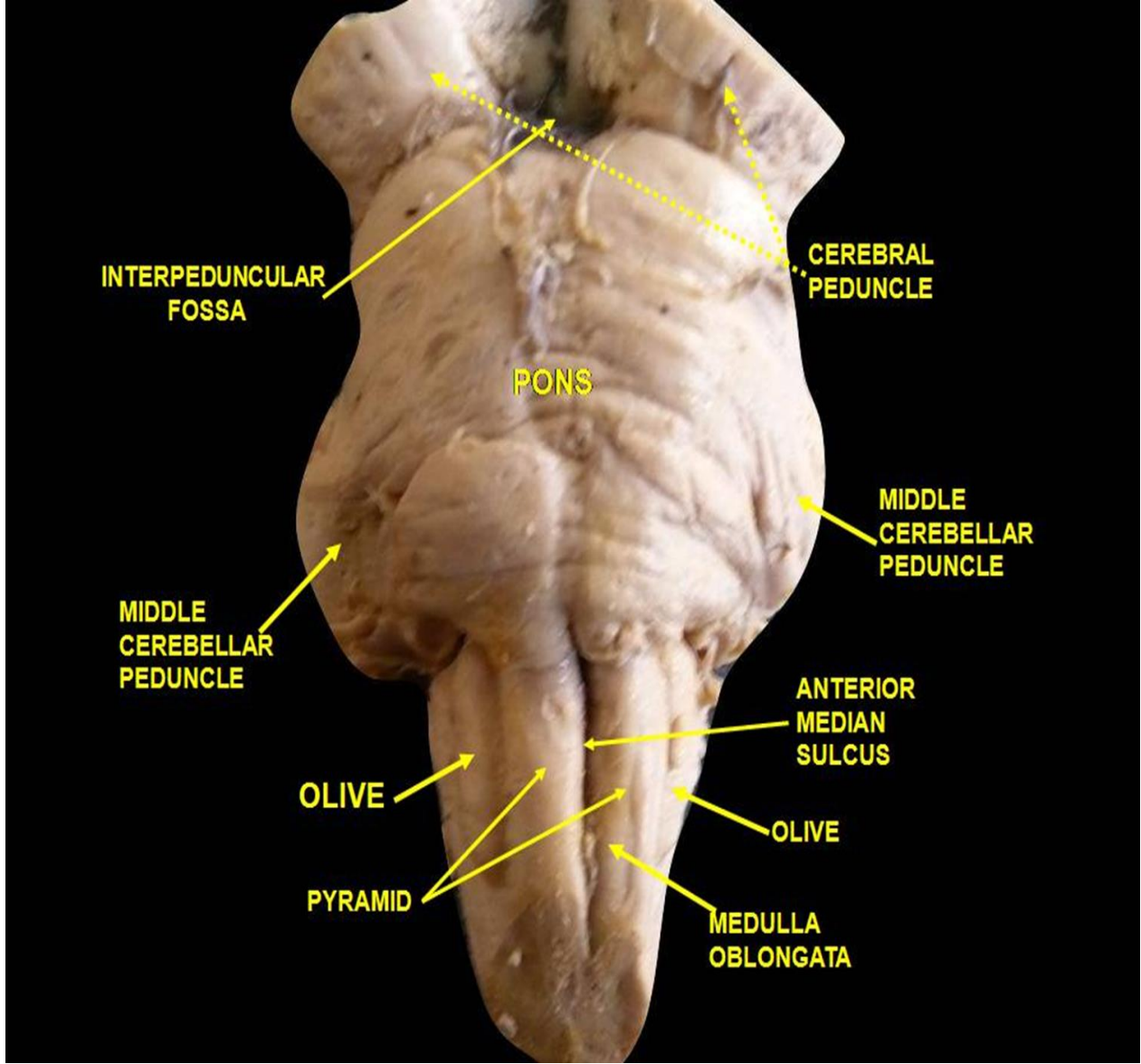
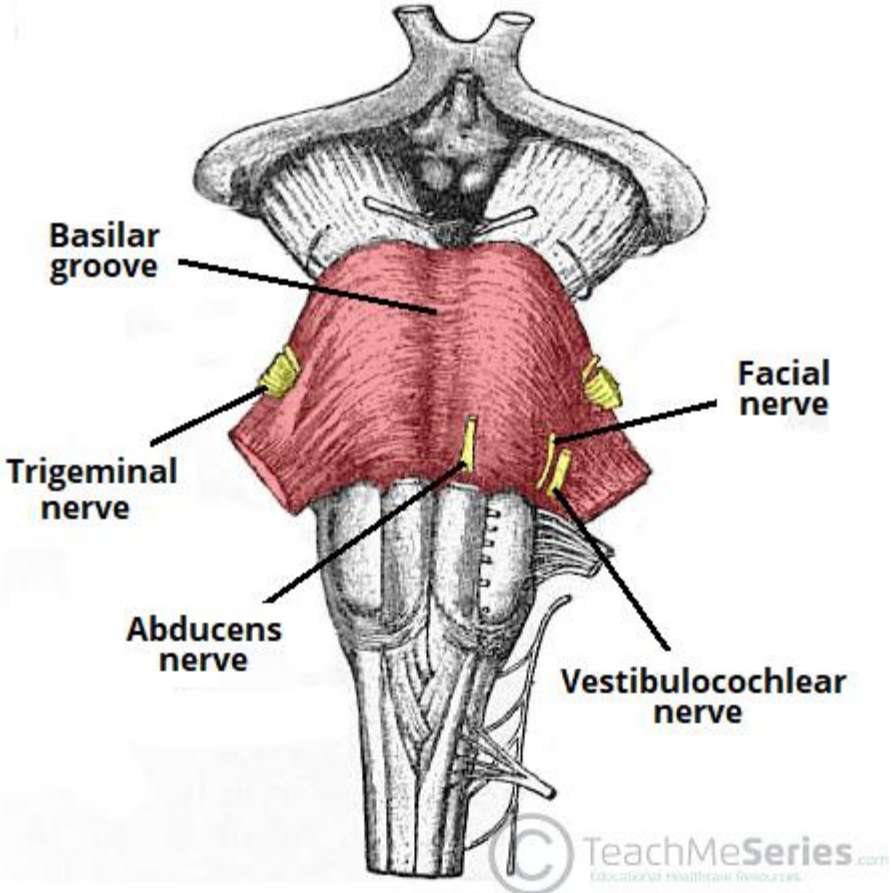
By Dr. Mohammed Alhefnawy

Anatomy Department

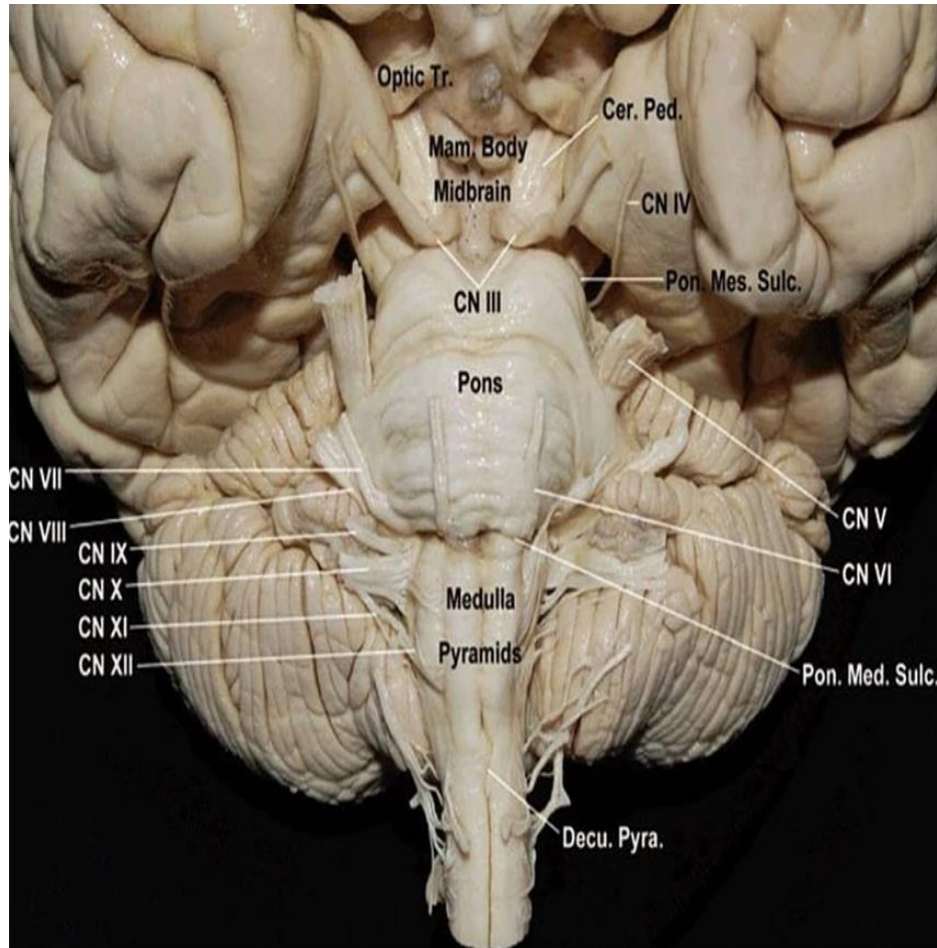
College of Medicine

King Saud University

Pons



External Features of the Ventral Surface of the Pons

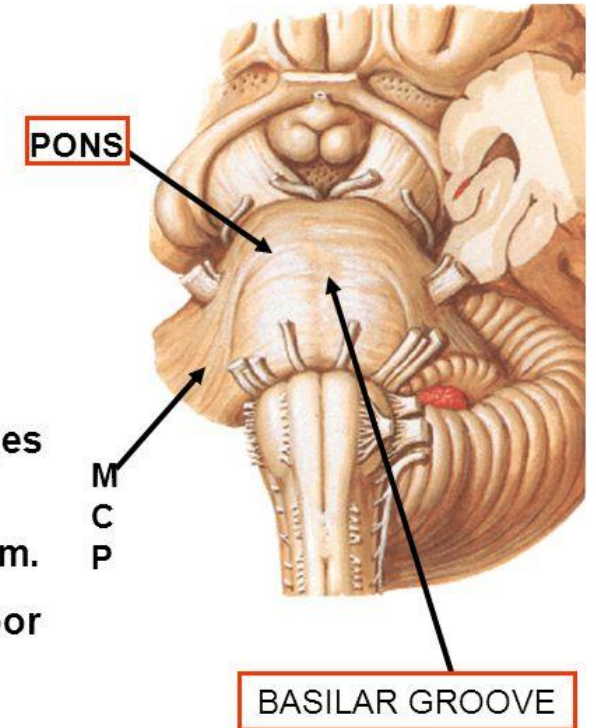


PONS

Length – 2.5 cm

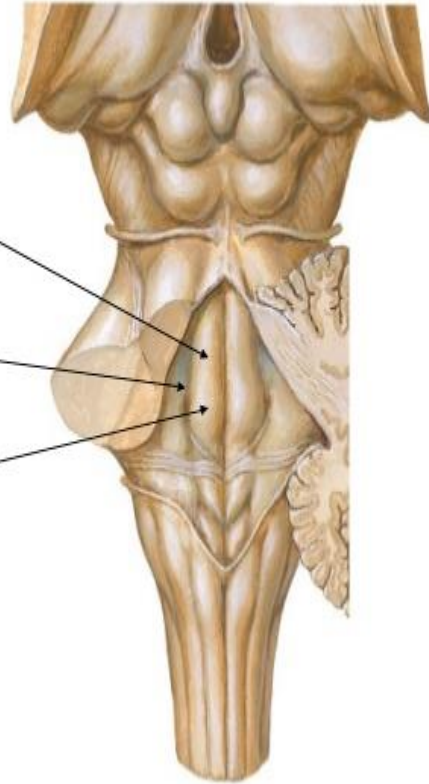
External features ..

1. Dorsal & ventral surfaces...
convex in all directions-transversely striated
2. Vertical basilar sulcus (vertical) .. lodges Basilar Artery.
3. Dorsal surface is hidden by cerebellum.
4. Dorsal surface forms upper part of floor of 4th Ventricle.
5. Laterally .. Continuous with Middle Cerebellar Peduncle- trigeminal nerve
6. Superior border- 3rd ,4th
7. Inferior border .. With 6th, 7th & 8th C.N.

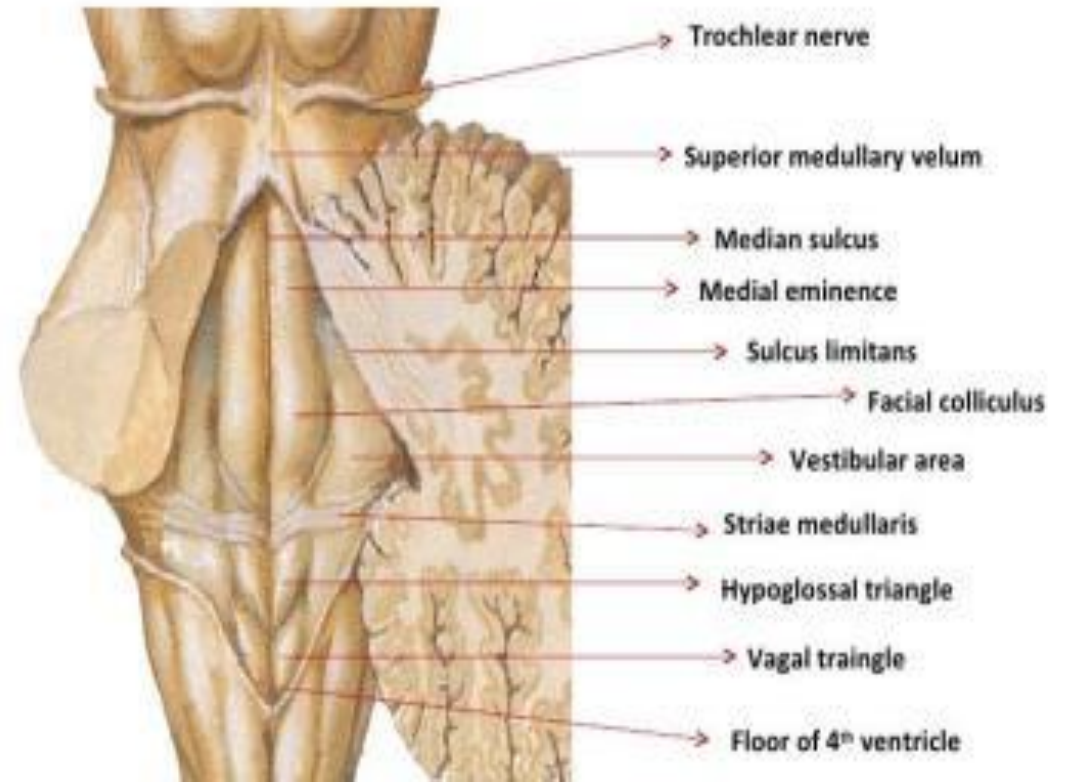


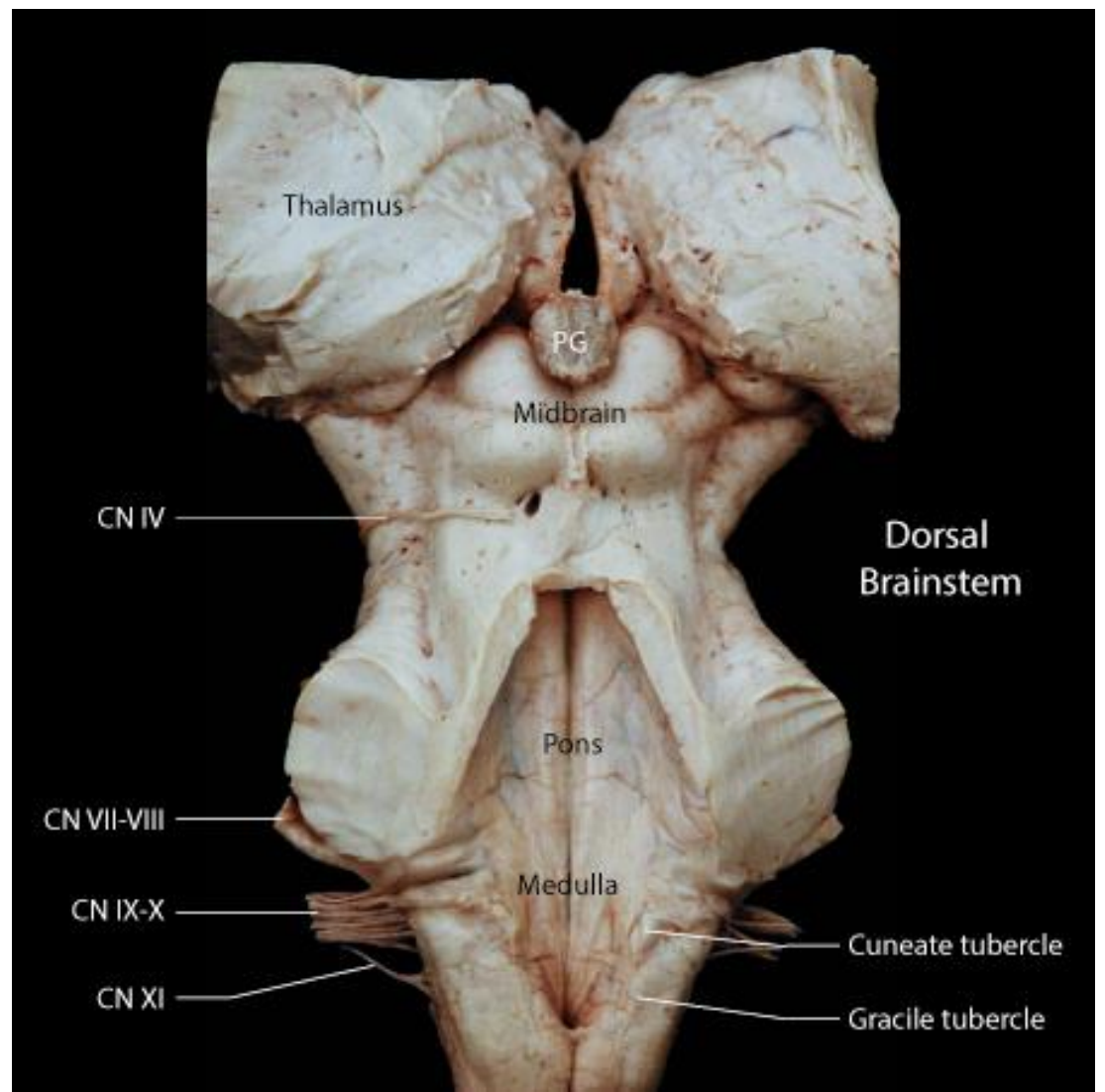
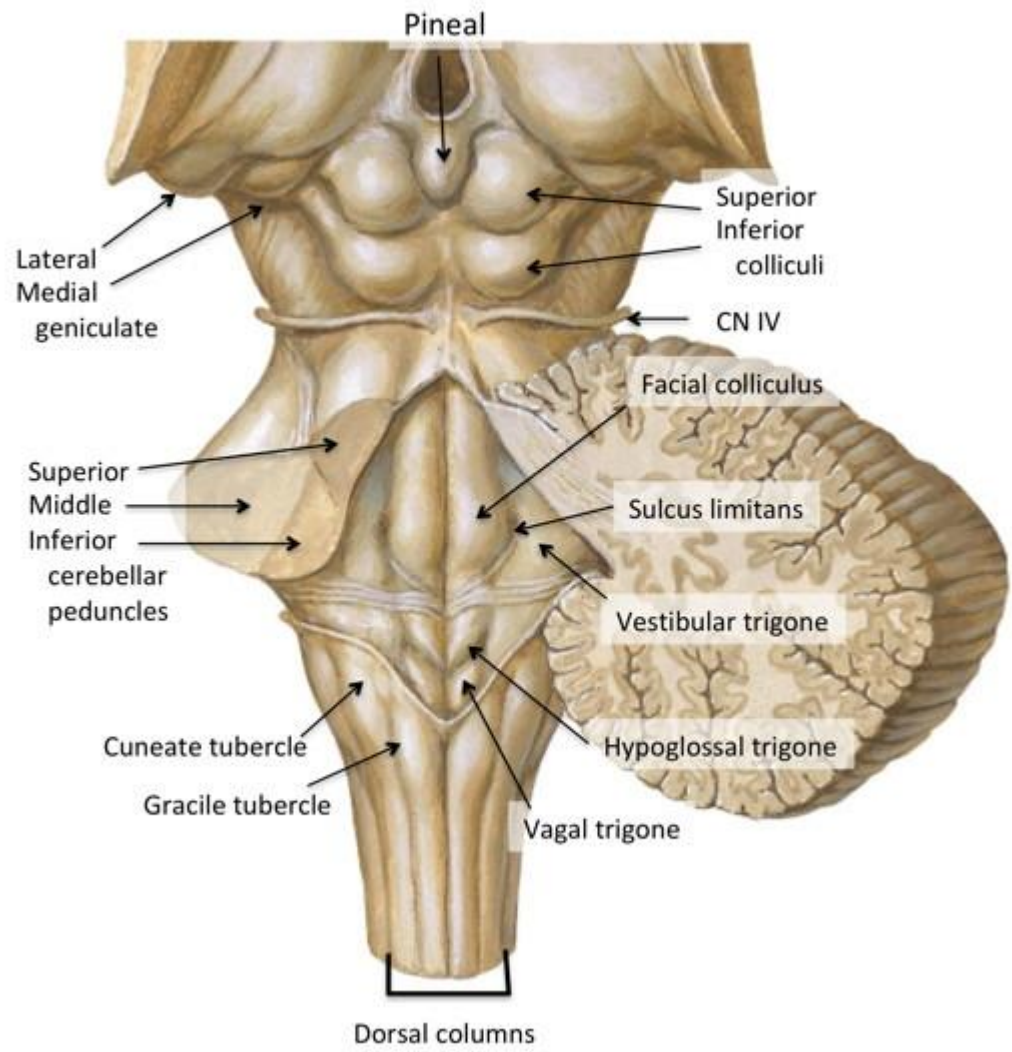
Dorsal Surface of the Pons

- Lateral to median sulcus is an elongated elevation : **Medial eminence**,
- Medial eminence is bounded laterally by : **Sulcus limitans**.
- Inferior end of the medial eminence is expanded as : **Facial colliculus**,
(which is produced by the root of the facial nerve winding around the abducent nucleus)

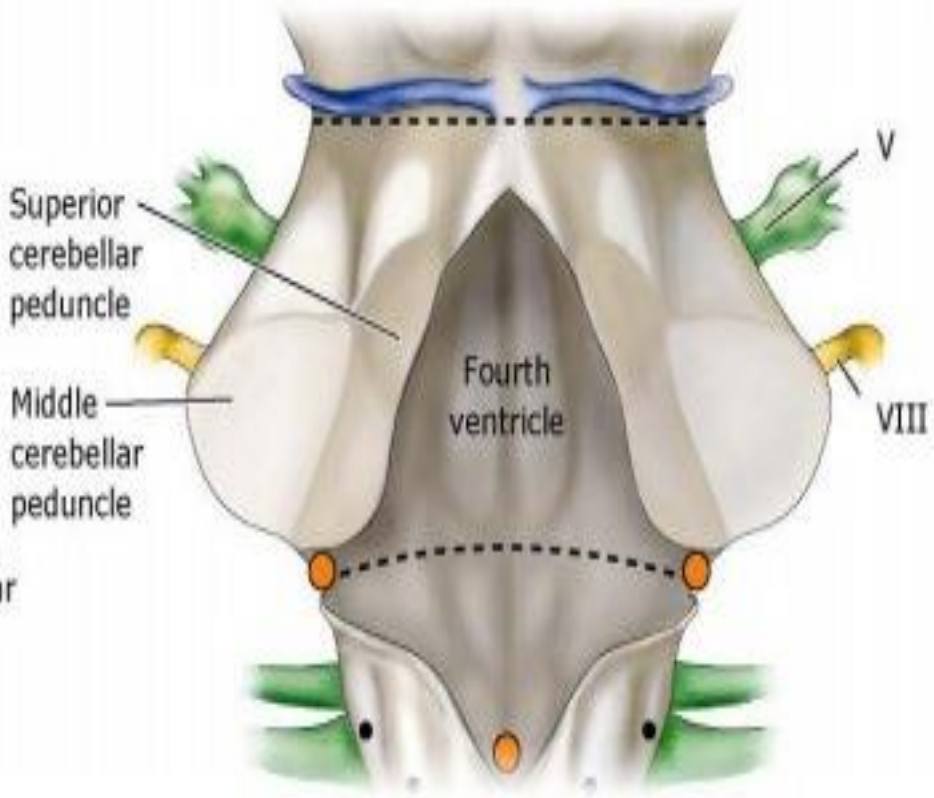
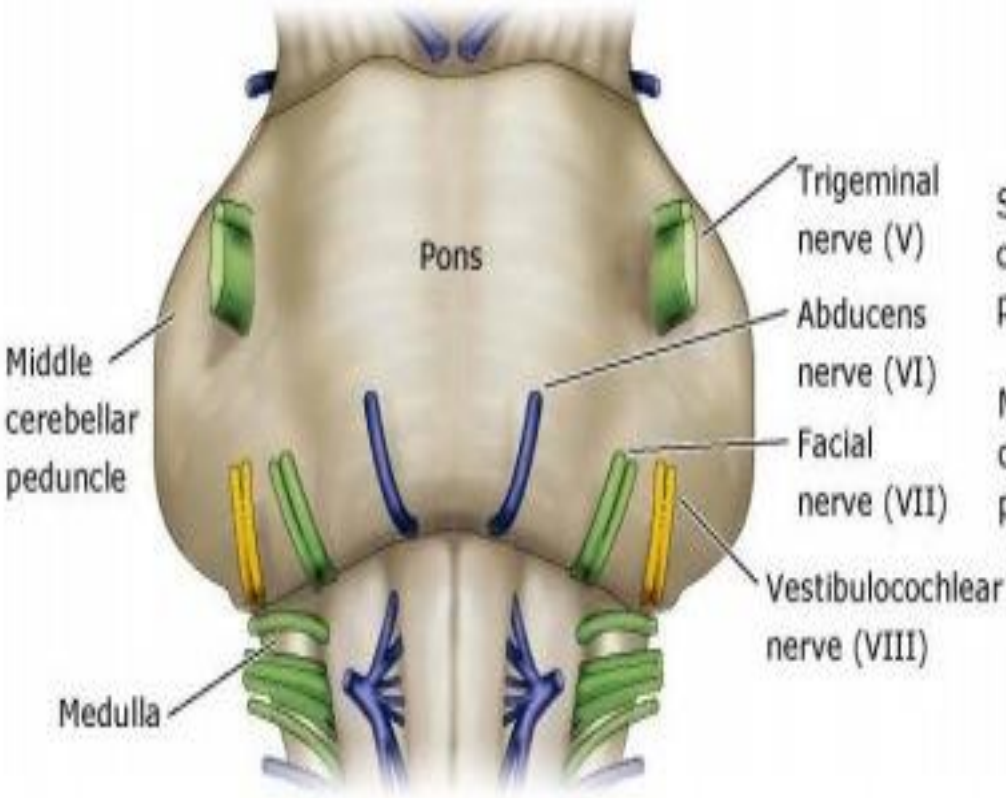


PONS (dorsal view)



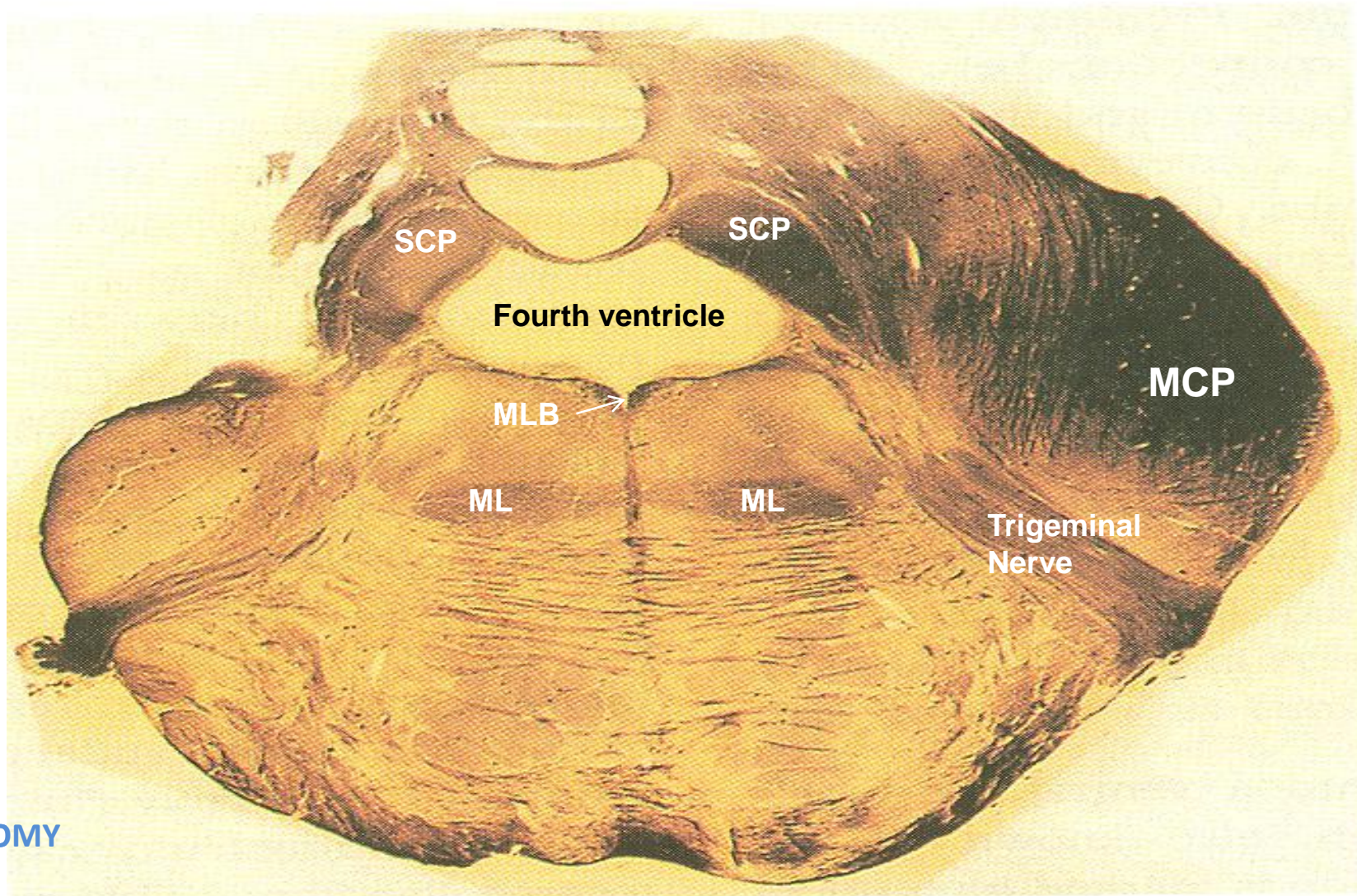


Pons

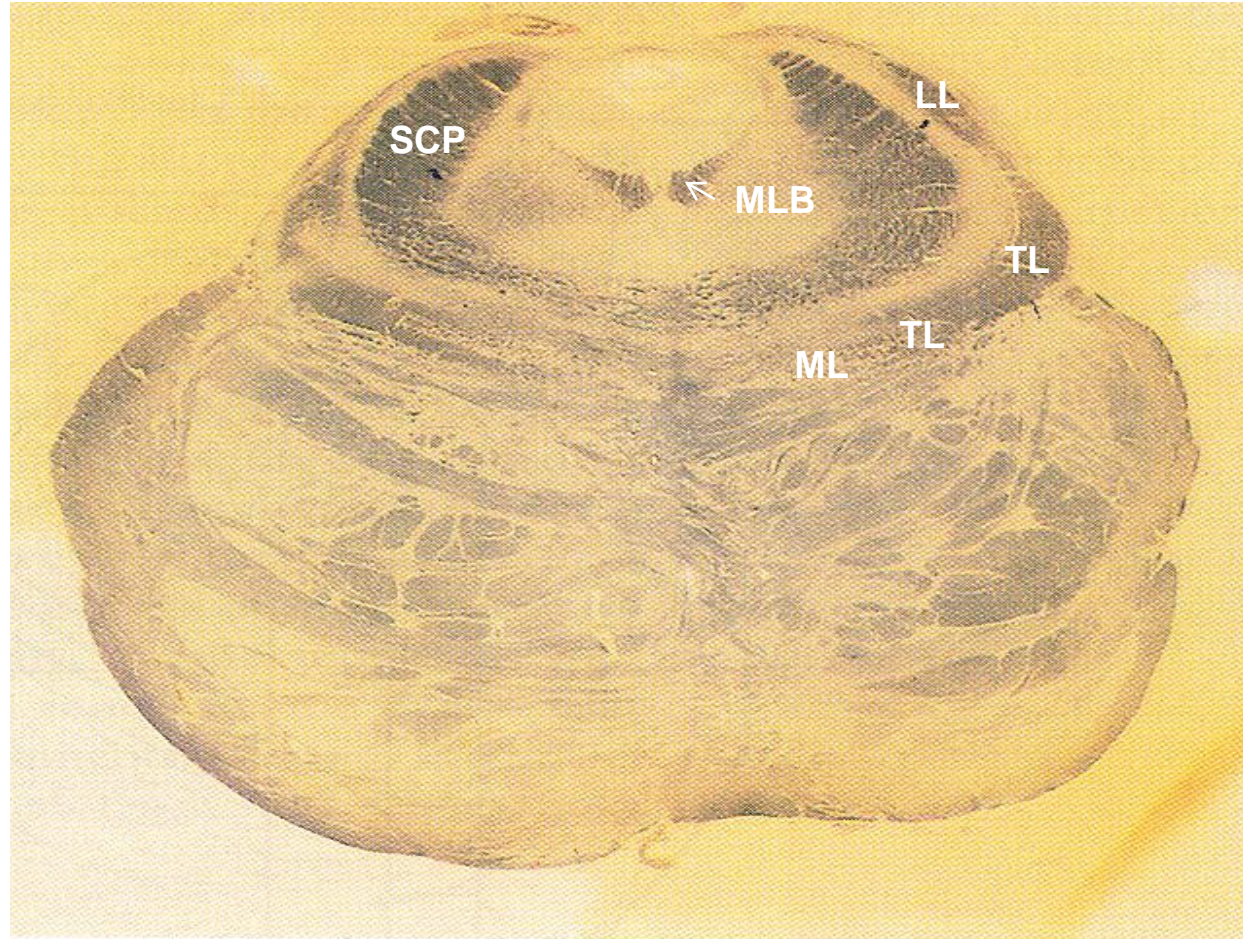


Pons

Level of Trigeminal Nuclei



Rostral Pons



Internal Structures of Pons (Caudal)

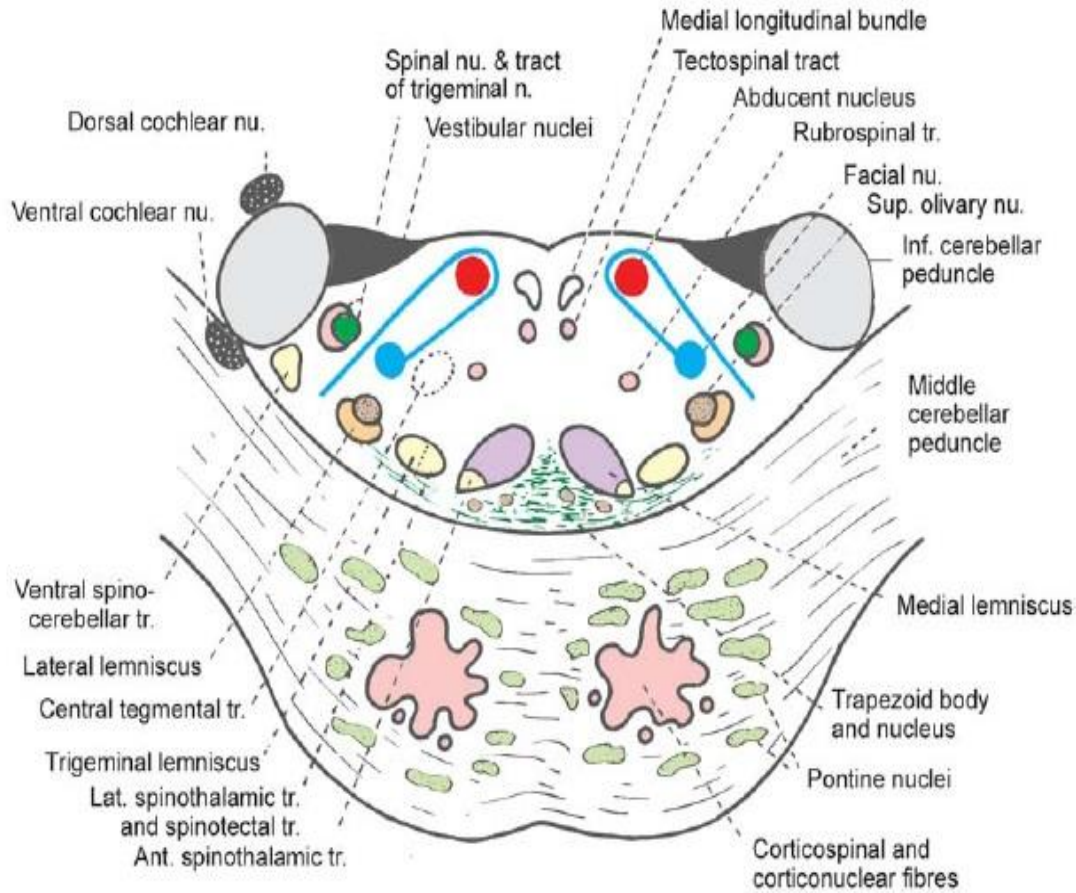
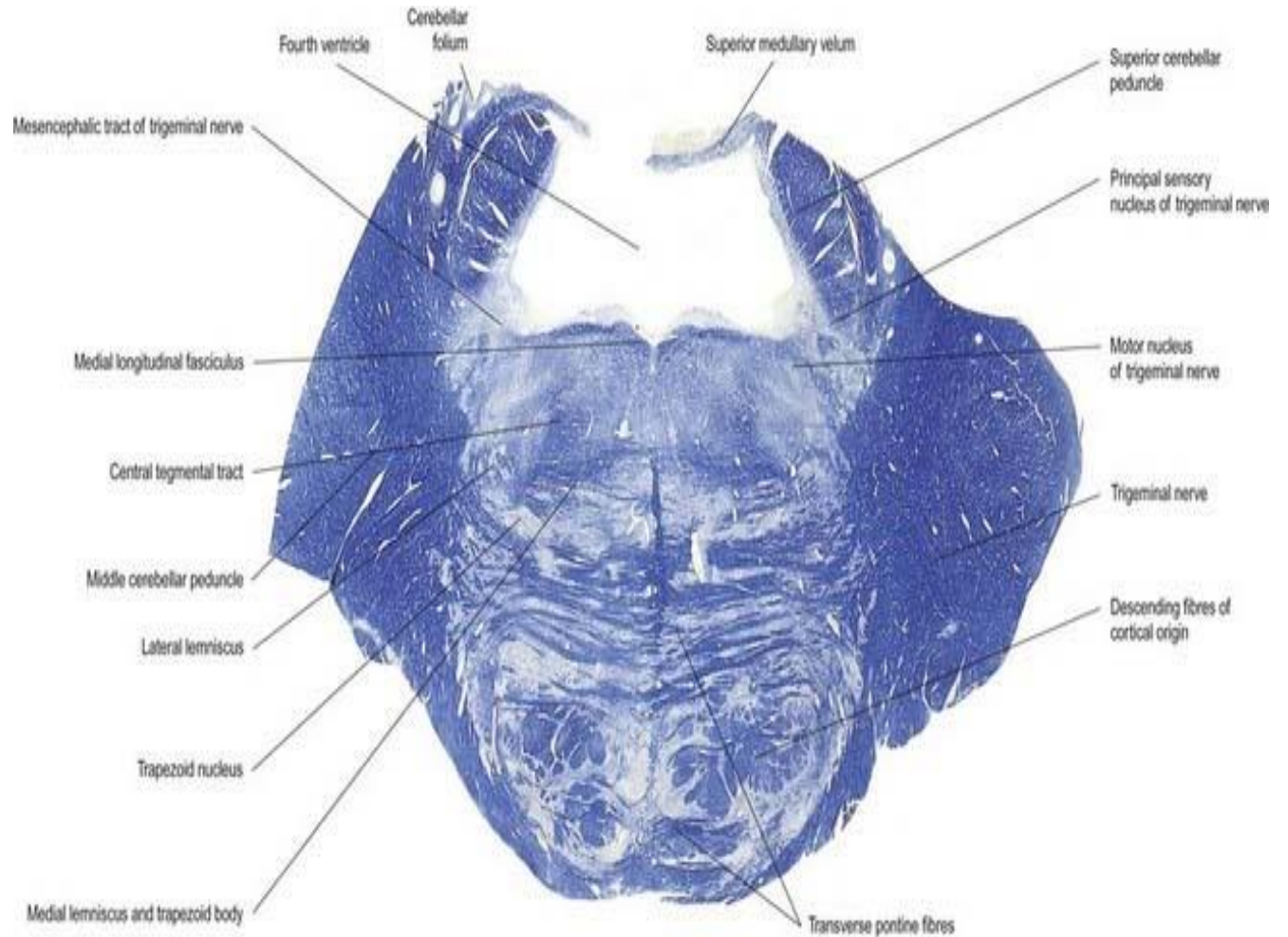
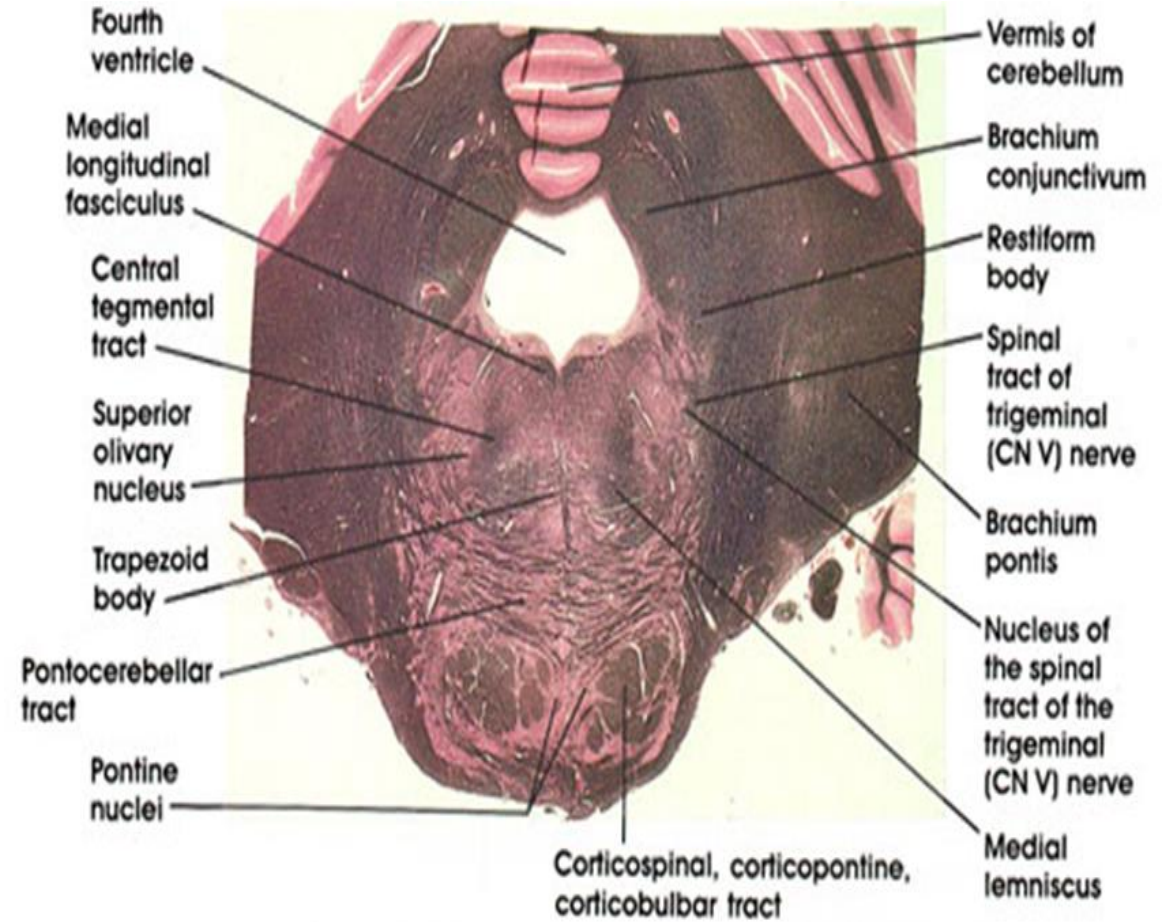
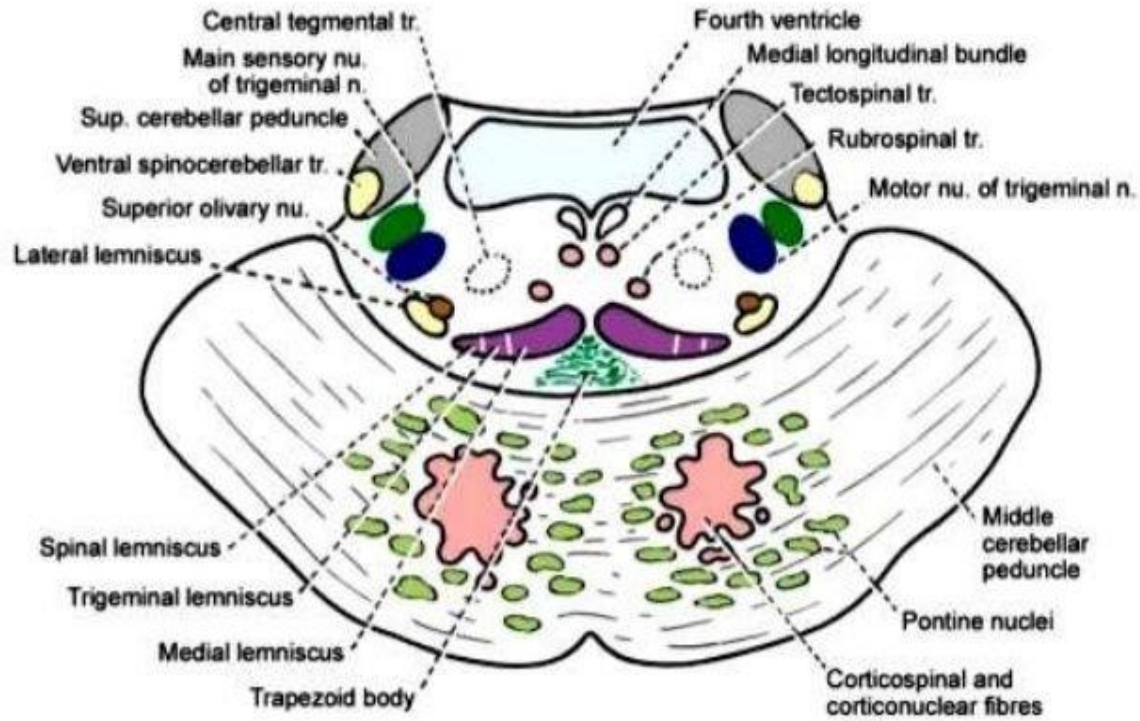


Fig. 11.5. Transverse section through the lower part of the pons.

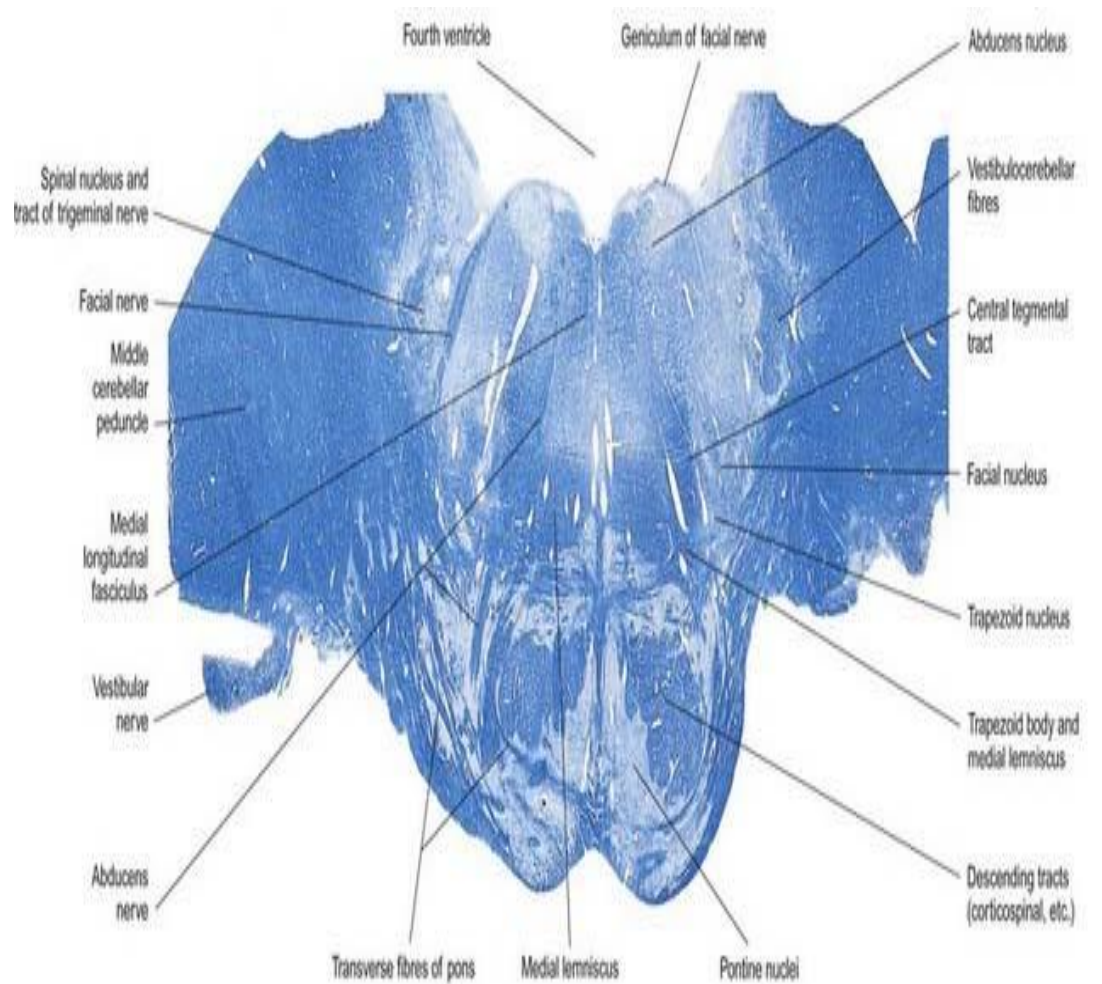
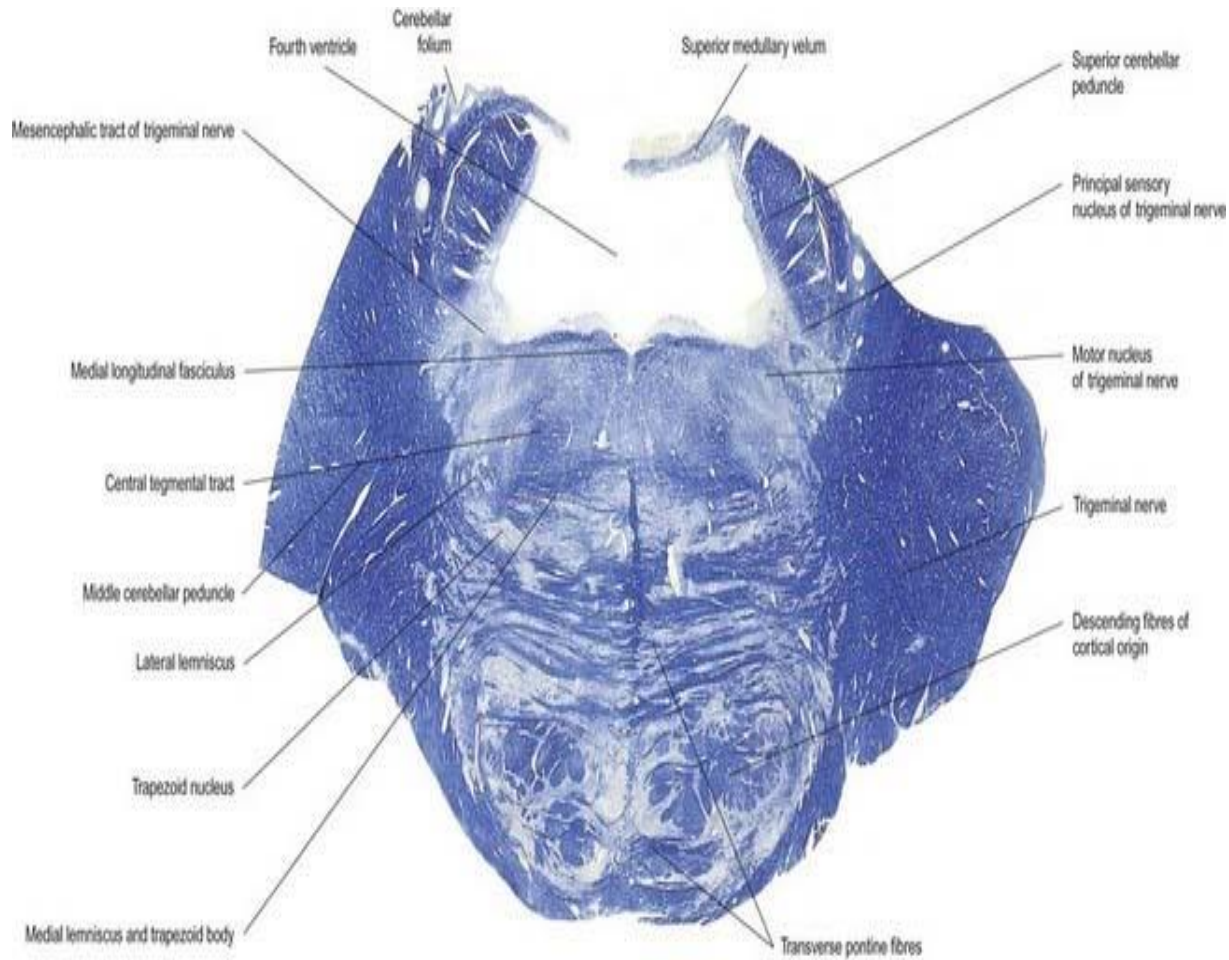


Internal Structures of Pons (Rostral)

Transverse section through the upper part of Pons

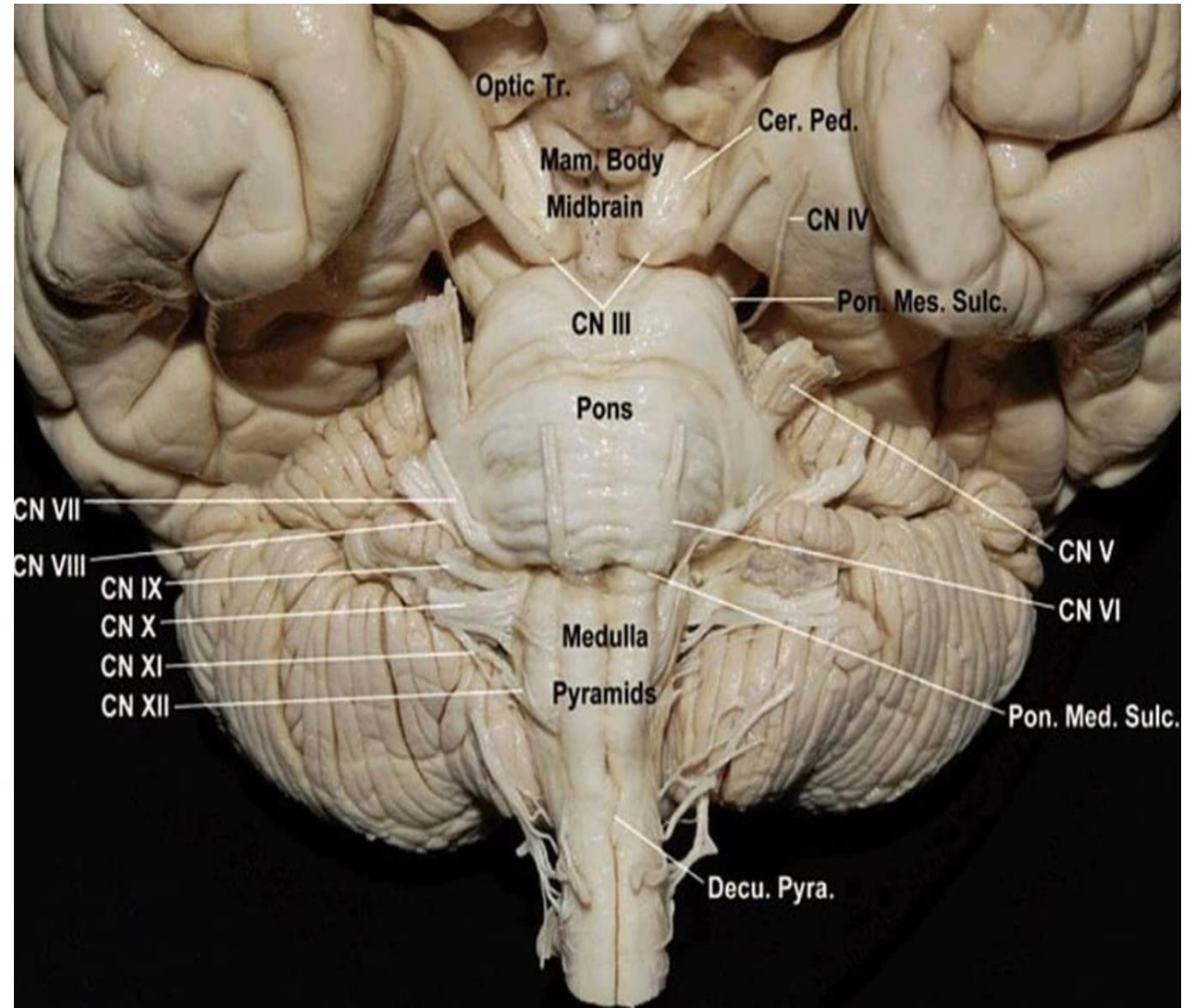
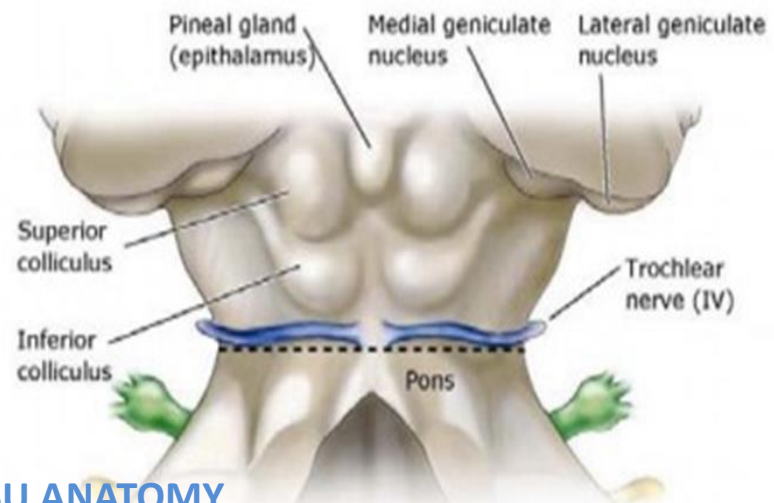
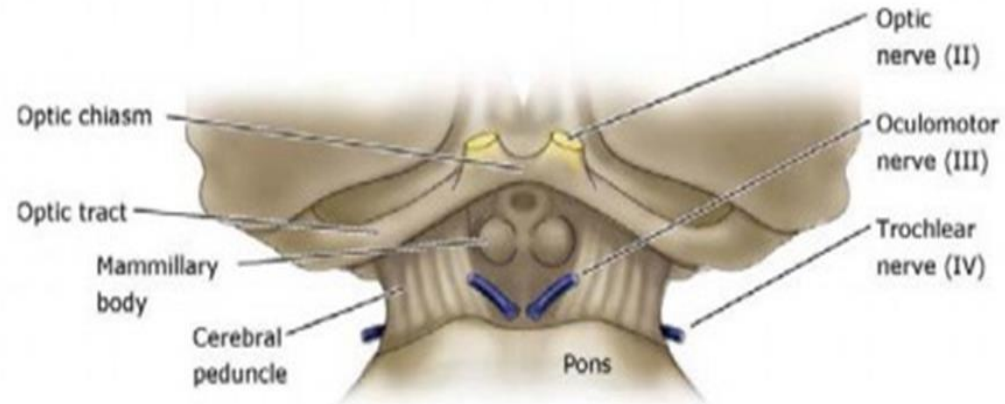


Internal Structures of Pons (Rostral)

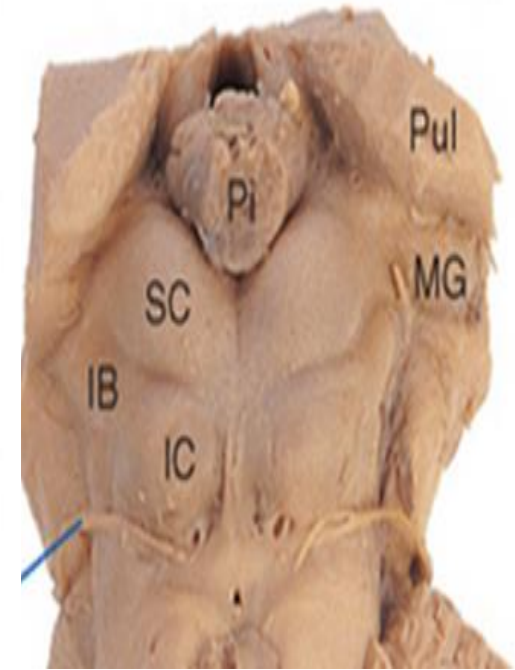
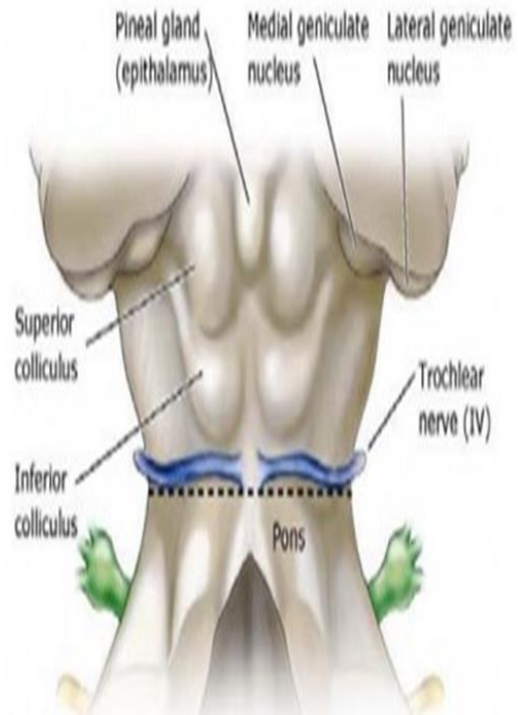
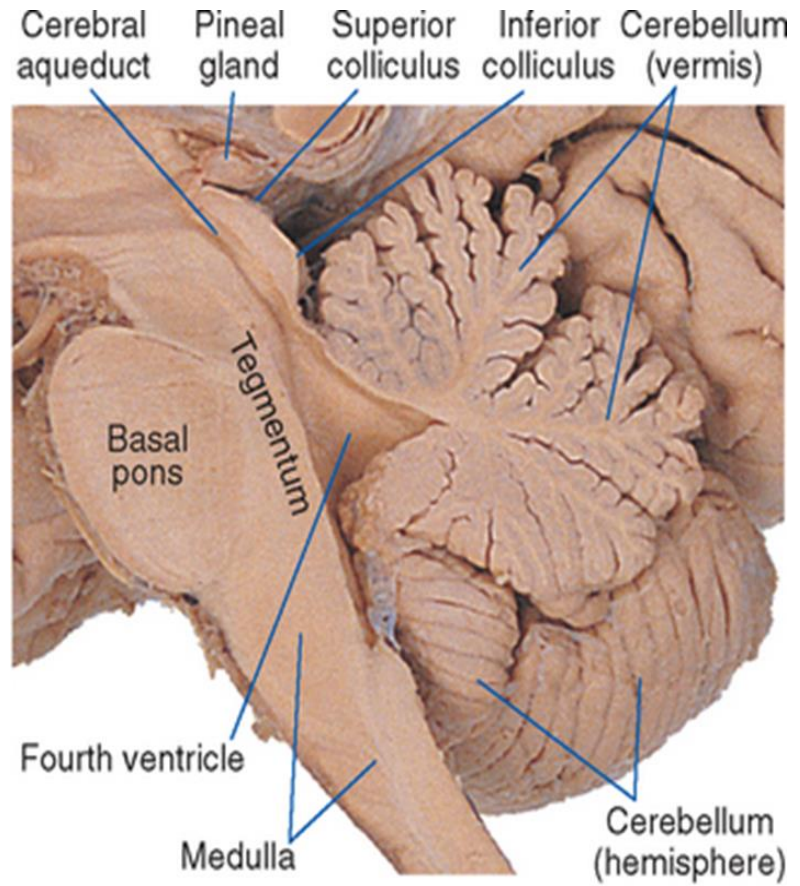


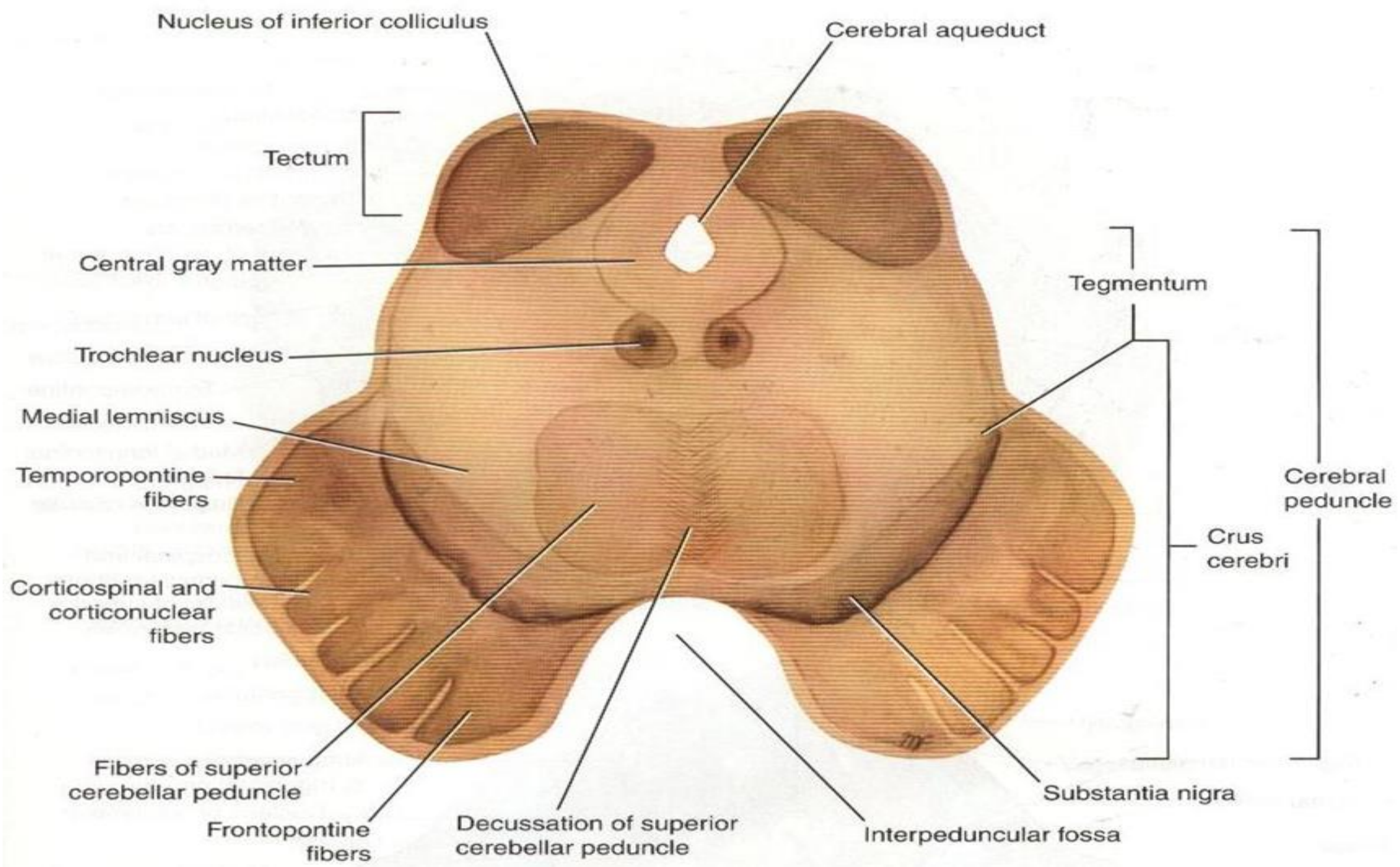
Midbrain

External Features of Ventral Surface of Midbrain



Midbrain





Midbrain Internal Structure (Inferior Colliculus) Caudal

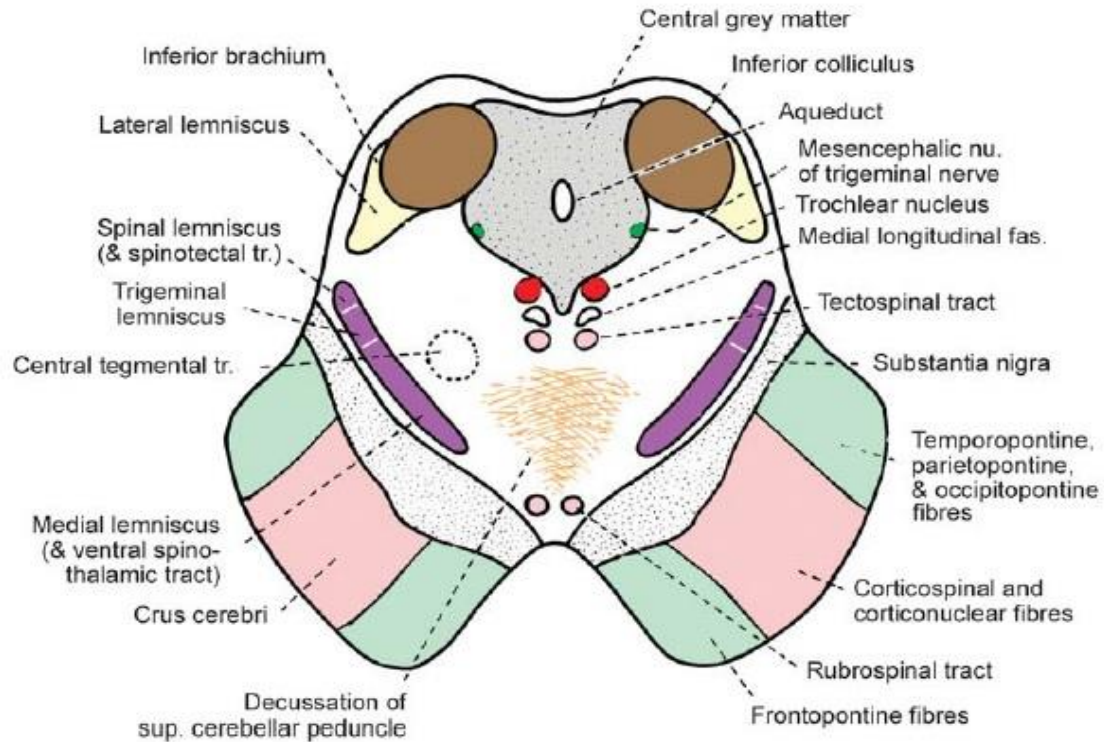
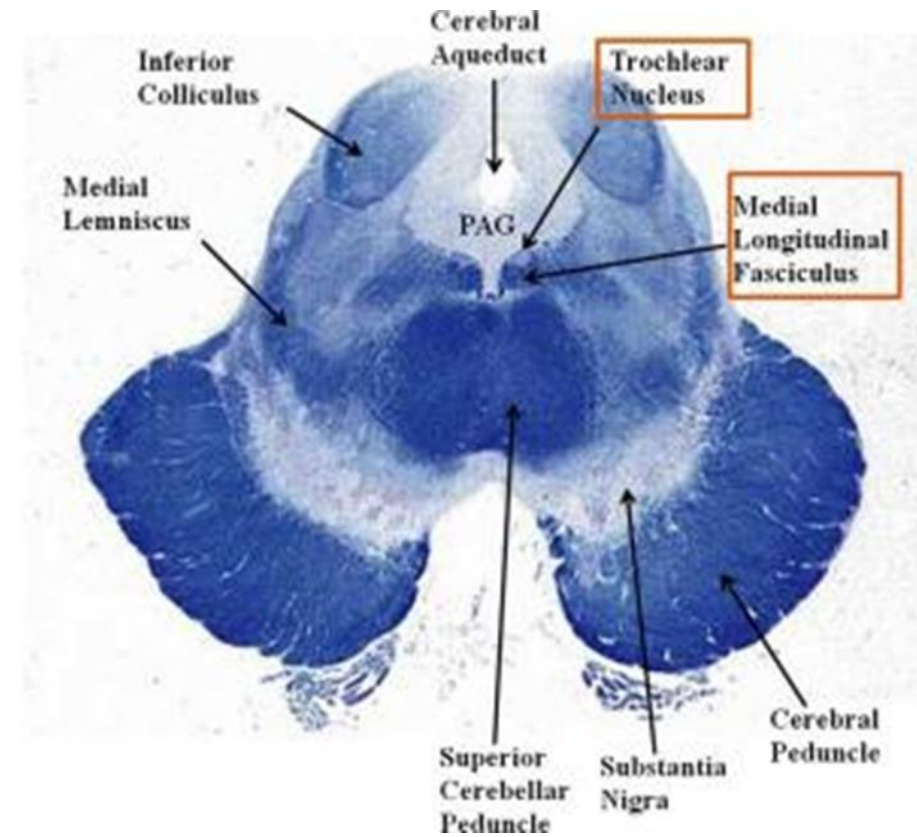


Fig. 11.8. Transverse section through the lower part of the midbrain.



Midbrain Internal Structure (Superior Colliculus) Rostral

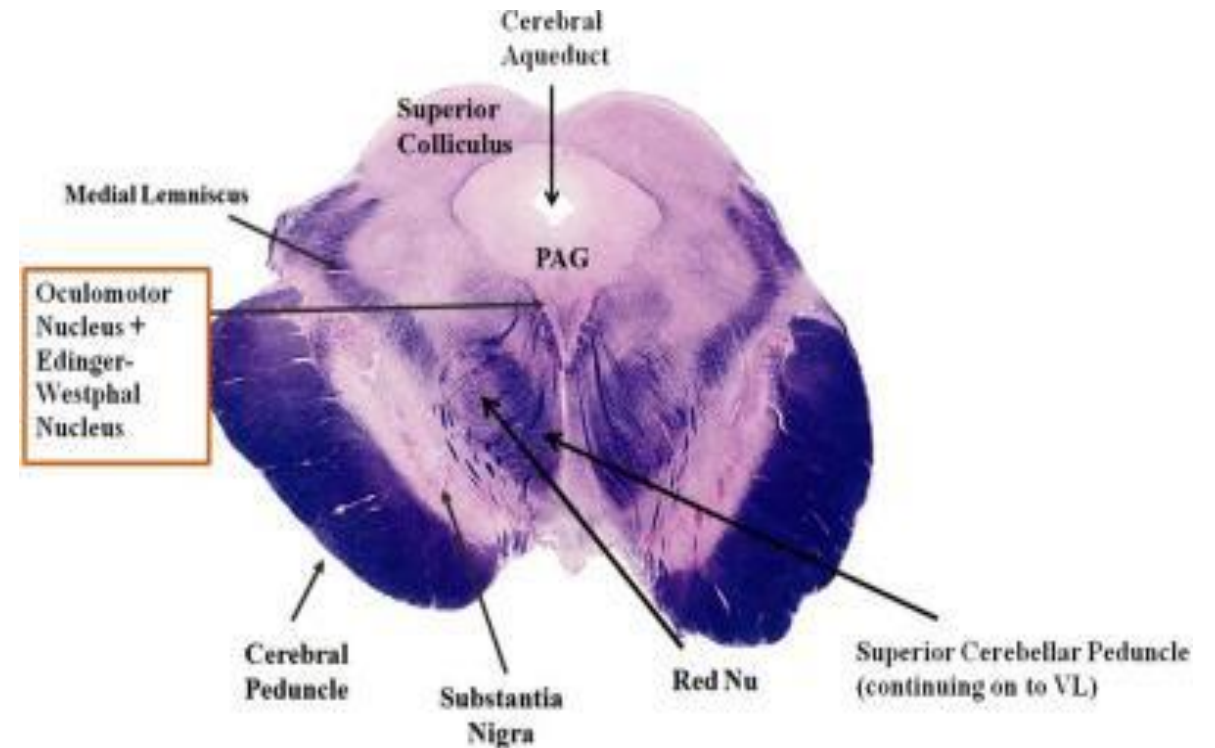
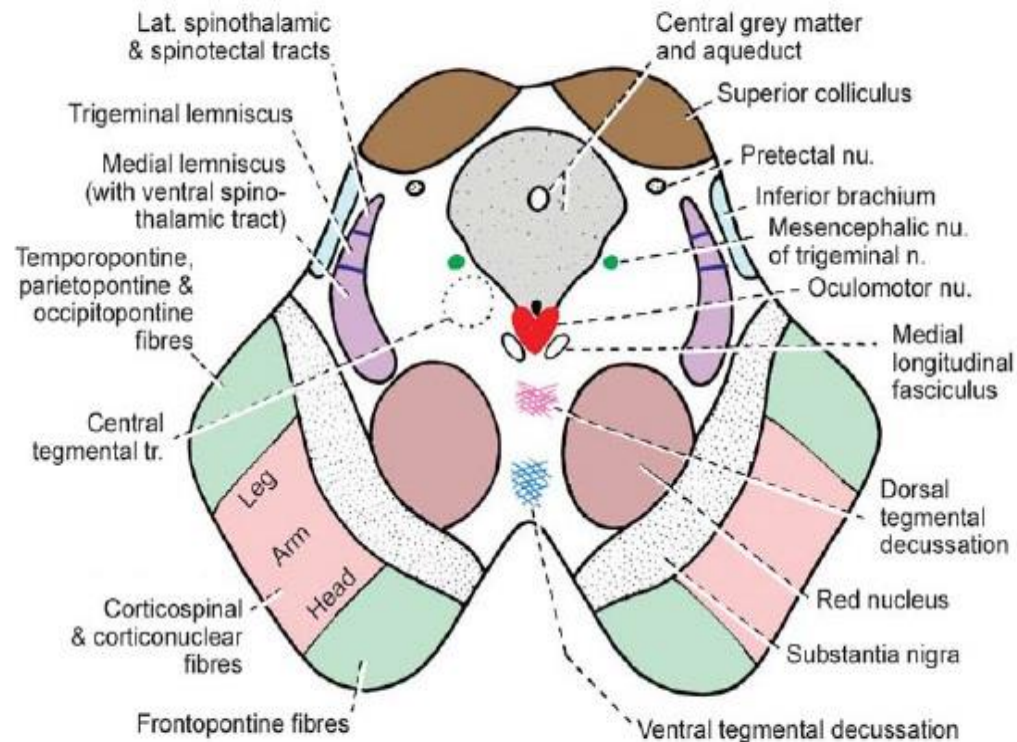
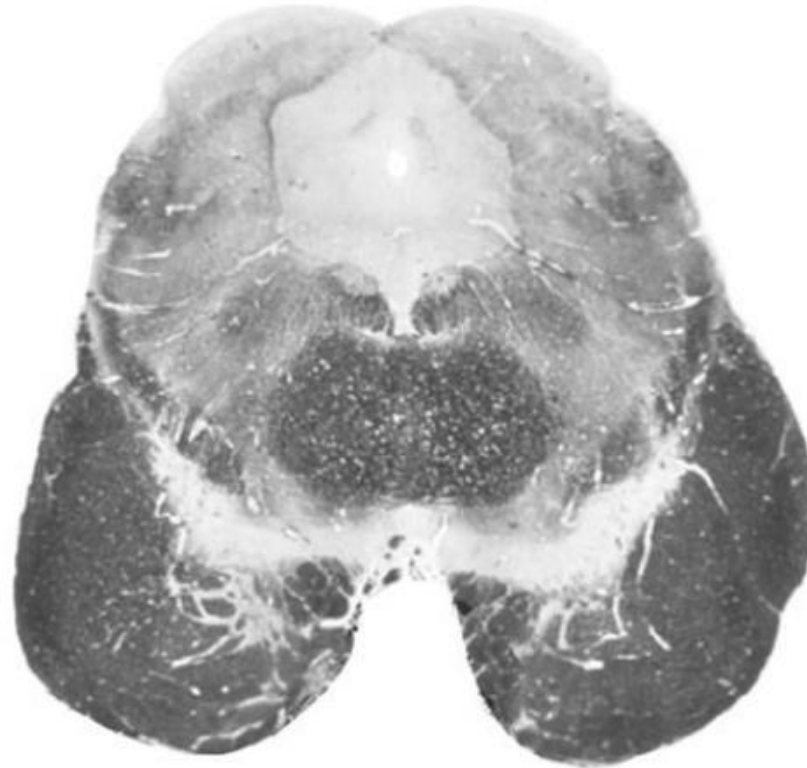


Fig. 11.9. Transverse section through the upper part of the midbrain.

Midbrain

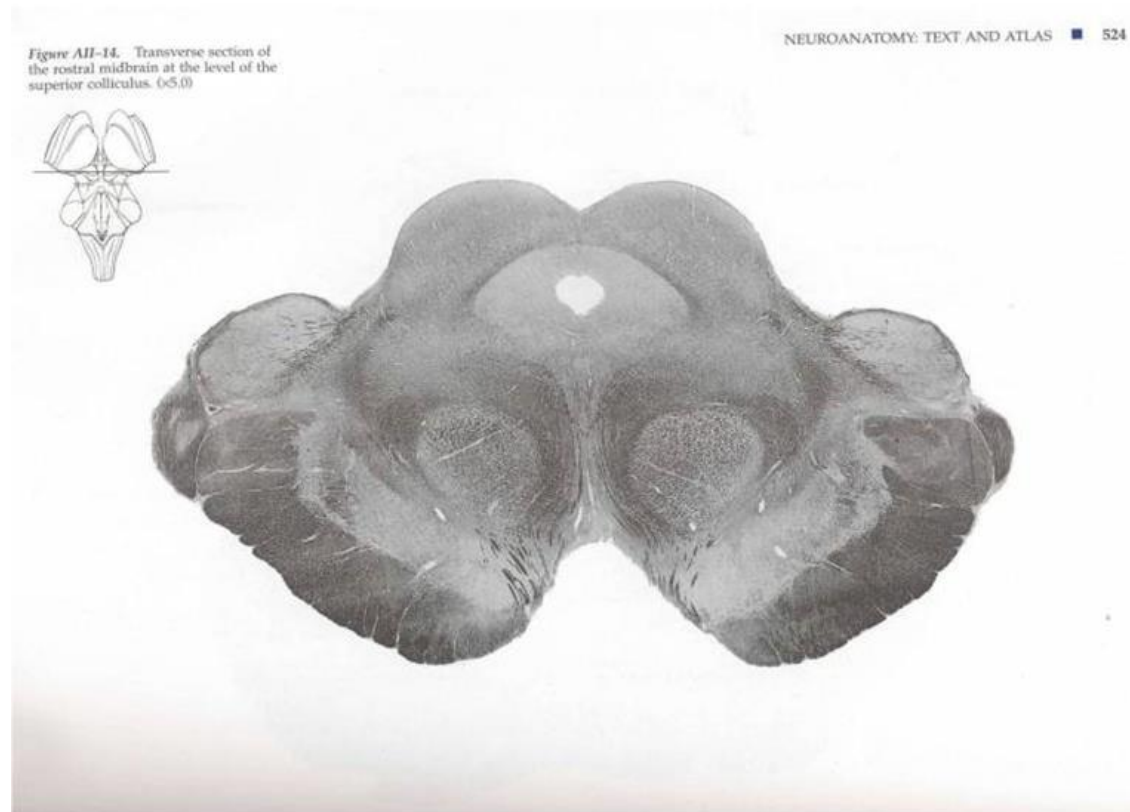
Level of Inferior Colliculus

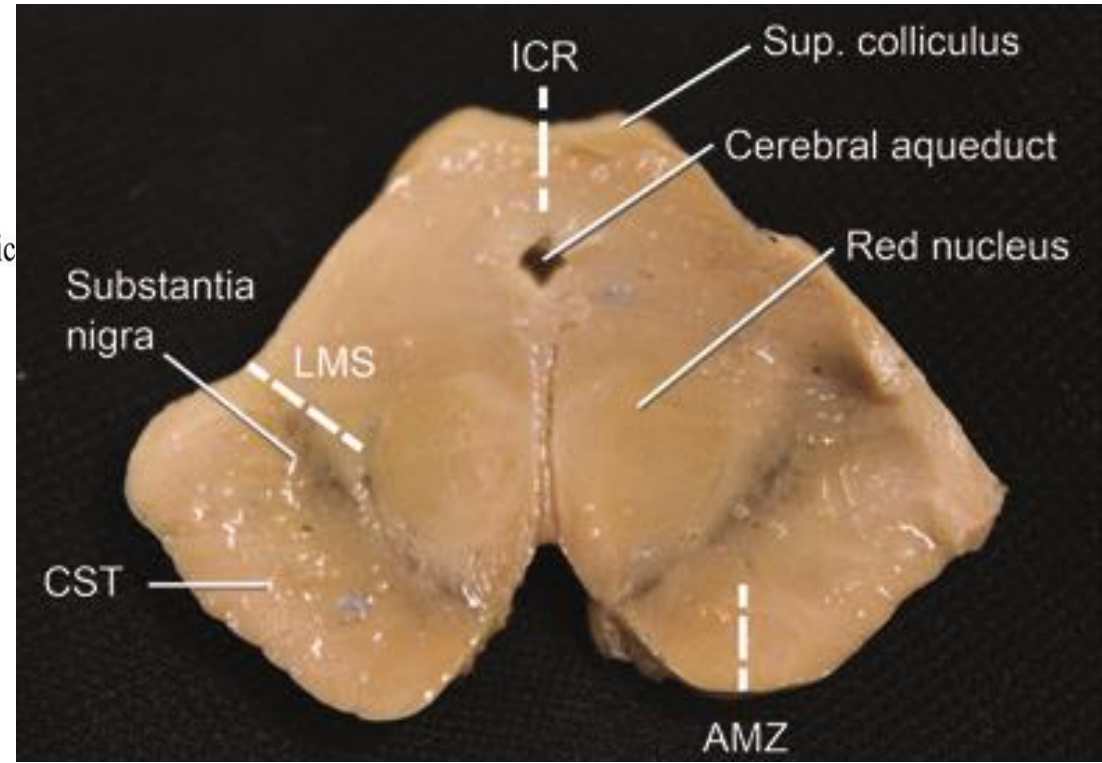
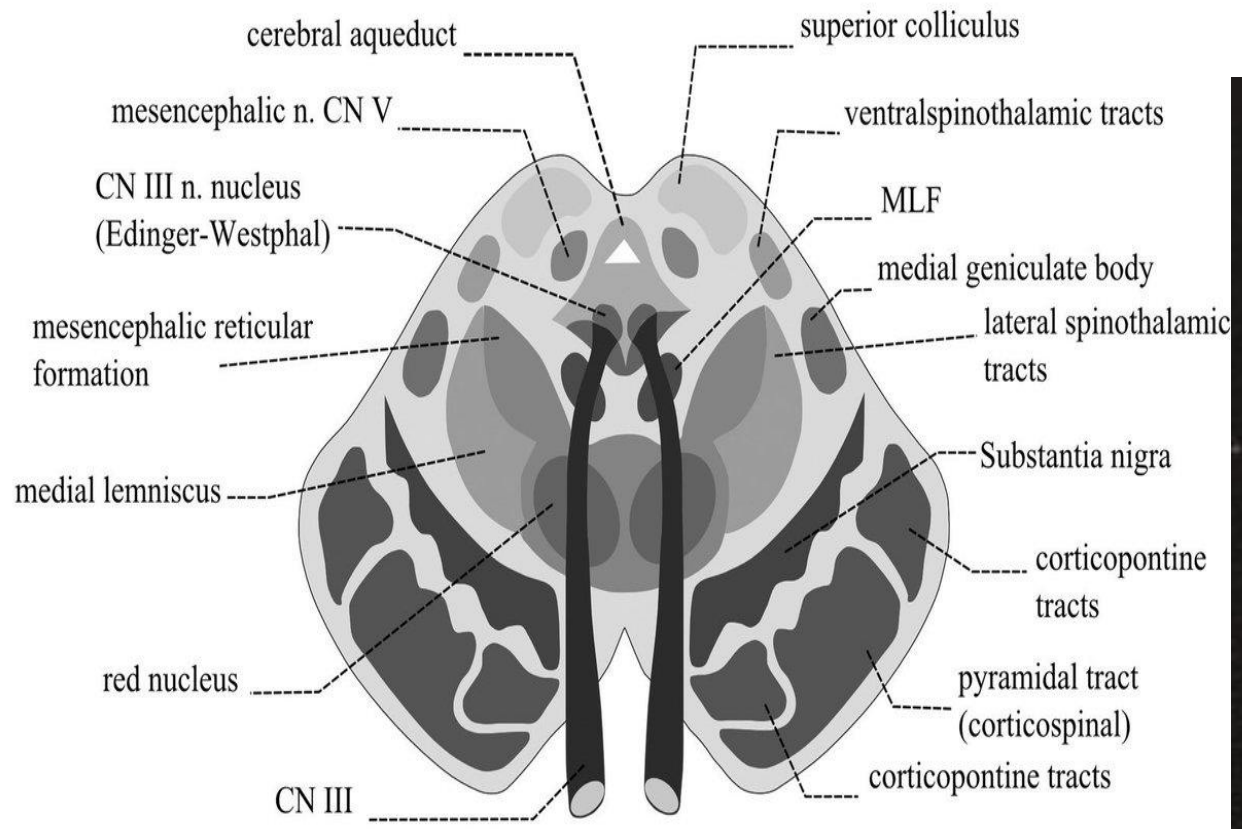
Caudal Midbrain
(level of Inferior Colliculus)



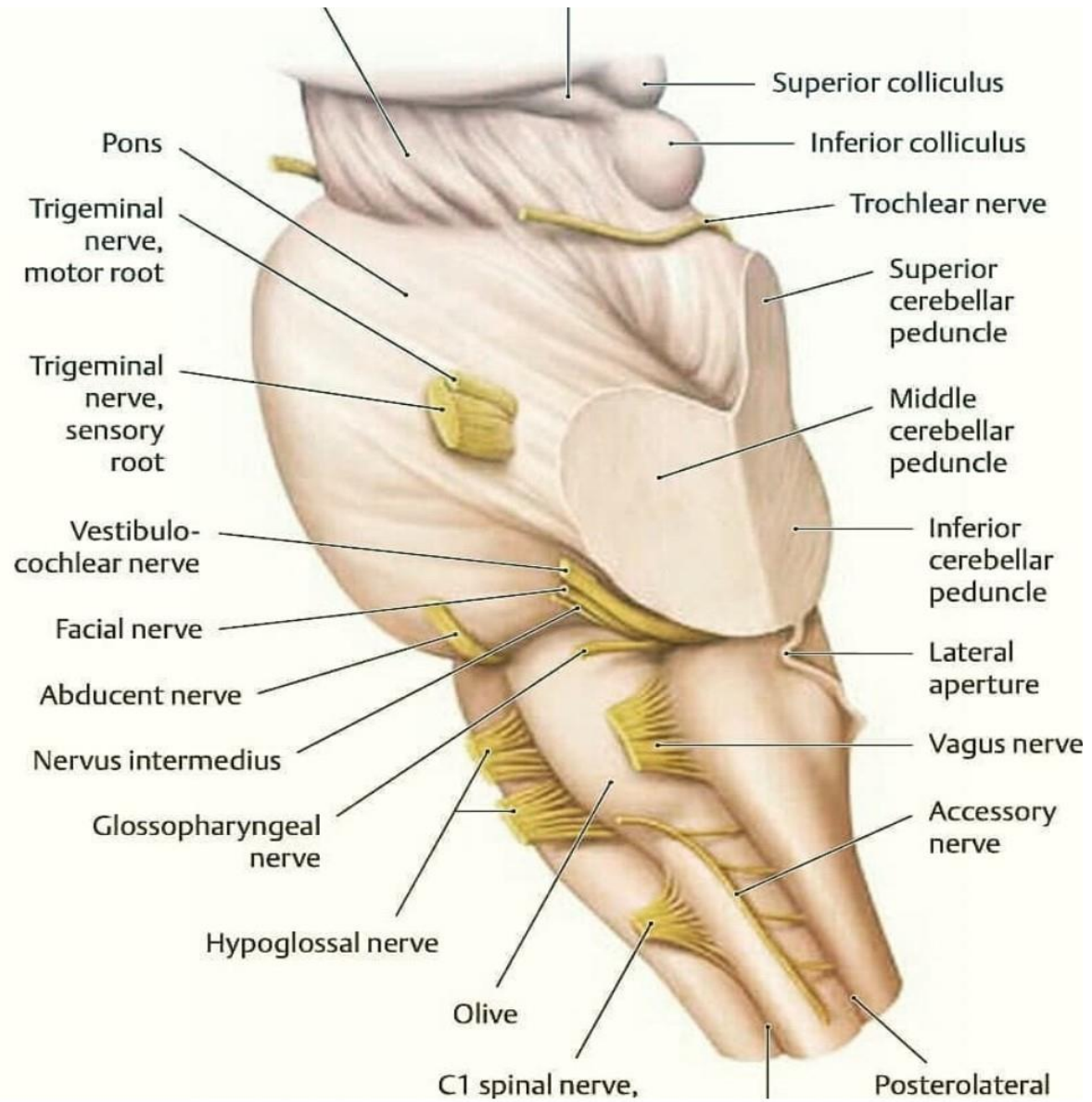
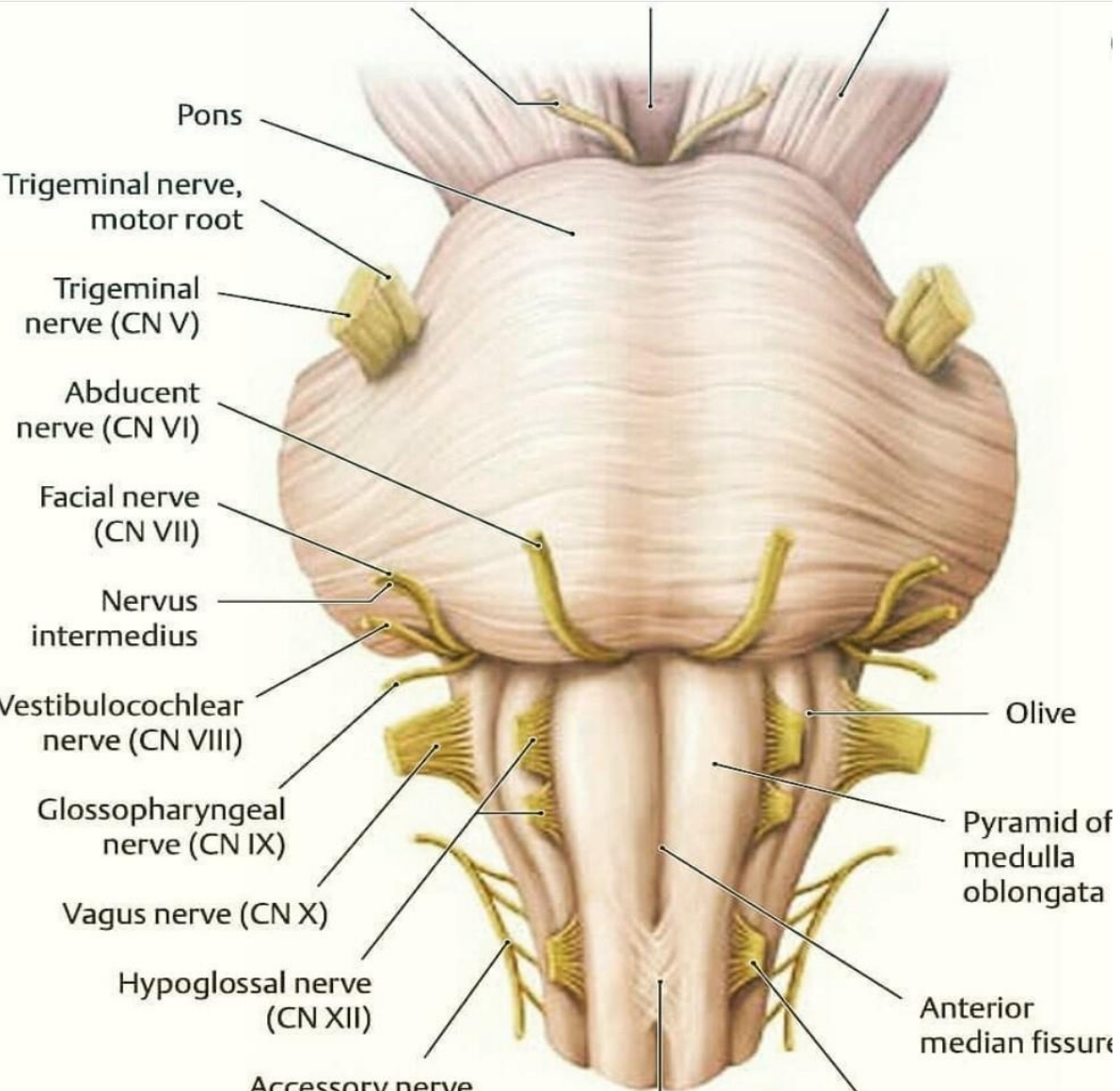
Midbrain

Level of Superior Colliculus

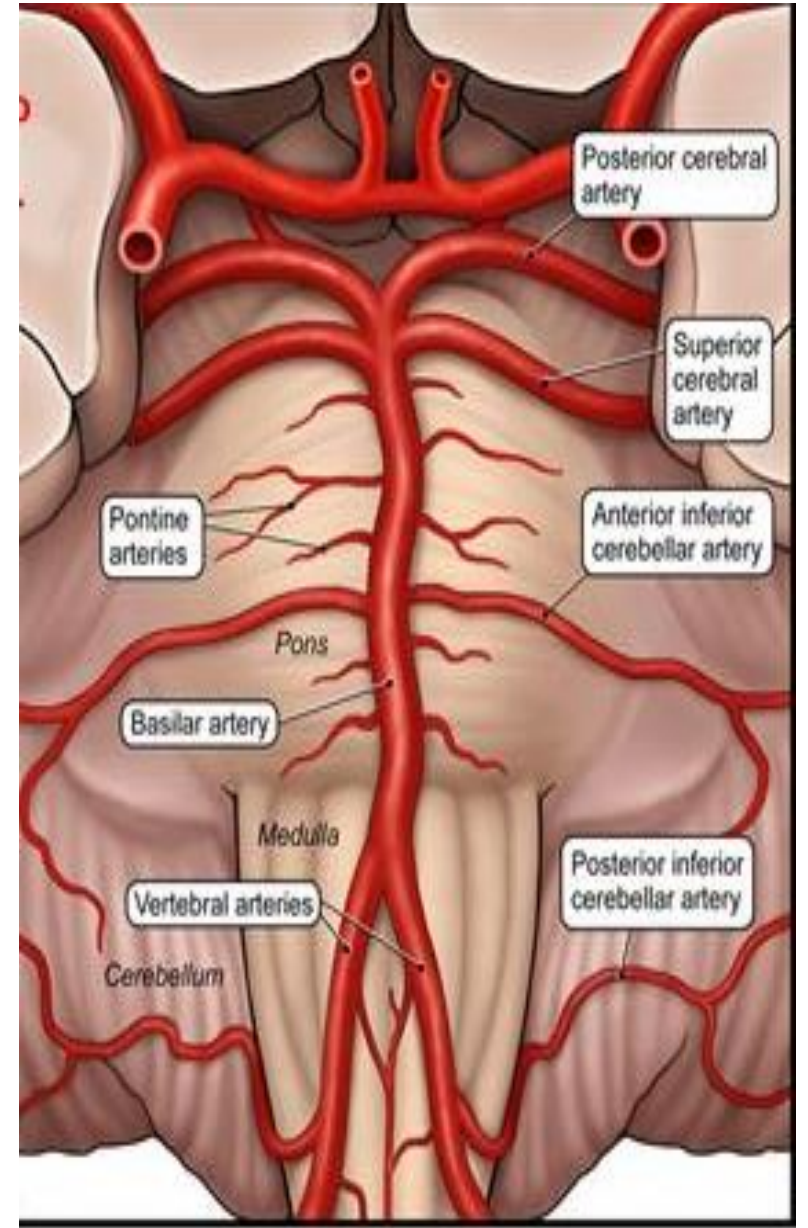
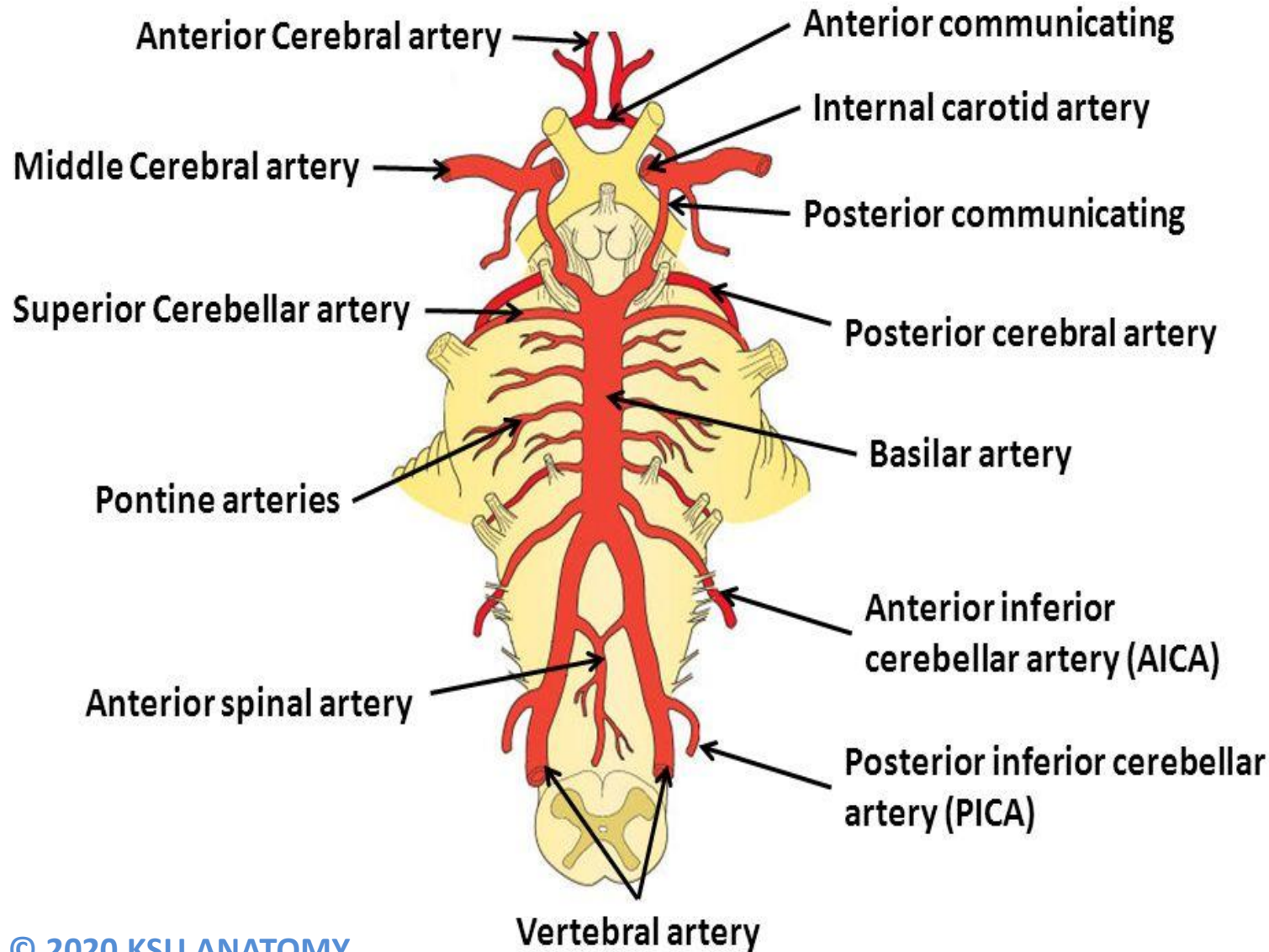


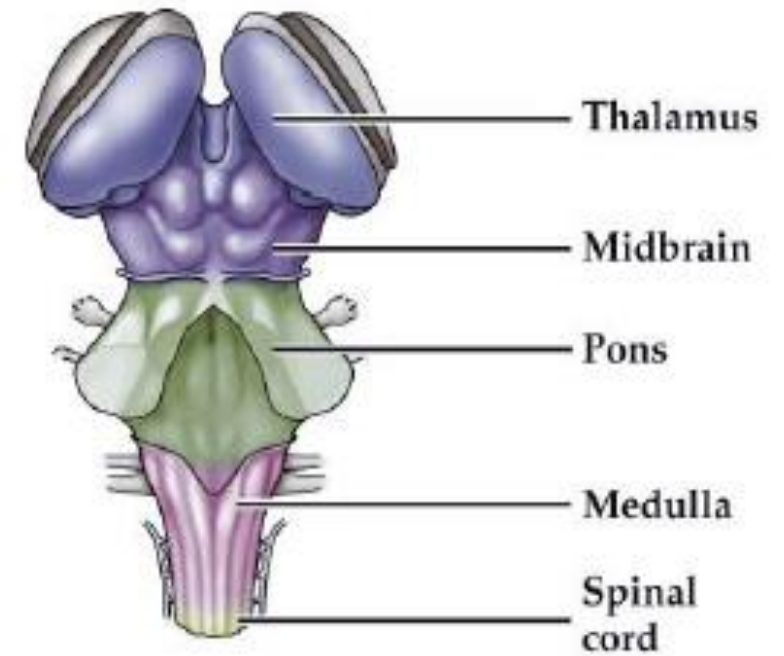
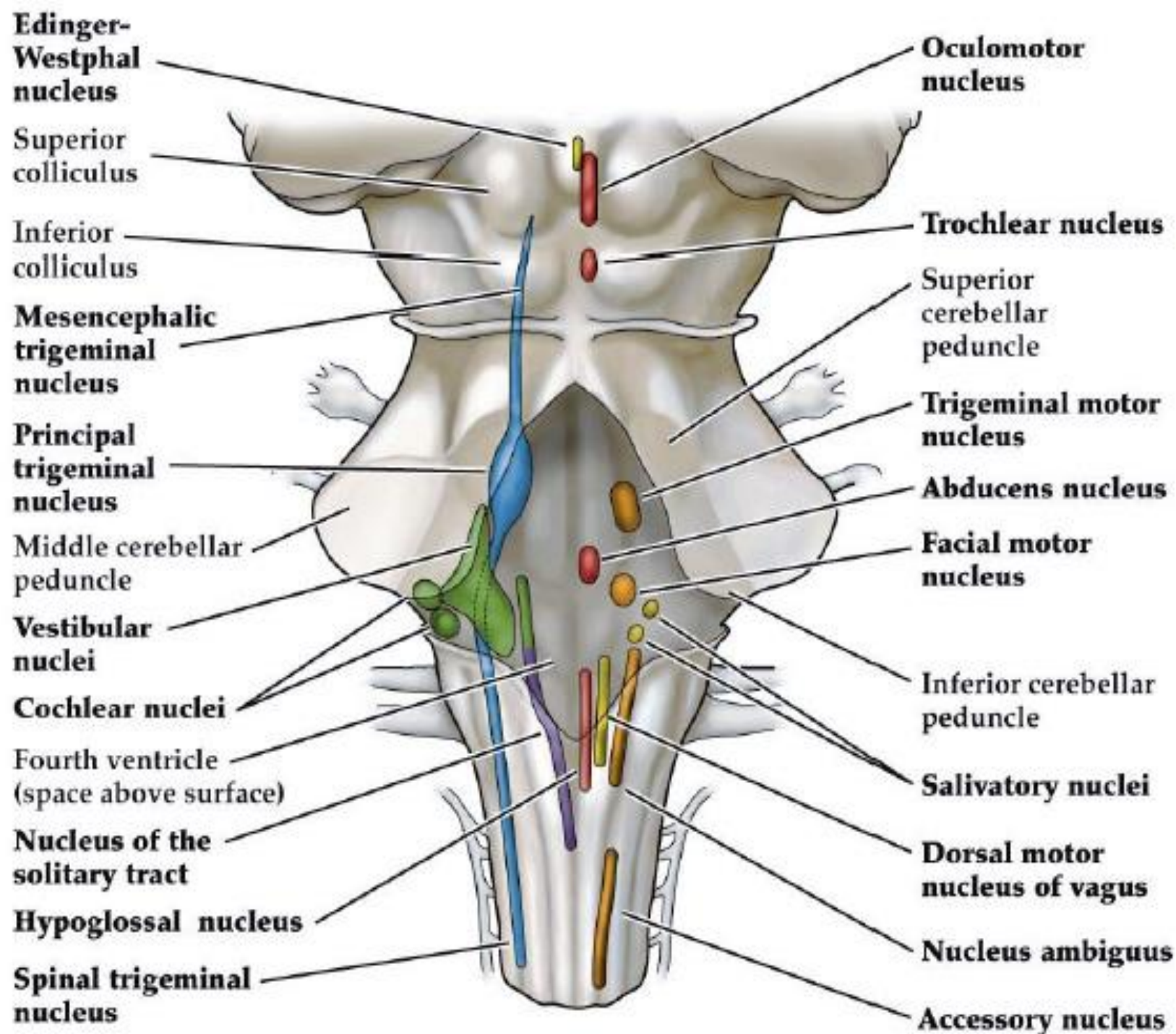


Cranial Nerves



Label the blood supply to the brainstem.

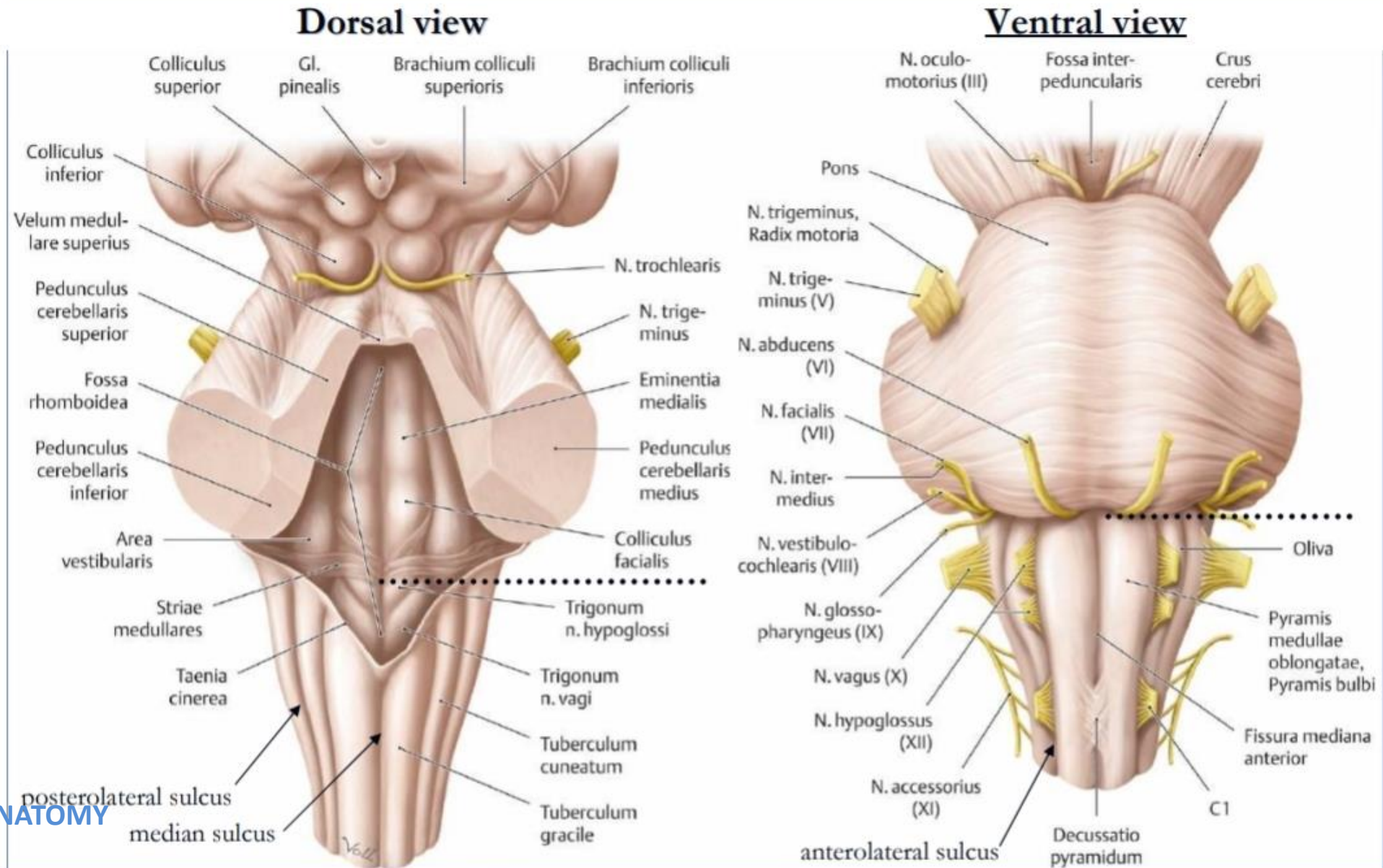


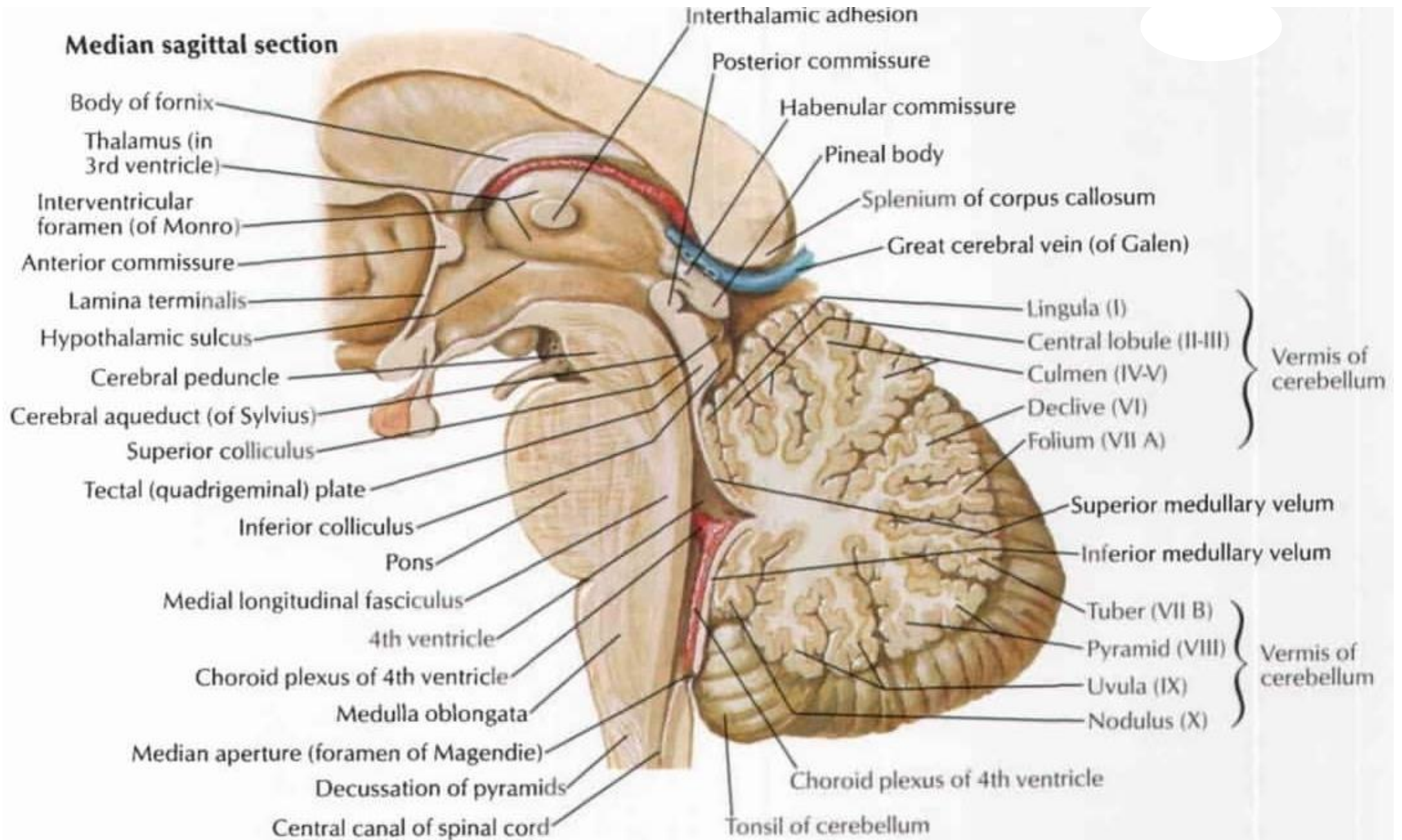


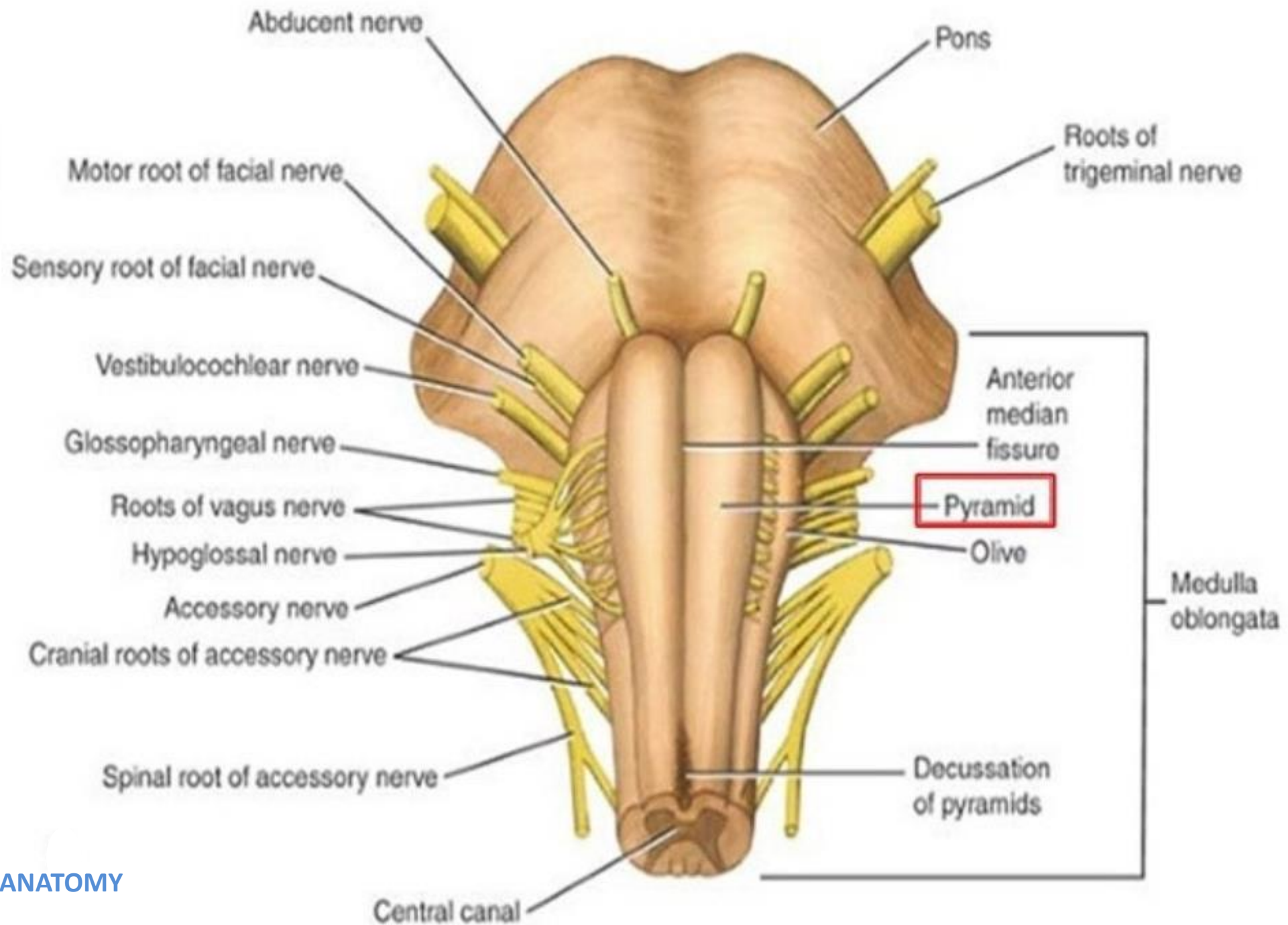
Color key for drawing at left:

■ Somatic motor	■ General sensory
■ Branchial motor	■ Special sensory
■ Visceral motor	■ Visceral sensory

Brainstem – macroscopic overview







Thank You

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