Azerbaijan Medical University "I approve"

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

(stomatologiya) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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: English

TEACHER \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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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.

**THE PLAN OF LECTURES on NEUROLOGY FOR**

**AMU 3rd YEAR STOMATOLOGY FACULTY**

**6th SEMESTER**

|  |  |  |
| --- | --- | --- |
| **1** | A brief history of the development of neurology. Development of neurology in Azerbaijan. Impairment of motor functions. The main symptoms of pyramidal and extrapyramidal system disorders. Brain. Symptoms of damage to the coordination system | **2** |
| **2** | Sensation and its disorders. Afferent systems of the face and oral cavity. Vegetative nervous system. Features of vegetative innervation of the face and oral cavity | **2** |
| **3** | Cranial nerves. Trigeminal and facial nerves. Clinical symptoms of damage. Sensory organs. Caudal group cranial nerves. (IX, X, XI, XII). Higher brain functions and its disorders. Structure, functions. Symptoms of the disorder. | **2** |
| **4** | Serebrovascular diseases. Neuroinfections. | **2** |
| **5** | Specific neurology of the face. Prosopalgia and prosoplegia. Diseases associated with odor disorders (rhinitis, influenza, traumatic brain injury, Parkinson's disease, Alzheimer's disease) | **2** |
| **6** | Regional neurostomatological diseases accompanied by autonomic and cephalic disorders. Facial seizures and hyperkinesis. | **2** |
| **7** | Epilepsy. Epileptiform paroxysms. Nerve and muscle diseases. Myodystrophies. Amyotrophias. Myasthenia gravis. Myotonia. Myoplegia. Pyramid, extrapyramidal and cerebral degenerations. | **2** |

**Totally: 14 h.**

**THE THEMATIC PLAN OF PRACTICAL LESSONS on NEUROLOGY FOR AMU**

**3rd YEAR STOMATOLOGY FACULTY STUDENTS**

**6th SEMESTER**

|  |  |  |
| --- | --- | --- |
| **1** | Clinical anatomy of the spinal cord. Methods of examination of motor functions  (muscle tone, volume of active and passive movements, reflexes). | **2** |
| **2** | Movement and its disorders. Peripheral and spastic paralysis. The main symptoms of disorders of peripheral nerves and plexuses. Cerebellum. Basic anatomical and physiological information. Symptoms of the disorder. Methods of examination of cerebral function.  Extrapyramidal system, syndromes of damage. | **2** |
| **3** | Sensation and it pathways. The features of face sensory innervations. Sensory lesions. The types of sensory lesions in the face. The examination methods of sensation | **2** |
| **4** | Cranial nerves. Anatomy and physiology. The syndromes and symptoms of the I, II, III, VI, cranial nerves lesions. The examination of olfactory, optic andoculomotor nerves function | **2** |
| **5** | Trigeminal and facial nerves. Lesion symptoms. The examination of V and VII cranial nerves function | **2** |
| **6** | IX, X, XI, XII cranial nerves. Bulbar andpsevdobulbarpalsy. The examination methods of bulbar group cranial nerves | **2** |
| **7** | Methods of examination of the functions of the autonomic nervous system. Features of the vegetative innervation of the face and mouth cavity. Symptoms and syndromes of its clinical damage. | **2** |
| **8** | Brain cortex. The localization of higher brain functions. Symptoms of disturbance | **2** |
| **9** | Meningeal syndrome. Examination of cerebrospinal fluid. Neuroinfections. Neurovascular diseases.. | **2** |
| **10** | Prosopalgias. Classification of facial pain. Trigeminal neuralgia.  Curatorial methods of neurostomatological patients. | **2** |
| **11** | Damage to the nervous system of the face and tongue. Mouth cavity syndromes. | **2** |
| **12** | Cephalgias (migraine, cluster pain, vascular pain) | **2** |
| **13** | Vegetative syndromes. Hyperkinesis on the face. | **2** |
| **14** | Neurovascular diseases. Diagnosis of acute vascular diseases of the brain, treatment and prevention | **2** |
| **15** | Epilepsy. Nervous and muscular diseases. Scheme of case history. | **2** |
|  | The final session | **1** |

**Totally 31 h.**

**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

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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.

**LITERATURE**

1. R.K. Şirəliyeva.Sinirsistemixəstəlikləri.Bakı 2003

2. R.K. Şirəliyeva.Nevrologiya.Bakı.2007

3. T.Q.Qədirovavə b.Uşaqsinirxəstəlikləri.Bakı 1991

4. T.M.Nəbiyev.NeyrostomatologiyaBakı 2019.

5. UE Gusev et al. Neurology and neurosurgery.2015

6. З.А.Суслина и др. Неврология. 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% |