

Module 1. General Neurology

Situational tasks

1. The doctor examined a patient with a shoulder injury and diagnosed a lesion of the upper part of the brachial plexus. What symptoms did he find in the patient?

- A. * Flaccid paresis of the proximal parts of the arm
- B. Flaccid paresis of the distal parts of the arm
- C. Total paresis of the arm
- D. Central paresis of the arm
- E. None of the above

2. The doctor, when striking the palmar surface of the hand closer to the fingers with a hammer, found rapid flexion of the II-V fingers. This is a reflex:

- A. Schaefer
- B. * Zhukovsky
- C. Rossolimo
- D. Bekhterev
- E. Babinsky

3. At which vertebra should pathology be sought if the patient has signs of transverse lesion of the spinal cord at the level of C6?

- A. * C5
- B. C4
- C. C6
- D. C3
- E. All answers are incorrect

4. At which vertebral level should pathology be sought if the patient has signs of transverse spinal cord injury at the Th6 level?

- A. Th6
- B. Th2
- C. Th3
- D. * Th4
- E. Th7

5. At which vertebral level should pathology be sought if the patient has signs of transverse spinal cord injury at the Th7 level?

- A. Th1

B. * Th5

C. Th7

D. Th4

E. All answers are incorrect

6. At which vertebral level should pathology be sought if the patient has signs of transverse spinal cord injury at the Th8 level?

A. Th2

B. * Th6

C. Th8

D. Th9

E. Th7

7. When tapping the back of the patient's hand near the 3rd-4th fingers, the neurologist found rapid flexion of the 2nd-5th fingers. This is a reflex:

A. Schaefer's

B. Zhukovsky's

C. Rossolimo's

D. * Bekhterev's

E. Babinsky's

8. The patient complains of weakness in the limbs. After the examination, the doctor diagnosed paresis and made a note "Tendon reflexes $D > S$ "? What does this indicate?

A. * The patient has central paresis on the right

B. The patient has central paresis on the left

C. The patient has peripheral paresis on the right

D. The patient has peripheral paresis on the left

E. All statements are incorrect

9. The patient complains of weakness in the arm. After the examination, the doctor diagnosed paresis and made a note "Tendon reflexes from the hands $S < D$ "? What does this indicate?

A. The patient has central paresis of the right hand

B. The patient has central paresis of the left hand

C. The patient has peripheral paresis of the right hand

D. * The patient has peripheral paresis of the left hand

E. All statements are incorrect

10. The patient complains of weakness in the limbs. After the examination, the doctor diagnosed paresis and made a note "Tendon reflexes $S > D$ "? What does this indicate?

- A. The patient has central paresis on the right
- B. * The patient has central paresis on the left
- C. The patient has peripheral paresis on the right
- D. The patient has peripheral paresis on the left
- E. All statements are incorrect

11. The patient complains of weakness in the leg. After the examination, the doctor diagnosed paresis and made a note "Tendon reflexes from the legs $D < S$ "? What does this indicate?

- A. The patient has central paresis of the right leg
- B. The patient has central paresis of the left leg
- C. * The patient has peripheral paresis of the right leg
- D. The patient has peripheral paresis of the left leg
- E. All statements are incorrect

12. When examining the neurological status of a patient with ischemic stroke, the doctor found flexion of the first finger with passive flexion of the second-fourth fingers of the hand. This is a reflex

- A. Jacobson-Lask
- B. Tremner
- C. * Klipel-Weil
- D. Bekhterev
- E. Rossolimo

13. When examining the neurological status of the patient, the doctor found involuntary symmetrical movements of the muscles of one side during active movement of the muscles of the other side - these are:

- A. * Imitation synkinesias
- B. Global synkinesias
- C. Coordinating synkinesias
- D. Protective reflexes
- E. None of the above

14. When tapping on the styloid process of the hand, the doctor found rapid flexion of the I-V fingers of the hand. This is a reflex:

- A. * Jakobson-Laske
- B. Tremner

C. Klipel-Weil

D. Bekhterev

E. Rossolimo

15. With rapid tactile stimulation of the fingers on the terminal phalanges of the II-IV fingers of the patient, he developed flexion of the fingers of the hand. This is a reflex:

A. Jakobson-Laske

B. * Tremner

C. Klipel-Weil

D. Bekhterev

E. Rossolimo

16. The patient has lower spastic paraparesis, pelvic disorders of the central type, the upper abdominal reflex is preserved, the middle and lower abdominal reflexes are absent. Name the level of the lesion.

A. Th3

B. Th12

C. Th5

D. * Th9

E. Th4

17. The patient has left-sided central hemiparesis. How to correctly record the difference in reflexes?

A. D>S

B. * S>D

C. D

D. S

E. None of the options are incorrect

18. The patient has right-sided central hemiparesis. How to correctly record the difference in reflexes?

A. * D>S

B. S>D

C. D

D. S

E. None of the options are incorrect

19. The patient has lost the Achilles reflex. Indicate which of the listed nerves is affected:

- A. Femoral
- B. Sciatic
- C. Peroneal
- D. * Tibial
- E. Lateral cutaneous nerve of the thigh

20. The patient has lost the flexion-ulnar reflex, difficulty bending the arm at the elbow joint. Which spinal root is affected?

- A. * C5-C6
- B. C4
- C. C2-C3
- D. C7-C8
- E. None of the above

21. The patient has lost the extensor-ulnar reflex on the right. Indicate which nerve is affected:

- A. * Radial
- B. Median
- C. Ulnar
- D. Musculocutaneous
- E. Axillary

22. The patient has lost the extensor-ulnar reflex, difficulty in extending the arm at the elbow joint. Which spinal root is affected?

- A. C5-C6
- B. C4
- C. * C7-C8
- D. None of the above
- E. All of the above

23. The patient has involuntary additional movements in functionally synergistic muscle groups during various movements of the limbs, face or trunk - these are:

- A. Imitative synkinesias
- B. Global synkinesias
- C. * Coordinative synkinesias
- D. Protective reflexes
- E. None of the above

24. The patient has oculomotor disorders on the left, central hemiparesis on the right. Where is the lesion?

- A. Corona radiata
- B. Internal capsule
- C. * Midbrain
- D. Pontine
- E. Medulla oblongata

25. The patient has peripheral paresis of the facial muscles on the right, central hemiparesis on the left. Where is the lesion?

- A. Corona radiata
- B. Internal capsule
- C. Midbrain
- D. * Pontine
- E. Medulla oblongata

26. The patient has central tetraparesis, central type pelvic disorders, and respiratory disorders. What is affected?

- A. Precentral gyrus
- B. Internal capsule
- C. Midbrain
- D. Pontine
- E. * Medulla oblongata

27. The patient has hemiparetic gait. What is affected?

- A. Spino-muscular pathway
- B. * Corticospinal pathway
- C. Posterior cords of the spinal cord
- D. Anterior horns of the spinal cord
- E. Posterior horns of the spinal cord

28. A patient with a fracture of the humerus has lost the flexion-ulnar reflex. Indicate which nerve is affected:

- A. radial
- B. median
- C. ulnar
- D. * musculocutaneous

E. axillary

29. A patient with a spinal injury has been diagnosed with damage to the epiconus of the spinal cord. Name the symptoms:

- A. * Flaccid paresis of the feet, pelvic disorders of the central type
- B. Flaccid paresis of the feet, pelvic disorders of the peripheral type
- C. Central paresis of the feet, pelvic disorders of the central type
- D. Central paresis of the feet, pelvic disorders of the peripheral type
- E. None of the above

30. The patient has a cyst of the upper part of the precentral gyrus. Name the symptoms of the lesion:

- A. * Central monoplegia of the leg
- B. Spastic monoplegia
- C. Focal Jacksonian epilepsy
- D. Spastic upper paraplegia
- E. Central paresis of the facial muscles

31. The patient has a contusion of the spinal cord at the level of the cervical thickening. Indicate the motor disorders he has:

- A. Central tetraplegia
- B. Peripheral tetraplegia
- C. * Peripheral paresis of the arms, central paresis of the legs
- D. Peripheral paresis of the legs
- E. Hemiparesis

32. The patient has flaccid paresis of the left leg with fascicular muscle twitching. Where is the lesion most likely to be located?

- A. The diameter of the spinal cord at the level of the lumbar thickening
- B. * The anterior horns of the spinal cord at the level of the lumbar thickening
- C. Lumbar plexus
- D. Epiconus of the spinal cord
- E. Femoral nerve

33. The patient has flaccid paresis of the left arm. How to correctly record the difference in reflexes from the hands?

- A. D>S
- B. S>D

C. $D=S$

D. * $S<D$

E. None of the options are incorrect

34. The patient has flaccid paresis of the right hand. How to correctly record the difference in reflexes from the hands?

A. $D>S$

B. $S>D$

C. * $D<S$

D. $D=S$

E. None of the options are incorrect

35. The patient has flaccid paresis of the feet, pelvic disorders of the central type. The lesion of which structure will cause such symptoms?

A. Transverse lesion of the spinal cord at the lower thoracic level

B. Transverse lesion of the spinal cord at the level of the lumbar thickening

C. The cauda equina

D. * Epiconus of the spinal cord

E. Conus of the spinal cord

36. Patient N. has a neurinoma of the cauda equina. Name the symptoms of the lesion.

A. Flaccid foot paresis

B. Central foot paresis, pelvic disorders of the peripheral type

C. * Flaccid foot paresis, pelvic disorders of the peripheral type

D. Flaccid foot paresis, pelvic disorders of the central type

E. None of the above

37. A patient's CT scan of the brain has been diagnosed with a cyst that irritates the upper part of the precentral gyrus on the right. Name the symptoms:

A. Central monoplegia of the right leg

B. Spastic monoplegia of the left arm

C. Jacksonian epilepsy in the left arm

D. * Jacksonian epilepsy in the left leg

E. Central paresis of the facial muscles

38. A patient's MRI scan of the brain has been diagnosed with a cyst that irritates the middle part of the precentral gyrus on the right. Name the symptoms:

A. Central monoplegia of the right leg

- B. Spastic monoplegia of the left arm
- C. * Jacksonian epilepsy in the left arm
- D. Jacksonian epilepsy in the left leg
- E. Central paresis of the facial muscles

39. The patient cannot extend his knee, the knee reflex has disappeared. Indicate what is affected:

- A. Tibial nerve
- B. Posterior roots of the spinal cord at the level of L2-L4
- C. * Femoral nerve
- D. Sciatic nerve
- E. Peroneal nerve

40. The patient has neuropathy of the tibial nerve. Which reflex will be absent?

- A. Cremasteric
- B. Popliteal
- C. * Achilles
- D. Plantar
- E. Anal

41. The patient has neuropathy of the facial nerve. Which reflex will change?

- A. Suprabular
- B. Corneal
- C. Mandibular
- D. All of the above
- E. * All of the above except the mandibular

42. A patient has neuropathy of the musculocutaneous nerve. Which reflex will be absent?

- A. * Flexor-ulnar
- B. Extensor-ulnar
- C. Carpo-radial
- D. Scapular
- E. All of the above

43. The patient has radial nerve neuropathy. Which reflex will be absent?

- A. Flexor-ulnar
- B. * Extensor-ulnar

C. Carpo-radial

D. Scapular-humeral

E. All of the above

44. The patient has femoral nerve neuropathy. Which reflex will be absent?

A. Cremasteric

B. * Popliteal

C. Achilles

D. Plantar

E. Anal

45. The patient has trigeminal nerve neuropathy. Which reflex will be altered?

A. Suprabral

B. Corneal

C. Mandibular

D. * All of the above

E. All of the above except the mandibular

46. The patient has lower flaccid paraparesis, pelvic disorders of the central type. Which structure will cause the following symptoms?

A. Transverse lesion of the spinal cord at the lower thoracic level

B. * Transverse lesion of the spinal cord at the level of the lumbar thickening

C. Cauda equina

D. Transverse lesion of the spinal cord at the midthoracic level

E. Conus spinalis

47. The patient has lower flaccid paraparesis, pelvic disorders of the peripheral type. Which structure will cause the following symptoms?

A. Transverse lesion of the spinal cord at the lower thoracic level

B. Transverse lesion of the spinal cord at the level of the lumbar thickening

C. * Cauda equina

D. Epiconus spinalis

E. Conus spinalis

48. The patient has paresis of the foot flexors, the Achilles reflex is not evoked. Indicate what is affected:

A. Peroneal nerve

B. * Tibial nerve

C. Femoral nerve

D. Anterior roots of the spinal cord at the level of L4-S1

E. Posterior roots of the spinal cord at the level of L2-L4

49. The patient has pathological foot signs. What is affected:

A. Anterior horns

B. Sacral plexus

C. Peripheral nerves of the legs

D. * Pyramidal tract

E. Internal capsule

50. The patient periodically has seizures in the left arm without loss of consciousness. Where is the focus localized?

A. Middle precentral gyrus on the left

B. * Middle precentral gyrus on the right

C. Lower precentral gyrus on the right

D. Upper precentral gyrus on the right

E. None of the above