**Pharmacology Quiz #4**

**Corrections & Rationales**

**By: Athena North-Henderson**

**Please take your time and read each question completely before selecting an answer. You have one hour to complete the quiz. When you are done, you may take a break and return to class at 10:10.**

1. The nurse has been doing medication education for the client receiving atenolol (Tenormin), a beta-blocker. The nurse determines that learning has occurred when the client makes which statement?
2. “I need to take my pulse every day.”
3. “I cannot take this drug if I develop glaucoma.”
4. “If I have any side effects, I will stop the medication.”
5. “I cannot continue to have my morning cup of coffee.”
6. The physician ordered prazosin (Minipress), an alpha-adrenergic blocker, for the client. The nurse plans to do medication education. What will the best plan of the nurse include?
7. Instruct the client to decrease his intake of sodium.
8. Instruct the client to wear sunglasses when outdoors.
9. Instruct the client to not take hot tub baths or hot showers.
10. Instruct the client to not take any OTC herbal preparations.
11. The physician has ordered bethanechol (Urecholine), a cholinergic drug, for the client with urinary retention. The client also has an enlarged prostate gland. What is the priority action by the nurse?
12. Administer the drug and push fluids.
13. Hold the drug and contact the physician.
14. Administer the drug and measure urinary output.
15. Hold the drug and prepare to catheterize the client.
16. The nurse is preparing to administer medications to a group of clients. One of the medications is benztropine (Cogentin), an anticholinergic drug. This drug is contraindicated in which client?
17. The client with tachycardia
18. The client with an irritable colon
19. The client with diarrhea
20. The client with a fractured femur
21. The physician orders dicyclomine (Bentyl), an anticholinergic drug, for a client. What is the nurse’s priority assessment prior to administering this drug?
22. Is the client able to urinate?
23. Is the client dizzy upon standing?
24. Does the client have light sensitivity?
25. Does the client have a history of alcoholism?
26. Which of the following drug actions would be most likely to produce a bronchospasm in a patient suffering from asthma?
27. A drug that blocked alpha1 and alpha2 receptors
28. A drug that stimulated beta1 and beta2 receptors
29. A drug that blocked beta1 and beta2 receptors
30. A drug that blocked beta1 receptors, but not beta2

1. The nursing instructor teaches the student nurses about the nervous system. The instructor determines that learning has occurred when the students make which statement(s)? Select all that apply.
2. “The peripheral nervous system has mainly sensory functions.”
3. “The nervous system helps us react to environmental changes.”
4. “The central nervous system includes the brain and spinal cord.”
5. “The somatic nervous system gives us voluntary control over moving.”
6. “The somatic nervous system gives us voluntary control over our gastrointestinal (GI) tract.”
7. Which statement is accurate concerning drugs classified as adrenergic antagonists?
8. Their actions are the opposite of those of sympathomimetics.
9. Their actions will block the neurotransmitter acetylcholine.
10. They will stimulate the sympathetic nervous system.
11. They are also known as anticholinergics.
12. Which of the following would inhibit the function of the autonomic nervous system?
13. Drugs that bind and then stimulate the postsynaptic neuron
14. Drugs that prevent the storage of neurotransmitter in vesicles
15. Drugs that increase neurotransmitter synthesis
16. Drugs that prohibit neurotransmitter reuptake
17. The client tells the nurse he worries about everything all day, feels confused, restless, and just can’t stop worrying. What is this client experiencing?
18. Social anxiety
19. Panic disorder
20. Generalized anxiety
21. Posttraumatic stress disorder (PTSD)
22. The nurse has completed group education for clients with anxiety disorders. The education is evaluated as successful when the clients make which statements? Select all that apply.
23. “We need different medicines for anxiety, and for difficulty in sleeping.”
24. “Antianxiety medicine should be used until our anxiety is gone.”
25. “We need therapy to learn where this anxiety comes from.”
26. “Antianxiety medicine should not be used indefinitely.”
27. “Relaxation techniques will often decrease anxiety.”
28. The client has generalized anxiety disorder. He asks the nurse “Will I need medication for this? My neighbor is very nervous and he takes medication.” What is the best response by the nurse?
29. “Medication is necessary initially; later we will try therapy.”
30. “Medications are a way of life for clients with anxiety disorders.”
31. “Probably not, but you shouldn’t compare yourself to your neighbor.”
32. “Medication is necessary when anxiety interferes with your quality of life.”
33. The client has been taking lorazepam (Ativan) for two years. The client stopped this medication after a neighbor said the drug manufacturer’s plant was contaminated with rat droppings. What best describes the nurse’s assessment of the client when seen three days after stopping his medication?
34. A sense of calmness and lack of anxiety.
35. Increased heart rate, fever, and muscle cramps.
36. Pinpoint pupils, constipation, and urinary retention.
37. Nothing different; it is safe to abruptly stop lorazepam (Ativan).
38. The client comes to the emergency department after an overdose of lorazepam (Ativan). The nurse will plan to administer which medication?
39. Naloxone (Narcan)
40. Nalmefene (Revex)
41. Pralidoxime (Protopam)
42. Flumazenil (Romazicon)
43. An individual who has difficulty sleeping due to two final examinations scheduled for the same day later in the week most likely would be suffering from:
44. Social anxiety.
45. Situational anxiety.
46. Performance anxiety.
47. Obsessive-compulsive disorder.
48. Which drug category can be used for treating anxiety?
49. Antibiotics
50. Antitussives
51. Seizure drugs
52. Anticoagulants
53. The client says to the nurse “My doctor said I have epilepsy and need to take medicine for those seizures I had. Do I really need medicine?” What is the best response by the nurse?
54. “You will need medicine for a little while to cure the seizures.”
55. “You might not need medicine; you may be controlled by a ketogenic diet.”
56. “Yes, you need to take medication on a continuous basis to control the seizures.”
57. “Having epilepsy is the same as having a mental illness; the medications are very similar.”
58. The client has epilepsy and receives phenytoin (Dilantin). The client has been seizure-free, and asks the nurse why he still needs blood tests when he is not having seizures. What is the best response by the nurse?
59. “Because phenytoin (Dilantin) can deplete your system of potassium.”
60. “Because phenytoin (Dilantin) can cause blood-thinning in some clients.”
61. “Because phenytoin (Dilantin) has a very narrow range between a therapeutic dose and a toxic dose.”
62. “Because phenytoin (Dilantin) can cause Stevens-Johnson syndrome, which will show up in the blood tests.”
63. The client is receiving Phenobarbital (Luminal) for control of seizures. The client tells the nurse she plans to become pregnant. What is the best response of the nurse?
64. “Your medication dose will need to be increased during your pregnancy.”
65. “Please talk to your doctor; this drug is contraindicated in pregnancy.”
66. “Your medication dose will need to be decreased during your pregnancy.”
67. “Please talk to your doctor; you will need a safer drug like valproic acid (Depakene).”
68. The physician has prescribed phenytoin (Dilantin) for a client with diabetes mellitus, type 1. What does the nurse include in the plan of care for this client?
69. Plan to institute safety precautions, as the client is at risk for dizziness and ataxia.
70. Plan to discuss with the physician the need to increase the client’s insulin based on serum glucose levels.
71. Plan to assess the client for petechiae, epistaxis, and hematuria.
72. Plan to discuss with the physician the need to decrease the client’s insulin based on serum glucose levels.
73. A person who stops talking mid-sentence and has a blank stare for 5 seconds would most likely be experiencing:
74. A convulsion.
75. A petit mal seizure.
76. A grand mal seizure.
77. A partial seizure.
78. The client has intractable pain, and the physician has proposed a nerve block. The nurse plans to teach the client about nerve blocks. Which statement would be included in the best plan of the nurse?
79. A nerve block enhances the effect of most of the endogenous opioids.
80. A nerve block modifies sensory information being sent to the spinal cord.
81. A nerve block depresses the activity of the sympathetic nervous system.
82. A nerve block stops pain transmission along the nerve to stop the pain.
83. The client has a patient-controlled analgesia (PCA) pump following surgery. The nurse keeps naloxone (Narcan) in the client’s room as per protocol. What does the nurse recognize as the rationale for this protocol?
84. Naloxone (Narcan) enhances the effect of the opioid in the patient-controlled analgesia (PCA) pump and increases analgesia.
85. Naloxone (Narcan) will reverse the effects of the narcotic in the patient-controlled analgesia (PCA) pump if an overdose occurs.
86. Naloxone (Narcan) is the antidote if an anaphylactic reaction to the opioid in the patient-controlled analgesia (PCA) pump occurs.
87. Naloxone (Narcan) is available to treat any systemic side effects, like constipation, of the opioid in the patient-controlled analgesia (PCA) pump.
88. The client has received spinal anesthesia. What common reaction will the nurse assess in the client?
89. Hemorrhage
90. Headache
91. Hypertension
92. Hot flashes

Spinal headaches frequently occur when the spinal dura mater has been punctured multiple times and a leakage of spinal fluid occurs. Hemorrhage is not common after spinal anesthesia. Hypertension is not common after spinal anesthesia. Hot flashes are not common after spinal anesthesia.

1. The nurse teaches the client about the correct use of a topical anesthetic for a skin condition. The nurse determines that learning has occurred when the client makes which statement(s)? Select all that apply.
2. “This lotion should only be used on small areas of skin.”
3. “It’s all right to use a lotion after the expiration date.”
4. “I must wash my hands before touching my eyes.”
5. “I must wear gloves when I apply the lotion.”
6. “This lotion works well on cuts too.”

The client has had spinal anesthesia. Prioritize the nursing interventions post-operatively.

1. 1
2. 2
3. 3
4. 4
5. Ambulate the client. D
6. Palpate the client’s bladder for fullness. B
7. Assess the client’s vital signs. A
8. Assess the client for leg movement and sensation. C
9. Which of the following correctly identifies a signs of general anesthesia?
10. A conscious but sleepy state of being
11. A sleeping state that can be awakened easily
12. A total loss of body movements
13. An unconscious state, without analgesia
14. The nurse plans care for a client with Parkinson’s disease. What will the best plan of the nurse include?
15. Monitor the client for psychotic symptoms.
16. Limit exercise to decrease the possibility of fractures.
17. Monitor the client for the ability to chew and swallow.
18. Check peripheral circulation for thrombophlebitis.
19. The client receives levodopa (Larodopa). The nurse has completed medication education and determines that learning has occurred when the client makes which statement?
20. “I must increase the fiber in my diet.”
21. “I must avoid yellow vegetables in my diet.”
22. “I need to increase my daily intake of protein.”
23. “I need to check my pulse before taking the medication.”
24. The client receives aspirin, a multivitamin, and an antihistamine every day. What is the best instruction by the nurse prior to administering levodopa (Larodopa)?
25. “These medications are safe to take with levodopa (Larodopa).”
26. “You should not take the aspirin with your levodopa (Larodopa).”
27. “You should not take the multivitamin with your levodopa (Larodopa).”
28. “You should not take the antihistamine with your levodopa (Larodopa).”
29. The elderly client receives levodopa (Larodopa). The nurse is primarily concerned about which problem with this client?
30. Diarrhea
31. Dark urine
32. Hypertension
33. Muscle twitching
34. Which of the following best explains why structural changes occur within the brains of people with Alzheimer’s disease?
35. Increases in blood pressure and cholesterol levels
36. Chronic inflammation and oxidate cellular damage
37. Cerebral bleeding and associated hypoxia
38. Increased acetylcholine levels
39. Which statement is the most accurate regarding acetylcholinesterase inhibitors when used for Alzheimer’s disease?
40. They increase synthesis of acetylcholine.
41. They reverse the structural damage within the brain.
42. They intensify the effect of acetylcholine at the receptor.
43. They increase enzymatic breakdown, leading to increased neuronal production.
44. What classification of drugs block the action of norepinephrine at the alpha and beta receptors?
45. Sympatholytics
46. Sympathomimetics
47. Parasympatholytics
48. Parasympathomimetics
49. The client tells the nurse that she awakens frequently during the night because of leg and foot cramps. What is the best response by the nurse?
50. “Ask your physician for a muscle relaxant.”
51. “Take a warm bath before going to bed.”
52. “Apply heat to relieve the cramping.”
53. “Increase your intake of calcium.”
54. Which of the following lists of treatment options would be considered optimal for treating a muscle spasm with an unknown cause?
55. Analgesics, antibiotics, and heat application
56. Anti-inflammatory agents, casting, and ultrasound
57. Analgesics, muscle relaxants, and massage
58. Anti-inflammatory agents, immobilization, and fluid and electrolyte replacement
59. Ativan (lorazepam) is used as an injected anesthetic; which other condition might you see this drug used with?
60. Anxiety
61. Depression
62. Bipolar disorder
63. Loss of appetite

1. What is the neurotransmitter used for skeletal muscle contractions?
2. Serotonin
3. Epinephrine
4. Acetylcholine
5. Norepinephrine
6. Besides being used as an anti-migraine medication, what is another use for amitriptyline?
7. Antipsychotic
8. Antidepressant
9. Anticonvulsant
10. Sedative-hypnotic
11. A client is ordered 62.5 micrograms of Benztropine Mesylate. 0.25 mg tablets are available. How many tablets will you give? *(mark “e” on your scan-tron and put the answer on the back)*
12. The doctor orders 100 mg Dilantin oral suspension three times daily for your client. The label says Dilantin 125 mg/5 mL. How many milliliters should you give? *(mark “e” on your scan-tron and put the answer on the back)*
13. Order: Atropine sulfate 0.15 mg SQ (subcutaneous) stat

Supply: Atropine sulfate 0.4 mg per mL

Give: \_\_\_\_\_\_\_\_\_\_ mL *(mark “e” on your scan-tron and put the answer on the back)*

***Order for a 66 lb child:*** Depakene 450 mg PO (by mouth) at 8 AM; Depakene 900 mg PO at 8 PM. (NOTE: The child is taking a safe, individualized dosage verified with blood levels).

***Supply:*** 480 mL bottle of Depakene syrup 250 mg/5 mL

*For questions 40-42, mark “e” on your scan-tron and put the answer on the back.*

1. How many mg/kg/day does this child receive?
2. Calculate the amount to be given for each of the two daily doses.
3. How many full days will this bottle last?
4. If the safe dose range of fentanyl IV preoperatively is 1 to 2 mcg/kg/dose, how many milligrams of fentanyl could a child weighing 88 lb receive per dose (minimum and maximum)? *(mark “e” on your scan-tron and put the answer on the back)*
5. Naloxone HCl 0.4 mg IV bolus. The pharmacy has naloxone 0.02 mg/mL stocked. How many mL would you administer? *(mark “e” on your scan-tron and put the answer on the back)*