

1. A woman with ischemic disease has been taking an antianginal medication that has the following properties: dilates coronary arteries, peripheral vessels (arterial and venous), reduces the need of myocardium in oxygen, improves endocardial blood circulation. Name this preparation:

- a. Dibasol
- b. Aminophylline
- c. Validol
- d. Papaverine
- e. Nitroglycerin

2. A patient has been taking glucocorticoids for a long time. Drug with drowsiness caused acute attack of his disease, blood pressure reduction, weakness. What are these occurrences connected with?

- a. Adrenal glands insufficiency

- b. Sensibilisation
- c. Cumulation
- d. Hyperproduction of corticotrophin hormone
- e. Drug habituation

3. A teenager had his tooth extracted under novocaine anaesthesia. 10 minutes later he presented with skin pallor, dyspnea, hypotension. When this reaction is developed and the allergen achieves tissue basophils, it reacts with:

- a. IgA
- b. IgM
- c. T-lymphocytes
- d. IgE
- e. IgD

4. 48 hours after tuberculin test (Mantoux test) a child had a papule up to 10 mm in diameter on the spot of tuberculin introduction. What hypersensitivity mechanism underlies the mentioned changes?

- a. Immunocomplex cytotoxicity
- b. Granulomatosis
- c. Anaphylaxis
- d. Antibody-dependent cytotoxicity
- e. Cellular cytotoxicity

5. A 25 year old patient had in the dentist's room a sudden attack of bronchial asthma. The doctor gave him salbutamol in the form of inhalation. What is the mechanism of action of this preparation?

- a. Stimulates alpha-adrenoreceptors
- b. Blocks phosphodiesterase
- c. Blocks M-cholinergic receptors
- d. Stimulates beta-2-adrenoreceptors
- e. Blocks H1-histamine receptors

6. A patient has myocardial infarction with thrombosis of the left coronary artery. What pharmacological preparation group should be used to reestablish blood flow?

- a. Fibrinolysis activators
- b. Beta-adrenergic blockers
- c. Glucocorticoids
- d. Angiotensin-converting enzyme inhibitors
- e. Narcotic analgesics

7. During the ether narcosis a patient had evident bradycardia with threat of cardiac arrest. What medication should be used to accelerate heartbeat under condition of narcosis that shouldn't be interrupted?

- a. Atropine
- b. Adrenaline
- c. Isadrine
- d. Camphor
- e. Caffeine

8. A patient with stomatitis was prescribed a medication of sulfonamide group. What is the mechanism of its antibacterial effect?

- a. Synthesis disturbance of cell membrane proteins
- b. Inhibition of sulphhydryl groups of thiol enzymes
- c. Protein coagulation
- d. Competitive antagonism with para-aminobenzoic acid**
- e. Decrease of membrane permeability

9. A patient with gingivitis was prescribed a gargle with a certain preparation. Its antiseptic properties are determined by atomic oxygen that slivers in presence of organic substances. It has also deodorant, adstringent (anti-inflammatory), and in big concentrations - cauterizing effect. Water solutions are used for bathing of wounds, mouth gargling and in higher concentrations - for burn treatment. It is also used for gastric lavage in case of poisoning. Name this preparation:

- a. Ethyl alcohol
- b. Sodium bicarbonate
- c. Chlorhexidine bigluconate
- d. Hydrogen peroxide
- e. Potassium permanganate**

10. The preparation complex for periodontitis treatment includes the medicine from the group of water soluble vitamins, bioflavonide derivative, which is prescribed together with ascorbic acid. This preparation has anti-oxidative properties, decreases gingival hemorrhage. What preparation is meant?

- a. Calcium pantothenate
- b. Cyanocobalamin
- c. Folic acid
- d. Rutin**
- e. Calcium panganate

11. An unconscious patient was admitted to the hospital. Objectively: cold skin, miotic pupils, heavy breathing, Chaine-Stokes periodicity, low arterial pressure, overfull urinary bladder. What caused the poisoning?

- a. Muscarinic receptor blockers
- b. -
- c. Tranquilizers
- d. Nonnarcotic analgetics
- e. Narcotic analgetics**

12. A 30 year old patient consulted a doctor about having diarrhea and stomach aches for 5 days, temperature rise up to 37,5°C with chills. The day before the patient was in a forest and drank some water from an open pond. He was diagnosed with amebic dysentery that was bacteriologically confirmed. Name the medication for treatment of this disease:

- a. Emethine hydrochloride
- b. Metronidazole**
- c. Chloramphenicol
- d. Furasolidone
- e. Phthalazole

13. In course of combined therapy a patient with chronic cardiac insufficiency was taking digitoxin and furosemid. As a result he had extreme muscular weakness. What electrolyte imbalances may be revealed in his blood?

- a. Hypercalcemia
- b. -
- c. Hyperkaliemia
- d. Hypocalcemia
- e. Hypokaliemia**

14. A patient with complaints of dizziness, worsening of vision acuity, sickness, salivation and

spasmodic stomachaches was taken to the admission department. The diagnosis was poisoning with organophosphorous compounds. What preparations should be included into complex therapy?

- a. Glucose and Bemegride
- b. Atropine sulfate and Dipiroxim**

- c. Tetacin-calcium and Unitiol
- d. Sodium thiosulfate and Bemegride
- e. Nalorphine hydrochloride and Bemegride

15. A surgeon cleansed his hands with 70% solution of ethyl alcohol before an operation. What is the main mechanism of antiseptic effect of preparations upon microorganisms?

- a. Oxidation of organic protoplasm components
- b. Blockade of sulfhydryl groups of enzyme systems
- c. Dehydratation of protoplasm proteins**
- d. Interaction with aminogroups of protoplasm proteins
- e. Interaction with hydroxyl enzyme groups

16. A patient who has been ill with tuberculosis for a long time has an intracellular mycobacteria disposition. What preparation must be included into the complex therapy of tuberculosis?

- a. Ethambutol
- b. Isoniazid**
- c. Ethionamide
- d. Rifampicin
- e. Sodium para-aminosalicylate

17. A patient started bleeding after tooth extraction. What action is necessary in this case?

- a. Adrenalin locally**
- b. Fibrinogen injection
- c. Neodicumarine orally
- d. Vicasol orally
- e. Thrombin injection

18. After tooth extraction the blood pressure of a patient fell dramatically, the patient lost consciousness. Collaptoid state was diagnosed. What drug should be used?

- a. Nitroglycerine
- b. Cordiamin**
- c. Isadrin
- d. Strophanthine
- e. Sustac

19. A patient who takes tetracyclin was recommended not to consume dairy products. Why did the doctor give him such recommendation?

- a. They increase risk of dysbacteriosis
- b. Dairy products dont assimilate
- c. They inhibit antibiotic absorption**
- d. Antibiotic toxicity increases
- e. Gastrointestinal digestion may be disturbed

20. A stomatologists examined first-grade pupils and revealed that one of children had yellowish brown teeth, two of them were split. Therefore the pupil was treated with "some pills" on account of pneumonia. What medication could have such a negative effect upon teeth?

- a. Doxycycline**
- b. Erythromycin
- c. Biseptol
- d. Ampicillin
- e. Oxacillin

21. A 50 year old patient with ischemic disease was prescribed an antiaggregant preparation. The patient was taking overdoses of this preparation. It resulted in nausea, vomiting, stomach pain during

fasting. What preparation was the patient prescribed?

- a. Dipiridamol
- b. Pentoxyphilline
- c. Parmidine
- d. Ticlide
- e. Acetylsalicylic acid**

22. Name the drug group that can reduce need of myocardium for oxygen, decrease force of heartbeat and inhibit lipolysis:

- a. alpha-adrenoceptor blockers
- b. Selective beta-adrenoceptor agonists
- c. alpha-adrenoceptor agonists
- d. Blockers of beta-adrenoceptor**
- e. Sympatholytics

23. A patient was attacked by bees. He was taken to the hospital with Quinckes edema. What antihistaminic medication without sedative effect sholuld be prescribed the patient?

- a. Suprastine
- b. Tavegil
- c. Diphenhydramine hydrochloride
- d. Diasoline**
- e. Phencarol

24. A patient with thyreotoxicosis was prescribed a medication that inhibits enzyme systems taking part in synthesis of thyroid gland hormones. What medication is it?

- a. Potassium iodide
- b. Diiodotyrosine
- c. Mercazolile**
- d. Thyreoidine
- e. Radioactive iodine

25. A purulent wound was treated with a solution that had antiseptic effect and contributed to the mechanical wound cleansing. What solution was used?

- a. Hydrogen peroxide**
- b. Alcoholic iodine
- c. Brilliant green
- d. Ethacrydine lactate
- e. Potassium permanganate

26. A patient with tuberculosis was prescribed a certain medication as a part of complex therapy - derivative of isonicotinic acid hydrazide. Name this preparation:

- a. Rifampicin
- b. Kanamycin
- c. Streptomycin sulfate
- d. Cephaloridine
- e. Isoniazide**

27. A patient with essential hypertension takes enalapril. What mechanism of action has this hypotensive medication?

- a. Inhibitor of cyclooxygenase
- b. Ca++ channel-blocking agent
- c. Antagonist of angiotensine II
- d. Inhibitor of phosphodiesterase
- e. Inhibitor of angiotensin converting enzyme**

28. After a surgical procedure a patient felt ill with enteroparesis. What medication from the group of anticholinesterase drugs should be prescribed?

- a. Aceclidine

b. Carbacholine

c. Proserin

d. Pilocarpine

e. Acetylcholine

29. A patient with chronic alcoholism has symptoms of polyneuritis and cardiac insufficiency. What vitamin preparation should be prescribed to this patient?

a. Retinol

b. Ergocalciferol

c. Thiamine

d. Rutin

e. Phylloquinone

30. A patient has a slowly healing fracture. What medicine can be used to accelerate formation of connective tissue matrix?

a. Methotrexate

b. Cyclosporine

c. Prednisolone

d. Cyclophosphamide

e. Methyluracil

31. Removal of a foreign body from patients eye involves local anesthesia with lidocaine. What is the action mechanism of this medication?

a. It inhibits cytochrome oxidase activity

b. It blocks passing of nitric oxide

c. It disturbs passing of  $\text{Na}^+$  through the membrane

d. It reduces dehydrogenase activity

e. It reduces passage of neuromediators

32. A patient with myocardium infarction was prescribed an analgetic in order to stop pain syndrome. The patient felt better but overdose caused weakness, myosis, respiratory depression. What medication was prescribed?

a. Ibuprofen

b. Paracetamol

c. Baralgin

d. Sedalgine

e. Morphine

33. For treatment of skin diseases with apparent inflammation in the maxillofacial area the topical glucocorticoids are applied. What preparation has the minimal resorptive effect?

a. Hydrocortisone

b. Prednisolone

c. Flumethasoni pivalas

d. Triamcinolone

e. Dexamethasone

34. A patient complains of painful cracks in mouth angles. What sulfanilamide can be recommended for local treatment of angular stomatitis?

a. Prednisolone ointment

b. Synthomycine liniment

c. Streptocide liniment

d. Butadiene ointment

e. Tetracycline ointment

35. What antihelmintic medication is used for stimulation of immune system in case of chronic generalized periodontitis?

a. Pumpkin seeds

b. Piperidine adipinate

c. Levamisole

d. Pyranthel

e. Chloxil

36. Leukoses are treated with antimetabolite methotrexate. What vitamin is its antagonist?

a. Rutin

**b. Folic acid**

c. Phyllochinone

d. Cyanocobalamin

e. Piridoxine

37. Mother of a two year old child consulted a dentist. In the period of pregnancy she was non-systematically taking antibiotics to treat an infectious disease. The child's examination revealed incisor destruction, yellow enamel, brown limbus of dental cervix. What preparation was mother taking during her pregnancy?

a. Octadine

**b. Doxycycline**

c. Ampiox

d. Furosemide

e. Xanthinol nicotinate

38. A 36 year old man with craniocerebral trauma has diminished breath sounds, thready pulse, reflexes are absent. What route of pyracetam introduction is the most suitable in this case?

a. Rectal

b. Oral

c. Inhaling

**d. Intravenous**

e. Subcutaneous

39. A patient is being operated under inhalation narcosis with nitrous oxide. It is known that it has evident lipophilic properties. What mechanism is responsible for transporting this preparation through biological membranes?

a. Filtration

b. Pinocytosis

c. Active transport

d. Facilitated diffusion

**e. Passive diffusion**

40. A patient was operated on account of abdominal injury with application of tubocurarin. At the end of operation, after the respiration had been restored, the patient got injection of gentamicin. It caused a sudden respiratory standstill and relaxation of skeletal muscles. What effect underlies this phenomenon?

**a. Potentiation**

b. Antagonism

c. Sensitization

d. Habituation

e. Cumulation

41. A child suspected for tuberculosis underwent Mantoux test. 24 hours after allergen injection there appeared a swelling, hyperaemia and tenderness. What are the main components in the development of this reaction?

**a. Mononuclears, T-lymphocytes and lymphokines**

b. Plasmatic cells, T-lymphocytes and lymphokines

c. Macrophages, B-lymphocytes and monocytes

d. B-lymphocytes, IgM

e. Granulocytes, T-lymphocytes and IgG

42. A surgeon used novocaine as an anaesthetic during surgical manipulations. 10 minutes after it the

patient became pale, he got dyspnea and hypotension. What type of allergic reaction is it?

- a. Cell-mediated
- b. Anaphylactic**
- c. Immune complex
- d. Cytotoxic
- e. Stimulating

43. A 70 year old patient suffering from cardiac insufficiency has been uncontrolledly taking digoxin that resulted in extrasystole, vomiting, vision impairment, anxiety, sleep disturbance, reduction of diuresis. Application of drugs relating to the following group will be pathogenetically reasonable in this case:

- a. Angiotensin II receptor blockers
- b. Stimulants of beta1-adrenoreceptors
- c. Donators of sulphydric groups**
- d. Potassium channel blockers
- e. Donators of nitrogen oxide

44. A patient was admitted to a surgical department for an operation. He has to undergo neuroleptanalgesia. To achieve neuroleptanalgesia it would be rational to combine fentanyl with the following medicine:

- a. Fraxiparine
- b. Droperidol**
- c. Salbutamol
- d. Cholosasum
- e. Pilocarpine

45. To prevent possible negative effect upon the gastric mucosa a patient with rheumatoid arthritis was administered a nonsteroid anti-inflammatory drug - a COX-2 selective inhibitor. Specify this drug:

- a. Ibuprofen
- b. Celecoxib**
- c. Acetylsalicylic acid
- d. Analgine
- e. Butadiion

46. A patient suffering from chronic bronchitis takes a synthetic mucolytic drug that stimulates sputum liquefaction. What drug is it?

- a. Acetylcysteine**
- b. Heparin
- c. Enalapril
- d. Furosemide
- e. Diazepam

47. A 30 year old woman has been continuously using lipstick with a fluorescent substance that led to development of a limited erythema on the prolabium, slight peeling, and later small transversal sulci and fissures. Microscopical examination of the affected zone revealed in the connective tissue sensitized lymphocytes and macrophages, effects of cytolysis. What type of immunological hypersensitivity has developed on the lip?

- a. IV type (cellular cytotoxicity)**
- b. II type (antibody cytotoxicity)
- c. Granulomatosis
- d. III type (immune complex cytotoxicity)
- e. I type (reagin type)

48. What contraction of upper extremity muscles will be observed during holding (but not moving) a load in a certain position?

- a. Isotonic
- b. Concentric
- c. Excentric

d. Isometric

e. Auxotonic

49. A 5 y.o. child enamel and dentin are striated with yellowish-brown stripes, the child has also dentin exposure, multiple caries. It is known that the child's mother had been taking antibiotics during her pregnancy. What medication might have caused such by-effect?

a. Lincomycin

b. Nystatin

c. Ampicillin

**d. Tetracycline**

e. Streptocid

50. A patient who has been treated in a neurological clinic with sedatives for a long time has the following complications: cough, rhinitis, lacrimation. What preparation might have caused such disorders?

a. Phenazepam

b. Reserpine

c. Diazepam

d. Valerian

**e. Sodium bromide**

51. During anaesthetization of the oral cavity mucous tunic a patient developed anaphylactic shock (generalized vasodilatation, increase in vascular permeability along with escape of liquid to the tissues). What type of hypersensitivity has the patient developed?

a. II type (antibody-dependent)

b. IV type (cellular cytotoxicity)

c. V type (granulomatosis)

**d. I type (anaphylactic)**

e. III type (immune complex)

52. Hemotransfusion stimulated development of intravascular erythrocyte hemolysis. The patient has the following type of hypersensitivity:

a. IV type hypersensitivity (cellular cytotoxicity)

b. V type hypersensitivity (granulomatosis)

c. I type hypersensitivity (anaphylactic)

d. III type hypersensitivity (immune complex)

**e. II type hypersensitivity (antibody-dependent)**

53. A patient suffering from tuberculosis was treated with rifampicin, which caused drug resistance of mycobacteria tuberculosis. In order to reduce mycobacteria resistance, rifampicin should be combined with the following drug:

a. Intraconazole

b. Acyclovir

**c. Isoniazid**

d. Metronidazole

e. Amoxicillin

54. A woman with ischemic disease has been taking an antianginal medication that has the following properties: dilates coronary arteries, peripheral vessels (arterial and venous), reduces the need of myocardium in oxygen, improves endocardial blood circulation. Name this preparation:

a. Validol

b. Dibasol

c. Aminophylline

**d. Nitroglycerin**

e. Papaverine

55. A patient has been taking glucocorticoids for a long time. Drug withdrawal caused acute attack of his disease, blood pressure reduction, weakness. What are these occurrences connected with?

- a. Cumulation
- b. Adrenal glands insufficiency**

- c. Sensibilisation
- d. Drug habituation
- e. Hyperproduction of corticotroph hormone

56. A patient suffering from myasthenia has been administered proserin. After its administration the patient has got nausea, diarrhea, twitch of tongue and skeletal muscles. What drug would help to eliminate the intoxication?

- a. Mesatonum
  - b. Atropine sulfate**
- c. Pyridostigmine bromide
  - d. Physostigmine
  - e. Isadrine

57. A patient suffering from syphilis has been treated with bismuth preparations. As a result of it some grey spots turned up on the mucous membrane of the oral cavity; nephropathy symptoms were also present. What drug should be used for treatment of bismuth intoxication?

- a. Naloxone
  - b. Methylene blue
  - c. Unithiol**
- d. Bemegride
  - e. Nalorphine

58. A 25 year old patient had in the dentists room a sudden attack of bronchial asthma. The doctor gave him salbutamol in the form of inhalation. What is the mechanism of action of this preparation?

- a. Stimulates alpha-adrenoreceptors
  - b. Blocks phosphodiesterase
  - c. Blocks M-cholinergic receptors
  - d. Stimulates beta<sub>2</sub>-adrenoreceptors**
- e. Blocks H1-histamine receptors

59. A patient has myocardial infarction with thrombosis of the left coronary artery. What pharmacological preparation group should be used to reestablish blood flow?

- a. Glucocorticoids
  - b. Fibrinolysis activators**
- c. Beta-adrenergic blockers
  - d. Narcotic analgesics
  - e. Angiotensin-converting enzyme inhibitors

60. A patient with stomatitis was prescribed a medication of sulfanamide group. What is the mechanism of its antibacterial effect?

- a. Inhibition of sulphhydryl groups of thiol enzymes
- b. Protein coagulation
- c. Synthesis disturbance of cell membrane proteins
- d. Decrease of membrane permeability
- e. Competitive antagonism with para-aminobenzoic acid**

61. A patient with periodontitis has been administered a glucocorticoid drug in form of an ointment. Specify this ointment:

- a. Ampicillin
- b. Erythromycin
- c. Tetracycline
- d. Decamine
- e. Prednisolone**

62. An unconscious patient was admitted to the hospital. Objectively: cold skin, miotic pupils, heavy breathing, Chaine-Stokes periodicity, low arterial pressure, overfull urinary bladder. What caused the

poisoning?

- a. Tranquilizers
- b. Muscarinic receptor blockers
- c. -
- d. Narcotic analgetics**
- e. Nonnarcotic analgetics

63. A 30 year old patient consulted a doctor about having diarrhea and stomach aches for 5 days, temperature rise up to 37,5C with chills. The day before the patient was in a forest and drank some water from an open pond. He was diagnosed with amebic dysentery that was bacteriologically confirmed. Name the medication for treatment of this disease:

- a. Emethine hydrochloride

**b. Metronidazole**

- c. Chloramphenicol
- d. Furasolidone
- e. Phthalazole

64. A patient diagnosed with acute pancreatitis was admitted to the surgical department. Which drug administration would be pathogenetically grounded?

- a. Fibrinolysin

**b. Contrical**

- c. Chymotrypsin
- d. Trypsin
- e. Pancreatin

65. In course of combined therapy a patient with chronic cardiac insufficiency was taking digitoxin and furosemid. As a result he had extreme muscular weakness. What electrolyte imbalances may be revealed in his blood?

- a. Hypocalcemia

- b. Hyperkaliemia

**c. Hypokaliemia**

- d. Hypercalcemia

- e. -

66. A patient with complaints of dizziness, worsening of vision acuity, sickness, salivation and spasmodic stomachaches was taken to the admission department. The diagnosis was poisoning with organophosphorous compounds. What preparations should be included into complex therapy?

- a. Glucose and bemegride

**b. Atropine sulfate and dipiroxim**

- c. Tetacin-calcium and unitiol

- d. Sodium thiosulfate and bemegride

- e. Nalorphine hydrochloride and bemegride

67. A surgeon cleansed his hands with 70% solution of ethyl alcohol before an operation. What is the main mechanism of preparations antiseptic effect upon microorganisms?

**a. Dehydratation of protoplasm proteins**

- b. Oxidation of organic protoplasm components

- c. Interaction with hydroxyl enzyme groups

- d. Interaction with aminogroups of protoplasm proteins

- e. Blockade of sulphydryl groups of enzyme systems

68. A patient who has been ill with tuberculosis for a long time has an intracellular mycobacteria disposition. What preparation must be included into the complex therapy of tuberculosis?

- a. Sodium para-aminosalicylate

- b. Ethambutol

- c. Rifampicin

- d. Ethionamide

**e. Isoniazid**

69. After tooth extraction the blood pressure of a patient fell dramatically, the patient lost consciousness. Collaptoid state was diagnosed. What drug should be used?

- a. Sustac
- b. Nitroglycerine
- c. Strophanthine
- d. Isadrin
- e. Cordiamin**

70. A patient who takes tetracyclin was recommended not to consume dairy products. Why did the doctor give him such recommendation?

- a. Gastrointestinal digestion may be disturbed
- b. They inhibit antibiotic absorption**
- c. They increase risk of dysbacteriosis
- d. Dairy products dont assimilate
- e. Antibiotic toxicity increases

71. A stomatologists examined first-grade pupils and revealed that one of children had yellowish brown teeth, two of them were split. Heretofore the pupil was treated with "some pills" on account of pneumonia. What medication could have had such a negative effect upon teeth?

- a. Oxacillin
- b. Ampicillin
- c. Biseptol
- d. Doxycycline**
- e. Erythromycin

72. A 50 year old patient with ischemic disease was prescribed an antiaggregant preparation. The patient was taking overdoses of this preparation. It resulted in nausea, vomiting, stomach pain during fasting. What preparation was the patient prescribed?

- a. Pentoxyphilline
- b. Acetylsalicylic acid**
- c. Ticlide
- d. Parmidine
- e. Dipiridamol

73. Name the drug group that can reduce need of myocardium for oxygene, decrease force of heartbeat and inhibit lipolysis:

- a. Alpha-adrenoceptor blockers
- b. Selective beta-adrenoceptor agonists
- c. Alpha-adrenoceptor agonists
- d. Beta-adrenoceptor blockers**
- e. Sympatholytics

74. A patient was attacked by bees. He was taken to the hospital with Quinckes edema. What antihistaminic medication without sedative effect sholuld be prescribed the patient?

- a. Diasoline**
- b. Phencarol
- c. Diphenhydramine hydrochloride
- d. Tavegil
- e. Suprastine

75. A patient with thyreotoxicosis was prescribed a medication that inhibits enzyme systems taking part in synthesis of thyroid gland hormones. What medication is it?

- a. Mercazolile**
- b. Potassium iodide
- c. Radioactive iodine
- d. Thyreoidine
- e. Diiodotyrosine

76. A purulent wound was treated with a solution that had antiseptic effect and contributed to the mechanical wound cleansing. What solution was used?

- a. Ethacrydine lactate
- b. Brilliant green
- c. Potassium permanganate
- d. Alcoholic iodine
- e. Hydrogen peroxide**

77. A patient with tuberculosis was prescribed a certain medication as a part of complex therapy - derivative of isonicotinic acid hydrazide. Name this preparation:

- a. Streptomycin sulfate
- b. Rifampicin
- c. Kanamycin
- d. Isoniazide**
- e. Cephaloridine

78. A patient with essential hypertension takes enalapril. What mechanism of action has this hypotensive medication?

- a. Inhibitor of cyclooxygenase
- b. Ca<sup>++</sup> channel-blocking agent
- c. Antagonist of angiotensine II
- d. Inhibitor of phosphodiesterase
- e. Inhibitor of angiotensin converting enzyme**

79. After a surgical procedure a patient felt ill with enteroparesis. What medication from the group of anticholinesterase drugs should be prescribed?

- a. Carbacholine
- b. Pilocarpine
- c. Acetylcholine
- d. Proserin**
- e. Aceclidine

80. A patient with chronic alcoholism has symptoms of polyneuritis and cardiac insufficiensy. What vitamin preparation should be prescribed to this patient?

- a. Phylloquinone
- b. Thiamine**
- c. Retinol
- d. Ergocalciferol
- e. Rutin

81. A patient has a slowly healing fracture. What medicine can be used to accelerate formation of connective tissue matrix?

- a. Cyclosporine
- b. Methyluracil**
- c. Cyclophosphan
- d. Prednisolone
- e. Methotrexate

82. Removal of a foreign body from patients eye involves local anesthesia with lidocaine. What is the action mechanism of this medication?

- a. It reduces dehydrogenase activity
- b. It reduces passage of neuromediators
- c. It blocks passing of nitric oxide
- d. It inhibits cytochrome oxidase activity
- e. It disturbs passing of Na<sup>+</sup> through the membrane**

83. During a surgery, the anesthesiologist used a ganglionic blocker for controlled hypotension. What drug was given the patient in this case?

- a. Pentaminum
- b. Pachycarpinum
- c. Benzohexonium
- d. Pirilenum
- e. Hygronium

84. A patient with myocardium infarction was prescribed an analgetic in order to stop pain syndrome. The patient felt better but overdose caused weakness, myosis, respiratory depression. What medication was prescribed?

- a. Paracetamol
- b. Morphine**
- c. Sedalgin
- d. Baralgin
- e. Ibuprofen

85. For treatment of skin diseases with apparent inflammation in the maxillofacial area the topical glucocorticoids are applied. What preparation has the minimal resorptive effect?

- a. Flumethasoni pivalas**
- b. Hydrocortisone
- c. Dexamethasone
- d. Triamcinolone
- e. Prednisolone

86. A patient complains of painful cracks in mouth angles. What sulfanilamide can be recommended for local treatment of angular stomatitis?

- a. Streptocide liniment**
- b. Prednisolone ointment
- c. Tetracycline ointment
- d. Butadiene ointment
- e. Synthomycine liniment

87. What antihelmintic medication is used for stimulation of immune system in case of chronic generalized periodontitis?

- a. Piperidine adipinate
- b. Pyrantel
- c. Chloxil
- d. Levamisole**
- e. Pumpkin seeds

88. A patient complains about retrosternal pain, dyspnea and palpitation. After examination he was diagnosed with coronary heart disease and prescribed verapamil. What is the mechanism of its action?

- a. It blocks alpha-adrenoreceptors
- b. It blocks potassium channels
- c. It blocks sodium channels
- d. It blocks calcium channels**
- e. It blocks beta-adrenoreceptors

89. Leukoses are treated with antimetabolite methotrexate. What vitamin is its antagonist?

- a. Cyanocobalamin
- b. Piridoxine
- c. Rutin
- d. Folic acid**
- e. Phyllochinone

90. Mother of a two year old child consulted a dentist. In the period of pregnancy she was non-systematically taking antibiotics to treat an infectious disease. The child's examination revealed incisor destruction, yellow enamel, brown limbus of dental cervix. What preparation was mother

taking during her pregnancy?

- a. Xanthinol nicotinate
- b. Octadine
- c. Furosemide
- d. Ampiox
- e. Doxycycline

91. A 36 year old man with craniocerebral trauma has diminished breath sounds, thready pulse, reflexes are absent. What route of pyracetam introduction is the most suitable in this case?

- a. Oral
- b. Inhaling
- c. Rectal
- d. Subcutaneous
- e. Intravenous

92. A patient with chronic heart failure has been taking digoxin for several months on an outpatient basis. At a certain stage of treatment, he got symptoms of drug overdose. What effect underlies the development of this complication?

- a. Functional cumulation
- b. Tachyphylaxis
- c. Adaptation
- d. Sensibilization
- e. Material accumulation

93. A patient was operated on account of abdominal injury with application of tubocurarin. At the end of operation, after the respiration had been restored, the patient got injection of gentamicin. It caused a sudden respiratory standstill and relaxation of skeletal muscles. What effect underlies this phenomenon?

- a. Antagonism
- b. Cumulation
- c. Potentiation
- d. Habituation
- e. Sensitization

94. A child suspected for tuberculosis underwent Mantoux test. 24 hours after allergen injection there appeared a swelling, hyperaemia and tenderness. What are the main components in the development of this reaction?

- a. Plasmatic cells, T-lymphocytes and lymphokines
- b. Granulocytes, T-lymphocytes and IgG
- c. Mononuclears, T-lymphocytes and lymphokines
- d. B-lymphocytes, IgM
- e. Macrophages, B-lymphocytes and monocytes

95. A patient suffering from coronary artery disease had taken a certain drug many times a day in order to arrest stenocardia attacks. Overdose of this drug finally caused intoxication. Objectively: cyanotic skin and mucous membranes, dramatic fall in the arterial pressure, tachycardia, respiration inhibition. Blood has increased concentration of methemoglobin. The drug the patient had taken relates to the following group:

- a. Calcium channel blockers
- b. Alpha-adrenoceptor blockers
- c. Organic nitrates
- d. Adenosine drugs
- e. Myotropic spasmolytics

96. A 30-year-old patient with pneumonia has been administered a 3-day course of an antibiotic from the group of azalides that has bactericidal effect, prolonged action, the ability to bind to phagocytic cells and accumulate in the infection foci. What drug has been administered?

- a. Azithromycin

- b. Benzylpenicillin sodium salt
- c. Ciprofloxacin
- d. Isoniazid
- e. Erythromycin

97. A patient was taken to a hospital with dizziness, dry mouth, mydriatic pupils, accommodation disorder, tachycardia, difficult urination, intestinal atony. These symptoms might have been caused by overdose of the following drug:

- a. Furosemide
- b. Captopril
- c. Prazosin
- d. Atropine sulfate**
- e. Clonidine

98. A student applied to a doctor and asked him to prescribe a drug for treatment of allergic rhinitis he fell ill with during linden flowering. What drug can be applied?

- a. Losartan
- b. Loratadine**
- c. Propranolol
- d. Noradrenaline hydrochloride
- e. Ambroxol

99. A 70 year old patient suffering from cardiac insufficiency has been uncontrolled taking digoxin that resulted in extrasystole, vomiting, vision impairment, anxiety, sleep disturbance, reduction of diuresis. Application of which drugs relating to the following group will be pathogenetically reasonable in this case?

- a. Potassium channel blockers
- b. Donors of nitrogen oxide
- c. Stimulants of beta1-adrenoreceptors
- d. Angiotensin II receptor blockers
- e. Donators of sulfhydryl groups**

100. A patient was admitted to a surgical department for an operation. He has to undergo neuroleptanalgesia. To achieve neuroleptanalgesia it would be rational to combine fentanyl with the following medicine:

- a. Cholosasum
- b. Pilocarpine
- c. Fraxiparine
- d. Droperidol**
- e. Salbutamol

101. To prevent possible negative effect upon the gastric mucosa a patient with rheumatoid arthritis was administered a nonsteroid anti-inflammatory drug - a COX-2 selective inhibitor. Specify this drug:

- a. Ibuprofen
- b. Celecoxib**
- c. Acetylsalicylic acid
- d. Analgine
- e. Butadiene

102. An elderly female patient suffers from the type 2 diabetes mellitus accompanied by obesity, atherosclerosis, coronary artery disease. Basal hyperinsulinemia is also present. What treatment would be the most appropriate?

- a. Amlodipine
- b. Glibenclamide**
- c. Retabolin
- d. Insulin
- e. Lovastatin

103. What contraction of upper extremity muscles will be observed during holding (but not moving) a load in a certain position?

- a. Excentric
- b. Isometric**
- c. Auxotonic
- d. Isotonic
- e. Concentric

104. A 5 y.o. child's enamel and dentin are striated with yellowish-brown stripes, the child has also dentin exposure, multiple caries. It is known that the child's mother had been taking antibiotics during her pregnancy. What medication might have caused such by-effect?

- a. Streptocid
- b. Lincomycin
- c. Tetracycline**
- d. Nystatin
- e. Ampicillin

105. A female patient consulted a doctor about pain and limited movements in the knee joints. Which of the following nonsteroid anti-inflammatory drugs should be administered taking into consideration that the patient has a history of chronic gastroduodenitis?

- a. Celecoxib**
- b. Promedol
- c. Butadiounum
- d. Acetylsalicylic acid
- e. Diclofenac sodium

106. A patient with symptoms of acute heart failure, namely pallor, acrocyanosis and rapid shallow breathing, has been delivered to the emergency department. Which of these drugs is indicated in this case?

- a. Adrenalin hydrochloride
- b. Corglycon**
- c. Cordiamine
- d. Digitoxin
- e. Nitroglycerine

107. A patient who has been treated in a neurological clinic with sedatives for a long time has the following complications: cough, rhinitis, lacrimation. What preparation might have caused such disorders?

- a. Reserpine
- b. Sodium bromide**
- c. Valerian
- d. Diazepam
- e. Phenazepam

108. During anaesthetization of the oral cavity mucous tunic a patient developed anaphylactic shock (generalized vasodilatation, increase in vascular permeability along with escape of liquid to the tissues). What type of hypersensitivity has the patient developed?

- a. III type (immune complex)
- b. II type (antibody-dependent)
- c. I type (anaphylactic)**
- d. IV type (cellular cytotoxicity)
- e. V type (granulomatosis)

109. A student came to see a doctor and asked to administer him a drug for treatment of allergic rhinitis that occurs in the period of linden flowering. What drug may be used?

- a. Propanolol
- b. Noradrenaline hydrotartrate
- c. Loratadine**

- d. Ambroxol
- e. Losartan

110. A patient with mandibular osteomyelitis has been administered an antibiotic from the tetracycline group. Specify this drug:

- a. Amikacin
- b. Doxycycline hydrochloride**
- c. Streptomycin

- d. Rifampicin
- e. Oxacillin

111. A patient suffering from tuberculosis was treated with rifampicin, which caused drug resistance of tuberculosis mycobacteria. In order to reduce mycobacteria resistance, rifampicin should be combined with the following drug:

- a. Metronidazole

- b. Amoxicillin

- c. Acyclovir

- d. Intraconazole

- e. Isoniazid**

112. A patient has herpetic conjunctivitis. What etiologic drug should be administered?

- a. Methisazone

- b. Ampicillin

- c. Acyclovir**

- d. Furagin

- e. Tetracycline

113. A patient consulted a physician about muscle rigidity, constrained movements, permanent arm tremor. The patient was diagnosed with Parkinson's disease. What preparation should be administered?

- a. Phenobarbital

- b. Phenytoin

- c. Levodopa**

- d. Diazepam

- e. Ethosuximide

114. A patient with coronary artery disease was admitted to the cardiological department. For stenocardia prevention a drug from the group of beta-adrenoceptor blockers was administered. What drug is it?

- a. Furosemide

- b. Metoprolol**

- c. Morphine hydrochloride

- d. Atropine sulfate

- e. Oxytocin

115. A patient has the pronounced pain syndrome induced by neuralgia. What drug from the group of nonsteroidal anti-inflammatory drugs will reduce pain sensitivity?

- a. Lidocaine hydrochloride

- b. Droperidol

- c. Codeine phosphate

- d. Ketamine hydrochloride

- e. Diclofenac sodium**

116. After starting treatment for pulmonary tuberculosis a patient complained about red tears and urine. What drug could cause such changes?

- a. Benzylpenicillin potassium salt

- b. Benzylpenicillin sodium salt

- c. Rifampicin**

- d. Biseptol-480
- e. Cefazolin

117. Before tooth extraction a patient was advised to take a certain drug for haemorrhage prevention. What drug was advised?

- a. Vicasolum
- b. Asparcam
- c. Dimedrol
- d. Magnesium sulfate
- e. Heparin

118. A 45-year-old patient suffers from neurosis characterized by irritability, sleeplessness, motiveless anxiety. What drug would eliminate all the symptoms?

- a. Caffeine sodium benzoate
- b. Levodopa
- c. Valerian extract
- d. Pyracetam
- e. Diazepam

119. A patient with a severe maxillofacial trauma has been delivered to the emergency department. What drug should be given this patient to relieve pain shock?

- a. Ibuprofen
- b. Sydnocarb
- c. Promedol
- d. Pantogam
- e. Mydocalm

120. After a tooth extraction, the patient developed acute heart failure. What drug should be prescribed in this case?

- a. Strophanthin
- b. Cordigitum
- c. Adonisid
- d. Convallaria majalis tincture
- e. Digitoxin

121. To treat ischemic heart disease, a patient was prescribed a beta-adrenergic blocking agent. After a time he developed a cough and bronchospasm. What drug can cause these side effects?

- a. Atenolol
- b. Talinolol
- c. Anaprilin (Propranolol)
- d. Phenihidine (Nifedipine)
- e. Metoprolol

122. A child with signs of rickets has been prescribed a certain liposoluble vitamin drug by the pediatrician and dentist. This drug affects the metabolism of phosphorus and calcium in the body and facilitates calcium accumulation in bone tissue and dentin. If its content in the body is insufficient, a person develops disorders of ossification process, dental structure, and occlusion. Name this drug:

- a. Ergocalciferol
- b. Tocopherol acetate
- c. Thyroidin
- d. Menadione (Vicasolum)
- e. Retinol acetate

123. A patient with signs of anxiety, fear, uncertainty, and mental strain was prescribed diazepam. What mechanism of tranquilizing action can be observed in this case?

- a. Interaction with benzodiazepine receptors
- b. Interaction with cholinergic receptors
- c. Interaction with dopamine receptors

- d. Interaction with serotonin receptors
- e. Interaction with adrenergic receptors

124. A patient with hypochromic anemia was prescribed an iron-containing drug for intravenous administration only. Name this drug:

- a. Dichlothiazide (Hydrochlorothiazide)

**b. Fercoven**

- c. Furosemide
- d. Mannitol
- e. Etacrynic acid

125. A child presents with dry cough. What non-narcotic antitussive drug can relieve the patient's condition?

- a. Morphine hydrochloride
- b. Codeine phosphate

**c. Glaucine hydrochloride**

- d. Potassium iodide
- e. Althaea officinalis roots

126. A patient with peptic ulcer disease of the stomach is prescribed a drug that blocks histamine H<sub>2</sub> receptors. Select this drug from the list:

**a. Famotidine**

- b. Omeprazole
- c. Dithylin (Suxamethonium)
- d. Atropine sulfate
- e. Bisacodyl

127. The patient is in the state of cardiogenic shock, he needs to be given a non-glycoside cardiotonic drug. What will be the drug of choice in this case?

- a. Cordiamin (Nikethamide)

- b. Amrinone

**c. Dobutamine**

- d. Ethimizol
- e. Caffeine

128. A certain drug with potent natriuretic action is usually prescribed for dehydration therapy of cerebral and pulmonary edemas. Name this drug:

- a. Spironolactone

- b. Mannitol

- c. Theophylline

**d. Furosemide**

- e. Etacrynic acid

129. A patient with malignant tumor was prescribed a narcotic analgesic to relieve the unbearable pain. What is the mechanism of analgesic action of such drugs?

- a. Inhibition of histamine receptors

**b. Activation of opiate receptors**

- c. Activation of D<sub>2</sub> dopamine receptors
- d. Inhibition of cholinergic receptors
- e. Inhibition of serotonin receptors

130. A patient with streptococcal pneumonia was prescribed an antimicrobial agent that disrupts microbial membranes. Name this drug:

- a. Erythromycin

- b. Doxycycline hydrochloride

- c. Gentamicin sulfate

**d. Benzylpenicillin sodium salt**

- e. Azithromycin

131. A 26-year-old woman presents with skin rashes and itching after eating citrus fruits. Prescribe her a drug that is an H1-histamine receptor antagonist:

- a. Menadione (Vicasolum)
- b. Acetylsalicylic acid
- c. Dimedrol (Diphenhydramine)
- d. Analgin (Metamizole)
- e. Paracetamol

132. A 30-year-old patient after a case of viral hepatitis type B has developed complaints of continuous nasal hemorrhages. What drug would be the most advisable for treatment of this condition?

- a. Folic acid
- b. Nadroparin calcium (Fraxiparine)
- c. Menadione (Vicasolum)
- d. Dipiridamol
- e. Asparcam

133. A patient with megaloblastic anemia was taking a water-soluble vitamin. Name this substance:

- a. Cyanocobalamin
- b. Tocopherol acetate
- c. Pyridoxine
- d. Ascorbic acid
- e. Thiamine chloride

134. Complex therapy of a patient with bronchopneumonia accompanied by exhausting dry cough includes a certain mucolytic agent that depolymerizes mucoproteins. Name this drug:

- a. Acetylcysteine
- b. Strophanthin
- c. Atenolol
- d. Neodicoumarin
- e. Codeine

135. Prior to tooth extraction under a local anesthesia, the patient was tested for novocaine allergy. The test result was positive. What substance can be used to administer anesthesia in this case?

- a. Acetylsalicylic acid
- b. Procainamide
- c. Lidocaine
- d. Analgin (Metamizole)
- e. Sodium valproate

136. To terminate a bronchial asthma attack that developed in the patient during the tooth extraction, the patient was given salbutamol. This drug belongs to the following pharmacological group:

- a. Beta-2-adrenergic agonists
- b. Narcotic analgesics
- c. Analeptics
- d. Adaptogens
- e. Muscarinic agonists

137. A doctor has made a diagnosis of gingivitis and recommended the patient to rinse the oral cavity with an oxidizing agent. Specify this agent:

- a. Salicylic acid
- b. Boric acid
- c. Hydrogen peroxide
- d. Phenol
- e. Brilliant green