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Кафедра неврологии и нейрохирургии
с курсами медицинской реабилитации, психиатрии, ФПКиП

ТЕСТОВЫЕ ЗАДАНИЯ
ДЛЯ КОНТРОЛЯ УРОВНЯ ЗНАНИЙ
ПО НЕВРОЛОГИИ И НЕЙРОХИРУРГИИ

для студентов учреждений высшего медицинского образования,
обучающихся по специальностям 1-79 01 01 «Лечебное дело»
(с английским языком обучения)

TEST TASKS TO CONTROL THE LEVEL OF KNOWLEDGE IN
NEUROLOGY AND NEUROSURGERY

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Тестовые задания для контроля уровня знаний по неврологии и нейрохирургии: пособие для студентов учреждений высшего медицинского образования, обучающихся по специальностям 1-79 01 01 «Лечебное дело» (на английском языке) / Н.Н. Усова, Е.В. Сереброва, М.В. Олизарович. — Гомель: учреждение образования «Гомельский государственный медицинский университет», 2021. — 73с.

В пособии представлен перечень вопросов и ответов к вопросам по основным темам программы по дисциплине «Неврология и нейрохирургия» для студентов учреждений высшего медицинского образования, обучающихся по специальностям 1-79 01 01 «Лечебное дело» (на английском языке). Тестовый контроль знаний позволит объективно оценить уровень самостоятельной и аудиторной подготовки студентов, что будет способствовать усвоению предложенного материала и повысит качество образования.

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TOPIC 1. MOTOR SYSTEM AND MOTOR DISORDERS

1. Where are located the bodies of the lower motor neurons?

- a) spinal ganglia
- b) precentral gyrus
- c) posterior horns of the spinal cord
- d) anterior horns of the spinal cord
- e) medulla

2. The decussation of corticospinal tract is located in:

- a) anterior white commissure
- b) lateral funiculus of the spinal cord
- c) internal capsule
- d) pons
- e) medulla

3. Pathological extensor-foot reflexes include all of the following, except:

- a) Scheffer's reflex
- b) Gordon's reflex
- c) Rossolimo's reflex
- d) Babinski's reflex
- e) Oppenheim's reflex

4. Deep reflexes include all of the following, except:

- a) Carporadial reflex
- b) Triceps reflex
- c) Knee reflex
- d) Achilles reflex
- e) Plantar reflex

5. The reflex arch of which reflex is located at the S₁-S₂ segments of the spinal cord?

- a) Carporadial reflex
- b) Triceps reflex
- c) Biceps reflex
- d) Knee reflex
- e) Achilles reflex

6. The following symptoms are characteristic for spastic paresis, except:

- a) increased muscle tone

- b) hyperreflexia
- c) atrophy and fasciculations
- d) absence of the superficial reflexes
- e) pathological reflexes

7. The following symptoms are characteristic for flaccid paresis, except:

- a) hypotonia
- b) hyporeflexia
- c) atrophy and fasciculations
- d) pathological reflexes
- e) reaction of degeneration on EMG

8. Where is the lesion in case of the motor Jackson's epilepsy?

- a) postcentral gyrus
- b) precentral gyrus
- c) internal capsule
- d) thalamus
- e) corona radiata

9. Where is the lesion in case of spastic hemiparesis?

- a) postcentral gyrus
- b) substantia nigra
- c) internal capsule
- d) thalamus
- e) anterior horns of the spinal cord

10. What symptom will be observed in complete transverse lesion of segments C₂-C₄?

- a) spastic tetraparesis
- b) flaccid tetraparesis
- c) spastic paresis of the arms and flaccid paresis of the legs
- d) spastic hemiparesis
- e) lower spastic paraparesis

11. What symptom will be observed in complete transverse lesion of segments C₅-T₁?

- a) spastic tetraparesis
- b) flaccid tetraparesis
- c) flaccid paresis of the arms and spastic paresis of the legs
- d) spastic hemiparesis
- e) lower spastic paraparesis

12. What symptom will be observed in complete transverse lesion of segments T₂-T₁₂?

- a) spastic tetraparesis
- b) flaccid paresis of the arms and spastic paresis of the legs
- c) spastic paresis of the arms and flaccid paresis of the legs
- d) lower flaccid paraparesis
- e) lower spastic paraparesis

13. What symptom will be observed in complete transverse lesion of segments L₁-S₂?

- a) spastic tetraparesis
- b) flaccid paresis of the arms and spastic paresis of the legs
- c) spastic paresis of the arms and flaccid paresis of the legs
- d) lower flaccid paraparesis
- e) lower spastic paraparesis

14. What symptom will be observed in left-side half transverse lesion of segments C₂-C₄?

- a) spastic tetraparesis
- b) flaccid tetraparesis
- c) spastic paresis of the arms and flaccid paresis of the legs
- d) left-side spastic hemiparesis
- e) right-side spastic hemiparesis

15. The cause of the Parkinson's syndrome is damage of:

- a) precentral gyrus
- b) substantia nigra
- c) internal capsule
- d) thalamus
- e) caudate nucleus

16. The following symptoms are typical for the Parkinson's syndrome, except:

- a) hyperreflexia
- b) hypertonia
- c) hypokinesia
- d) tremor
- e) postural instability

17. Hypokinesia may include the following symptoms, except:

- a) hypomimia

- b) acheiroparesis
- c) brachialgia
- d) athetosis
- e) micrographia

18. Hyperkinetic-hypotonic syndrome may include the following symptoms, except:

- a) dystonia
- b) propulsion
- c) hemiballismus
- d) athetosis
- e) chorea

19. Fast, brief, abrupt, unbalanced, irregular, non-stereotyped movements are a manifestation of:

- a) myoclonia
- b) tics
- c) hemiballismus
- d) athetosis
- e) chorea

20. The patient has violent turns and tilts of the head to the right. What type of hyperkinesia is observed in this case?

- a) hemiballismus
- b) myoclonia
- c) dystonia
- d) akathisia
- e) tic

TOPIC 2. SENSITIVE SYSTEM AND ITS LESION. CEREBELLUM

1. Where are located the bodies of the second neurons of the superficial sensitivity tract?

- a) spinal ganglia
- b) thalamus
- c) posterior horns of the spinal cord
- d) anterior horns of the spinal cord
- e) medulla

2. Where is located the decussation of deep sensitivity tract?

- a) anterior white commissure
- b) lateral funiculus of the spinal cord
- c) internal capsule
- d) pons
- e) medulla

3. Which type of sensitive disorder will appear in case of multiply symmetric lesion of the peripheral nerves

- a) mononeuritic
- b) polyneuritic
- c) segmentary
- d) conductive
- e) cerebral

4. The patient has symmetrical disorder of pain and temperature sensitivity in dermatomes C₄–T₅ and normal deep and tactile sensitivity. Where is the lesion in this case?

- a) anterior horns of the spinal cord
- b) anterior white commissure
- c) postcentral gyrus
- d) internal capsule
- e) medulla

5. The lesion of the posterior limb of the internal capsule will lead to the:

- a) sensitive ataxia
- b) distal tetra anesthesia
- c) “semi-jacket” type of sensitive disorder
- d) lower paraesthesia
- e) contralateral hemihypesthesia

6 The combination of hemihypesthesia, hemialgia, sensitive hemiataxia and hemianopsia are characteristic to the lesion of the:

- a) postcentral gyrus
- b) precentral gyrus
- c) internal capsule
- d) thalamus
- e) peripheral nerves

7. The main symptoms of the patient are right side loss of pain and temperature sensitivity below T₇ dermatome, contralateral loss of deep sensitivity from the T₅ dermatome and spastic paresis of the left leg. The patient has lesion of:

- a) postcentral gyrus
- b) internal capsule
- c) transversal size of the spinal cord in level T₇
- d) hemitransversal size of the spinal cord in level T₇
- e) hemitransversal size of the spinal cord in level T₅

8. The patient has decrease of all kinds of sensitivity in dermatomes C₆, C₇ on the left arm. The examination found out the lesion of:

- a) anterior horns of the spinal cord
- b) medial lemniscus
- c) postcentral gyrus
- d) posterior spinal roots C₆, C₇
- e) anterior spinal roots C₆, C₇

9. The sensitive ataxia is characteristic to the lesion of:

- a) posterior funiculus of the spinal cord
- b) anterior funiculus of the spinal cord
- c) posterior horns of the spinal cord
- d) lateral funiculus of the spinal cord
- e) anterior spinal roots

10. What symptom is not observed in case of transversal size of the spinal cord lesion in the level C₄?

- a) spastic tetraparesis
- b) flaccid tetraparesis
- c) conductive type of sensitive disorder
- d) pelvic organs disorders
- e) vegetative disorders

11. Lateral spinothalamic tract is responsible for:

- a) pain and temperature sensitivities
- b) muscular-joint sensitivity
- c) tactile sensitivity
- d) vibratory sensitivity
- e) sense of pressure

12. What is the main symptom of the superior region of the postcentral gyrus lesion?

- a) anesthesia in the opposite arm
- b) anesthesia in the opposite leg
- c) anesthesia in the face
- d) same side hemianesthesia
- e) contralateral hemianesthesia

13. What symptom is not typical for cerebellar lesion?

- a) bradykinesia
- b) decreased muscle tone
- c) nystagmus
- d) dysarthria
- e) dysmetria

14. What symptom is not typical for dynamic ataxia?

- a) megalography
- b) decreased muscle tone
- c) intentional tremor
- d) absence of deep reflexes
- e) adiadochokinesis

15. What tract provides muscular-cerebellar communication?

- a) cortico-nuclear
- b) cortico-spinal
- c) Gower's tract
- d) anterior spinal thalamic
- e) Goll's tract

16. What symptom is characteristic for static ataxia:

- a) hemiballismus
- b) rigidity
- c) positive Romberg test
- d) pathological reflexes
- e) intentional tremor

17. For examination of dynamic ataxia, all tests should be performed, except:

- a) heel-to-knee test
- b) finger-to-nose test
- c) "tandem gait" test
- d) diadochokinesis test
- e) test on proportionality of the movements

18. Babinski and Stewart's-Holmes tests are used to identify:

- a) intention tremor
- b) cerebellar gait
- c) megalography
- d) nystagmus
- e) asynergia

19. The patient has intentional tremor, adiadochokinesis and decreased muscle tone in the left limbs. In this case the lesion is in the:

- a) right cerebellar hemisphere
- b) left cerebellar hemisphere
- c) posterior funiculus of the spinal cord
- d) anterior funiculus of the spinal cord
- e) left thalamus

20. What symptom will not appear in case of the cerebellar vermis lesion?

- a) disturbance of walking
- b) positive Romberg test
- c) positive Babinski test
- d) athetosis
- e) decreased muscle tone

TOPIC 3. CRANIAL NERVES I-VI. METHODS OF EXAMINATION AND SYMPTOMS OF LESION. INSTRUMENTAL METHODS OF DIAGNOSTICS OF NEUROLOGICAL DISEASES

1. Where is located the cortical olfactory center?

- a) postcentral gyrus
- b) precentral gyrus
- c) sulcus calcarinus
- d) uncus of parahippocampal sulcus
- e) superior temporal gyrus

2. Olfactory hallucination is a symptom of irritation of:

- a) receptor cells in nasal mucosa
- b) olfactory bulb
- c) olfactory tract
- d) olfactory triangle
- e) temporal lobe

3. What is the main subcortical center of vision?

- a) retina
- b) optic chiasma
- c) lateral geniculate body
- d) inferior colliculi
- e) occipital lobe

4. The cortical optic center is located in:

- a) sulcus calcarinus
- b) parahippocampal sulcus
- c) superior temporal gyrus
- d) inferior frontal gyrus
- e) superior frontal gyrus

5. The patient has a contralateral homonymous hemianopsia. In this case, damage of the following anatomical structures is possible, except:

- a) optic nerve
- b) optic tract
- c) lateral geniculate body
- d) internal capsule
- e) occipital lobe

6. Ophthalmoscopy is performed for examination of:

- a) visual acuity

- b) visual fields
- c) color vision
- d) optic nerve disc
- e) nystagmus

7. Where is the lesion in case of bitemporal hemianopsia?

- a) retina
- b) internal part of optic chiasma
- c) external part of optic chiasma
- d) lateral geniculate body
- e) occipital lobe

8. Papilledema usually is a symptom of:

- a) inflammation
- b) multiple sclerosis
- c) epilepsy
- d) increased intracranial pressure
- e) carotid aneurism

9. Where are located the nuclei of the oculomotor and trochlear nerves?

- a) frontal lobe
- b) midbrain
- c) pons
- d) medulla
- e) spinal cord

10. The main symptoms of oculomotor nerve lesion are all of the following, except:

- a) miosis
- b) mydriasis
- c) ptosis
- d) strabismus
- e) diplopia

11. What is the symptom of trochlear nerve lesion?

- a) divergent strabismus
- b) diplopia when looking down
- c) ptosis
- d) accommodation paralysis
- e) mydriasis

12. The trigeminal nuclei are the following, except:

- a) principal sensory nucleus
- b) spinal nucleus
- c) mesencephalic nucleus
- d) nucleus of solitary tract
- e) motor nucleus

13. Segmental type of facial sensitivity disorder occurs in case of lesion of the:

- a) trigeminal ganglion
- b) thalamus
- c) mesencephalic trigeminal nucleus
- d) postcentral gyrus
- e) spinal nucleus of trigeminal nerve

14. What is the main symptom of abducens nerve lesion?

- a) convergent strabismus
- b) exophthalmoses
- c) ptosis
- d) accommodation paralysis
- e) mydriasis

15. Horner syndrome includes the following symptoms, except:

- a) strabismus
- b) narrowing of the palpebral fissure
- c) miosis
- d) enophthalmos
- e) anhidrosis of the face

16. The main indications for cerebral angiography are the following, except:

- a) arterial aneurysm
- b) arteriovenous malformation
- c) arterial dissection
- d) meningitis
- e) cerebral tumors

17. The main indications for electroneuromyography are the following, except:

- a) muscular dystrophia
- b) polyneuropathy
- c) myasthenia

- d) encephalitis
- e) diseases of the motor neuron

18. What is the main indication for electroencephalography?

- a) meningitis
- b) mononeuropathy
- c) epilepsy
- d) myotonia
- e) myasthenia

19. In comparison with CT the MRI has the benefits, except:

- a) reveals demyelination
- b) better visualizes skull fractures
- c) better visualizes the structures of the posterior cranial fossa
- d) better visualizes spinal cord lesions
- e) isn't accompanied by radiation

20. The main indications for CT are the following, except:

- a) multiple sclerosis
- b) brain tumors
- c) stroke
- d) craniocerebral injury
- e) hydrocephalus

TOPIC 4. CRANIAL NERVES VII-XII. ALTERNATING SYNDROMS, MENINGES OF THE BRAIN, CEREBROSPINAL FLUID, MENINGEAL SYNDROME

1. The following symptoms can be observed in damage of the facial nerve with the exception of:

- a) Hyperacusis
- b) Loss of corneal reflex at side of lesion
- c) Loss of lacrimation at side of lesion.
- d) Loss of taste sensation on anterior 2/3 of ipsilateral tongue
- e) Palsy of mimic muscles

2. After a minor head injury a young patient was unable to close his left eye and had drooling of saliva from left angle of mouth. He is suffering from:

- a) VII nerve injury
- b) V nerve injury
- c) III nerve injury
- d) Combined VII and III nerve injury
- e) II nerve injury

3. Possible causes of facial nerve lesion are following except:

- a) Bell's palsy
- b) Herpes infection
- c) Migraine
- d) Acoustic neuroma
- e) Stroke

4. Most common cause of Low Motor Neuron facial palsy is:

- a) Multiple sclerosis
- b) Bell's palsy
- c) Diabetes Mellitus
- d) Leprosy
- e) Meningitis

5. All following symptoms are features of Wallenberg's syndrome except:

- a) Ipsilateral loss of pain and temperature
- b) Ipsilateral loss of taste sensation
- c) ipsilateral loss of posterior column sensations
- d) Ipsilateral involvement of lower cranial nerves
- e) Contralateral loss of pain and temperature

6. Lateral medullary syndrome (Wallenberg's syndrome) is characterized by all, Except:

- a) Giddiness
- b) Dysphagia
- c) Crossed hemianaesthesia
- d) Horner's syndrome is rare
- e) Dysarthria

7. Lateral medullary syndrome is caused by thrombosis of:

- a) Anterior inferior cerebral artery
- b) Posterior inferior cerebellar artery
- c) Vertebral artery
- d) Basilar artery
- e) Carotid artery

8. Abdul Khan presents with pain, numbness and impaired sensation over half of the face along with ataxia, nystagmus, dysphagia and hoarseness of voice. His pain and thermal sensations over opposite half are impaired. Horner's syndrome is present. Likely cause of the disease is thrombosis of which vessel?

- a) Anterior inferior cerebellar artery
- b) Posterior inferior cerebellar artery
- c) Basilar
- d) Pontine vessels
- e) Carotid artery

9. Wallenberg's syndrome does not involve:

- a) IX cranial nerve
- b) X cranial nerve
- c) V cranial nerve
- d) XII cranial nerve
- e) sympathetic system

10. Lesion of posterior inferior cerebellar artery at brain affects:

- a) Spinal tract of trigeminal nerve
- b) Tractus Solitarius
- c) III cranial nerve
- d) Corticospinal tract
- e) Nucleus Ruber

11. Fauville syndrome includes the following, except:

- a) 5 nerve palsy
- b) 6 nerve palsy
- c) 7 nerve palsy
- d) Contralateral hemiparesis
- e) Contralateral pathological foot signs

12. The patient has atrophy of the right half of the tongue and deviates to the right side, the right half of a palate hangs down, the right voice sheaf is paralyzed. The pharyngeal reflex is absent. The speech greased nasal; swallowing is disturbed. What is the name of this syndrome?

- a) pseudobulbar syndrome;
- b) bulbar syndrome
- c) Bell's syndrome
- d) Ramsay Hunt syndrome
- e) Millard Gubler syndrome

13. The patient has atrophy of the right half of the tongue and its deviation to the right side, the right half of a palate hangs down, the right voice sheaf is paralyzed. The pharyngeal reflex is absent. The speech greased nasal; swallowing is disturbing. What brain structures are damaged?

- a) 5 cranial nerve
- b) 6 cranial nerve
- c) motor nucleus of 9, 10, 12 cranial nerves
- d) upper neuron of 9, 10, 12 cranial nerves
- e) 7 cranial nerve

14. The patient has dysarthria, the tongue deviates to the right side, externally tongue is normal, atrophies and fasciculations in muscles of tongue are absent. What structures suffered?

- a) lower motor neuron 12 cranial nerves
- b) upper motor neuron 12 cranial nerves
- c) lower motor neuron 7 cranial nerves
- d) motor nucleus of the 9 cranial nerves
- e) upper motor neuron 7 cranial nerves

15. The nuclei of which cranial nerves are located at medulla oblongata?

- a) 5, 9, 10, 12 cranial nerves
- b) 3 cranial nerves
- c) 4 cranial nerves
- d) 6 cranial nerves

e) 7 cranial nerves

16. What nerves are passing through a jugular foramen?

- a) 9th, 10th, 12th cranial nerves
- b) 5th, 7th cranial nerves
- c) 5th, 9th, 10th, 12th cranial nerves
- d) 5th, 12th cranial nerves
- e) 9th, 10th, 11th cranial nerves

17. At the patient the right shoulder is lowered, turn of the head is complicated to the left, right sternomastoid and trapezius muscles are atrophied. What structures suffered?

- a) posterior horns of the C₁–C₅ segments
- b) the right hypoglossal nerve
- c) anterior root of C₁–C₅ on the right
- d) the right accessory nerve
- e) the right vagus nerve

18. CSF follows under an elevated pressure, bloody. After centrifugation – xanthochromia. Protein — 3 g/l, in a deposit of 70 erythrocytes under review. What's the diagnosis?

- a) normal composition of the CSF
- b) purulent meningitis
- c) serous meningitis
- d) subarachnoid hemorrhage
- e) brain tumor

19. Result of lumbar puncture: protein — 0,33 g/l, cells — 4 in 1 mkl (1,0 neutrophils, 3,0 lymphocytes). What's the diagnosis?

- a) normal composition of the CSF
- b) purulent meningitis
- c) serous meningitis
- d) hemorrhage
- e) brain tumor

20. Result of lumbar puncture: protein — 0,40 g/l, cells — 5 in 1 mkl. What's the diagnosis?

- a) serous inflammation
- b) purulent inflammation
- c) hemorrhage
- d) hemorrhage
- e) normal composition of the CSF

21. Result of lumbar puncture: protein — 0,66 g/l, cells — 2000 in 1 mkl (85 % — neutrophils). What's the diagnosis?

- a) normal composition of the CSF
- b) purulent meningitis
- c) serous meningitis
- d) subarachnoid hemorrhage
- e) brain tumor

22. Result of lumbar puncture: protein — 0,45 g/l, cells — 400 in 1 mkl (90 % — lymphocytes). What's the diagnosis?

- a) normal composition of the CSF
- b) purulent meningitis
- c) serous meningitis
- d) subarachnoid hemorrhage
- e) brain tumor

23. Result of lumbar puncture: protein — 0,66 g/l, cells — 3000 in 1 mkl (80 % — neutrophils). What's the diagnosis?

- a) normal composition of the CSF
- b) purulent meningitis
- c) serous meningitis
- d) subarachnoid hemorrhage
- e) brain tumor

24. What is normal result of cerebrospinal fluid?

- a) protein — 0,1 g/l, cells — 70 in 1 mkl
- b) protein — 0,45 g/l, cells — 4 in 1 mkl
- c) pressure is 100 mm of a water column
- d) protein — 1,0 g/l, cells — 70 in 1 mkl
- e) protein — 0,1 g/l, cells — 700 in 1 mkl

25. Result of lumbar puncture: protein — 0,45 g/l, cells — 2 in 1 mkl. What's the diagnosis?

- a) normal composition of the CSF
- b) purulent meningitis
- c) serous meningitis
- d) subarachnoid hemorrhage
- e) brain tumor

26. Result of lumbar puncture: protein — 3,3 g/l, cells — 7 in 1 mkl. What's the diagnosis?

- a) normal composition of the CSF
- b) purulent meningitis
- c) serous meningitis
- d) subarachnoid hemorrhage
- e) brain tumor

27. Where CSF is produced?

- a) vessel plexus of brain ventricles
- b) pia mater
- c) dura mater
- d) arachnoid
- e) brain arteries

28. Result of lumbar puncture: protein — 1,32 g/l, cells — 666 in 1 mkl (90 % lymphocytes). What's the diagnosis?

- a) normal composition of the CSF
- b) purulent meningitis
- c) serous meningitis
- d) subarachnoid hemorrhage
- e) brain tumor

TOPIC 5. HEMISPHERES OF THE BRAIN AND HIGHER CEREBRAL FUNCTIONS. BLOOD SUPPLY OF THE BRAIN AND SPINAL CORD

1. Where is located the cortical olfactory center?

- a) postcentral gyrus
- b) precentral gyrus
- c) sulcus calcarinus
- d) uncus of parahippocampal sulcus
- e) superior temporal gyrus

2. A lesion in the paracentral lobule causes:

- a) Contralateral foot weakness
- b) Seizures only
- c) Migraine
- d) Cognitive loss
- e) Loss the pain sensation

3. A medial temporal lesion produces:

- a) Visual amnesia only
- b) Auditory amnesia
- c) Apraxia
- d) Anterograde learning problems
- e) Loss the pain sensation

4. Lesion in inferior frontal gyrus causes:

- a) Defect in articulation
- b) Incomprehension of written language
- c) Incomprehension of spoken language
- d) Motor aphasia
- e) Apraxia

5. In right-handed person temporoparietal lobe injury leads to:

- a) Wernicke's aphasia
- b) Urinary incontinence
- c) Motor aphasia
- d) Lower quadrantic hemianopsia
- e) Gaze palsy

6. A patient being evaluated for aphasia is unable to repeat sentences correctly or to name objects properly. However, the patient's speech is effortless and melodic. There are frequent errors in word choice and obvious difficulties in comprehension. The remainder of the patient's

neurologic examination is normal. Damage in which area of the brain would account for this type of aphasia:

- a) Posterior temporal and parietal lobes, dominant hemisphere
- b) Frontal and parietal lobes, dominant hemisphere
- c) Prefrontal and frontal regions, dominant hemisphere
- d) Posterior parietal and temporal lobes, nondominant hemisphere
- e) Frontal and occipital lobes, dominant hemisphere

7. «Prosopagnosia» is characterized by:

- a) Inability to read
- b) Inability to identify faces
- c) Inability to write
- d) Inability to speak
- e) Inability to count

8. The characteristic psychiatric feature of a frontal lobe tumor is

- a) Abnormal gait
- b) Aphasia
- c) Distractibility
- d) Antisocial behavior
- e) Inability to count

9. The patient looks left side and has right side hemiparesis. Where is the lesion localized?

- a) left hemisphere
- b) brain stem
- c) cerebellum
- d) pons
- e) midbrain

10. The patient understands someone else's speech, but doesn't speak. What disturbance of the speech has the patient?

- a) Dysarthria
- b) Broca's aphasia
- c) Agraphia
- d) Wernicke aphasia
- e) Incomprehension of written language

11. The patient has hallucinations which begin with emergence before eyes of stars, sparks, a flame are observed. Where is the lesion localized?

- a) frontal lobe
- b) temporal lobe

- c) parietal lobe
- d) occipital lobe
- e) cerebellum

12. What symptoms has the right-handed person with the damage of the left frontal lobe of a brain?

- a) Broca's aphasia
- b) Alexia
- c) Inability to count
- d) Distractibility
- e) Inability to count

13. Damage of which part of the brain causes auditory, olfactory and taste hallucinations?

- a) Frontal lobe
- b) Parietal lobe
- c) Occipital lobe
- d) Temporal lobe
- e) Cerebellum

14. What symptom will be observed in the lesion of the right parietal lobe at right-handed persons?

- a) Anosognosia
- b) Alexia
- c) Inability to speak
- d) Inability to count
- e) Apraxia

15. What are the typical symptoms for the lesion of the post-central gyrus?

- a) Alexia
- b) Hemiparesis
- c) Monoanesthesia
- d) Inability to count
- e) Apraxia

16. What symptom arises at lesion of the left temporal lobe at right-handed persons?

- a) Motor aphasia
- b) Wernicke's aphasia
- c) Nominal aphasia
- d) Inability to count

e) Anosognosia

17. What symptoms arise at lesion of the left parietal lobe at right-handed persons?

- a) Motor aphasia
- b) Acalculia
- c) Agraphia
- d) Visual agnosia
- e) Anosognosia

18. The patient has the visual agnosia? Where is the lesion localized?

- a) Frontal lobe
- b) Temporal lobe
- c) Parietal lobe
- d) Occipital lobe
- e) Cerebellum

19. Symptoms of damage to the occipital lobe are following, except:

- a) Visual hallucinations
- b) Visual agnosia
- c) Quadrant hemianopsia
- d) Superior quadrantic anopsia
- e) Apraxia

20. Lesion of posterior cerebral artery at brain affects:

- a) Occipital lobe
- b) Pons
- c) Caudate nucleus
- d) Cerebellum
- e) Frontal lobe

TOPIC 6. TUMORS OF THE BRAIN AND SPINAL CORD. PURULENT AND PARASITIC DISEASES.

1. Regarding raised intracranial pressure in adults, true is:

- a) Sutural diastasis
- b) No papilloedema
- c) May present with vomiting, headache and blurred vision
- d) No systemic symptom
- e) Hemiparesis

2. Trans tentorial herniation causes:

- a) Neck stiffness
- b) Motor aphasia
- c) 2nd cranial nerve palsy
- d) 3rd cranial nerve palsy with contralateral papillary dilatation
- e) Agnosia

3. Increased intracranial tension is associated with all except:

- a) Paraparesis
- b) Abducent paralysis
- c) Headache
- d) Visual blurring
- e) Vomiting

4. Increased intracranial tension is not characterized by:

- a) Headache and vomiting
- b) Intellectual changes
- c) Tremor
- d) Papilledema
- e) Tachycardia

5. Indications of glucocorticoids in raised intracranial tension:

- a) Cerebral abscess
- b) Brain tumor
- c) Head injury
- d) Cerebral infarct
- e) Cerebral Hemorrhage

6. Best method to monitor intracranial pressure is:

- a) Intraventricular catheter
- b) Subarachnoid bolt
- c) Intraparenchymal catheter

- d) Epidural catheter
- e) Lumbar puncture

7. Neurocysticercosis should be treated by:

- a) Albendazole
- b) Niclosamide
- c) Amantadin
- d) Emoxipine
- e) Ipidacrine

8. Which of the following is the most common central nervous system parasitic infection?

- a) Echinococcosis
- b) Sparganosis
- c) Paragonimiasis
- d) Neurocysticercosis
- e) Cryptococcosis

9. True statement about neurocysticercosis is:

- a) Seizures due to neurocysticercosis are resistant to antiepileptic drugs
- b) Albendazole is superior to praziquantel in the tt of above condition
- c) Common presentation is 6th CN palsy and hemiparesis
- d) Steroids are used in the management of hydrocephalus
- e) Common presentation is 7^h CN palsy and tremor

10. Commonest presentation of neurocysticercosis is:

- a) Seizures
- b) Focal neurological deficits
- c) Dementia
- d) Radiculopathy
- e) Polyneuropathy

11. Treatment of Neuroechinococcosis multilocularis includes:

- a) Prazequantil
- b) Albendazole
- c) Niclosamide
- d) Flubendazole
- e) Ceftriaxon

12. Cysticercosis present as:

- a) Seizures
- b) Neuropathy

- c) Encephalitis
- d) Muscular hypertrophy
- e) Encephalitis

13. Which of the following is the most common location of intracranial neurocysticercosis?

- a) Brain parenchyma
- b) Subarachnoid space
- c) Spinal cord
- d) Orbit
- e) Dura mater

14. All of the following may cause metastatic tumor causing spinal cord compressions except:

- a) Lung carcinoma
- b) Breast carcinoma
- c) Lymphoma
- d) Meningioma
- e) Colon cancer.

15. Spinal shock is characterized by:

- a) Spasticity
- b) Wasting
- c) Sensory loss
- d) Urinary retention
- e) Areflexia

16. Cervical cord injury does not cause:

- a) Horner's syndrome
- b) Loss of sensation over face
- c) Spasticity of foot
- d) Wasting with fasciculations of lower limb
- e) Tetraparesis

17. Which of the following is not a feature of extra medullary tumor:

- a) Early corticospinal signs and paralysis
- b) Root pain or midline Back-pain
- c) Abnormal CSF
- d) Sacral sparing
- e) Loss of sensation

18. Which of the following signs is not suggestive of a cervical spinal cord injury:

- a) Flaccidity
- b) Increased rectal sphincter tone
- c) Diaphragmatic breathing
- d) Priapism
- e) Horner's syndrome

19. Most common presentation of neuroblastoma is:

- a) Lytic lesion in skull with suture diasthesis
- b) Lung metastasis
- c) Renal invasion
- d) Secondaries in brain
- e) Retinopathy

20. The following symptoms of brain tumor are possible, except:

- a) consciousness impairment
- b) bladder impairment
- c) headache
- d) nausea, vomiting
- e) hemiparesis

TOPIC 7. INFECTIOUS DISEASES OF THE NERVOUS SYSTEM

1. Neurological complications of meningitis include all of the following, except:

- a) Seizures
- b) Increased intracranial pressure
- c) Cerebral hamartoma
- d) Toxic shock
- e) Brain edema

2. Acute Pyogenic Meningitis true is/are:

- a) Purulent exudates within leptomeninges
- b) CSF cloudy with lymphocytes
- c) Spreads to ventricle
- d) Causes ventricular enlargements
- e) High eosinophils level in CSF

3. Purpura can occur in:

- a) Meningococemia
- b) DIC syndrome
- c) HUS
- d) Scurvy
- e) Thrombocytopenia

4. A 15-year-female patient develops loss of appetite, cough followed by neck rigidity. CSF examination shows glucose 40 mg %, protein — 1, 66 g/l, cells — 1000 in 1 mkl (80 % — neutrophils). The likely diagnosis is:

- a) Tubercular meningitis
- b) Brain abscess
- c) Bacterial meningitis
- d) Viral encephalitis
- e) Viral meningitis

5. CSF glucose level is:

- a) Half the plasma glucose
- b) 2/3 plasma glucose
- c) 1/3 plasma glucose
- d) Same as plasma glucose CSF
- e) 3/4 plasma glucose

6. Normal CSF glucose level in the normoglycemic adult is:

- a) 20–40 mg/dl

- b) 40–70 mg/dl
- c) 70–90 mg/dl
- d) 90–110 mg/dl
- e) 110–130 mg/dl

7. A patient's CSF report reads as follows: sugar of 30 mg/dl, protein of 150 mg/dl, chloride of 550 mg/dl; lymphocytosis present; the picture is suggestive of:

- a) Fungal meningitis
- b) Viral meningitis
- c) Tubercular meningitis
- d) Leukemia
- e) Meningococcal meningitis

8. Meningitis with normal glucose seen in:

- a) Tubercular meningitis
- b) Cryptococcus
- c) Coxsackie
- d) Listeria
- e) Meningococcal meningitis

9. Which of the following agent is least likely to cause Meningitis in the elderly:

- a) Listeria Monocytogenes
- b) Streptococcus pneumonia
- c) Gram Negative bacteria
- d) Herpes Simplex Virus – 2
- e) Pneumococcus

10. Acute meningitis in adolescents and young adults is caused by:

- a) N. meningitidis
- b) H. Influenzae
- c) Staphylococcus
- d) Streptococcus
- e) E. Coli

11. Due to delay in reaching a laboratory for analysis of a CSF sample, it should be transported at:

- a) -20°C
- b) -4°C
- c) 20°–40°C
- d) 37°C incubation

e) 57°C at water bath

12. Which of the following is the classical CSF finding seen in Tubercular meningitis?

- a) Increased protein, decreased sugar, increased lymphocytes
- b) Increased protein, sugar and lymphocytes
- c) Decreased protein, increased sugar and lymphocytes
- d) Increased sugar, protein and neutrophils
- e) Increased sugar, decreased protein and neutrophils

13. All of the following CSF findings are present in tuberculous meningitis, except:

- a) Raised protein levels
- b) Low chloride levels
- c) Cob web formation
- d) Raised sugar levels
- e) Increased lymphocytes

14. Characteristic finding in CT in a tuberculous meningitis case is:

- a) Exudate seen in basal cistern
- b) Hydrocephalus is noncommunicating
- c) Calcification commonly seen in umbellium
- d) Ventriculitis is a common finding
- e) Brain damage

15. The CSF findings in tuberculous meningitis are all the following except:

- a) Raised protein
- b) Low sugar
- c) Low chloride
- d) High RBC count
- e) Raised lymphocytes

16. All are complications of tubercular meningitis except:

- a) Hydrocephalus
- b) Infarction
- c) Obliterative endarteritis
- d) Sino venous thrombosis
- e) Intracranial tension

17. A patient with fever had a lumbar puncture done as part of workup for fever. The CSF revealed high proteins with low sugar and marked increase in lymphocytes. The diagnosis is likely to be:

- a) Tubercular meningitis
- b) Bacterial meningitis
- c) Viral encephalitis
- d) Meningococcal meningitis
- e) Leukemia

18. A 15-year-old boy presents to you with history of fever, altered sensorium and purpuric rash for two days. On examination, the patient is found stuporous. He has a BP of 90/60 mmHg and extensive palpable purpura over the legs. Which of the following would be the most appropriate initial choice of antibiotic?

- a) Vancomycin
- b) Penicillin G
- c) Ciprofloxacin
- d) Gentamicin
- e) Doxycycline

19. The drug of choice in Cryptococcal Meningitis is:

- a) Pentostatin
- b) Amphotericin B
- c) Clotrimazole
- d) Zidovudine
- e) Ciprofloxacin

20. Which of the following viruses is not a common cause of viral encephalitis?

- a) Herpes simplex virus type 6
- b) Japanese encephalitis virus
- c) Herpes simplex virus type 1
- d) Cytomegalovirus
- e) Arbovirus

21. A young male develops fever, followed by headache, confusional state, focal seizures and right hemiparesis. The MRI performed shows bilateral frontotemporal hyperintense lesion. The most likely diagnosis is:

- a) Acute pyogenic meningitis
- b) Herpes simplex encephalitis
- c) Neurocysticercosis
- d) Carcinomatous meningitis

e) Leukemia

22. The drug of choice in Herpes Simplex Encephalitis is:

- a) Acyclovir
- b) Zidovudine
- c) Amantadine
- d) Vidarabine
- e) Clotrimazole

23. Commonest cause of sporadic encephalitis is:

- a) Japanese B Virus
- b) Herpes Simplex Virus
- c) Human Immunodeficiency Virus
- d) Rubella Virus
- e) Cytomegalovirus

24. Herpes simplex encephalitis diagnosed by:

- a) MRI
- b) Biopsy
- c) Corneal scraping and culture
- d) EEG
- e) CSF PCR of HSV DNA

25. True about HSV encephalitis is/are:

- a) Caused by HSV-1
- b) Hemorrhagic lesion seen
- c) Frontal lobe lesion seen
- d) Eosinophilic inclusion bodies seen
- e) Xanthochromia not seen

26. Symptoms of poliomyelitis include the following except:

- a) lower spastic paraplegia
- b) bulbar syndrome
- c) asymmetric peripheral paresis of legs
- d) flaccid paralysis of the facial nerve
- e) flaccid paralysis of the accessory nerve

27. Symptoms of meningitis include the following except:

- a) change of CSF
- b) fever
- c) thorax pain, cough
- d) neck stiffness

e) high temperature

TOPIC 8. VASCULAR DISEASES OF NERVOUS SYSTEM

1. Anterior cerebral artery occlusion can cause:

- a) Urinary retention
- b) Sensory aphasia
- c) Hemianaesthesia of opposite side of face
- d) Hemianopia
- e) Motor aphasia

2. Prosopagnosia is inability to:

- a) Recognize normal daily object by feel and touch
- b) Correct grammatical mistakes
- c) Smell properly
- d) Read and write sentences
- e) Recognize faces

3. Pontine Stroke is associated with all except:

- a) Bilateral pin point pupil
- b) Pyrexia
- c) Vagal palsy
- d) Quadriparesis
- e) Tachycardia

4. Which of the following is the most common cause of late neurological deterioration in a case of cerebro-vascular accident:

- a) Rebleeding
- b) Vasospasm
- c) Embolism
- d) Hydrocephalus
- e) High BP

5. For screening of proximal internal carotid artery stenosis should be used:

- a) Doppler flow USG
- b) CT subtraction angiography
- c) MRI
- d) Angiography
- e) PET

6. Which is true about carotid stenosis?

- a) Ipsilateral hemiplegia by embolism of MCA
- b) Bruit indicates severity of stenosis

- c) Common in ECA
- d) Aspirin reduces risk of TIA
- e) Main symptom is loss sensation

7. Following sensory impairments occur in extensive damage of somatosensory area of cerebral cortex, except:

- a) Pressure
- b) Sensory localization
- c) Exact weight determination
- d) Pain
- e) loss of sensation

8. Hemiplegia is most commonly caused by thrombosis of:

- a) Anterior cerebral artery
- b) Middle cerebral artery
- c) Posterior cerebral artery
- d) Basilar artery
- e) Vertebral artery

9. Which of the following is not a usual feature of right middle cerebral artery territory infarct?

- a) Aphasia
- b) Hemiparesis
- c) Facial weakness
- d) Dysarthria
- e) Loss sensation

10. A hypertensive individual had a sudden headache and became unconscious within a few minutes. On regaining consciousness, there was complete flaccid hemiplegia with no involvement of upper face, absence of tendon reflexes and a positive Babinski sign. Which one of the following arteries could have ruptured?

- a) Lateral striate branch of middle cerebral
- b) Medial striate branch of anterior cerebral
- c) Posterolateral branch from posterior cerebral
- d) Posterior choroidal branch of posterior cerebral
- e) Basilar artery

11. Hemiplegia is commonly associated with embolism of the:

- a) Anterior cerebral artery
- b) Middle cerebral artery
- c) Posterior cerebral artery

- d) Anterior communicating artery
- e) Basilar artery

12. Commonest cause of cerebral infarction is:

- a) Embolism
- b) Arteritis
- c) Thrombosis
- d) Cysticercosis
- e) Hypertension

13. Most common cause of cerebrovascular accident is:

- a) Embolism
- b) Arterial thrombosis
- c) Venous thrombosis
- d) Hemorrhage
- e) Hypertension

14. Commonest cause of cerebrovascular accident is:

- a) Arterial thrombosis
- b) Venous thrombosis
- c) Embolism
- d) Tumor
- e) Hypertension

15. Most common cause of stroke in young women in India among OCP users:

- a) Cortical vein thrombosis
- b) Moya-moya disease
- c) Atherosclerosis
- d) Hypertension
- e) Embolism

16. Hemorrhagic infarction is seen in:

- a) Venous thrombosis
- b) Thrombosis
- c) Septicemia
- d) Embolism
- e) Central venous thrombosis

17. Memory impairment occurs in embolism of posterior cerebral artery because of damage to:

- a) Hippocampal gyrus

- b) Superior temporal gyrus
- c) Prefrontal gyrus
- d) Angular gyrus
- e) Frontal lobe

18. All of the following are used to decrease intracranial pressure, except:

- a) Pentoxifylline
- b) Mannitol
- c) Steroid
- d) Hyperventilation
- e) Craniectomy

19. The only thrombolytic agent approved for the treatment of ischemic stroke is:

- a) Tissue Plasminogen activator
- b) Streptokinase
- c) Urokinase
- d) Pro-urokinase
- e) Tenecteplasa

20. Which is least common site of berry aneurysm:

- a) Basilar artery
- b) Vertebral artery
- c) Anterior cerebral artery
- d) Posterior cerebral artery
- e) Medium cerebral artery

21. Most common cause of subarachnoid hemorrhages:

- a) Hypertension
- b) AV malformation
- c) Berry aneurysm
- d) Trauma
- e) Embolism

22. The most common site of Berry aneurysm is:

- a) Junction of anterior communicating artery with anterior cerebral artery
- b) Junction of posterior communicating artery with internal carotid artery
- c) Bifurcation of middle cerebral artery
- d) Vertebral artery
- e) Medium cerebral artery

23. Commonest cause of subarachnoid hemorrhage is:

- a) Rupture of circle of Willis aneurysm
- b) Rupture of vertebral artery aneurysm
- c) Rupture of venocomitants of corpus striatum
- d) Rupture of Dural sinuses
- e) Rupture of middle cerebral artery

24. A 25-year-old male had severe headache followed by unconsciousness. CSF tap revealed red blood cells. Most likely diagnosis is:

- a) Subdural hematoma
- b) Embolism
- c) Tumor
- d) Ruptured aneurysm
- e) Trauma

25. A 45 years old hypertensive male presented with sudden onset severe headache, vomiting and neck stiffness. On examination he didn't have any focal neurological deficit. His CT scan showed blood in the Sylvian fissure. The probable diagnosis is:

- a) Meningitis
- b) Ruptured aneurysm
- c) Hypertensive bleed
- d) Stroke
- e) Trauma

26. A 45-year-old hypertensive male patient presented in the casualty with two hours' history of sudden onset of severe headache associated with nausea and vomiting on clinical examination the patient had neck stiffness and right sided ptosis. Rest of the neurological examination was normal. What is the clinical diagnosis?

- a) Hypertensive brain hemorrhage
- b) Migraine
- c) Aneurysmal subarachnoid hemorrhage
- d) Arteriovenous malformation hemorrhage
- e) Hypertension

27. A nondiabetic, non-hypertensive adult male develops sudden severe headache with altered sensorium, likely diagnosis is:

- a) Brain tumor
- b) Subarachnoid hemorrhage
- c) Encephalitis
- d) Meningitis

e) Hypertension

28. Most common cause of spontaneous subarachnoid hemorrhage is:

- a) Trauma
- b) Hypertension
- c) Berry aneurysm rupture
- d) Raised intracranial tension
- e) Encephalitis

29. The common cause of subarachnoid hemorrhage is:

- a) Arterio-venous malformation
- b) Cavernous angioma
- c) Aneurysm
- d) Hypertension
- e) Trauma

30. Most common cause of subarachnoid hemorrhage is:

- a) Hypertension
- b) Aneurysm
- c) Arterio-venous malformation
- d) Bleeding disorders
- e) Trauma

31. Most common cause of intracranial hemorrhage is:

- a) Subarachnoid hemorrhage
- b) Intracerebral hemorrhage
- c) Subdural hemorrhage
- d) Extradural hemorrhage
- e) Trauma

32. Most common cause of subarachnoid hemorrhage is:

- a) Hypertension
- b) Berry aneurysm
- c) Intracranial tumors
- d) Arterio-venous malformations
- e) Trauma

33. Sudden excruciating headache is seen in:

- a) Subarachnoid hemorrhage
- b) Aneurysmal bleeding
- c) Epilepsy
- d) Intracerebral hemorrhage

e) Histeria

34. Lacunar infarcts are caused by:

- a) Lipohyalinosis of penetrating arteries
- b) Middle carotid artery involvement
- c) Emboli to anterior circulation
- d) None of the above
- e) Trauma

35. Lacunar infarction is not characterized by the development of:

- a) Pure sensory weakness
- b) Pure motor weakness
- c) Ataxic paresis
- d) Dysarthria
- e) Quadriparesis

TOPIC 9. AUTOIMMUN AND DEGENERATIVE DISEASES OF THE NERVOUS SYSTEM

1. The main symptoms of multiple sclerosis are all of the following except:

- a) central paresis
- b) muscular atrophy
- c) ataxia
- d) disorders of urination
- e) retrobulbar neuritis

2. Multiple sclerosis is not characterized by the presence of:

- a) fasciculations
- b) increased deep reflexes
- c) decreased abdominal reflexes
- d) nystagmus
- e) intentional tremor

3. In the diagnosis of multiple sclerosis all diagnostic methods can be used with the exception of:

- a) MRI of the brain
- b) MRI of the spinal cord
- c) cerebrospinal fluid examination
- d) evoked potentials
- e) echoencephalography

4. For the pathogenetic treatment of exacerbation of multiple sclerosis should be used:

- a) analgesics
- b) muscle relaxants
- c) nootropic drugs
- d) corticosteroids
- e) anticonvulsants

5. The main drugs that change the course of multiple sclerosis include all of the following except:

- a) Interferon beta
- b) Copaxone
- c) Methylprednisolone
- d) Fingolimod
- e) Natalizumab

6. What symptom is not characterized for Parkinson's disease?

- a) postural instability
- b) bradykinesia
- c) rigidity
- d) tremor
- e) paresis

7. Parkinson's disease is not characterized by the presence of:

- a) positive Babinski's symptom
- b) acheiroparesis
- c) shuffling gait
- d) micrographia
- e) vegetative disorders

8. The main groups of drugs for the pathogenetic treatment of Parkinson's disease include all of the following, except:

- a) agonists of dopamine receptors
- b) preparations of levodopa
- c) amantadine
- d) MAO-inhibitors of the type B
- e) antipsychotics

9. What medicine belongs to agonists of dopamine receptors?

- a) Entacapone
- b) Pramipexole
- c) Selegine
- d) Trihexiphenidyl
- e) Midantane

10. What is the main surgical treatment for Parkinson's?

- a) deep brain stimulation
- b) callosotomy
- c) lobectomy
- d) vagus nerve stimulation
- e) thalamotomy

11. The main direction of treatment for acute disseminated encephalomyelitis is the appointment of:

- a) corticosteroids
- b) beta-blockers
- c) non-steroidal anti-inflammatory drugs
- d) osmotic diuretics

e) surgical treatment

12. The main symptoms of myasthenia gravis are all of the following, except:

- a) weakness and fatigue of the skeletal muscles
- b) dementia
- c) ptosis
- d) bulbar disturbances
- e) weakness of the masseter muscles

13. Diagnosis of myasthenia gravis includes all of the following methods except:

- a) Neostigmine test
- b) electroneuromyography
- c) immunological blood test
- d) CT or MRI of the anterior mediastinum
- e) cerebral angiography

14. What medicine is not used in the treatment of myasthenia gravis?

- a) Prednisolone
- b) Piridostigmine bromide
- c) Amantadine
- d) Cyclophosphamide
- e) plasmapheresis

15. The symptoms of amyotrophic lateral sclerosis do not include:

- a) muscle weakness
- b) atrophy and fasciculation
- c) bulbar disorders
- d) pseudobulbar syndrome
- e) hyperkinesia

16. What is the main method for the diagnosis of amyotrophic lateral sclerosis?

- a) electroneuromyography
- b) electroencephalography
- c) magnetic resonance imaging
- d) CT scan
- e) transcranial dopplerography

17. Alzheimer's symptoms do not include:

- a) dementia

- b) ataxia
- c) aphasia
- d) apraxia
- e) agnosia

18. The following drugs may be used in the treatment of Alzheimer's disease except:

- a) Galantamine
- b) Akantinode memantine
- c) D-Penicillamine
- d) Donepezile Hydrochloride
- e) Choline Alfoscerate

19. What type of sensitive disorder is observed in syringomyelia?

- a) mononeuritic
- b) polyneuritic
- c) segmental of "a jacket"
- d) conductive
- e) cerebral

20. Trophic and autonomic disorders of syringomyelia include the following except:

- a) painless felon
- b) Raynaud's syndrome
- c) Charcots osteoarthropathy
- d) Horner's syndrome
- e) hyperkeratosis

21. All are clinical features of myasthenia gravis, except:

- a) Spontaneous remission
- b) Absent deep tendon reflexes
- c) Proximal muscle involvement
- d) Worsen by exertion
- e) Oculomotor disorders

22. A 45-year-old woman, presenting with the history of diplopia and dysphagia worsening as the day progresses, can be diagnosed to have:

- a) Thyrotoxicosis
- b) Myasthenia gravis
- c) Muscular dystrophy
- d) Brain tumor
- e) Stroke

23. Myasthenia gravis is associated with:

- a) Decreased acetyl choline at nerve endings
- b) Decreased myosin
- c) Absent troponin C
- d) Decreased myoneural junction transmission
- e) Muscle inflammation

24. Drug of choice for myasthenia gravis:

- a) Gallamine
- b) Succinylcholine
- c) D tubocurare
- d) Pyridostigmine
- e) Pyracetami

25. All are features of Parkinson's disease, except:

- a) Resting tremors
- b) Brady or hypokinesia
- c) Rigidity
- d) Preserved postural reflexes
- e) Depression

26. True about Alzheimer's disease:

- a) Mutation in APP gene
- b) Autoimmune disease
- c) Aluminum is a risk factor
- d) Viral infection has a risk
- e) Hereditary

27. Alzheimer's Disease is associated with:

- a) Delirium
- b) Delusion
- c) Dementia
- d) Depression
- e) Hemiparesis

28. Alzheimer's disease, true is all except:

- a) Anterograde amnesia
- b) Dysdiadochokinesia
- c) Receptive aphasia
- d) Recognition of familiar faces is absent
- e) Memory loss

29. Which sign is pathognomonic for motor neuron disease?

- a) Fasciculation
- b) Bladder, bowel involvement
- c) Pseudohypertrophy
- d) Sensory loss in patchy manner
- e) Ataxia

30. Motor neuron disease, true is

- a) Sensory involvement
- b) Ocular motility is impaired
- c) Involvement of anterior and lateral columns of spinal cord
- d) Intellectual improvement
- e) Ataxia

31. Fasciculations are seen in:

- a) Motor neuron disease
- b) Duchenne's muscular dystrophy
- c) Polymyositis
- d) Multiple sclerosis
- e) None of the above

32. Amyotrophic lateral sclerosis involves:

- a) Anterior horn cells
- b) Posterior horn cells
- c) Dorsal root ganglia
- d) Ventral root ganglia
- e) Myoneural junction

33. Impotence is a feature of which of the following:

- a) Multiple sclerosis
- b) Poliomyelitis
- c) Amyotrophic lateral sclerosis
- d) Meningitis
- e) Trauma

TOPIC 10. HEREDITARY DISEASES OF THE NERVOUS SYSTEM

1. 38-year-old patient has chorea hyperkinesia, progressive dementia, and psychiatric disorders. What disease should be suspected by a doctor?

- a) Amyotrophic lateral sclerosis
- b) Alzheimer's disease
- c) Hepatocerebral dystrophy
- d) Parkinson's disease
- e) Huntington's disease

2. What are the first-line drugs for the treatment of Huntington's disease?

- a) corticosteroids
- b) antipsychotics
- c) muscle relaxants
- d) analgesics
- e) anticholinesterase drugs

3. What is the consequence of a genetic mutation in Wilson-Konovalov disease?

- a) iron metabolism disorder
- b) copper metabolism disorder
- c) calcification of the basal ganglia
- d) degeneration of spinal cord motor neurons
- e) autoimmune process

4. Wilson's disease is not characterized by the presence of:

- a) hepatitis, cirrhosis
- b) hyperkinetic syndrome
- c) akinetic-rigid syndrome
- d) epileptic seizures
- e) autonomic nervous system disorders

5. What is the main drug for the treatment of Wilson's disease?

- a) Prednisone
- b) Haloperidol
- c) D-penicillamine
- d) Baclofen
- e) Pyridostigmine bromide

6. Symptoms of Duchenne myodystrophy are the following, except:

- a) progressive muscle weakness

- b) muscle atrophy
- c) lack of deep reflexes
- d) pathological reflexes
- e) gastrocnemius pseudohypertrophy

7. A child with muscular dystrophy, while getting up from a lying position, uses support on his hands and lift on himself as on a ladder. This symptom is called:

- a) Babinski symptom
- b) Stuart-Holmes symptom
- c) acherokinesis
- d) Gowers symptom
- e) pathological symptom of Marinescu-Radovici

8. Extra neural symptoms of Duchene myodystrophy include the following except:

- a) joint contractures
- b) scoliosis
- c) cardiomyodystrophy
- d) endocrine disorders
- e) deafness

9. What method is not used in the diagnosis of primary muscular dystrophy?

- a) electroencephalography
- b) genetic testing
- c) electroneuromyography
- d) blood CPK test
- e) muscle biopsy

10. What drugs are not used in the treatment of muscular dystrophy?

- a) muscle relaxants
- b) metabolic drugs
- c) parasympathomimetic drugs
- d) physiotherapeutic treatment
- e) orthopedic correction

11. In spinal amyotrophy takes place degeneration of:

- a) neurons of the precentral gyrus
- b) neurons of the anterior horns of the spinal cord
- c) cerebellum
- d) basal nuclei

e) lateral columns of the spinal cord

12. What is the main symptom of Werdnig-Hoffmann disease?

- a) cerebellar ataxia
- b) hemianopsia
- c) flaccid tetraparesis
- d) dementia
- e) sensory ataxia

13. A 17-year-old patient has distal lower paraparesis, the absence of Achilles reflexes, atrophy of the lower leg muscles, and steppage when walking. What hereditary disease can be assumed?

- a) spinal amyotrophy
- b) Duchenne myodystrophy
- c) hereditary spastic paraplegia
- d) Charcot-Marie-Tooth disease
- e) Friedreich's disease

14. What is the main instrumental method for the diagnosis of hereditary polyneuropathies?

- a) MRI of the brain
- b) MRI of the spinal cord
- c) polysomnography
- d) electroneuromyography
- e) echoencephalography

15. A 25-year-old patient has difficulty relaxing muscles, their spasm for several seconds, arising after a voluntary contraction. What diagnosis may be suspected?

- a) myasthenia gravis
- b) myodystrophy
- c) myotonia
- d) spinal amyotrophy
- e) hereditary polyneuropathy

16. Myotonia is not characterized by the presence of:

- a) generalized muscle hypertrophy
- b) difficulty relaxing muscles
- c) percussion symptoms
- d) progressive muscle atrophy
- e) increased symptoms in the cold

17. In hereditary spastic paraplegia occurs degeneration of:

- a) posterior columns of the spinal cord
- b) lateral columns of the spinal cord
- c) anterior horns of the spinal cord
- d) posterior horns of the spinal cord
- e) basal nuclei

18. What symptoms are not observed in Strumpell disease?

- a) increase in muscle tone
- b) pathological reflexes
- c) increased deep reflexes
- d) deformation of the feet
- e) atrophy, fasciculations

19. Symptoms of Friedreich's disease include the following except:

- a) meningeal symptoms
- b) progressive ataxia
- c) lack of deep reflexes
- d) decreased deep sensitivity
- e) pathological reflexes

20. Extra neural symptoms in Friedreich disease do not include:

- a) deformation of the feet
- b) kyphoscoliosis
- c) cardiomyopathy
- d) cataract
- e) pigmented nevi

21. Bilateral loss of ankle jerk and extensor plantar response is seen in:

- a) Amyotrophic lateral sclerosis
- b) Freidrich's ataxia
- c) Tabes dorsalis
- d) Lead poisoning
- e) Multiple sclerosis

22. Earliest presentation of Friedrich's ataxia is

- a) Ataxia
- b) Seizures
- c) Optic atrophy
- d) Stuttering
- e) Loss sensation

23. Huntington's disease is due to the loss of:

- a) Nigrostriatal dopaminergic neurons
- b) Intrastriatal cholinergic neurons
- c) Intrastriatal GABAergic neurons
- d) Intrastriatal cholinergic and GABAergic neurons
- e) Intrastriatal dopaminergic neurons

24. All are true about Huntington's disease except:

- a) Chorea
- b) Behavioral disturbance
- c) Early onset of memory loss
- d) Cog-wheel rigidity
- e) Dementia

25. Inverted champagne bottle muscle atrophy occurs in:

- a) Peroneal muscular atrophy
- b) Duchene's muscular dystrophy
- c) Progressive muscular atrophy
- d) Amyotrophic lateral sclerosis
- e) Multiple sclerosis

TOPIC 11. DISORDERS OF THE PERIPHERAL AND AUTONOMIC NERVOUS SYSTEM

1. What symptom is not observed in acute inflammatory demyelinating polyradiculoneuropathy?

- a) progressive tetraparesis
- b) cranial nerve damage
- c) respiratory disorders
- d) sensitivity disorders
- e) increased deep reflexes

2. What is the main instrumental method for the diagnosis of acute inflammatory demyelinating polyradiculoneuropathy?

- a) electroencephalography
- b) electroneuromyography
- c) ultrasound vascular examination
- d) MRI of the brain
- e) Spinal cord MRI

3. The following measures may be used in the treatment of Guillain-Barré syndrome except:

- a) plasmapheresis
- b) administration of immunoglobulins
- c) administration of corticosteroid
- d) artificial lung ventilation
- e) nasogastric tube placement

4. In a 56-year-old patient progressive asymmetric flaccid distal lower paraparesis is observed over a period of 7 weeks. An EMG study revealed a decrease in the speed of all the nerves of the lower extremities being studied. What diagnosis can be made?

- a) Guillain-Barré syndrome
- b) myasthenia gravis
- c) muscular dystrophy
- d) lower spastic paraplegia
- e) chronic inflammatory demyelinating polyradiculoneuropathy

5. Motor disorders in polyneuropathies may include the following except:

- a) tetra- or paraparesis
- b) decreased muscle tone
- c) amyotrophy

- d) cramps
- e) rigidity

6. Sensitive disorders in polyneuropathies may include the following except:

- a) sensory ataxia
- b) paresthesia
- c) neuropathic pain
- d) hypesthesia
- e) hyperosmia

7. The autonomic manifestations of polyneuropathies do not include:

- a) central urine retention
- b) orthostatic hypotension
- c) hypohidrosis
- d) impaired gastrointestinal motility
- e) fixed heart rate, tachycardia

8. What drug is not used in the treatment of polyneuropathy?

- a) Mannitol
- b) Meldonium
- c) Thioctic acid
- d) Ipidacrine
- e) Pentoxifylline

9. A 45-year-old patient has lower back pain irradiating to the back of the left leg and a positive left side Laseque symptom; deep reflexes are not changed, muscle strength is 5 points, sensory disturbances are absent. What will be the preliminary diagnosis?

- a) lumbalgia
- b) left-sided lumbar ischialgia
- c) left-sided radiculopathy L₅
- d) left-side radiculopathy S₁
- e) left-sided radiculoischemia S₁

10. A 53-year-old patient complains of pain in the lower back and the outer surface of the right leg, numbness of the outer surface of the right shin and inner surface of the foot, difficulty in extending the thumb of the right foot. What diagnosis may be suspected?

- a) right-sided lumbar ischialgia
- b) right-sided radiculopathy L₅
- c) right-sided radiculoischemia L₅

- d) right-sided radiculopathy S₁
- e) right-sided radiculoischemia S₁

11. A 38-year-old patient has pain in the cervical spine and right arm, decreased sensitivity of 2–3 fingers of the right hand and the back surface of the right hand and forearm, the absence of triceps reflex on the right. What diagnosis may be suspected?

- a) right-sided cervicobrachialgia
- b) right-sided radiculopathy C₅
- c) right-sided radiculopathy C₆
- d) right-sided radiculopathy C₇
- e) right-sided radiculopathy C₈

12. Symptoms of the median nerve lesion do not include:

- a) pain and paresthesia of 1–4 fingers
- b) atrophy of tenor muscles
- c) 1–3 finger flexors weakness
- d) vegetative disturbances
- e) paresis of the extensor muscles of the forearm

13. What is the main symptom of the radial nerve lesion?

- a) dropped hand
- b) paresis of the flexors of the hand
- c) absence of biceps reflex
- d) atrophy of tenor and hypotenor muscles
- e) numbness of 1–3 fingers of the hand

14. What instrumental method is not used in the diagnosis of vertebral lesions of the peripheral nervous system?

- a) CT scan
- b) magnetic resonance imaging
- c) electroneuromyography
- d) x-ray examination
- e) ultrasound dopplerography

15. The following measures may be used in the treatment of vertebral lesions of the peripheral nervous system except:

- a) drug treatment
- b) physiotherapy
- c) paravertebral blockade
- d) surgical treatment
- e) thrombolytic therapy

16. What group of drugs is not used for treatment of vertebral lesions of the peripheral nervous system?

- a) non-steroidal anti-inflammatory drugs
- b) calcium channel blockers
- c) muscle relaxants
- d) anticonvulsants
- e) corticosteroids

17. What medicine should not be used for relief of pain syndrome in vertebral lesions of the peripheral nervous system?

- a) Meloxicam
- b) Celecoxib
- c) Ipidacrine
- d) Gabapentin
- e) Fluoxetine

18. The symptoms of a femoral nerve lesion do not include:

- a) paresis of the hip flexors and extensors of the lower leg
- b) hypesthesia of the anterior thigh
- c) positive Babinski symptom
- d) lack of knee reflex
- e) positive symptoms of Wasserman, Matskevich

19. What symptom is not characteristic for the lesion of the tibial nerve?

- a) paresis of the flexors of the foot and fingers
- b) decrease of the Achilles reflex
- c) decrease of the plantar reflex
- d) steppage when walking
- e) hypesthesia of the posterior surface of the lower leg and plantar surface of the foot

20. A patient 50-years old after a long sleep in an uncomfortable position complains of weakness of the left foot, inability to stand on the left heel, numbness of the front surface of the left lower leg and foot. What nerve damage can be suspected?

- a) tibial nerve
- b) peroneal nerve
- c) femoral nerve
- d) sciatic nerve
- e) sural nerve

21. Which of the following statements is true regarding Guillain Barre Syndrome:

- a) Facial nerve palsy occurs
- b) Spasticity
- c) Hyperreflexia
- d) Pyramidal signs
- e) Distal muscle weakness

22. A child presents with ascending flaccid paralysis. There is subsequent respiratory muscle involvement. CSF examination shows albumin- cytological dissociation. Treatment of choice is:

- a) Cycloserine
- b) Oral prednisolone
- c) I.V. Methylprednisolone
- d) I.V. Immunoglobins
- e) Piracetam

23. Characteristic and common presentation of diabetic neuropathy is:

- a) Amyotrophy
- b) Mononeuropathy
- c) Symmetrical distal polyneuropathy
- d) Autonomic neuropathy
- e) Symmetrical proximal polyneuropathy

24. Sensory motor neuropathy caused by:

- a) Diabetes mellitus
- b) Lead poisoning
- c) Arsenic
- d) Leprosy
- e) AIDS

25. All are true about peripheral neuropathy except:

- d) Decreased reflexes
- a) Glove and stocking anesthesia
- b) Proximal muscle weakness
- c) Nerve conduction deficit
- e) Distal muscle weakness

26. Injury to the Ulnar nerve at the wrist causes paralysis:

- a) Apposition of the thumb
- b) Abduction of the carpo-metacarpal joint of the thumb

- c) Adduction of the thumb
- d) Flexion of the MCP joint of the middle finger
- e) Flexion of the thumb

27. Claw hand is caused by lesion involving:

- a) Ulnar nerve
- b) Median nerve
- c) Radial nerve
- d) Posterior interosseous nerve

28. Carpel tunnel syndrome is due to compression of:

- a) Radial nerve
- b) Ulnar nerve
- c) Palmer branch of the Ulnar nerve
- d) Median nerve

29. True about carpal tunnel syndrome:

- a) Paresthesia of the lateral 2 fingers
- b) Atrophy of the thenar eminence
- c) Atrophy of the hypothenar eminence
- d) Claw hand
- e) Tinel sign is positive

30. Which of the following does not predispose to carpal tunnel syndrome?

- a) Hypertension
- b) Hypothyroidism
- c) Pregnancy
- d) Acromegaly
- e) Female

31. A previously healthy 45 yrs. old laborer suddenly develops acute lower back pain with right-leg pain and weakness of dorsiflexion of the right great toe. Which of the following is true?

- a) Immediate treatment should include analgesics muscle
- b) The appearance of the foot drop indicates early surgical intervention
- c) If the neurological sign resolves within 2 to 3 weeks but low back pain persists, the proper treatment would include fusion of affected Lumbar vertebra.
- d) If the neurological signs fail to resolve within 1 week, Lumbar laminectomy and excisions of any herniated nucleus pulposus should be done
- e) Immediate treatment should include back strengthening exercises

32. Pain along hip, back of thigh and loss of sensation along the lateral border of foot and decreased ankle jerk, site of lesion is:

- a) L₄-L₅
- b) L₅-S₁
- c) L₃
- d) L₁-T₁₂
- e) Metacarpals

33. Backache, radiating to groin, along lateral part of thigh, front of leg and dorsum of foot is mostly due to disc prolapse at:

- a) L₄-L₅
- b) S₁-S₂
- c) L₅-S₁
- d) L₂-L₃
- e) L₃

**TOPIC 12. EPILEPSY AND PAROXYSMAL CONDITIONS.
HEAD AND FACIAL PAIN**

1. Absence seizures are characterized on EEG by:

- a) 3 Flz spike and wave
- b) 1–2 Hz spike and wave
- c) Generalized polyspikes
- d) Hypsarrhythmia
- e) Ones polyspikes

2. Myoclonic seizure typically seen in:

- a) Subacute sclerosing panencephalitis (SSPE)
- b) Cerebellar lesion
- c) Pontine lesion
- d) Thalamic lesion
- e) Frontal lobe lesion

3. True about juvenile myoclonic epilepsy:

- a) Focal seizure
- b) Generalized seizure
- c) Myoclonus
- d) Responses to Sodium Valproate
- e) Spike and waves in EEG

4. All are used in status epilepticus, except:

- a) Phenytoin
- b) Carbamazepine
- c) Diazepam
- d) Phenobarbitone
- e) Thiopentone sodium

5. In generalized tonic- clonic Status epilepticus drug of choice is:

- a) Ethosuxamide.
- b) Sodium valproate
- c) Lamotrigine
- d) Diazepam
- e) Vigabatrin

6. All of the following are features of absence seizures except:

- a) Usually seen in childhood
- b) 3-Hz spike wave in EEG
- c) Postictal confusion

- d) Precipitation by hyperventilation
- e) Generalized seizures

7. All of the following drugs are used for managing status epilepticus except:

- a) Phenytoin
- b) Diazepam
- c) Thiopentone sodium
- d) Carbamazepine
- e) Propaphol

8. 1st line drug to be used in absence seizures:

- a) Phenytoin
- b) BZD
- c) Valproate
- d) Carbamazepine
- e) Diazepam

9. All of the following drugs are used for managing status epilepticus except:

- a) Phenytoin
- b) Diazepam
- c) Thiopentone sodium
- d) Carbamazepine
- e) Propaphol

10. The drug of choice for absence seizures:

- a) Valproate
- b) Gabapentin
- c) Carbamazepine
- d) Phenytoin
- e) Diazepam

11. Absence seizures are seen in:

- a) Grand mal epilepsy
- b) Myoclonic epilepsy
- c) Petit mal epilepsy
- d) Hyperkinetic child
- e) Febrile seizures

12. A 45-year-old man presents with a daily headache. He describes two attacks per day over the past 3 weeks. Each attack lasts about an hour and awakens the patient from sleep. The patient has noted associated tearing and reddening of his right eye as well as nasal stuffiness. The pain is deep, excruciating, and limited to the right side of the head. The neurologic examination is nonfocal. The most likely diagnosis of this patient's headache is:

- a) Migraine headache
- b) Cluster headache
- c) Tension headache
- d) Brain tumor
- e) Intracranial tension

13. Cluster headache is characterized by all, except:

- a) Affects predominantly females.
- b) Unilateral headache.
- c) Onset typically in 20–50 years of life.
- d) Associated with conjunctival congestion.
- e) Associated with depression

14. A 35-year-old lady has unilateral headache, nausea, vomiting and visual blurring. The diagnosis is:

- a) Migraine
- b) Glaucoma
- c) Subarachnoid hemorrhage
- d) Posterior fossa cyst.
- e) Trigeminal neuralgia

15. What is drug of choice for acute attack of migraine:

- a) Methysergide
- b) Caffeine
- c) Amitryptiline
- d) Sumatriptan
- e) Duloxetine

16. A female has episodic, recurrent headache in left half of head with nausea and paresthesia on right upper and lower limbs is most probably suffering from:

- a) Migraine
- b) Glossopharyngeal neuralgia
- c) Herpes zoster infection of trigeminal Nerve
- d) Brain tumor

e) Trigeminal neuralgia

17. Ophthalmoplegic migraine means:

- a) When headache is followed by complete paralysis of the III and VI nerve on the same side as the hemicrania
- b) When the headache is followed by partial paralysis of the IIIrd nerve on the same side as the hemicrania without any scotoma
- c) Headache associated with III, IV and VI nerve paralysis
- d) Headache associated with optic neuritis
- e) Headache associated with VII nerve paralysis

18. Which of the following drugs is useful in prophylaxis of migraine?

- a) Propranolol
- b) Sumatriptan
- c) Domperidone
- d) Ergotamine
- e) Corticosteroids

19. A female aged 30, presents with episodic throbbing headache for past 4 years with nausea and vomiting. Most likely diagnosis is:

- a) Migraine
- b) Cluster headache
- c) Angle closure glaucoma
- d) Temporal arteritis
- e) Trigeminal neuralgia

20. A woman complains of headache associated with paresthesia of the right upper and lower limb. Likely diagnosis is:

- a) Trigeminal neuralgia
- b) Glossopharyngeal neuralgia
- c) Migraine
- d) Cluster headache
- e) Trigeminal neuralgia

21. A woman has bilateral headache that worsens with emotional stress; she has two children, both doing badly in school; diagnosis is:

- a) Migraine
- b) Cluster headache
- c) Tension headache
- d) Trigeminal neuralgia
- e) Trigeminal neuralgia

22. All the following drugs are used for absence seizures except:

- a) Clonazepam
- b) Phenytoin
- c) Valproate
- d) Ethosuximide
- e) Lamotrigine

23. Drug of choice in simple focal seizure is:

- a) Phenytoin
- b) Valproic acid
- c) Carbamazepine
- d) Phenobarbitone
- e) Diazepam

**TOPIC 13. TRAUMATIC BRAIN AND SPINAL CORD INJURY.
NEUROSURGICAL TREATMENT OF VASCULAR DISEASES OF
NERVOUS SYSTEM**

1. Severe head injury does not include:

- a) brain concussion
- b) brain contusion of severe degree
- c) compression of the brain
- d) diffuse axonal damage
- e) compression of the head

2. What symptom is not characterized for brain concussion?

- a) headache
- b) amnesia
- c) autonomic symptoms
- d) transient neurological micro symptoms
- e) loss of consciousness for 1 hour

3. The symptoms of moderate brain contusion do not include:

- a) loss of consciousness for 5 hours
- b) flaccid tetraparesis
- c) meningeal syndrome
- d) amnesia
- e) brain stem symptoms

4. A 58-year-old patient complains of a headache, memory impairment, and weakness in the right extremities growing over the past week. He notes that about 2 months he accidentally fell and hit his head, did not lose consciousness, did not consult a doctor. What disease should be excluded in the first place?

- a) cerebral infarction
- b) subarachnoid hemorrhage
- c) chronic subdural hematoma
- d) brain tumor
- e) meningitis

5. Symptoms of acute epi- and subdural hematomas are the following except:

- a) lucid interval
- b) homolateral mydriasis
- c) contralateral hemiparesis
- d) bradycardia

e) dementia

6. What instrumental method is not used in the diagnosis of head injury?

- a) magnetic resonance imaging
- b) X-ray examination
- c) CT scan
- d) electroneuromyography
- e) cerebral angiography

7. What group of drugs is not used to treat head injury:

- a) diuretics
- b) anticoagulants
- c) neuroprotectors
- d) anticonvulsants
- e) antipsychotics

8. The main symptoms of spinal injury are the following except:

- a) para- and tetraparesis
- b) conductive type of sensory impairment
- c) bulbar syndrome
- d) disturbances of urination and defecation
- e) vegetative disorders

9. In the diagnosis of spinal injury is not used:

- a) magnetic resonance imaging
- b) X-ray examination
- c) ultrasound dopplerography
- d) lumbar puncture
- e) CT scan

10. The main complications of brain injury include the following except:

- a) meningitis
- b) brain abscesses
- c) epileptic seizures
- d) hydrocephalus
- e) retrobulbar neuritis

11. The treatment of spinal cord injury does not include:

- a) surgical treatment
- b) osmotic diuretics

- c) neuroprotective therapy
- d) peripheral vasodilators
- e) immunoglobulins

12. The following symptoms can be observed in rupture of cerebral aneurysm except:

- a) severe headache
- b) meningeal syndrome
- c) impaired consciousness
- d) epileptic seizures
- e) akinetic-rigid syndrome

13. On what scale is evaluated the severity of the condition of the patient with subarachnoid hemorrhage?

- a) Hoehn-Yahr scale
- b) Hunt-Hess scale
- c) Fisher scale
- d) National Institutes of Health Stroke Scale
- e) Spetzler-Martin scale

14. What is the radical surgical treatment for cerebral aneurysm?

- a) clipping of the aneurysm
- b) stenting
- c) coiling
- d) ventricular drainage
- e) stereotactic electrocoagulation

15. Development of what symptom is not characteristic for the prehemorrhagic stage of cerebral arteriovenous malformation?

- a) epileptic seizure
- b) transient ischemic attack
- c) headache
- d) sensory ataxia
- e) noise in the head

16. In the treatment of cerebral arteriovenous malformation is not used:

- a) total removal of arteriovenous malformation
- b) clipping of leading and discharge vessels
- c) deep brain stimulation
- d) endovascular embolization
- e) radiosurgery (gamma knife)

17. What symptom is not characteristic for the carotid-cavernous anastomosis?

- a) throbbing noise in the head
- b) exophthalmos, chemosis
- c) nystagmus
- d) decreased visual acuity;
- e) bleeding from the eyeball and nose.

18. What is the main method for diagnosis of arterial aneurysms and malformations?

- a) echoencephalography
- b) echoencephalography
- c) cerebral angiography
- d) lumbar puncture
- e) CT scan

19. The main types of surgical treatment for occlusion processes of the main cerebral vessels are the following except:

- a) carotid endarterectomy
- b) extra-intracranial micro anastomosis
- c) vertebral artery reconstruction
- d) elimination of coiling or kinking of the internal carotid arteries
- e) endovascular embolization

20. Subdural hematoma is most commonly results from

- a) Rupture of intracranial aneurysm
- b) Rupture of cerebral AVM
- c) Injury to cortical bridging veins
- d) Hemophilia
- e) Hypertension

21. A 62-year-old diabetic female patient presented with history of progressive right-sided weakness of one-month duration. The patient was also having speech difficulty. Fundus examination showed papilledema. Two months ago, she also had a fall in her bathroom and struck her head against a wall. The most likely clinical diagnosis is

- a) Alzheimer's disease
- b) Left parietal glioma
- c) Left MCA territory stroke
- d) Left chronic subdural hematoma
- e) Hypertension

22. Most common type of intracranial hemorrhage in boxers is:

- a) Intra ventricular
- b) Extradural
- c) Subdural
- d) Cerebellar
- e) Subarachnoid

23. On accident there is damage of cervical spine, first line of management is

- a) X-ray
- b) turn head to side
- c) maintain airway
- d) stabilize the cervical spine
- e) CT scan

24. Commonest cervical vertebral fracture of:

- a) C₃
- b) C₄
- c) C₂
- d) C₅
- e) C₁

CORRECT ANSWERS

Topic 1 1. D; 2. E; 3. C; 4. E; 5. E; 6. C; 7. D; 8. B; 9. C; 10. A; 11. C; 12. E; 13. D; 14. D; 15. B; 16. A; 17. D; 18. B; 19. E; 20. C.

Topic 2 1. C; 2. E; 3. B; 4. B; 5. E; 6. D; 7. E; 8. D; 9. A; 10. B; 11. A; 12. B; 13. A; 14. D; 15. C; 16. C; 17. C; 18. E; 19. B; 20. D.

Topic 3 1. D; 2. E; 3. C; 4. A; 5. A; 6. D; 7. B; 8. D; 9. B; 10. A; 11. B; 12. D; 13. E; 14. A; 15. A; 16. D; 17. D; 18. C; 19. B; 20. A.

Topic 4 1. B; 2. A; 3. A; 4. B; 5. A; 6. D; 7. C; 8. C; 9. D; 10. A; 11. A; 12. B; 13. C; 14. D; 15. A; 16. E; 17. D; 18. D; 19. A; 20. E; 21. B; 22. C; 23. B; 24. B; 25. A; 26. E; 27. A; 28. C.

Topic 5 1. D; 2. A; 3. D; 4. D; 5. A; 6. A; 7. B; 8. D; 9. A; 10. B; 11. D; 12. A; 13. D; 14. A; 15. C; 16. B; 17. B; 18. D; 19. E; 20. A.

Topic 6 1. C; 2. D; 3. A; 4. C; 5. A; 6. A; 7. A; 8. D; 9. B; 10. A; 11. B; 12. A; 13. A; 14. D; 15. C; 16. B; 17. D; 18. B; 19. A; 20. B.

Topic 7 1. C; 2. A; 3. A; 4. C; 5. A; 6. B; 7. C; 8. C; 9. D; 10. A; 11. C; 12. A; 13. D; 14. A; 15. D; 16. D; 17. A; 18. B; 19. B; 20. A; 21. B; 22. A; 23. B; 24. E; 25. A; 26. A; 27. C.

Topic 8 1. A; 2. E; 3. C; 4. B; 5. A; 6. D; 7. D; 8. B; 9. A; 10. A; 11. B; 12. A; 13. A; 14. C; 15. A; 16. A; 17. A; 18. A; 19. A; 20. B; 21. C; 22. A; 23. A; 24. D; 25. B; 26. C; 27. B; 28. C; 29. C; 30. B; 31. B; 32. B; 33. A; 34. A; 35. E.

Topic 9 1. B; 2. A; 3. E; 4. D; 5. C; 6. E; 7. A; 8. E; 9. B; 10. A; 11. A; 12. B; 13. E; 14. C; 15. E; 16. A; 17. B; 18. C; 19. C; 20. B; 21. B; 22. B; 23. D; 24. D; 25. D; 26. A; 27. C; 28. B; 29. A; 30. C; 31. A; 32. A; 33. A.

Topic 10 1. E; 2. B; 3. B; 4. E; 5. C; 6. D; 7. D; 8. E; 9. A; 10. B; 11. B; 12. C; 13. D; 14. D; 15. C; 16. D; 17. B; 18. E; 19. A; 20. E; 21. B; 22. A; 23. D; 24. C; 25. A.

Topic 11 1. E; 2. B; 3. C; 4. E; 5. E; 6. E; 7. A; 8. A; 9. B; 10. A; 11. D; 12. E; 13. A; 14. E; 15. E; 16. B; 17. C; 18. C; 19. D; 20. B; 21. A; 22. D; 23. C; 24. A; 25. B; 26. C; 27. A; 28. D; 29. B; 30. A; 31. B; 32. B; 33. A.

Topic 12 1. A; 2. A; 3. B; 4. B; 5. D; 6. C; 7. D; 8. C; 9. D; 10. A; 11. C;
12. B; 13. A; 14. A; 15. D; 16. A; 17. B; 18. A; 19. A; 20. C; 21. C; 22. B; 23. C.

Topic 13 1. E; 2. E; 3. B; 4. C; 5. E; 6. D; 7. B; 8. C; 9. C; 10. E; 11. E;
12. E; 13. B; 14. A; 15. D; 16. C; 17. C; 18. C; 19. E; 20. C; 21. D; 22. C; 23. D;
24. D.

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