

Overdose-CNS Final

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1. Which of the following is the most common brain tumor in children?

- A. Central neurocytoma.
- B. Pilocytic astrocytoma.
- C. Anaplastic astrocytoma.
- D. Grade 1 meningioma.
- E. Diffuse astrocytoma.

Answer: B

2. On the epilepsy case, the laboratory investigations revealed increase of which of the following?

- A. Troponin-T.
- B. Lactic acid.
- C. Urea.
- D. ALT.
- E. Creatinine.

Answer: B

3. Resting "pill-rolling" tremor, rigidity, and hypokinesia are mainly seen in:

- A. Amyotrophic lateral sclerosis.
- B. Multiple sclerosis.
- C. Alzheimer disease.
- D. Parkinson disease.
- E. Huntington disease.

Answer: D

4. Prions are sensitive to:

- A. Ethanol (80%).
- B. Ionizing radiation.
- C. Treatment with formaldehyde (3.7%).
- D. Ethanol (50%).
- E. Phenol (90%).

Answer: E

5. How many of the following enters somatosensory area?

- 1- Thalamus.
- 2- Somatosensory area 1.
- 3- Visual area.
- 4- Auditory areas.
- 5- Cerebellum.

The best answer is:

- A. five.
- B. two.
- C. Four.
- D. Three.
- E. One.

Answer: C

6. Which of the following is a common adverse effect of amphetamines?

- A. Bradycardia.
- B. Constipation.
- C. Hypertension.
- D. None of the statements is true.
- E. Somnolence.

Answer: C

7. Lesion of which of the following causes muscle hypertonia?

- A. Posterior parietal cortex.
- B. Supplementary motor area.
- C. Pre-motor cortex.
- D. Primary motor cortex.
- E. Specialized area of motor control.

Answer: D

8. Which of the following does not support the growth of *C. botulinum* spores if they contaminate food?

- A. Acidic conditions provided by foods such as canned fruit.
- B. Alkaline conditions provided by vegetables such as mushrooms.
- C. Acidic conditions provided by meat.
- D. Alkaline conditions provided by vegetables such as green beans.
- E. Alkaline conditions provided by fish.

Answer: A

9. Which of the following groups of drugs can be useful for the management of the memory in Alzheimer's disease patient?

- A. GABAergic.
- B. Adrenergic.
- C. Dopaminergic.
- D. Cholinergic.
- E. Serotonergic.

Answer: D

10. Which of the following symptoms is most likely to result from infection inside the middle ear?

- A. Dry mouth.
- B. Loss of sensation in the lower teeth.
- C. Loss of sensation from the soft palate.
- D. Facial paralysis.
- E. Dry eye.

Answer: A

11. Which of the following trigeminal end branches carries the most diverse fiber modalities?

- A. Inferior alveolar nerve.
- B. Auriculotemporal nerve.
- C. Lingual nerve.
- D. Zygomatic nerve.
- E. Nasociliary nerve.

Answer: C

12. Which of the followings is particularly high in copper?

- A. Subthalamic nucleus.
- B. Substantia nigra.
- C. Putamen.
- D. Caudate nucleus.
- E. Globus pallidus.

Answer: B

13. During smell sensation, which of the following will be more activated on the right side of the brain than the left?

- A. Piriform cortex.
- B. Anterior olfactory nucleus.
- C. Entorhinal cortex.

- D. Olfactory tubercle.
- E. Orbitofrontal cortex.

Answer: E

14. Which of the following drugs would be appropriate to treat anaphylactic shock?

- A. Norepinephrine.
- B. Pilocarpine.
- C. Dobutamine.
- D. Phenylephrine.
- E. Epinephrine.

Answer: E

15. Which of the following is grade III brain tumor?

- A. Anaplastic meningioma.
- B. Myxopapillary ependymoma.
- C. Dysembryoblastic neuroepithelial tumor.
- D. Glioblastoma.
- E. Medulloblastoma.

Answer: A

16. In polio cases, infectivity in the pharyngeal foci is around, and in the intestinal foci

- A. One week, 7-14 days.
- B. b-2 weeks, 7-10 days.
- C. c-2-3 months, 3-4 months.
- D. d-2 weeks, 6-8 weeks.
- E. e-One week, 6-8 weeks.

Answer: E

17. Which of the following side effects not related to local anesthetics?

- A. Hyperthermia.
- B. CNS symptoms.
- C. Allergic reactions.
- D. Cardiovascular instability.
- E. None of the statements is true.

Answer: A

18. Which of the following parts of the brachial plexus is the most suitable to be targeted for block anesthesia to anesthetize the lateral side of the upper limb?

- A. Upper roots.
- B. Radial nerve.

- C. Lateral cord.
- D. Posterior divisions.
- E. Musculocutaneous nerve.

Answer: A

19. Which of the following is responsible of the papillary light reflex?

- A. Pretectal nucleus.
- B. Suprachiasmatic nucleus.
- C. Superior colliculus.
- D. Ventral lateral geniculate nuclei.
- E. Pontine raphe nucleus.

Answer: A

20. Which cells are nearly all binocular and perform length summation?

- A. Border cells.
- B. Hypercomplex cells.
- C. Complex cells.
- D. Ganglion cells.
- E. Simple cells.

Answer: C

21. Which of the following represents the correct path of aqueous humor from production to absorption?

- A. Anterior cavity – pupil – posterior cavity.
- B. Posterior cavity – pupil – anterior cavity.
- C. Posterior chamber – pupil – anterior chamber.
- D. Ciliary process – posterior cavity – anterior cavity.
- E. Posterior cavity – pupil – anterior chamber.

Answer: C

22. An injury to which of the following nerves will have the most effect on salivation?

- A. Maxillary branch of the trigeminal.
- B. Greater petrosal nerve.
- C. Small petrosal nerve.
- D. Lesser petrosal nerve.
- E. Mandibular branch of the trigeminal.

Answer: D

23. An elderly female who lives in a farmhouse was brought to the emergency room in serious condition after ingesting a liquid from an unlabeled bottle found near her bed, apparently in a suicide attempt. She presented with diarrhea, frequent urination, convulsions, breathing difficulties, constricted pupil, and excessive salivation. Which of the following is correct regarding this patient?

- A. Her symptoms can be treated by using an anticholinesterase agent.
- B. She most likely consumed an organophosphate pesticide.
- C. Her symptoms can be treated by using a cholinergic agent.
- D. She most likely consumed atropine.
- E. The symptoms are consistent with sympathetic activation.

Answer: B

24. Which of the following drugs can worsen decreasing in salivary secretion in patients taking anticancer radiation?

- A. Pilocarpine.
- B. Neostigmine.
- C. Muscarinic agonists.
- D. Muscarinic antagonists.
- E. Anticholinesterase agents.

Answer: D

25. Which of the following cannot provoke new onset of epilepsy seizures?

- A. Hyperglycemia.
- B. Hepatic failure.
- C. Hyperthyroidism.
- D. Hyponatremia.
- E. Hypoglycemia.

Answer: C

26. Parallel fibers in the cerebellar cortex originate from:

- A. Granular cells.
- B. Stellate cells.
- C. Golgi cells.
- D. Purkinje cells.
- E. Basket cells.

Answer: A

27. In the tympanic cavity, which of the following pairs of structures and their location is the most accurate?

- A. Round window – laterally.
- B. Pyramid – anterior.
- C. Epitympanic recess – inferior.
- D. Tegmen tympani – superior.
- E. Tensor tympani muscle – posterior.

Answer: D

28. Which of the following represent the orbit?

- A. The sphenoid bone form most of the orbital roof.
- B. The axes of the two orbits diverge anteriorly.
- C. The orbit is oval in shape.
- D. Inferior orbital fissure connects the orbit with infratemporal fossa.
- E. The medial edge of orbit is formed by the lacrimal bone.

Answer: B

29. Which of the following may result from a right spinal cord hemisection at T4 level?

- A. Hyporeflexia in the right lower limb.
- B. Left lower limb paralysis.
- C. Loss of vibration sensation from right lower limb.
- D. Phantom limb sensation for the left lower limb.
- E. Loss of pain sensation from the right lower limb.

Answer: C

30. Which of the following represent the correct sequence of structures in transmitting the sound vibration?

- A. Malleus – incus – stapes – scala vestibuli – scala tympani.
- B. Oval window – scala tympani – helicotrema – scala vestibuli – round window.
- C. Malleus – stapes – incus – scala vestibule -scala tympani.
- D. Malleus – incus – stapes – scala tympani – scala vestibuli.
- E. Incus – malleus – stapes – scala tympani – scala vestibuli.

Answer: A

31. Ptosis (drooping eyelids) or diplopia because of weakness in the extraocular muscles fluctuating in severity from time to time is the most common symptom of which of the following?

- A. Myasthenia gravis.
- B. Diabetic peripheral neuropathy.
- C. Gullain-Barre syndrome.

- D. Chronic inflammatory demyelinating polyneuropathy.
- E. Lambert-Eaton syndrome.

Answer: A

32. At which of the following regions the facial artery will be most superficially located?

- A. The angle of the mouth.
- B. The inferior border of the mandible.
- C. Carotid triangle.
- D. Submandibular triangle.
- E. The middle part of the face.

Answer: B

33. Which of the following nuclei may receive inputs through spinal nerves?

- A. Main sensory nucleus of the trigeminal.
- B. Nucleus solitarius.
- C. Mesencephalic nucleus of the trigeminal.
- D. Nucleus ambiguus.
- E. Spinal nucleus of the trigeminal.

Answer: E

34. The pathway to which of the following is concerned with olfactory memories?

- A. Piriform cortex.
- B. Anterior olfactory nucleus.
- C. Amygdala.
- D. Olfactory tubercle.
- E. Entorhinal cortex.

Answer: E

35. The following opioid is more potent than morphine:

- A. Tramadol.
- B. Pethidine.
- C. Dextropropoxyphene.
- D. Fentanyl.
- E. All these drugs are less potent than morphine.

Answer: D

36. Removing the somatosensory association area makes the person unable to judge:

- A. The complex forms felt on the opposite side of the body.
- B. The weights of the objects.
- C. The critical degrees of pressure against the body.

- D. The texture of materials.
- E. The shapes or forms of objects.

Answer: A

37. An injury at which of the following regions may result in loss of discriminate touch sensation from the left lower and upper limbs?

- A. Right side of medulla at level of pyramidal decussation laterally.
- B. Left side of the pons laterally.
- C. Right side of the midbrain laterally.
- D. Right side of the spinal cord.
- E. Right ventral posteromedial nucleus of the thalamus?

Answer: C

38. Which of the following drugs can cause orthostatic hypotension?

- A. Prazosin.
- B. Clonidine.
- C. Propranolol.
- D. Metoprolol.
- E. All statements are true.

Answer: A

39. The effect of removing the somatosensory association area is:

- A. Amorphosynthesis.
- B. Apraxia.
- C. Agraphesthesia.
- D. Astereognosis.
- E. Ataxia.

Answer: A

40. Which of the following is the main action of carbidopa in combination with levodopa?

- A. Inhibits metabolic conversion of levodopa to dopamine outside the CNS.
- B. Helps activate dietary vitamin B6, a deficiency of which occurs during levodopa therapy.
- C. Increase permeability of the BBB to levodopa, giving levodopa better access to the CNS.
- D. Blocks Ach release in the CNS, thereby facilitating levodopa's ability to restore a dopamine-Ach balance.
- E. Reduces levodopa-induced hypotension by blocking vascular dopamine receptors.

Answer: A

41. Which of the following best summarizes why nitrous oxide cannot be used alone for general anesthesia?

- A. Methemoglobinemia occurs even with low inspired concentrations.
- B. Inspired concentrations > 10% tend to profound cardiac negative inotropic effects.
- C. MAC (minimum alveolar concentration) is > 100%.
- D. Almost lack of analgesic activity, regardless of concentration.
- E. Very high frequency of bronchospasm.

Answer: C

42. Which of the following facial muscles is the deepest?

- A. Zygomaticus minor.
- B. Levator anguli oris.
- C. Zygomaticus major.
- D. Levator labii superioris.
- E. Levator labii alaeque nasi.

Answer: B

43. Which of the following is true about interposed nuclei?

- A. Control flexor muscles: reticular formation and vestibular nuclei.
- B. Control flexor muscles: red nuclei and thalamus.
- C. Coordination: reticular formation and vestibular nuclei.
- D. Control extensor muscles: red nuclei and thalamus.
- E. Control extensor muscles: reticular formation and vestibular nuclei.

Answer: B

44. Which of the following nerves contains fibers of postganglionic neurons?

- A. White ramus communicant.
- B. Splanchnic nerves.
- C. Lateral cutaneous nerve of the forearm.
- D. Vagus nerve.
- E. Chorda tympani.

Answer: C

45. Which of the following is the best are to be targeted by block anesthesia to anesthetize the sole of the foot?

- A. Anterior to superior extensor retinaculum.
- B. Anterior medial malleolus.

- C. Posterior to medial malleolus.
- D. Anterior to lateral malleolus.
- E. Posterior to lateral malleolus.

Answer: C

46. From which layer of the cerebral cortex large numbers of axons extend to the thalamus?

- A. Layer III and IV.
- B. Layer III.
- C. Layer VI.
- D. Layer V.
- E. Layer I and II.

Answer: C

47. In Group B streptococcal disease (GBS):

- A. The risk of GBS is much lower with prematurity or ruptured amniotic membranes.
- B. Localizing findings and clinical findings are specific, and the diagnosis is sometimes revealed by the isolation of GBS from blood or CSF.
- C. The mortality rate is low particularly when appropriate antibiotics are used.
- D. Fever is sometimes absent, and infants may even be hypothermic.
- E. The typical GBS case is an infant who is not doing well.

Answer: D

48. All of the following pairs is well matched EXCEPT:

- A. Terminal ganglion – postganglionic parasympathetic neurons.
- B. Dorsal root of the spinal nerve – vagal afferent fibers.
- C. Autonomic plexus – postganglionic sympathetic fibers.
- D. Facial nerve – superior salivatory nucleus.
- E. Sympathetic nerves – postganglionic sympathetic fibers.

Answer: B

49. An injury at which neck triangles most likely to cause paralysis of the genohyoid muscle?

- A. Submental.
- B. Carotid.
- C. Muscular.
- D. Supraclavicular.
- E. Digastric.

Answer: B

50. Which of the following has true action potential?

- A. Bipolar cells.
- B. Amacrine cells.
- C. Horizontal cells.
- D. Ganglion cells.
- E. Rods and cones.

Answer: D

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