Azerbaijan Medical University "I approve"

GENERAL NEUROLOGY Head. Chair prof. A.K. Mammadbeyli

(general medicine, military medicine) _____

12/02/2021

Spring semester (VI) 3-rd course

Working curriculum

(SILLABUS)

SPECIALTY CODE:
SPECIALTY TYPE: Mandatory
SEMESTER OF LEARNING: VI
NUMBER OF CREDITS: 3 credits
FORM OF EDUCATIONFull-time
LEARNING LANGUAGE: Russian
TEACHER

DEPARTMENT CONTACTS: 012 441 31 83 - 170

E-MAİL: department_nmg@amu.edu.az
Nevrologiya19@gmail.com

Prerequisites: no

Course Description

In this specialty, the following are studied: the structure of the main parts of the nervous system, their interconnections, relationships, physiological characteristics; pathological symptoms and syndromes arising from pathology, their correct assessment and topical diagnosis using additional research methods.

Purpose of the course

The main goal of teaching neurology is to teach students the theoretical foundations, research methods, methodology for diagnosing and choosing tactics for treating neurological diseases.

Course summary

After studying the educational material, students should master the practical skills of studying the nervous system, the basics of topical diagnosis and assessment of pathological symptoms and syndromes.

THEMATIC PLAN OF LECTURES OF THE III COURSE OF TREATMENT - PREVENTIVE AND MILITARY MEDICAL FACULTIES

SPRING SEMESTER

N	Topics	Hours
1	Brief history of development of neurology. Motor functions, their disorders. Central and peripheral paralysis	2
2	Cerebellum. Extrapyramidal system. Dysfunction of the cerebellum and extrapyramidal system	2
3	Sensitivity and sensory organs, impairment of their functions	2
4	Motor cranial nerves, impairment of their functions	2
5	Autonomic nervous system. Structure, functions, main symptoms of lesion	2
6	Localization of functions in the cerebral cortex. Disorders of higher cerebral functions	2
7	Peripheral nervous system. Lesion symptoms	2

Total: 14 hours

THEMATIC PLAN OF PRACTICAL LESSONS OF THE III COURSE MEDICAL - PREVENTIVE AND MILITARY - MEDICAL FACULTIES IN SPRING SEMESTER

N	Topics	Hours
1	Motor path. Impaired motor function. Central and peripheral paralysis	2
2	Cerebellum. Lesion symptoms	2
3	Subcortical ganglia. Internal capsule. Akinetic - rigid and hypotonic - hyperkinetic syndromes	2
4	Overall sensitivity. Sensitive paths. Lesion symptoms	2
5	Peripheral nervous system, structure. Lesion symptoms	2
6	Colloquium	2
7	Sense organs. I, II, VIII pairs of cranial nerves. Lesion symptoms	2
8	III, IV and VI pairs of cranial nerves. Lesion symptoms	2
9	V and VII pairs of cranial nerves. Lesion symptoms	2
10	IX, X, XI, XII pairs of cranial nerves. Lesion symptoms. Bulbar and pseudobulbar paralysis	2
11	Colloquium	2
12	Autonomic nervous system. Structure, functions, lesion symptoms	2
13	Hemispheres of the brain. Higher cortical functions. Lesion symptoms	2
14	Meningeal syndrome. Cerebro - spinal fluid	2
15	Additional methods of studying the nervous system (EEG, EMG, REG, TCDG, PET, MRI)	2
16	Colloquium	1
	Total	31

The structure of the practical lesson

(2 acad. Hours - 1 hour 30 min.)

1. Introductory part 5 min study room

2. Discussion of the topic of the lesson 30 min study room

3. Demonstration of practical skills according to the topic, analysis of patients 25 min clinic, study room

4. Independent (self) work of students. Practical skills study and their delivery 25 min clinic, study room

5. Completion of the lesson, homework 5 min study room

_____

Total: 1 hour 30 minutes

Evaluation

In order to get credits for the discipline, you need to score 100 points:

50 points - before the exam

Including:

10 point - admission rate

10 point - completion of the essay (abstract)

10 point - practical skills

20 points - points scored for seminars

50 points - exam results

The exam is conducted on a test system.The test includes 50 questions.The answer to each question is worth 1 point.Incorrectly answered questions deduct points for correctly answered questions.

NOTE

The exam requires a minimum of 17 points.The points for the exam and the lesson before the exam are summed up:

A - "Excellent" -91 - 100

B - "Very good" -81 – 90

C - "Good" -71 – 80

D - "Mediocre" -61 - 70

E - "Satisfactory" -51 - 60

F - "Unsatisfactory" - less than 51 points

ESSAY

During the semester, 10 abstracts are completed.Each task is estimated at 1 point.Reception of the abstract ends at the end of the 14th week of classes.

The abstract is done in handwritten way (legible handwriting) or in writing in a word file;volume 1-2 pages (font 12).Each essay is an independent student's work.Plagiarism is not allowed.

Abstract topics - 1 point

1. Spinal cord. Clinical Anatomy
2. Symptoms of spinal cord injury
3. Pathways of the cerebellum
4. Pathways of the spinal cord

5. Medulla oblongata, clinical anatomy
6. Midbrain, clinical anatomy
7. Varolie bridge, clinical anatomy
8. Reticular format
9. Limbic system
10. Neurotransmitters
11. Olfactory nerve, structure, symptoms of damage
12. Optic nerve, structure, symptoms of damage
13. Types of hemianopsia
14. Methods for the study of the visual analyzer
15. Eyeground, norm and pathology
16.III pair of cranial nerves, structure, symptoms of damage
17. Posterior longitudinal bundle
18. Types of squint and double vision
19. Pupil, norm and pathology
20. IV pair of cranial nerves, structure, symptoms of damage
21. VI pair of cranial nerves, structure, symptoms of damage
22. V pair of cranial nerves, structure, symptoms of damage
23. VII pair of cranial nerves, structure, symptoms of defeat
24. Facial nerve, damage to the intracranial branches
25. VIII pair of cranial nerves, structure, symptoms of damage
26. Methods of research auditory analyzers
27. Vestibular analyzer, symptoms of lesion
28. IX pair of cranial nerves, structure, symptoms of damage
29. Taste function, Research methods, symptoms of defeat
30. X pair of cranial nerves, structure, symptoms of damage
31. XI pair of cranial nerves, structure, symptoms of lesion
32. XII pair of cranial nerves, structure, symptoms of lesion
33. Bulbar and pseudobulbar paralysis
34. Motor path

35. Methods for the study of the motor system
36. Symptoms of spinal cord injury at different levels
37. Study of physiological reflexes
38. Study of pathological reflexes
39. The structure and symptoms of lesions of the peripheral motor neuron
40. The structure and symptoms of lesions of the central motor neuron
41. Alternating paralysis
42. Study of gait, types of disorders
43. Central paralysis
44. Peripheral paralysis
45. Extrapyramidal system
46. Akinetico-rigid (pallidary syndrome)
47. Hypotonic - hyperkinetic syndrome
48. Types of hyperkinesis and tremor
49. Cerebellum. Symptoms of defeat
50. Types of research of the coordination system
51. Types of ataxia
52. General sensitivity and its types
53. Ways of sensitivity, topical diagnosis of lesions
54. Clinical variants of sensitive disorders
55. Thalamic, capsular and polyneuropathic syndromes
56. Research methods of sensitivity system
57. The structure of the parasympathetic nervous system
58. The structure of the sympathetic nervous system
59. Methods for the study of the autonomic nervous system
60. Hypothalamus, structure and function
61. Symptoms of damage to the autonomic nervous system
62. Types of pelvic dysfunctions
63. Autonomic innervation of the bladder, pathology options
64. Cortex of the cerebral hemispheres

65. Localization of the main cortical functions
66. Methods for the study of cortical functions
67. Types of cortical disorders
68. Types of aphasia
69. Types of agnosia
70. Types of impairment of consciousness
71. Intelligence and methods of its assessment
72. Memory and types of memory impairments
73. Types of apraxia
74. The membranes of the brain
75. Meningeal syndrome
76. CSF in health and disease
77. Technique of lumbar puncture
78. Indications and contraindications for lumbar puncture
79. The clinical significance of craniography
80. Signs of intracranial hypertension on the craniogram
81. Radiopaque methods of studying the nervous system
82. Angiography of cerebral vessels
83. Methods of ultrasound examination of the brain
84. Echoencephalography
85. Doppler
86 Electroencephalography
87. Rheoencephalogy
88. Thermography
89. Electromyography
90. Modern methods of research of the nervous system
91. Computed tomography
92. Monitoring electroencephalography
93. Magnetic resonance imaging
94. Positron emission tomography

95. Spondylography
96. Myelography in the diagnosis of spinal cord diseases
97. Methods for assessing blood flow in the vessels of the brain
98. Cervical plexus and its nerves
99. Brachial plexus and its nerves
100. Lumbar plexus and its nerves
101. Sacral plexus and its nerves
102. Study of the nervous status of newborns
103. Scheme for assessing the nervous status in the history of the disease

Evaluation of abstracts is recorded in the teacher's journal and (or) in the computer system.

PRACTICAL SKILLS
MEDICAL - PREVENTIVE FACULTY
SPRING SEMESTER III COURSE

As a result of practical training, students must master.

1. Research of the olfactory function. Study of the range of movements of the eyeballs, the study of pupillary reactions. **1 point**.

2. Be able to test different types of sensitivity on the face; to investigate the functions of the chewing muscles; explore corneal, conjunctival and mandibular reflexes; determine Kerer points. To investigate the functions of the facial muscles of the face, to induce the superciliary reflex.**1 point.**

3. Explore the taste on the tongue. Assess the functions of swallowing, phonation; to induce a pharyngeal reflex and a reflex from the soft palate. Determine the central and peripheral paralysis of the muscles of the tongue. **1 point.**

4. Investigate the functions of the motor system (determine muscle strength, muscle tone, physiological and pathological reflexes). **1 point.**

5. Investigate the coordination of movements (simple and complex Romberg's tests; finger - nasal, knee - calcaneal tests, diadochokinesis, Babinsky's test). **1 point.**

6. Explore simple (tactile, painful, temperature) and deep (vibrational, muscular - articular, weight and pressure) sensitivity. **1 point.**

7. Explore complex sensitivity (stereognosis, two-dimensional spatial sense, discrimination, localization and kinesthetic feeling). **1 point.**

8. Study of the autonomic nervous system (determination of sympathicotonia, vagotonia, normotonia) and determination of autonomic reactivity (Ashner's test, clinostatic and orthostatic tests, cutaneous dermographism). **1 point.**

9. Investigate the higher cortical functions (by correctly constructing a survey, determine the state of mental development, memory, speech, praxis, the ability to read and write). **1 point.**

10. Investigate meningeal symptoms (stiff neck, symptoms of Kernig, Brudzinsky, Lessaj). **1 point.**

Total: 10 points.

LITERATURE

1. R.K. Şirəliyeva. Sinir sistemi xəstəlikləri. Bakı 2003
2. R.K. Şirəliyeva. Nevrologiya. Bakı.2007
3. T.Q.Qədirovavə b.Uşaq sinir xəstəlikləri. Bakı 1991
4. T.M.Nəbiyev.Neyrostomatologiya Bakı 2019.
5. UE Gusev et al. Neurology and neurosurgery.2015
6. A.S. Petrukhin.Pediatric neurology.2009
7. Richard S. Snell Clinical Neuroanatomy
8. Roger P. Simon, Michael J. Aminoff, David A. Greenberg. Lange. Clinical Neurology. 10th edition

Appendix No 1

Rules for assessing the admission rate of students enrolled in the credit system

(The decision was approved by the Academic Council of AMU No. 10 of 25.06.2019)

Checkout

Total number of hours	Number of hours missed									
	1	2	3	4	5	6	7	8	9	10 and more
45	0	0,5	0,75	1	1,2	1,4	1,6	1,75	2 points limit	Not allowed to attend the exam

Appendix No. 2

A student who missed more than 40% of the lecture (regardless of the absence at practical classes) is not allowed to attend the exams.

Estimating missed lecture hours

Number of lecture hours	Number of hours missed (not allowing exam attendance)	Percentage of absences
4	2	50%
6	3	50%
8	4	50%
10	5	50%
12	5	42%
14	**6**	**43%**
16	7	44%
20	9	45%
30	13	43%