Paramedic Emergency Care

Questions and Answers

From Bradys Paramedic Emergency Care 3rd Edition

Emergency Pharmacology

1. What is a safe dosage of ipratropium for a child?
p. 389

A.) 0.03 mg/kg body weight
B.) 0.15 mg/kg in 2.5 ml of normal saline by nebulizer
*C.) Safety has not been established
D.) 0.5 g/kg slow IV diluted with 1:1 sterile water

2. How long after the first dose has been given can a second of naloxone be given?
p. 397

A.) 10 minutes
*B.) 5 minutes
C.) 2 minutes
D.) 7 minutes

3. What is the pediatric dose of furosemide?
p. 381

*A.) 1 mg/kg
B.) 5 mg/kg
C.) 80 mg IV push
D.) 20 mg IV push

4. Which condition increases the rate of absorption of a medication?
p. 337

*A.) Hyperthermia
B.) Acidosis
C.) Hypothermia
D.) Shock

5. Which is NOT a condition that results from stimulation of the parasympathetic nervous system?
p. 346

A.) Secretion by digestive glands
*B.) Pupillary dilation
C.) Bronchoconstriction
D.) Increased smooth muscle activity

6. What is the protective mechanism that selectively allows the entry of only a limited number of compounds into the brain?
p. 338

A.) Drug brain barrier
B.) Compound brain barrier
*C.) Blood brain barrier
D.) Fluid brain barrier

7. How long does it generally take to see results from a glucagon injection?
p. 390-391

A.) Instantly
*B.) 5-20 minutes
C.) 5-15 minutes
D.) 5-10 minutes

8. What is not an indication of methylprednisolone?
p. 392

A.) Spinal cord injury
*B.) Major motor seizure
C.) Anaphylaxsis
D.) Exacerbation of COPD

9. Which is the fundamental measurement of length in the metric system?
p. 348

A.) Inch
B.) Mile
C.) Gram
*D.) Meter

10. What medication decreases a bodily function or activity?
p. 336

A.) Stimulant
B.) Bolus
C.) Synergism
*D.) Depressant

11. Which type of solid drug comes in the form of a gelatin container with a powder inside?
p. 335

*A.) Capsule
B.) Tablet
C.) Suppository
D.) Pill

12. Which is an indication of magnesium sulfate?
p. 394

A.) Hypocalcaemia
B.) Hypertensive
*C.) Eclampsia
D.) Shock

13. Which is the fundamental measurement of volume in the metric system?
p. 348

A.) Gram
B.) Quart
C.) Ounce
*D.) Liter

14. What is the difference between effective and toxic concentrations of a medication called?
p. 339

A.) Therapeutic level
*B.) Therapeutic index
C.) Therapeutic zone
D.) Therapeutic range

15. Which is the formula for computing the volume of a drug to be administered?
p. 350

*A.) Volume administered=(volume on hand) X (desired dose)/concentration on hand
B.) Volume administered=(concentration on hand) X (desired dose)/volume on hand
C.) Concentration on hand=(volume on hand) X (volume administered)/desired dose
D.) Volume on hand=(volume administered) X (desired dose)/concentration on hand

16. How should nifedipine be administered?
p. 383

*A.) Orally
B.) Intravenously
C.) Intramuscularly
D.) Rectally

17. What is the dosage to an adult in cardiac arrest with the 1:10,000 solution of epinephrine?
p. 363

A.) 1.0-1.5 mg
*B.) 0.5-1.0 mg
C.) 2.0-2.5 mg
D.) 1.5-2.0 mg

18. When is aminophylline contraindicated?
p. 385

A.) Congestive heart failure
*B.) Uncontrolled cardiac dysrhythmias
C.) Bronchial asthma
D.) Pulmonary edema

19. What oxygen level should the COPD patient receive initially?
p. 362

A.) 50%
B.) 80%
*C.) 35%
D.) 65%

20. Which type of administration places the lines into the bone?
p. 353

*A.) Intraosseous
B.) Sublingual
C.) Intravenous
D.) Intracardiac

21. When is lidocaine contraindicated?
p. 370

*A.) Bradycardia with PVC's
B.) Malignant PVC's
C.) Ventricular fibrillation
D.) Ventricular tachycardia

22. What percentage of total hormones released by the adrenal medulla are epinephrine?
p. 343

A.) 60%
*B.) 80%
C.) 20%
D.) 40%

23. Which type of drugs are administered via an intramuscular route?
p. 335

A.) Liquid
*B.) Parenteral
C.) Solid
D.) Rectal

24. What classification is given to verapamil?
p. 375

A.) Non-selective beta blocker
B.) Antiarrhythmic
*C.) Calcium channel blocker
D.) Sympathetic agonist

25. How are most critical care medications administered?
p. 337

A.) Subcutaneously
B.) Orally
*C.) Intravenously
D.) Intramuscularly

26. Which preganglionic nerves control activity in the abdonimopelvic region?
p. 343

A.) Adrenal medulla
B.) Sympathetic chain
C.) Parasympathetic chain
*D.) Collateral

27. What is the amount of aminophylline should be mixed with 90 milliliters of 5% dextrose when being used to treat bronchial asthma?
p. 386

A.) 500 mg
B.) 600 mg
*C.) 250 mg
D.) 350 mg

28. How many milligrams of procainamide are in the 10-milliliter vials?
p. 372

A.) 2000 mg
*B.) 1000 mg
C.) 3000 mg
D.) 4000 mg

29. Which is the drug of choice for managing cardiogenic shock?
p. 365

A.) Labetalol
B.) Norepinephrine
C.) Dobutamine
*D.) Dopamine

30. What medication slows intraventricular conduction to a greater degree than lidocaine?
p. 371

A.) Adenosine
B.) Verapamil
C.) Bretylium tosylate
*D.) Procainamide

31. How many milligrams of norepinephrine should be diluted in 500 milliliters of D5W to attain the recommended dose?
p. 364

*A.) 8
B.) 6
C.) 2
D.) 4

32. Which patient should naloxone be used carefully in?
p. 397

A.) Narcotic analgesic overdose
*B.) Habitual narcotic user
C.) Coma of unknown origin
D.) Narcotic overdose

33. What is the adult emergency dosage of thiamine?
p. 390

A.) 400 mg
B.) 200 mg
C.) 300 mg
*D.) 100 mg

34. What must be done first if a medication amount is to be figured using the patient's weight?
p. 351

A.) Convert the weight to micrograms
*B.) Convert the weight to kilograms
C.) Convert the weight to grains
D.) Convert the weight to kilograins

35. Which schedule of addictive medication has a lesser potential for abuse as well as a number of accepted medical uses?
p. 333

A.) II
B.) IV
C.) I
*D.) III

36. How many milliliters does it take to make one cubic centimeter?
p. 349

A.) 3
B.) 2
*C.) 1
D.) 4

37. What results from an inactive medication after biotransformation has occurred?
p. 338

A.) Mesabolite
B.) Melabolite
C.) Menabolite
*D.) Metabolite

38. How should sodium bicarbonate be administered?
p. 378

A.) IV infusion
B.) Intraosseous
C.) Endotracheal
*D.) IV bolus

39. What is the pediatric dosage of epinephrine 1:10,000?
p. 363

A.) 0.02 mg/kg
B.) 0.04 mg/kg
C.) 0.03 mg/kg
*D.) 0.01 mg/kg

40. Which type of parenteral administration places the medication in the fatty layer under the skin?
p. 352

A.) Sublingual
B.) Intravenous
*C.) Subcutaneous
D.) Transdermal

41. What is the usual dosage of promethazine when used to treat nausea?
p. 399

A.) 37.5-50 mg
*B.) 12.5-25 mg
C.) 25-37.5 mg
D.) 50-62.5 mg

42. How long after administration of syrup of ipecac does emesis occur?
p. 396

A.) 15-20 minutes
*B.) 5-10 minutes
C.) 10-15 minutes
D.) 20-25 minutes

43. What is the space between the nerve cell and the target organ called?
p. 341

A.) Synapse space
B.) Neurotransmittor space
C.) Cholinergic space
*D.) Neuroeffector space

44. Which is a contraindication of diphenhydramine?
p. 395

A.) Dystonic reactions
B.) Anaphylaxis
C.) Allergic reactions
*D.) Asthma

45. Which is used to treat children with croup?
p. 386

*A.) Racemic epinephrine
B.) Methylprednisolone
C.) Albuterol
D.) Glucagon

46. How many units of oxytocin can be administered intramuscularly following delivery of the placenta?
p. 394

*A.) 3-10
B.) 6-13
C.) 4-11
D.) 5-12

47. Which receptors are specific to norepinephrine and epinephrine-like substances?
p. 344

A.) Neuroinergic
*B.) Adrenergic
C.) Cholinergic
D.) Dopaminergic

48. What dosage increments are commonly used when using morphine for pain?
p. 379

A.) 4 mg
B.) 3 mg
*C.) 2 mg
D.) 5 mg

49. What is the maximum total dosage of procainamide that should be administered when given at a rate of 20 mg/minute?
p. 372

A.) 13 mg/kg
B.) 15 mg/kg
C.) 19 mg/kg
*D.) 17 mg/kg

50. Where does the sympathetic nervous system arise from?
p. 341

A.) Cervical spine
*B.) Thoracic spine
C.) Occiput spine
D.) Sacrum spine

51. How many grams of magnesium sulfate should be administered via the IV?
p. 394

A.) 6-8
B.) 8-10
C.) 4-6
*D.) 2-4

52. When is nitros oxide contraindicated?
p. 379

*A.) Intoxicated patient
B.) Hyperventilation
C.) Suspected ischemic chest pain
D.) Burns

53. What is the initial dose of atropine when treating asystole?
p. 376

A.) 0.5 mg
*B.) 1.0 mg
C.) 0.7 mg
D.) 1.2 mg

54. When administering naloxone endotracheally how much total fluid needs to be used?
p. 397

A.) 30 ml
*B.) 10 ml
C.) 40 ml
D.) 20 ml

55. What are the groups of autonomic nerve cells located outside of the central nervous system called?
p. 340

A.) Post-ganglionic
B.) Pre-ganglionic
C.) Autonomic synapse
*D.) Autonomic ganglia

56. How should haloperidol be administered?
p. 398

A.) Subcutaneously
B.) Sublingually
*C.) Intramuscularly
D.) Intravenously

57. What is the pediatric dosage of diphenhydramine?
p. 395

*A.) 2-5 mg/kg
B.) 9-11 mg/kg
C.) 7-9 mg/kg
D.) 5-7 mg/kg

58. Which is an example of a synthetic medication?
p. 332

A.) Insulin
B.) Calcium chloride
*C.) Lidocaine
D.) Atropine

59. What is the subcutaneous injection dosage of terbutaline in an adult?
p. 387

A.) 0.75 mg
*B.) 0.25 mg
C.) 0.07 mg
D.) 0.01 mg

60. Which is NOT one of the most common methods of administering drugs in the prehospital setting?
p. 337

A.) Intravenous
*B.) Orally
C.) Intramuscular
D.) Subcutaneous

61. What is the maximum dosage of verapamil in a 30-minute period?
p. 375

A.) 40 mg
B.) 10 mg
*C.) 30 mg
D.) 20 mg

62. Where does the liver eliminate a drug?
p. 338

A.) Air
B.) Urine
C.) Feces
*D.) Bile

63. Which type of drugs block the actions of the sympathetic nervous system?
p. 345

A.) Antagonists
*B.) Sympatholytics
C.) Sympathomimetics
D.) Agonists

64. What is the maximum recommended dosage of adenosine?
p. 374

A.) 10 mg
B.) 16 mg
*C.) 12 mg
D.) 14 mg

65. What is the trade name that is given to a drug?
p. 334

A.) Drug's chemical structure name
B.) Abbreviated chemical name
C.) Name published in the United States Pharmacopeia
*D.) Manufacturer's given name

66. What is a side effect that is harmful to the patient?
p. 336

A.) Therapeutic action
B.) Cumulative action
*C.) Untoward effect
D.) Idiosyncratic effect

67. How should labetalol be administered to treat hypertensive crisis?
p. 369

A.) Intramuscular injection
*B.) Slow IV injection
C.) Rectally
D.) Bolus

68. What is the concentration of nitronox to oxygen in nitros oxide?
p. 379

*A.) 50% to 50%
B.) 80% to 20%
C.) 75% to 25%
D.) 40% to 60%

69. What is the metric system based upon?
p. 348

A.) The unit 4
B.) The unit 8
C.) The unit 6
*D.) The unit 10

70. How many times the recommended IV dose should an endotracheal dose be?
p. 352

A.) 4 times
B.) 5 times
*C.) 2 times
D.) 3 times

71. Which drugs bind to the receptors and cause a response?
p. 339

A.) Antibolus
B.) Bolus
*C.) Agonists
D.) Antagonists

72. Which method of administering a parenteral drug has one patient dose ready to be loaded into the syringe?
p. 335

A.) Preloaded syringe
B.) Tube
*C.) Ampule
D.) Vial

73. Which is a contraindication of using calcium chloride?
p. 383

A.) Patient with calcium-channel-blocker toxicity
*B.) Patient with digitalis toxicity
C.) Patient with decreased calcium
D.) Patient with elevated potassium

74. What is the only method that albuterol should be administered?
p. 388

A.) Absorption
B.) Injection
C.) Ingestion
*D.) Inhalation

75. What is the pediatric dosage of diazepam?
p. 392

A.) 0.3-0.4 mg/kg
B.) 0.4-0.5 mg/kg
C.) 0.2-0.3 mg/kg
*D.) 0.1-0.2 mg/kg

76. How many sublingual nitroglycerin tablets should be administered in the prehospital setting maximum?
p. 382

*A.) 3
B.) 5
C.) 4
D.) 6

77. What is the standard dosage of activated charcoal used to treat poisoning?
p. 397

A.) 25-50 grams
*B.) 50-75 grams
C.) 75-100 grams
D.) 100-125 grams

78. What are most drugs used for in prehospital care?
p. 332

A.) Neurological emergency
B.) Gastrointestinal emergency
C.) Muscular skeletal emergency
*D.) Cardiovascular emergency

79. How soon after administration of nitroglycerin is pain relief generally felt?
p. 381

A.) 4-5 minutes
*B.) 1-2 minutes
C.) 2-3 minutes
D.) 3-4 minutes

80. Which is the fundamental measurement of mass in the metric system?
p. 348

A.) Ounce
B.) Liter
*C.) Gram
D.) Pound

81. What are proteins present on the surface of cell membranes?
p. 339

*A.) Drug receptors
B.) Drug acceptors
C.) Drug relayers
D.) Drug inhibitors

82. How many grams of a 50% dextrose in water solution should be administered?
p. 389

A.) 50
B.) 75
C.) 100
*D.) 25

83. What is the desired dosage range for dobutamine?
p. 367

*A.) 2-20 mcg per kg per minute
B.) 4-40 mcg per kg per minute
C.) 3-30 mcg per kg per minute
D.) 1-10 mcg per kg per minute

84. Which medication can be administered orally in the prehospital setting?
p. 360

A.) Nitroglycerin
B.) Diazepam
C.) Procardia
*D.) Activated charcoal

85. What is the standard preparation of dopamine?
p. 366

A.) 100 milligrams in 4 milliliters of solvent
B.) 400 milligrams in 7 milliliters of solvent
C.) 300 milligrams in 6 milliliters of solvent
*D.) 200 milligrams in 5 milliliters of solvent

86. What is verapamil indicated for in the prehospital setting?
p. 375

A.) Cardiogenic shock
B.) Ventricular tachycardia
C.) Severe hypertension
*D.) Paroxysmal supraventricular tachycardia

87. How long does the sympathomimetic effects of breylium last in the non-cardiac arrest setting?
p. 372

A.) 50 minutes
B.) 40 minutes
C.) 30 minutes
*D.) 20 minutes

88. Which schedule of addictive medications have a high potential for abuse and offer no acceptable medical indications?
p. 333

A.) II
*B.) I
C.) IV
D.) V

89. How many milligrams are in one grain?
p. 349

A.) 15
B.) 45
C.) 90
*D.) 60

90. Which medication cannot be diluted in saline for endotracheal administration in the field?
p. 353

*A.) Diazepam
B.) Atropine
C.) Lidocaine
D.) Naloxone

91. Which type of liquid drug preparation does not remain mixed?
p. 335

*A.) Suspension
B.) Spirit
C.) Syrup
D.) Solution

92. Which is NOT a basis for the physical description of medicine?
p. 348

*A.) Height
B.) Mass
C.) Length
D.) Volume

93. How long will a 75- to 100-milligram bolus of lidocaine maintain adequate blood levels?
p. 369

A.) 90 minutes
B.) 60 minutes
*C.) 20 minutes
D.) 40 minutes

94. What is the pediatric dosage of glucagon?
p. 391

*A.) 0.03 mg/kg
B.) 0.09 mg/kg
C.) 0.07 mg/kg
D.) 0.05 mg/kg

95. When is epinephrine contraindicated?
p. 384

A.) Bronchial asthma
*B.) Hypertension
C.) Exacerbation of some forms of COPD
D.) Anaphylaxis

96. Which type of receptors cause peripheral vasoconstriction, mild bronchoconstriction and stimulation of metabolism?
p. 345

A.) Alpha 2
B.) Beta 1
*C.) Alpha 1
D.) Beta 2

97. What dosage vials are available of methylprednisolone?
p. 393

*A.) 125 mg and 250 mg
B.) 200 mg and 325 mg
C.) 225 mg and 350 mg
D.) 175 mg and 300 mg

98. Which neurotransmitter is used by all pre- and post-ganglionic nerve fibers?
p. 347

A.) Dopamine
B.) Norepinephrine
C.) Epinephrine
*D.) Acetylcholine