

9.14**Classes #14 and 15: Spinal and hindbrain anatomy***Readings:*

Nauta & Feiertag, pp. 143 - 173. Focus especially on figures pp. 163-172, text pp. 167-173.

Brodal, pp. 71-90. (Mostly a review of the above.)

Questions:

[Nauta, Chapter 10]

1. Define "dura mater" and "pia mater": meaning of the Latin terms, and basic anatomy.
2. Define "arachnoid membrane" and "subarachnoid space".
3. How does Weigert's myelin stain work? (p. 146) Explain his use of a "mordant".
4. Summarize the functional topography of motor neurons in a spinal cross section through the cervical or the lumbar enlargement.
5. What is Clarke's column? (p. 154, 157)
6. Describe the location of spinal association fibers (propriospinal axons). Axons of Lissauer's zone or tract are part of this system: Where do its axons arise, and terminate?

[Nauta, Chapter 11]

7. What are the foramina of Luschka and Magendie? (A foramen is an opening.) Why are they so important? (163)
8. What are the "flexures" in the neural tube? (162-163)
9. What happens to the roof plate where the pontine flexure (bend) forms? (162)
10. What is the obex?
11. What is the origin of the term "branchial" in reference to the branchial motor column? (170)
12. Memorize figure 71. Name one example of each of the four types of cranial nerves depicted. (172)

[Additional questions based on Brodal, ch. 3]

13. What is meant by Rexed's laminae? Describe what and where they are. (80f)
14. What are the gracile and cuneate nuclei (nuc. gracilis and nuc. cuneatus)? What sensory cell group is found just lateral to these nuclei in the caudal hindbrain or upper cervical spinal cord? (88)

15. What is the largest cranial nerve?