CONTROL AND MEASURING INSTRUMENTS

Questions of the program for midterm control 1, 2

Name disciplines: «The nervous system and sensory and visual organs in pathology»

Discipline code: NSSOVHBP 3306

Name and code of the OP: 6B10115 "Medicine"

Amount of study hours/credits: 30 hours/1 credits

Course and semester of study: 3rd year/6th semester

Shymkent, 2025y.

The contrjl and measuring tools were developed in accordance with the working curriculum of the discipline (sillabus) and discussed at a department meeting.

Protocol: № 11 «26» 06. 2025y.

Head of department, d.m.s., professor Bekmurzaeva E.K. Бекм

Border control №1:

Task to demonstrate practical skills.

Questioning patients with diseases of the nervous system
General examination of patients with meningeal syndrome.
General examination of patients with hemorrhagic stroke.
General examination of patients with ischemic stroke.

Technique and method for determining the rigidity of the occipital muscles
Technique and method for determining Kernig's symptom
Technique and methodology for determining Brudzinski's symptom (upper)
Technique and methodology for determining Brudzinski's symptom (lower)

Border control #2:

Laboratory research methods for meningeal syndrome
Instrumental research methods for meningeal syndrome
Laboratory research methods for hemorrhagic stroke
Instrumental research methods in hemorrhagic stroke
Laboratory research methods for ischemic stroke
Instrumental research methods for ischemic syndrome

Defense of the educational medical history.
The form for completion and defense is attached to the library collection of the department and the academy.

OPTION 1

1. Hydrostatic pressure in the arteries of the head when moving from a horizontal to a vertical position ... .
A. will decrease at first and then increase
B. is increasing
C. does not change
D. will initially increase and then decrease.
E. decreases
2. General physical activity is called... .
A. intense work of a certain muscle group
B. a load that partially covers muscle groups, but with intense work
C. load on a specific muscle group
D.load on the spine
E. a load that necessarily includes all muscle groups in active activity
3. Dysphagia is a disorder...
A. speeches
V. voices

S. breathing
D.sense of smell
E. swallowing
4. Narcotic analgesics... .
A. do not act through segmental and descending inhibitory neurons of the substantia gelatinosa
V. does not block pain transmission at the level of the posterior horns of the spinal cord
S. block the conduction of pain at the level of the posterior horns of the spinal cord
D. increase the release of algogenic neurotransmitter
E. reduce blood pressure
5. According to the visual analogue scale, pain from to... (in mm) is considered mild.
A. 0; 40
B. 40; 60
P. 80; 100
D. 40; 80
E. 40; 50
6. Specify the forms of sleep disorders:
A. neurasthenia
B. drug addiction
S. hysteria
D. depression
E. hypersomnia
7. In motor aphasia the patient... .
A. does not understand words, but cannot speak himself
V. can speak, but does not understand words.
S. understands words, but cannot speak himself.
D. can speak, but only one word.
E. can speak, but cannot pronounce consonants.
8. To confirm the diagnosis of subarachnoid hemorrhage, the following research method is used:
A. Craniography and spondylography
V. Rheoencephalography
S. Echoencephaloscopy
D. Blood coagulation test
E. Cerebrospinal fluid examination
9. The main diagnostic signs of subarachnoid hemorrhage are ... .
A. purple face, arterial hypertension, increasing impairment of consciousness, meningeal symptoms, Cheyne-Stokes breathing, hemiplegia
B. pale face, preserved consciousness, gradual development of hemiplegia, history of myocardial infarction
C. headache, vomiting, aphasia and hemiparesis, disappearing within the first day, arterial hypertension
D. development of hemiparesis and anisocoria 1-3 days after traumatic brain injury
E. pronounced meningeal symptom, severe headache, vomiting
10. Hemorrhagic cerebral infarction is localized in … .
A. white matter
B. In the basal ganglia
C.gray matter

D. anywhere in the brain
E. brainstem
11. A factor that predisposes to imbalance and unexpected falls in the elderly is
A. extinction of righting reflexes
B.reducing reaction time
C.increased proprioception
D. expansion of visual fields
E. decreased activity
12. Microcephaly is called... .
A. reduction in the size of the facial skull
B. reduction in the size of the brain part of the skull
C. increase in head circumference
D. premature closure of individual cranial sutures
E. reduction of the thalamus
13. The mediator of neuromuscular transmission is ... .
A.dopamine
B. vitamins of group B
C. adrenaline
D. norepinephrine
E. acetylcholine
14. Retrograde amnesia is called... .
A. loss of memory for events and circumstances preceding the injury
B. inability to reproduce events at the time of injury and during the period of loss of consciousness
C. long-term memory loss
D. impaired memory of events occurring after trauma
E. arcuate movement of the hip, inversion of the foot, asymmetry of step length
15. Cognitive impairment includes...
A. amaurosis
B. emotional lability
S. orthosis
D. agnosia
E. hyperacusis
16. The main cause of spinal cord injury is
A. road traffic accident
B. falling from a height
C. sports injury
D. self-mutilation
E. slippery floor
17. Dysphagia is manifested by a disorder
A. speech, phonation and swallowing
B. swallowing functions
S. pronunciation aspect of speech
D.laser therapy
E. speeches
18. Using magnetic resonance imaging, the focus of ischemic stroke in the brain is detected from the onset of the disease:

A. in 3 hours
B. in 1 hour
C. in 6 hours
D. by the end of the first day
E. only on the second day
19.The pyramidal pathway is also called:
A.spinothalamic tract
B. N.rubrospinal tract
C. WITH.frontopontocerebellar tract
D.bulbothalamic pathway
E.corticospinal tract
20.What is a mediator for the sympathetic nervous system:
A.Acetylcholine
B. N.Serotonin
C. WITH.Adrenaline, norepinephrine
D.GABA
E.Glutamate and aspartate

Option 2

1.Signs of increased excitability of the sympathetic nervous system:
A.rapid pulse, decreased blood pressure, dilated pupils
B. N.slow pulse, sweating, decreased blood pressure, narrow pupils
C. WITH.rapid pulse, arterial hypertension, dilated pupils
D. bradycardia, hypotension, small pupils
E. hypothermia, hypotension
2.What is the neurotransmitter for the parasympathetic nervous system?
A.gamma-aminobutyric acid
B. N.thyroxine
C. WITH.acetylcholine
D.glutamate and aspartate
E.norepinephrine
3.The sphincter of the pupil is innervated by:
A.III
B.VI
C.IV
D.VII
E.X
4.Dysphagia occurs when a pair of cranial nerves is damaged:
A.V-VII
B. N.VII-XI
C.WITH.XII-X
D.III-IV
E.IX-X
5.Specify the time at which symptoms reverse in the case of transient ischemic attacks:

A.2-3 days
B.3-5 days
C. 5-7 days
D.1-2 weeks
E.from a few minutes to 24 hours
6.For hemorrhagic stroke, the cerebrospinal fluid is characterized by the presence of:
A.lowering glucose levels
B.presence of red blood cells
C.increased glucose levels
D.presence of leukocytes
E.presence of neutrophils
7.Note the main diagnostic signs of subarachnoid hemorrhage:
A. pale face, consciousness preserved, gradual development of hemiplegia, often a history of myocardial infarction or cardiac arrhythmia
B. purple face, arterial hypertension, increasing disturbances of consciousness, vomiting, meningeal symptoms, gaze paralysis, hemiplegia, Cheyne-Stokes respiration
C. absence of focal neurological symptoms, severe meningeal syndrome, severe headache, vomiting, stupor
D. headache, vomiting, aphasia, hemiparesis, disappearing within 24 hours, arterial hypertension
E. history of previous traumatic brain injury, after
8.The source of spontaneous subarachnoid hemorrhage is:
A. aneurysms of cerebral vessels
B. brain tumors
C. atherosclerosis of cerebral vessels
D. traumatic brain injury
E. vasculitis
9.The leading symptom of spontaneous subarachnoid hemorrhage:
A. anisokarya
B. hemiparesis
C. meningeal syndrome
D. speech impairment
E. paresis of the oculomotor nerve
10.The main method of examining patients with cerebral aneurysms:
A. Craniography
B. Pneumoencephalography
C. Computed tomography
D. Magnetic resonance imaging with contrast
E. Electroencephalography
11.Hemorrhagic stroke occurs more often when:
A. arterial hypertension, vascular malformation
B. atherosclerosis
C. myocardial infarction
D. diabetes mellitus
E. perforated ulcer of the duodenum
12.The vertebral artery supplies:
A. parietal lobe

B. temporal lobe
C. medulla oblongata
D. hippocampus
E. frontal lobe
13.The blood supply to the brain is provided by arteries:
A. Iliac
B. Internal carotid
C. Adamkevich
D. Femoral
E. Deproge-Gotteron
14.When settling the cerebrospinal fluid of a patient with tuberculous meningitis after 12-24 hours, what can be discovered?
A. fibrin film
B. opalescence
C. xanthochromia
D. leukocytes
E. erythrocytes
15.Name the crucial factor in the diagnosis of meningitis:
A. acute onset of the disease with an increase in body temperature
B. acute onset of the disease with meningeal syndrome
C. toxic shock syndrome
D. signs of congestion in the fundus
E. changes in cerebrospinal fluid
16.Absolute indication for lumbar puncture:
A. meningeal syndrome
B. stroke
C. cerebral hemorrhage
D. cerebral edema
E. intracranial hypertension
17.Contraindications for lumbar puncture:
A. meningeal syndrome
B. stroke
C. intracranial hypertension
D. cerebral hemorrhage
E. traumatic brain injury
18.List the meningeal symptoms:
A. Kernig, upper and lower Brudzinski, rigidity of the occipital muscles
B. Neri, Lassegue, Wasserman, Matskevich, Bonnet, Dejerine
C. Babinsky, Lask-Jacobson, Bekhterev-Zhukovsky symptoms
D. Hoffman, Gordon, Oppenheim, Chaddock, Kernig
E. Marinescu-Radovici, Karchikyan, Lessage, Brudzinsky
19.Of decisive importance in the diagnosis of meningitis is:
A. acute onset of the disease with an increase in temperature
B. acute onset of the disease with meningeal syndrome
C. addition of infectious toxic shock syndrome
D. signs of congestion in the fundus

E. changes in the cellular composition of the cerebrospinal fluid
20.The myelin sheath of a nerve fiber determines:
A. axon length and conduction accuracy
B. axon length
C. nerve impulse conduction velocity
D. the speed of electric current
E. dendrite length and conduction accuracy

Option 3

1. Specify the nerve damage in dysarthria:
A. wandering
B. glossopharyngeal
C. trigeminal
D. sublingual
E. facial
2.Specify the symptoms of damage to Broca's area:
A. sensory aphasia
B. apraxia
C. amnestic aphasia
D. motor aphasia
E. amusia
3.Specify the symptoms of damage to Wernicke's area:
A. motor aphasia
B. apraxia
C. sensory aphasia
D. amnestic aphasia
E. dysarthria
4.Early complications of acute purulent meningitis include:
A. increased blood sugar
B. intellectual and memory disorders
C. akinetic mutism
D. akinetic-rigid syndrome
E. hydrocephalus
5.Protein - 0.66 g/l, cytosis - 2000 in 1 μl (85% - neutrophils) are characteristic of...
A. purulent inflammation
B. serous inflammation
C. cerebral edema
D. spinal cord edema
E. hemorrhages
6.Protein - 0.45 g/l, cytosis - 400 in 1 μl (90% - lymphocytes) are characteristic of...
A. purulent inflammation
B. hemorrhages
C. serous inflammation
D. cerebral edema
E. spinal cord edema

7. A 19-year-old male college student was admitted to the hospital with headache, photophobia, vomiting, and fever. The patient's medical history revealed contact with a tuberculosis patient. Physical examination: the patient lies in a "pointing dog" position with his head tilted back. The neck muscles are rigid to the width of two finger widths. Kernig's and Brudzinski's signs are positive. Which syndrome does this patient have?
A. convulsive
B. meningeal
C. epileptic
D. transient attack
E. hemorrhagic
8. An 18-year-old woman, A., was brought to the emergency room complaining of a severe headache, fever, nausea, and vomiting. Her medical history revealed that she had been ill for a week and had been hiking with friends. Upon examination, she lay with her eyes closed, refused to be covered with a blanket, and experienced a sharp increase in pain sensitivity. When the doctor attempted to bend the woman's head, her lower extremities flexed at the hip and knee joints. What symptom is present in this case?
A.Lesage
B. Gordon
C. Oppenheim
D. Shoffara
E. Brudzinsky
9. A 25-year-old man, a welder, consulted his local doctor complaining of pain in his right eye and double vision. His medical history revealed that he became ill after exposure to cold while working in a draft. Examination revealed ptosis and decreased near vision. Which pair of cranial nerves is affected in this patient?
A. facial
B. visual
C. trigeminal
D. oculomotor
E. glossopharyngeal
10. A 35-year-old man, a school teacher, was brought to the hospital emergency room on referral from his local doctor. He complained of a severe headache, nausea, and an inability to move freely due to sudden, severe weakness in his left leg. His medical history revealed chronic nephritis. Examination revealed pale skin and decreased pain sensitivity. His blood pressure was 190/100 mmHg. Indicate the development of this pathological condition in this man:
A. meningeal syndrome
B. transient attack
C. hemorrhagic stroke
D. myocardial infarction
E. epileptic seizure
11. A 79-year-old woman lives in a nursing home. She complains of dizziness and poor hearing, and frequently gets into arguments with her neighbors because she can't remember what she ate for breakfast, where she put her personal belongings, or her remaining jewelry. However, she clearly remembers attending a teacher training college, being a beautiful dancer, and being respected by her colleagues. What type of memory impairment does this woman have?
A. retrograde amnesia

B. antegrade amnesia
C. confabulation
D. asterixis
E. apraxia
12. A 55-year-old man presented to the emergency room complaining of dizziness and severe weakness in his right arm, and was unable to use it. His medical history revealed that he became ill after emotional stress, following the death of his wife. Upon examination, he spoke with difficulty, separating words into syllables. Decreased sensation, muscle strength, and hyporeflexia were observed in the affected arm, along with muffled heart sounds and an accentuated second aortic sound. His blood pressure was 210/125 mmHg. Which diagnostic test would be helpful in establishing the diagnosis?
A. encephalography of the brain
B. echoencephalography
C. CT scan of the skull
D. myography
E. MRI of the brain
13. A 42-year-old woman was brought to the hospital emergency room by her relatives with complaints of headache, fever, nausea, and photophobia. Her medical history revealed she had been ill for over a week, following an acute respiratory viral infection. On examination, she was lying on her side with her eyes closed and refused to be covered. Hyperesthesia, nuchal rigidity extending four finger widths, and a positive Kernig's sign were detected. Which diagnostic test would be most helpful in establishing the diagnosis?
A. CT scan of the brain
B. MRI of the brain
C. spinal puncture
D. electroencephalography
E. echography of the brain
14. A 57-year-old woman with a 17-year history of hypertension developed a severe headache, nausea, and repeated vomiting after an emotional stress attack. A home visit by her primary care physician revealed dorsiflexion of the first toe and fan-like spreading of the others when pressing a bent finger along the tibial crest. What is the likely pathological symptom?
A. Kocher
B. Schaeffer
C. Gordon
D. Oppenheim
E. Brudzinsky
15. A 60-year-old man experienced a severe headache at a bus stop. He screamed, tried to run, and swore obscenely. People around him called an ambulance. He answered the doctor's questions correctly, but not immediately, and struggled to find words, pronouncing them in single syllables. He complained of increasing weakness in his left arm and leg. He had a history of angina and was taking Isoket spray, which was not helpful. He also had decreased sensation on the left side and a positive Babinski sign. What is the presumptive diagnosis in this case?
A. epileptic seizure
B. transient attack
C. meningeal syndrome
D. ischemic stroke

E. hysterical attack
16. A local police officer, while making house-to-house visits, discovered a man, apparently about 55 years old, in the basement of an abandoned house. He has no identification, doesn't know his identity, and doesn't remember how he ended up there. An examination at the clinic revealed a subcutaneous hematoma on his head, decreased muscle strength, spastic paresis, hyporeflexia, and a positive Gordon reflex on the right. What is the likely cause of this man's memory impairment?
A. hypomnesia
B. paramnesia
C. confabulation
D. retrograde amnesia
E. antegrade amnesia
17. A 23-year-old man, a professional boxer, sought medical attention from his local doctor. He complained of decreased sensation in his fingers after another knockout. Examination revealed slightly decreased carporadial reflexes on both sides, and touching the skin of his hand was perceived as pain, while cold was perceived as warmth. Which sensory disturbances did this patient experience?
A. paresthesia
B. hypoesthesia
C. hyperesthesia
D. polyesthesia
E. dysesthesia
18. A passenger, apparently homeless, was brought to the railway station's medical center by police. He refused to answer the officer's questions and smiled, angering the officer. During the doctor's examination, the man refused to answer questions and indicated he was unable to speak, but when asked to show his eyes, nose, and ears, he correctly identified them. A linear postoperative scar was found on his head; upon palpation, this area was soft and boneless, and reflex testing revealed a positive Babinski sign. What is the speech impairment in this case?
A. motor aphasia
B. sensory aphasia
C. confabulation
D. dysarthria
E. dyslexia
19. A patient is admitted to the emergency room with suspected ischemic cardioembolic stroke. Determine the appropriate examination strategy:
A. General clinical tests, EEG, REG, ultrasound Doppler, consultation with a neurosurgeon
B. General clinical tests, cerebrospinal fluid puncture, CT, ultrasound, angiography, consultation with a therapist
C. General clinical tests, ultrasound, echo-EG, EEG, REG
D. General clinical tests, CT scan, consultation with a neurosurgeon.
E. General clinical tests, CT scan, ultrasound Doppler, ophthalmologist consultation
A 54-year-old man is in the neuro-stroke unit of a clinic with a cerebral infarction. Objectively: motor aphasia, right-sided hemiplegia. To prevent pressure ulcers, the patient needs...
A. Skin toilet 2 times a week
B. Turning in bed 2 times a day
C. turning in bed every 2–3 hours
D. Skin toilet once a week

E. turning in bed once a day