МИНИСТЕРСТВО ОБРАЗОВАНИЯ И НАУКИ РОССИЙСКОЙ ФЕДЕРАЦИИ
ФГАОУ ВО «Казанский (Приволжский) федеральный университет»
Институт фундаментальной медицины и биологии
Высшая школа медицины
Кафедра морфологии и общей патологии
Дисциплина «НЕЙРОАНАТОМИЯ»
Специальности «Лечебное дело», «Стоматология»

«УТВЕРЖДАЮ»

Заведующий кафедрой _____

1. Spinal cord. Function, topography, structure. Sheaths (membranes) of the spinal cord. Simple reflex arch. Formation of the spinal nerve, its branches.
2. The internal structure of the cerebral hemisphere. Commissural fibers, their localization, function. Striatum and pallidum: basal (subcortical) nuclei, their localization, functions. Examples of extrapyramidal pathways: reticulospinalis, rubraspinalis.
3. Motor and sensory regions of cerebral cortex, their localization: centers of general sensitivity. Examples of sensitive pathways: superficial (spinothalamic) and conscious deep sensitivity (Gaulle and Burdach).
4. Motor and sensory regions of cerebral cortex, their localization: centers of motor functions. Examples of motor (pyramidal) pathways: cortical-nuclear and cortical-spinal (anterior, lateral).
5. Intermediate brain: thalamic part (thalamus, epithalamus, metathalamus), subthalamic region (hypothalamus). The third ventricle, walls, communications. Formation of the fasciculi longitudinalis posterioris.
6. Midbrain, its structures. Topography of white matter and nuclei. Pathways of midbrain: tractus tectospinalis, tractus rubrospinalis.
7. Pons: structure, functions, topography of gray and white matter, its connections with other parts of the brain. Formation of lemniscus lateralis.
8. Cerebellum: structure, function, topography of gray and white matter. Superior, Middle and Inferior cerebellar peduncles: connection with other parts of the brain. Cerebrospinal pathways of deep proprioceptive sensitivity (Spinocerebellar tracts).
9. The rhomboid brain: its components. The ventricle of the rhomboid brain, its structure, walls, communication. Rhomboid fossa, projection of the nucleus of cranial nerves.
10. The brain stem, its components, embryological development. The concept of the reticular formation, its functions, meaning, pathways: reticular-spinal tract, medial longitudinal fasciculus.
11. The ventricles of brain system: localization, functions, walls and communications. The dural venous sinuses of the brain, their structure, functions.

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12. Blood supply of the brain (arteries, veins, arterial and venous anastomoses). The dural venous sinuses of the brain, their structure, functions.
13. Olfactory organ: anatomy structure. I cranial nerve – pathway.
14. Vision organ: eyeball (its structure), membranes, blood supply. II cranial nerve – pathway. Cortex and subcortex centers of vision.
15. Vision organ: smooth and skeletal muscles of the eyeball, their functions, location, innervation (III, IV and VI pairs of cranial nerves).
16. Organ of vision: auxiliary apparatus - lacrimal gland, lacrimal sac, eyelids - structure and innervation (participation of III, V, VII pairs of cranial nerves).
17. The organ of hearing and balance. The external, middle and internal ear: their components, communications, blood supply and innervation. VIII cranial nerve – pathway.
18. Taste organ: tongue. Innervation of the mucosa and skeletal muscle of the tongue. Participation V, VII, IX. The X and XII pairs of cranial nerves. Pathway of taste analyzer.
19. Innervation of the skin and muscles of the head: mimic, muscles of mastication. Innervation of the temporomandibular joint.
20. Skin analyzer: path of the skin analyzer (conducting path of superficial (spinothalamic) sensitivity), features of the innervation of the skin glands.
21. Innervation of the skin and muscles of the neck. Involvement of the posterior branches of the spinal nerves, branches of the cervical plexus, V, VII, XI and XII pairs of cranial nerves.
22. Innervation of the main and auxiliary respiratory muscles of inhalation and exhalation: participation of the posterior branches of the spinal nerves, the anterior branches of the thoracic spinal nerves, branches of the cervical, brachial and lumbar plexus.
23. Cervical plexus, its formation, topography, branches, innervation zones. Role of cervical plexus in the innervation of the skin and muscles of the neck.
24. Brachial plexus, its formation, topography and branches, innervation zones. Role of brachial plexus in the innervation of the shoulder joint and the muscles that move this joint. Shoulder skin innervation.

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25. Brachial plexus, its formation, topography and branches, innervation zones. Role of brachial plexus in the innervation of the elbow joint and the muscles that move this joint. Innervation of the skin of the forearm.
26. Brachial plexus, its formation, topography and branches, innervation zones. Role of brachial plexus in the innervation of the wrist joint, the joints of the hand and the muscles that move these joints. Innervation of the skin of the hand.
27. Lumbar and sacral plexuses, their formation, topography, branches, innervation zones. Role of these plexuses in the innervation of the skin and abdominal muscles.
28. Innervation of the hip joint and the muscles that move this joint. Involvement of the lumbar and sacral plexuses. Innervation of the skin in the area of the hip joint.
29. Innervation of the knee joint and the muscles that move this joint. Involvement of the lumbar and sacral plexuses. Innervation of the skin in the region of the thigh of the knee joint.
30. Innervation of the ankle joint and the muscles that move these joints. Innervation of the skin in the area of shin and ankle joint.
31. Innervation of the muscles that move the joints of the foot. Innervation of the skin in the area of the foot.
32. Principles of autonomic and sensitive innervation of the internal organs of the head. Formation and location of nerves, plexuses, localization of nuclei, nodes on the example of the innervation of the salivary glands.
33. Principles of autonomic and sensitive innervation of the internal organs of the neck. Formation of splanchnic nerves, thoracic aortic plexus, localization of nodes on the example of the innervation of the pharynx. Participation of IX and X pairs of cranial nerves.
34. Principles of autonomic and sensitive innervation of the internal organs of the chest cavity. Formation of splanchnic nerves, thoracic aortic plexus, localization of nodes on the example of heart innervation.
35. Principles of autonomic and sensitive innervation of the internal organs of the abdominal cavity. Formation of splanchnic nerves, abdominal aortic plexus, localization of nodes on the example of the innervation of the pancreas.

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Заведующий кафедрой _____

36. Principles of autonomic and sensitive innervation of the internal organs of the abdominal cavity. Formation of splanchnic nerves, abdominal aortic plexus, localization of nodes on the example of the innervation of the small intestine.
37. Principles of autonomic and sensitive innervation of the internal organs of the abdominal cavity. Formation of splanchnic nerves, abdominal aortic plexus, localization of nodes on the example of colon innervation.
38. Principles of autonomic and sensitive innervation of the internal organs of the small pelvis. Formation of splanchnic nerves, plexuses, localization of nodes on the example of bladder innervation.