

Teste hemostasis

1. The mechanism of action of direct anticoagulants consists of:

- A. Interfering the hepatic synthesis of vitamin K-dependent coagulation factors
- B. Connection with antithrombin III to formation of a complex with anticoagulant action
- C. Direct activation of plasminogen to formation of plasmin
- D. Inhibition of platelet functions by different mechanisms
- E. Direct injury of fibrin fibers.

2. Select the principles of dosing of streptokinase in pulmonary artery thromboembolism:

- A. For therapeutic purposes, 40.000-60 000 UA are administered in infusion for 4-6 hours, followed by the fractional introduction i/v of 5-10 000 UA every 4-6 hours 10-14 days.
- B. 100-350 mg once daily or 300-500 mg once every 3 days
- C. For therapeutic purpose 0.1ml / 10kg, twice a day, prophylactic once a day for 10-14 days
- D. 300-800 mg /on a day during the meal
- E. Initially, 250 000 UA dissolved in 50 ml isotonic solution or 5% glucose solution in infusion for 30 min, then 750 000 UA dissolved in 500 ml saline or glucose solution for 7-8 hours in infusion.

3. Select the mechanism of action of clopidogrel and ticlopidine:

- A. It prevents thromboxane synthesis (TX-A₂)
- B. It increases the amount of cAMP in platelets
- C. Direct action on platelet membrane
- D. Block of platelet receptors for ADP
- E. Block of thromboxane receptors (TX-A₂)

4. Select the correct statement about folic acid:

- A. Inhibits the central nervous system
- B. It acts on the coagulation of blood
- C. It influences the formation of purine and pyrimidine nucleotides
- D. Stimulates the central nervous system
- E. Acts directly on plasminogen

5. Select the correct answer for oral anticoagulants:

- A. They do not penetrate the placental barrier
- B. They have no teratogenic effect
- C. They can cause various malformations of the central nervous system (of the fetus), if they are used during the pregnancy
- D. They can be given for the treatment and prophylaxis of thrombosis during pregnancy
- E. They do not cause liver, kidney injury

6. Select the correct answer about the acetylsalicylic acid:

- A. It possesses anti-aggregating effect at doses greater than 500mg
- B. Administered in high doses, loses selectivity over platelet cyclooxygenase, responsible for the formation of TX A₂
- C. The anti-aggregating action is short-term and requires frequent administration
- D. Initially, it develops antipyretic and analgesic action and after antiaggregant and anti-inflammatory action
- E. The latency of the anti-aggregating effect is 5-7 days.

7. Select the indication of phytonadione:

- A. Bleeding caused by overdosage with coumarin anticoagulants: A
- B. Hemorrhages produced by fibrinolytic overdose
- C. Bleeding caused by overdose of standard heparin
- D. Hemorrhages produced by overdose of heparins with low molecular weight
- E. Bleeding caused by overdose of antiaggregants.

8. Select the mechanism of action of ϵ -aminocaproic acid:

- A. Decreases the capillary permeability, increases the degree of platelet adhesion.
- B. Inhibits plasminogen activators by preventing plasmin formation, stimulates platelet adhesion and aggregation
- C. Participates in the synthesis of liver factors of coagulation
- D. It specifically neutralizes the heparin
- E. Stimulates the platelet formation from megakaryocytes

9. Aprotinin is indicated in bleeding by overdose of:

- A. Coumarin anticoagulants
- B. Fibrinolytic overdose
- C. Standard heparin
- D. Heparins with low molecular weight
- E. Anti-aggregants

10. Select the mechanism of action of low molecular weight heparins (HMMM):

- A. They inhibit the formation of coagulation factors and C, S proteins in the liver.
- B. They specifically and irreversibly inhibit thrombin, including the thrombin from the thrombus, with which they form a stable complex.
- C. They are coupled with antithrombin III, predominantly inhibiting the action of factor IIa and partially of factor Xa of coagulation.
- D. In complex with antithrombin III, they inhibit the action of Xa factor of coagulation
- E. They are coupled with antithrombin III and factor X a

11. Name the most common dextran adverse reaction:

- A. Allergic reaction
- B. Retrosternal pain
- C. Pulmonary edema
- D. Nephrotoxic effect
- E. Cerebral edema

12. Name the specific blocker of glycopeptide IIb / IIIa receptors from platelet:

- A. Sulfinpyrazone
- B. Pentoxiphylline
- C. Dipiridamole
- D. Tirofiban
- E. Ridogrel

13. Name the selective thromboxane synthetase inhibitor:

- A. Sulfinpyrazone
- B. Pentoxiphylline
- C. Dipyridamole
- D. Tirofiban
- E. Ridogrel

14. Name the mechanism of the anti-aggregating action of acetylsalicylic acid:

- A. It inhibits thromboplastin activity and prevents the passage of prothrombin into thrombin
- B. It binds calcium ions into the blood
- C. It inhibits the synthesis of prostaglandins and thromboxane
- D. It activates antithrombin III
- E. It activates factors IX, X, XI, XII, and kalikrein.

15. Which of the anti-aggregates acts through cAMP?

- A. Dextran 40;
- B. Prostacyclin;
- C. Ticlopidine.
- D. Clopidogrel;
- E. Acetylsalicylic acid;

16. Which drug is preferable for long-term prophylaxis of venous thrombosis?

- A. Acenocumarol;
- B. Standard heparin;
- C. Streptokinase;
- D. Acetylsalicylic acid;
- E. Dipyridamole.

17. Name the mechanism of action of fibrinolytics:

- A. Forms the complex with antithrombin III, which has anticoagulant properties;
- B. Activates the plasminogen with formation of plasmin;
- C. Inhibits platelet aggregation by different mechanisms;
- D. Inhibits hepatic synthesis of vit.K-dependent coagulation factors;
- E. Inhibits metabolism of arachidonic acid.

18. Name the mechanism of action of the protamine:

- A. Activates the coagulation cascade;
- B. Inactivates the antithrombin;
- C. Inactivates heparin;
- D. Activates the factors VIII and IX of coagulation;
- E. Activates the clotting factors XI and XII of coagulation.

19. Name the best drug for long-term prophylaxis of venous thrombosis:

- A. Acenocoumarol;
- B. Standard heparin;
- C. Streptokinase;
- D. Acetylsalicylic acid;
- E. Dipyridamole.

20. Name the phytomenadione indication:

- A. Keratitis;
- B. Rheumatoid arthritis;
- C. Angina pectoris;
- D. Parenchymal hemorrhage;
- E. Muscle pain.

21. Indicate the medication in fibrinolytic overdose:

- A. Phytomenadione;
- B. Aminocaproic acid;
- C. Protamine sulphate;
- D. Etamsylate;
- E. Ticlopidine.

22. Name the mechanism of action of indirect anticoagulants:

- A. Inhibits thromboplastin activity;
- B. It binds calcium ions into the blood;
- C. Inhibits the transformations of prothrombin and proconvertin into active forms in the liver;
- D. Activates antithrombin III;
- E. Activates the transformations of factors IX, X, XI, XII into active factors.

23. Indicate the drug that changes the coagulation time:

- A. Heparin;
- B. Acenocoumarol;
- C. Acetylsalicylic acid (in small doses);
- D. Carbazochrome;
- E. Dipyridamole

24. Select the proportion between protamine sulfate and heparin, necessary for neutralization of the last one:

- A. 0.5 ml protamine at 100 U heparin;
- B. 1 ml protamine at 100 U heparin;
- C. 1.2 ml protamine at 100 U heparin;
- D. 1.5 ml protamine at 100 U heparin
- E. 2 ml protamine at 100 U heparin

25. Which of the following drugs is not from antithrombotic group?

- A. Heparin;
- B. Streptokinase;
- C. Ethyl biscumacetate;
- D. Acetylsalicylic acid;
- E. Aprotinin.

26. Select the laboratory investigation that ensure the effectiveness and harmlessness of fibrinolytic medication:

- A. Coagulation time (maintained 2-3 times N);
- B. Thrombin time (not more than 2 times the N value);
- C. Recalculation time (not more than 2 times the N value);
- D. Cephalin time (2 times the value of N);
- E. Ethanol test (positive).

27. Name the drug that is not from hemostatic group:

- A. Phytomenadione;
- B. Etamsylate;
- C. Aprotinin;
- D. Acenocoumarol;
- E. Protamine sulfate.

28. In which of clinical situation phytomenadione is not so effective as a hemostatic?

- A. Bleeding from prolonged treatment with orally administered tetracycline or sulfamide;
- B. Bleeding in patients with mechanical jaundice;
- C. Bleeding in patients with large bowel resection;
- D. Bleeding by hyperfibrinolysis;
- E. Bleeding by overdose of coumarin anticoagulants.

29. Name the heparin antagonist:

- A. Thrombin;
- B. Acenocoumarol;
- C. Menadione;
- D. Protamine sulfate;
- E. Fibrinogen.

30. In acute thrombosis, if 6 months ago, the patient made a treatment with streptokinase, it is recommended:

- A. To keep the drug, because its effectiveness has already been demonstrated;
- B. To keep the drug, but to increase the dose;
- C. To keep the drug, but to reduce the dose;
- D. To change the drug, because tolerance to it has developed;
- E. To change the drug to avoid allergic reactions;

31. Name the topical drug used for stopping bleeding from small vessels:

- A. Phytomenadione;
- B. Calcium chloride;
- C. Acetylsalicylic acid;
- D. Thrombin
- E. Fibrinogen.

32. Name the criteria that confirms the effectiveness of heparin:

- A. The coagulation time after Li-Wait should be 7-10 minutes;
- B. The coagulation time after Li-Wait should be 10-15 minutes;
- C. The coagulation time after Li-Wait should be 20-25 minutes;
- D. The prothrombin index 50-70%;
- E. The prothrombin index 70-105%;

33. Name the mechanism of action of sodium citrate:

- A. It binds the calcium ions;
- B. Inhibits thrombin activity;
- C. Depresses the thromboplastin synthesis;
- D. Inhibits the synthesis (activation) of prothrombin and proconvertin in the liver;
- E. It promotes platelet aggregation.

34. Which of the following affirmations is not true for heparin?

- A. Heparin is isolated from animal tissues;
- B. Bad heparin is absorbed from the digestive tract;
- C. The rate of heparin clearance is dose-dependent;
- D. The effect of heparin can be antagonized by protamine;
- E. Heparin passes into breast milk.

35. Which of the anti-aggregants inhibits prostaglandin synthesis?

- A. Dextran 40;
- B. Dipyridamole;
- C. Prostacyclin;
- D. Acetylsalicylic acid;
- E. Ticlopidine.

36. Name the drug with direct influence on the factor X of the coagulation:

- A. Acenocoumarol;
- B. Heparin;
- C. Sodium citrate;
- D. Nadroparin;
- E. Warfarin.

37. Name the criteria that demonstrate the effectiveness of indirect anticoagulants:

- A. Prothrombin index > 40%;
- B. The prothrombin index 50-70%;
- C. Prothrombin index < 70-100%;
- D. International Standardization Index > 4;
- E. International Standardization Index < 2;

38. What is the latency of the warfarin action?

- A. 24 hours;
- B. 24-36 hours;
- C. 36-48 hours;
- D. 48-72 hours;
- E. 72-96 hours.

39. Which of the following statements about vitamin B12 is false?

- A. Vitamin B12 administration is therapeutically useful in case of deficiency;
- B. Macrocytic anemia due to vitamin B12 deficiency is improved by folic acid administration;
- C. Contrary to folic acid, vitamin B12 may favorably influence funicular myelosis that occurs in pernicious anemia;
- D. Vitamin B12 is the best antidote in case of administration of a maximum dose of methotrexate;
- E. After gastrectomy, we expect a vitamin B12 deficiency even that orally intake is sufficient.

40. Name the group of drugs allowed for use in pregnant women:

- A. Direct anticoagulants;
- B. Indirect anticoagulants - coumarin derivatives;
- C. Indirect anticoagulants - indandion derivatives;
- D. Anti-aggregant-inhibitors of cyclooxygenase;
- E. ADP receptor anti-aggregants;

41. Which statement is false for H1- histamine receptor blockers?

- A. They are used to relieve itching;
- B. They reduce the symptoms of allergic rhinitis;
- C. They do not influence gastric acid secretion triggered by histamine;
- D. Some H1 antagonists are used as sedatives;
- E. They are the first drugs of choice used in anaphylactic shock.

42. Select the contraindication for antihistamines H1:

- A. Bronchial asthma;
- B. Parkinson's syndrome;
- C. Postoperative vomiting;
- D. Drivers;
- E. Contact dermatitis.

43. Name the most common side effects of dextran?

- A. Allergic reaction;
- B. Retrosternal pain;
- C. Pulmonary edema;
- D. Nephrotoxic effect;
- E. Cerebral edema.

44. What is the effective time of action of dextran 70?

- A. Up to 4 hours;
- B. Up to 8 hours;
- C. Up to 12 hours;
- D. Only 60 min;
- E. Up to 24 hours.

II. CM

1. Name the drugs that use in bleeding caused by the overdose of indirect anticoagulants:

- A. Phytomenadione.
- B. Protamine sulfate.
- C. Ticlopidine.
- D. Menadione.
- E. Fresh or frozen plasma.

2. Select the drugs for treatment and prophylaxis of venous thrombosis:

- A. Direct anticoagulants
- B. Indirect anticoagulants
- C. Fibrinolytic drugs
- D. Anti-platelets
- E. Antifibrinolytics

3. What are the interactions of oral indirect anticoagulants with the following groups of drugs:

- A. Oral antidiabetic drugs increase the effect of oral anticoagulants by moving them from the albumin.
- B. Oral antidiabetics decrease the effect of anticoagulants.
- C. Statins decrease the effect of oral anticoagulants.
- D. Statins increase the effect of oral anticoagulants by moving them from albumin.
- E. Antiplatelets stimulate the action of anticoagulants and as a result increase the risk of bleeding.

4. The pharmacokinetic properties of standard heparin are:

- A. Heparin is absorbed from the mucosa of the gastrointestinal tract
- B. It is absorbed well after subcutaneous and intravenous administration
- C. Cross the placental barrier.
- D. TS after intravenous injection is variable, depending on the dose
- E. A subcutaneous injection of the bioavailability of heparin is limited to 25-30%.

5. Select the correct statements for low molecular weight heparins compared to standard heparin:

- A. Possesses superior bioavailability for subcutaneous administration
- B. T_{1/2} is longer.
- C. The anticoagulant effect for subcutaneous administration is longer
- D. The action of inhibiting the IIa (thrombin) factor is stronger
- E. The action of inhibiting the Xa factor is weak or null.

6. Select the correct statements for specific thrombin inhibitors compared to heparins:

- A. The efficacy is greater and the adverse reactions are less
- B. Does not cause complications caused by inactivation by F4, platelet
- C. Does not require laboratory control
- D. Exerts a good effect on coagulability parameters
- E. Causes important interactions with other drugs

7. Select the pharmacokinetic properties of oral anticoagulant:

- A. The action of oral anticoagulants is slow and long-lasting
- B. It does not penetrate the placental barrier
- C. It binds in a small proportion to plasma proteins
- D. In plasma, in 90-99% it is bind by albumin
- E. They cannot be used as an emergency medication

8. Select the correct answers that relate to ticlopidine:

- A. Ticlopidine prevents ADP (adenosine diphosphate) binding to P2y purine platelet receptors, which results in inhibition of platelet activation
- B. It is not fixed by plasma proteins
- C. Constant plasma concentration is achieved quickly after several days of treatment
- D. It will be administrated only after a benefit-risk balance has been made, due to numerous adverse reactions
- E. It is a harmless drug that does not cause dangerous side effects

9. Select the fibrinolytic properties:

- A. Fibrinolytics are effective within the first 24 hours after the onset of acute myocardial infarction and cerebral infarction.
- B. Proportion between benefits/risks of fibrinolytic is favorable for patients with high risk of thrombosis and dangerous thromboembolism
- C. Fibrinolytics will not be associated with heparins due to potentiation of the fibrinolytic effect
- D. Fibrinolytics have a short half-life, so to maintain their effect over time, they should be introduced intravenously in infusion.
- E. Anistreplase has a longer half-life, lasting effect, which allows it to be administered in intravenous in bolus injections.

10. Select the correct statements about the mechanism of action of the antiplatelet agents:

- A. Indobufen: inhibits thromboxane synthetase, selectively decreases TXA₂ formation.
- B. Dipyridamole activates platelet adenylate cyclase, increasing the amount of cAMP in platelets.
- C. Pentoxifylline inhibits phosphodiesterase, increasing the amount of cAMP in the smooth muscle cells of vessels, in platelets and erythrocytes.
- D. Dextran inhibit thromboxane A₂ receptors, and coagulation factor VIII, which stimulates platelet aggregation.
- E. Eptifibatide selectively blocks fibrinogen binding to platelet GPIIb / IIIa receptors, due to RGD-like action, inhibiting platelet aggregation.

11. Name the cyanocobalamine indications:

- A. Pernicious anemia;
- B. Megaloblastic anemia;
- C. Neuritis;
- D. Iron deficiency anemia;
- E. Myocardial infarction.

12. Select the indications for the use of antifibrinolytics:

- A. Actinic disease;
- B. Thrombophlebitis;
- C. Acute pancreatitis;
- D. Traumatic, hemorrhagic and septic shock;
- E. Myocardial infarction.

13. Select the indications for using of the fibrinolytic:

- A. Pulmonary thromboembolism;
- B. Acute myocardial infarction;
- C. Arterial and venous thrombosis;
- D. Thrombocytopenia;
- E. Actinic disease;

14. Select the indications for the use of indirect coagulants:

- A. Gastric bleeding;
- B. Thrombophlebitis;
- C. Parenchymal and capillary hemorrhages;
- D. In overdose of indirect anticoagulants;
- E. Arterial and venous thrombosis.

15. Name the mechanisms of heparin anticoagulant action:

- A. It activates antithrombin III;
- B. It stops the activity of factors IX, X, XI, XII, and calicrein;
- C. It inhibits thromboplastin activity and blocks the passage of prothrombin into thrombin;
- D. It inhibits prothrombin synthesis in the liver;
- E. It binds calcium ions into the blood.

16. Select the indications of anti-aggregates drugs:

- A. Prophylaxis of arterial thrombosis;
- B. Acute myocardial infarction;
- C. Ischemic heart disease;
- D. cerebral circulatory disorders;
- E. Parenchymal and capillary hemorrhages

17. Explain the long-acting effect of acetylsalicylic acid on platelet?

- A. It has a high half-life;
- B. It irreversibly inactivates thrombocyte cyclooxygenase;
- C. It electively achieves high persistent concentrations in platelet cytoplasm;
- D. Platelets do not have systems that restore cyclooxygenase inactivated by acetylsalicylic acid;
- E. It stabilizes thrombocyte membranes by preventing the release of arachidonic acid.

18. In what cases will you prescribe the next drugs?

- A. Fraxiparin in antithrombin III insufficiency
- B. Protamine sulfate in overdose of direct anticoagulants
- C. Etamzilate in overdose of indirect anticoagulants
- D. Aminocaproic acid in fibrinolytic overdose
- E. Phytomenadione in overdose with platelet anti-aggregates

19. Name the indications for the use of antifibrinolytic remedies:

- A. Hemorrhages caused by increased fibrinolysis;
- B. Thrombosis predisposition;
- C. Liver cirrhosis;
- D. Overdose of streptokinase;
- E. Parenchymal hemorrhages.

20. Select the links of the mechanism of antifibrinolytic action of aminocaproic acid:

- A. Decrease plasmin activity;
- B. Acts directly on the fibrin, stabilizing it;
- C. Inhibits plasminogen activators;
- D. Acts as an inhibitor on the different proteolytic enzymes;
- E. Blocks the activators of plasminogen (fibrinolysin) conversion into plasma.

21. Select the links of the mechanism of anti-aggregation action of dipyridamole:

- A. Inhibits cyclooxygenase and thromboxane formation;
- B. Blocks platelet phosphodiesterase;
- C. Stimulates platelet adenylate cyclase;
- D. Stimulates platelet phosphodiesterase;
- E. Increases cAMP in platelets.

22. Name the pharmacokinetic properties for indirect anti-coagulants:

- A. It is absorbed from the digestive tract;
- B. It is metabolized slowly;
- C. It is highly bound to plasma proteins;
- D. It is excreted unchanged through the urine in large proportion;
- E. The slow installation of the effect is due to a cumulative process.

23. Select the most effective drugs for prophylaxis of arterial thrombosis?

- A. Heparin;
- B. Streptokinase;
- C. Acenocoumarol;
- D. Dipyridamole;
- E. Acetylsalicylic acid.

24. Select the side effects of fibrinolytic:

- A. Systemic bleeding;
- B. Thrombocytopenia;
- C. Anaphylactic shock;
- D. Alopecia;
- E. Myocardial rupture.

25. Select the best anticoagulant, which will be given during the preoperative period for the patients who will be supposed to neurosurgical intervention, interventions on the urogenital tract, prostate, for the prophylaxis of thrombosis and thromboembolism:

- A. Warfarin.
- B. Heparin.
- C. Nadroparin
- D. Ticlopidine.
- E. Acetylsalicylic acid.

26. Select the side effects of ethyl biscumacetate:

- A. Hepatotoxicity;
- B. Ototoxicity;
- C. Teratogenicity;
- D. Neurotoxicity;
- E. Nephrotoxicity.

27. Characterized the pharmacokinetic properties of protamine sulfate:

- A. It is given subcutaneously
- B. It is given intravenously
- C. The action manifests in 1-2 minutes
- D. The action manifests in 10-20 minutes
- E. The action is manifested within 1 hour.

28. Select the pharmacokinetic properties of oral anticoagulants:

- A. Absorption is 80-90% at oral administration
- B. Absorption is 20-40% at oral administration
- C. Binding with plasma albumin is 97-99%
- D. They do not mate with plasma albumin
- E. They are rapidly eliminated in an unchanged form from the body

29. Select the anti-platelet drugs:

- A. Direct thrombin inhibitors
- B. Phosphodiesterase inhibitors
- C. Inhibitors of GP IIb / IIIa receptors
- E. Coumarin derivatives
- E. Idandionic derivatives

30. Name the contraindications of fibrinolytic:

- A. Acute myocardial infarction with ST-segment elevation on ECG
- B. Hemorrhagic stroke
- C. Treatment with oral anticoagulants
- D. Refractory hypertension $\geq 180 / 95$
- E. Pulmonary artery thromboembolism

31. Name the plasma volume substitutes that cause a pseudoagglutination:

- A. Dextran 70;
- B. Human albumin;
- C. Starch;
- D. Dextran 40;
- E. Jelatinol.

32. Name the drugs used in hemophilia A:

- A. Factor VIII concentrate;
- B. Factor IX concentrate;
- C. Factor XIII concentrate;
- D. Prothrombin complex concentrate;
- E. Thrombin

33. Name the contraindication of heparin:

- A. Severe hypertension;
- B. Status asthmatics;
- C. Predisposition to bleeding;
- D. Hard liver disease;
- E. Insufficiency of coagulation factors.

34. Select the topical remedies that use for stopping bleeding from small vessels:

- A. Phytomenadione;
- B. Calcium chloride;
- C. Acetylsalicylic acid;
- D. Thrombin;
- E. Fibrine.

35. Select the specific characteristics of the iron drugs:

- A. The daily requirement for a healthy adult is about 1mg in men and 1.4mg in women;
- B. It is mostly absorbed in the stomach;
- C. Gastric food and antacids decrease its bioavailability;
- D. Absorption is higher in patients with iron-deficiency anemia than in healthy persons;
- E. After absorption, it is transported by the plasma beta-glycoprotein.

36. Select the drugs that can be used as local hemostatic:

- A. Epinephrine;
- B. Thromboplastin
- C. Thrombin;
- D. Fibrin;
- E. Phytomenadione.

37. Select the characteristics that correspond to vitamin B12 (cyanocobalamin):

- A. It is mainly absorbed in the stomach;
- B. It cannot be absorbed in patients with total gastrectomy;
- C. The daily requirement is 1–2.5 mg;
- D. Liver deposits are 1–10 mg;
- E. Parenteral administration in high doses contributes to preferential elimination through urine.

38. Name the drug used in hemophilia B:

- A. Factor VIII concentrate;
- B. Factor IX concentrate;
- C. Factor XIII concentrate;
- D. Prothrombin complex concentrate;
- E. Thrombin

1. CM More efficient than hemostasis through swabs with sterile cotton sponge would be the use of some washes with:

- A Physiological Ser
- B Xilin 2% with epinephrine 1 / 100,000
- C Ethanol
- D Trichloroacetic acid
- E Zinc chloride 30%

2. CS Select the vitamin preparation, antagonist of the anticoagulants with indirect action:

- a) tocopherol;
- b) thiamine;
- c) cyanocobalamin;
- d) riboflavin;
- e) phytomenadione.

3. CS Indicate heparin antagonist:

- a) vitamin K;
- b) menadione;
- c) unitiol;
- d) protamine sulfate;
- e) calcium chloride.

4. CS Indicate the topical remedy for stopping bleeding from small vessels:

- a) vitamin K;
- b) calcium chloride;
- c) thrombin;
- d) acetylsalicylic acid;
- e) fibrinogen.

5. CS Select the following preparations that CANNOT be used as local hemostatic:

- a) phytomenadione.
- b) thromboplastin;
- c) thrombin;
- d) fibrin;
- e) epinephrine;

6. CS Name the fibrinolysis inhibitor:

- a) pantripin;
- b) lidase;
- c) terilitine;
- d) aminocaproic acid;
- e) pepsin.

7. CM Which of the following hemostatic drugs are used locally?

- a) epinephrine;
- b) phytomenadione;
- c) thrombin;
- d) fibrin;
- e) protamine sulfate.

8. CM Indicate the mechanism of the anti-aggregating action of acetylsalicylic acid:

- a) inhibits cyclooxygenase and thromboxane formation;
- b) blocks platelet phosphodiesterase;
- c) stimulates platelet adenylatcyclase;
- d) stimulates platelet phosphodiesterase;
- e) inhibit cyclooxygenase and prostacycline formation.

9. CM Select coagulant indications for use:

- a) gastric hemorrhage;
- b) thrombophlebitis;
- c) parenchymal and capillary hemorrhages;
- d) in overdose of indirect anticoagulants;
- e) arterial and venous thrombosis.

10. CM Select indications for the use of antifibrinolytics:

- a) actinic disease;
- b) thrombophlebitis;
- c) acute pancreatitis;
- d) traumatic, hemorrhagic and septic shock;
- e) myocardial infarction.

11. CM Indicate hemostatic with topical action:

- a) heparin;
- b) thrombin;
- c) menadione;
- d) human fibrin;
- e) gelatin.

12. CM Indicate coagulant remedies:

- a) menadione;
- b) cyanocobalamin;
- c) thrombin;
- d) calcium chloride;
- e) fenindion.

13. CM Anti-inflammatory steroids exerts on the hemogram the following effects:

- a) increase the number of lymphocytes and eosinophils;
- b) reduce the number of lymphocytes and eosinophils.
- c) increase the number of platelets;
- d) increase the number of neutrophils in the blood.
- e) reduce the number of neutrophils in the blood;

Emergency stomatology:

1. The main principles of shock treatment are:

- A. To increase the arterial pressure
- B. To increase the peripheral vascular resistance
- C. To increase the cardiac output
- D. To improve the peripheral blood flow

E. To decrease the peripheral vascular resistance

2. Dopamine at low doses influences mainly:

- A. Alfa-adrenoreceptors (leads to peripheral vasoconstriction)
- B. Dopamine receptors (leads to vasodilation of renal and mesenteric vessels)
- C. Beta-1 adrenoreceptors (leads to enhanced cardiac output)
- D. Beta-2 adrenoreceptors
- E. All of the above

3. Dopamine at medium doses influences mainly:

- A. Alfa-adrenoreceptors (leads to peripheral vasoconstriction)
- B. Dopamine receptors (leads to vasodilation of renal and mesenteric vessels)
- C. Beta-1 adrenoreceptors (leads to enhanced cardiac output)
- D. Beta-2 adrenoreceptors
- E. All of the above

4. Dopamine in high doses influences mainly:

- A. Alfa-adrenoreceptors (leads to peripheral vasoconstriction)
- B. Dopamine's receptors (leads to vasodilation of renal and mesenteric vessels)
- C. Beta-1 adrenoreceptors (leads to enhancing of cardiac output)
- D. Beta-2 adrenoreceptors
- E. All of the above

5. Tick the group of drugs for treatment of shock with hypovolemia:

- A. Positive inotropic drugs
- B. Vasoconstrictors
- C. Plasma expanders
- D. Analeptics drugs
- E. Vasodilators

6. The reason of furosemide administration for hypertension emergency:

- A. Block the adrenergic transmission
- B. Diminishing of blood volume and amount of Na⁺ ions in the vessels endothelium
- C. Depression of rennin-angiotensin-aldosterone system
- D. Depression of the vasomotor center
- E. Vasodilation

7. Name the diuretic drug with high potency and fast action:

- A. Furosemide
- B. Spironolactone
- C. Hydrochlothiazide
- D. Indapamide
- E. Xipamide

8. Which drug's withdrawal effect cause hypertensive crisis:

- A. Reserpine
- B. Prasosine
- C. Propranolol
- D. Enalapril
- E. Clonidine

9. Which of the following are antihypertensive drugs:

- A. Propranolol
- B. Amlodipine
- C. Prednisolone
- D. Dopamine

E. Izoturon

10. Which of the following drugs are used in hypertensive emergencies:

- A. Sodium nitroprusside
- B. Diazoxide
- C. Furosemide
- D. Lisinopril
- E. Valsartan

11. Which of the following are considered drugs of choice in treating arterial hypertension in older patients:

- A. Diuretics
- B. ACE inhibitors
- C. Beta-blockers
- D. Sympatholytics
- E. Alfa-blockers

12. Which of the antihypertensive drugs are absolutely contraindicated in pregnancy:

- A. Atenolol
- B. Trimethaphan
- C. Losartan
- D. Lisinopril
- E. Clonidine

13. What is the mechanism of action of isothiourea derivatives?

- A. Stimulation of alpha-adrenoreceptors
- B. Stimulation of alpha and beta-adrenoreceptors
- C. Direct muscletropic action on vessels
- D. Vasomotor centre stimulation
- E. Stimulation of beta-adrenoreceptors

14. Which antihypertensive drugs are more safe in elderly patients?

- A. Diuretics
- B. Ganglioblockers
- C. ACE inhibitors
- D. α -adrenoblockers
- E. α -central adrenomimetics

15. Which plasma volume substitutes cause pseudoagglutination?

- A. Dextran - 40, - 70
- B. Albumin
- C. Hydroxyethyl starch
- D. Crystalloid
- E. Jelatinol

16. Which is the most favorable quantitative ratio of colloid/crystalloid to treat hypovolemic shock?

- A. 1:1
- B. 1:2
- C. 1:9
- D. 1:4
- E. 1:10

17. Which is the most common adverse reaction for dextrans?

- A. Allergic reaction
- B. Retrosternal pain
- C. Ototoxic effect
- D. Nephrotoxic effect

E. Hepatotoxic effect

18. Select the drugs used in cardiac shock:

- A. Dopamine
- B. Norepinephrine
- C. Phenylephrine
- D. Difetur
- E. Epinephrine

19. What effects are the basis of antishock action of glucocorticoids:

- A. Increase minutes – beat and minutes – volume
- B. Ino- and chronotrop negative effects
- C. Decrease the release of histamine and other mediators
- D. Increased sensitivity to catecholamine
- E. Stimulation of hyaluronidase

20. Select the first line drugs used to treat vasospastic angina:

- A. Nitroglycerine
- B. Molsidomine
- C. Nifedipine
- D. Propranolol
- E. Metoprolol

21. Which of the following is clinical effect of nitrates:

- A. Increase heard oxygen consumption
- B. Reduce preload
- C. Reduce afterload
- D. Increase peripheral resistance
- E. Decrease cardiac ejection as a result of reduced afterload

22. Choose the drugs that are used in treating only of ventricular arrhythmias :

- A. Fenithoine
- B. Lidocaine
- C. Verapamil
- D. Tocainid
- E. Mexiletine

23. Choose the drugs that are used in treating only of supraventricular arrhythmias:

- A. Procainamide
- B. Diltiazeme
- C. Gallopamil
- D. Tocainide
- E. Verapamil

24. Nitrates toxicities result from all of the following effects:

- A. Cerebral vein dilatation
- B. Reflex tachycardia
- C. Peripheral circulatory disorders
- D. Increased cardiac force
- E. Cerebral artery dilatation

25. Select the antianginal drugs that increase cardiac oxygen supply:

- A. Nimodipine
- B. Nicardipine
- C. Nitroglycerine
- D. Acebutolol
- E. Dipyridamole

26. Select the antianginal drugs that decrease cardiac oxygen consumption:

- A. Bisoprolol
 - B. Isosorbide dinitrate
 - C. Dipyridamole
 - D. Amlodipine
 - E. Verapamil
- 27. The antianginal effect of propranolol is attributed to:**
- A. Block of exercise-induced tachycardia
 - B. Decreased end-diastolic ventricular volume
 - C. Dilations of constricted coronary vessels
 - D. Increased cardiac force
 - E. Increased resting heart rate
- 28. Select the drugs that often cause reflex tachycardia:**
- A. Verapamil
 - B. Atenolol
 - C. Isosorbide dinitrate
 - D. Nitroglycerine
 - E. Dipyridamole
- 29. Which diuretics may be useful in the treatment of pulmonary edema?**
- A. Furosemide i/v
 - B. Indapamide
 - C. Mannitol
 - D. Hydrochlorothiazide
 - E. Spironolactone
- 30. Choose the drugs that are used in atrial and ventricular arrhythmias:**
- A. Amiodarone
 - B. Quinidine
 - C. Lidocaine
 - D. Procainamide
 - E. Disopyramide
- 31. Select the drugs that decrease cardiac oxygen consumption and increase cardiac oxygen supply:**
- A. Diltiazem
 - B. Metoprolol
 - C. Verapamil
 - D. Isosorbide dinitrate
 - E. Dipyridamole
- 32. Select the contraindications of nitrates:**
- A. Renal failure
 - B. Cerebral edema
 - C. Pulmonary edema
 - D. High intracranial pressure
 - E. High blood pressure
- 33. What antithrombotic drugs represent the first choice in acute myocardial infarction?**
- A. Heparin
 - B. Acetylsalicylic acid
 - C. Warfarin
 - D. Ethyl biscumacetate
 - E. Streptokinase
- 34. Which of antianginal drugs represent the first choice in angina pectoris attacks:**

- A. Nifedipine
- B. Isosorbide mononitrate
- C. Metoprolol
- D. Nitroglycerine
- E. Dipyridamol

35. Which form and route of administration is more suitable in angina pectoris attacks:

- A. Oral
- B. Sublingual
- C. Ointment
- D. Intravenous perfusion
- E. Retard plaster

36. Select the drugs to treat the acute pulmonary edema:

- A. Spironolactone
- B. Furosemide
- C. Metoprolol
- D. Digoxin
- E. Nitroglycerine

37. Select the effects of dopamine:

- A. Dilates cardiac vessels
- B. Dilates renal vessels
- C. Bradicardia
- D. Increase arterial pressure
- E. Increase cardiac output

38. Select the effects of epinephrine:

- A. Dilates cardiac vessels
- B. Constricts cardiac vessels
- C. Bradicardia
- D. Increase of arterial pressure
- E. Increase of cardiac output

39. Select the effects of phenylephrine:

- A. Dilates cardiac vessels
- B. Dilates renal vessels
- C. Bradicardia
- D. Increase arterial pressure
- E. Increase cardiac output

40. Select the drug for treatment the arrhythmias in acute period of myocardial infarction:

- A. Quinidine
- B. Disopyramide
- C. Lidocaine
- D. Verapamil
- E. Amiodarone

41. Which drug from listed below may be indicated in atrioventricular block –II degree?

- A. Verapamil
- B. Propranolol
- C. Strophanthin K
- D. Isoprenaline
- E. Digoxin

42. Select the contraindications of nitrates:

- A. Congestive heart failure
- B. Renal failure
- C. Cerebral edema
- D. Pulmonary edema
- E. High intracranial pressure

43. Which of the following laboratory and clinical investigations demonstrate about the acute intoxication with glycosides?

- A. Hypokalemia
- B. Hypomagnesemia
- C. A-V block
- D. Ventricular fibrillation
- E. Hypocalcemia

44. Which of the following are symptoms of acute intoxication with glycosides?

- A. Palpitations
- B. Constipations
- C. Diarrhea
- D. Somnolence
- E. Aberrations of color perception

45. Which diuretics can be used in hypertensive crisis:

- A. Furosemide
- B. Spironolactone
- C. Hydrochlorothiazide
- D. Indapamide
- E. Torasemide

46. Select the best drugs used to treat chronic angina pectoris associated with diabetes and bronchial asthma:

- A. Nitroglycerine
- B. Nifedipine
- C. Metoprolol
- D. Propranolol
- E. Amlodipine

47. Which drugs are indicated in cerebral trauma with cerebral edema:

- A. Furosemide
- B. Nitroglycerine
- C. Mannitol
- D. Morphine
- E. Torasemide

48. Which adrenoblocker is useful as cerebral vasodilator?

- A. Phentolamine
- B. Nicergoline
- C. Tolazoline
- D. Propranolol
- E. Oxprenolol

49. Which drugs are indicated in migraine attacks:

- A. Sumatriptan
- B. Ergotamine
- C. Ravimig
- D. Amitriptyline
- E. Paracetamol

50. Which drugs are indicated in treatment to prevent the migraine attacks:

- A. Sumatriptan
 - B. Ergotamine
 - C. Paracetamol
 - D. Amitriptyline
 - E. Metoprolol
51. **Which drugs are contraindicated in cerebral edema:**
- A. Furosemide
 - B. Nitroglycerine
 - C. Mannitol
 - D. Morphine
 - E. Torasemide
52. **Which of the following are considered drugs of choice in hypertension emergency in pregnancy:**
- A. Diuretics
 - B. ACE inhibitors
 - C. Beta-blockers
 - D. Alpha-agonist with central action
 - E. Alpha-blockers
53. **Which drugs are indicated in hypoglycemic coma:**
- A. Epinephrine
 - B. Prednisolone
 - C. Sodium hydrocarbonate
 - D. Insulin
 - E. Glucose sol. 5%
54. **Which drugs are indicated in hypoglycemic coma:**
- A. Epinephrine
 - B. Prednisolone
 - C. Glucose sol. 40%
 - D. Insulin
 - E. Glucose sol. 5%
55. **Which adrenomimetic drug is more effective in hypoglycemic coma?**
- A. Ethylephrine
 - B. Propranolol
 - C. Norepinephrine
 - D. Epinephrine
 - E. Salbutamol
56. **What is the therapeutic effect of sympathomimetic in bronchial asthma?**
- A. Vasodilation
 - B. Striated muscle stimulation
 - C. Cardiac stimulation
 - D. Vasoconstriction with hypertension, weak bronchoconstriction
 - E. Bronchodilation and inhibition of histamine releasing by reaction Ag + Ac
57. **The bronchodilatory effect of salbutamole inhaler administered, installs:**
- A. After 4 days
 - B. Slowly
 - C. Quickly
 - D. At the end of the first week of treatment
 - E. Systematically, over a month of treatment
58. **When appears the effect of corticosteroids at intravenously administration?**
- A. 10-15 minutes after administration

- B. One month after systematical administration
 - C. After 5-7 days of systematical administration
 - D. Over 12 to 14 hours after administration
 - E. Over 24-72 hours after administration
- 59. When installs the maximum effect of inhaled glucocorticoids:**
- A. 20-30 minutes after inhalation
 - B. 12 hours after inhalation
 - C. 24 hours after inhalation
 - D. 5-7 days after systematical inhalation
 - E. 1 month after systematical inhalation
- 60. The causes of false insulin resistance are:**
- A. Increased immunoglobulin
 - B. Increased use of carbohydrates
 - C. Infection
 - D. Poor nutrition
 - E. Massive surgical intervention
- 61. In acute myocardial infarction must indicate:**
- A. Indirect anticoagulants
 - B. Direct anticoagulants
 - C. Antiplatelets
 - D. Indirect fibrinolytics
 - E. Direct fibrinolytics
- 62. Glucocorticoids are used in the treatment of:**
- A. Acute lymphocytic leukemia
 - B. Addison's disease
 - C. Bronchial asthma
 - D. Chemotherapy-induced vomiting
 - E. Osteoporosis
- 63. The most likely complication of insulin therapy in patients is:**
- A. Dilutional hyponatremia
 - B. Hypoglycemia
 - D. Pancreatitis
 - E. Severe hypertension
 - C. Increased bleeding tendency
- 64. Name the side effects of fibrinolytic drugs that are used in treatment of acute myocardial infarction:**
- A. Acute renal failure
 - B. Development of antiplatelet antibodies
 - C. Encephalitis secondary to liver dysfunction
 - D. Hemorrhagic stroke
 - E. Neutropenia
- 65. Select the drugs that use in hypertension emergency in pregnancy:**
- A. Clonidine
 - B. Magnesium sulphate
 - C. Captopril
 - D. Valsartan
 - E. Metoprolol
- 66. Select the drugs that use in biliary colic:**
- A. Papaverine
 - B. Drotaverine

- C. Baralgine
 - D. Atropine
 - E. Morphine
- 67. Select the drugs that are used in renal colic:**
- A. Papaverine
 - B. Magnesium sulphate internal
 - C. Baralgine
 - D. Atropine
 - E. Omnopon
- 68. Select the antiovomitive drugs that are used in pregnancy?**
- A. Metoclopramide
 - B. Difenhidramine
 - C. Droperidol
 - D. Scopolamine
 - E. Dexamethasone
- 69. Excitation of which receptor produces the positive inotropic effect of dopamine?**
- A. α -1-adrenoceptors
 - B. α -2-adrenoreceptor
 - C. β -1-adrenoceptors
 - D. β -2-adrenoreceptor
 - E. N-cholinoreceptors
- 70. Which adrenomimetic has the longest antihypotensive duration of action?**
- A. Epinephrine
 - B. Ephedrine
 - C. Norepinephrine
 - D. Phenylephrine
 - E. Difetur

Drugs with influence on the mucosa of the oral cavity and the dental pulp

- 1. CM Which groups of drugs exert a protective effect on the mucous membranes of the mouth and oral cavity**
- A. deodorants
 - B. astringents
 - C. mucilaginous
 - D. keratoplastics
 - E. softeners
- 2. CM Select the organic astringent drugs**
- A. salvina
 - B. copper sulphate
 - C. tannin
 - D. romazulan
 - E. basic nitrate of bismuth
- 3. CM What effects other than the astringent are observed for organic astringents?**
- A. cauterized
 - B. anti inflammatory
 - C. antiseptic
 - D. irritating

E. regenerating

4. CM List the particularities of action of organic astringents:

- A. protects sensitive nerve endings
- B. forms deep, loose albuminates
- C. partially coagulates the extracellular fluid proteins
- D. causes the constriction of superficial vessels
- E. prostaglandin synthesis

5. CM Determine the combined organic astringent drugs:

- A. marasolvina
- B. paradontax
- C. elecasol
- D. romazulan
- E. rotocan

6. CM Determine inorganic astringent drugs:

- A. tannic acid
- B. copper sulphate
- C. lead acetate
- D. marosalvin
- E. alauinii

7. CS Explaining the mechanism of the astringent action of organic drugs:

- A. dissociates into anions and cations
- B. dissociates into aminoacids
- C. interacts with thiol groups
- D. it partially coagulates the proteins of the extracellular fluid, the exudate and the mucus
- E. releases molecular oxygen

8. CM For which cause inorganic astringents are used limited in dentistry:

- A. tolerance develops at the astringent effect
- B. It is mainly used in inflammatory processes of the mucous membranes
- C. are not active in the presence of protein exudate
- D. may cause irritant and cauterizing effect
- E. contain ethereal oils, glycosides

9. CM Select mucilaginous drugs

- A. zinc oxide
- B. starch mucilage
- C. lizocim
- D. medicinal charcoal
- E. linseed mucilage

10. CM Select the adsorbent drugs used in dentistry

- A. zinc oxide
- B. lysozyme
- C. medicinal charcoal
- D. white clay
- E. starch mucilage

11. CM The mucilaginous drugs in dentistry are used for:

- A. decrease the unpleasant odor from the oral cavity
- B. treatment of acute diseases of the mucosa of the oral cavity
- C. devitalization of the pulp
- D. conditions with algal syndrome

E. treatment of the pulpitis

12. CM The adsorbent drugs in dentistry are mainly used for:

- A. preparation of toothpaste
- B. gargle in the gingivitis
- C. drying of the affected tissues
- D. preparation of curative dental powders
- E. decrease in unpleasant odor from the mouth

13. CM Select the emollient drugs:

- A. glycerin
- B. copper sulphate
- C. lanolin
- D. regesan
- E. tannin

14. CM What is the mechanism of action of emollient drugs?

- A. increased elasticity of mucous membranes and skin
- B. protein denaturation and inhibition of enzymes required for microorganisms
- C. forms a protective film
- D. stimulates antibody formation and phagocytosis
- E. decreases irritation and inflammation

15. CM The emollient drugs in dentistry serve as bases for the medicinal forms used in the treatment:

- A. pulpitis
- B. stomatitis
- C. periodontitis
- D. gingivitis
- E. bleeding

16. CM Select deodorant drug groups:

- A. strong acids and bases
- B. aromatic etheric oils
- C. anionic detergents
- D. oxidants
- E. thiosemicarbazone derivatives

17. CM Select synthetic keratoplastic drugs:

- A. tocopherol
- B. calanhoe juice
- C. vinisol
- D. retinol
- E. aevir

18. CS Select keratoplastic drugs of animal origin:

- A. tocopherol
- B. propolis
- C. methyluracil
- D. retinol
- E. groundnut oil

19. CM Select the effects of calanhoe juice:

- A. anti-inflammatory
- B. cauterized
- C. local anesthetic
- D. regenerating
- E. irritating

20. CM Select the indications of calanhoe juice:

- A. catarrhal gingivitis
- B. trauma to the mucosa of the oral cavity
- C. ulcero-necrotic disorders of the mucosa of the oral cavity
- D. herpetic stomatitis
- E. aphthous stomatitis

21. CM Select the effects of regesan (grape seed oil):

- A. cauterized
- B. cytoprotective
- C. astringent
- D. antioxidant
- E. regenerating

22. CM Select the active components of the regesan (grape seed oil):

- A. tocopherol
- B. tannins
- C. unsaturated fatty acids
- D. amino acids
- E. saturated fatty acids

23. CM Select the indications of the regesan (grape seed oil) in dentistry:

- A. periodontitis
- B. combustion of the mucosa of the oral cavity
- C. trauma to the mucosa of the oral cavity
- D. trophic ulcers
- E. unpleasant odor from the mouth

24. CM Select the effects of propolis:

- A. cauterized
- B. analgesic
- C. anti-inflammatory
- D. astringent
- E. antifungal

25. CM Which drugs increase salivation:

- A. galantamine
- B. atropine
- C. neostigmine
- D. platifiline
- E. scopolamine

26. CM Which drugs inhibit saliva secretion:

- A. galantamine
- B. atropine
- C. pilocarpine
- D. scopolamine
- E. neostigmine

27. CS Atropine in dentistry is used in:

- A. xerostomia
- B. hypersalivation before surgery
- C. acute dental pain
- D. acute and chronic sialadenitis
- E. calculations of the salivary glands

28. CM Which drugs are used for necrotizing the dental pulp:

- A. silver nitrate
- B. spedian
- C. acemina
- D. phenol
- E. podofilina

29. CM Why arsenious anhydride can cause pain when the pulp is necrotized:

- A. releases histamine
- B. causes rapid necrosis of the pulp
- C. causes hyperemia and tissue edema
- D. denature proteins
- E. high dose administration by periodontal diffusion

30. CM Which antimicrobial drugs are most commonly used in toothpaste:

- A. antium dioxide
- B. laurylsulfonate of sodium
- C. triclorozan
- D. tetracycline
- E. metronidazole

31. CM Which preparations are used as abrasives in dental pastes:

- A. lauryl sulfonate of sodium
- B. flint dioxide
- C. hydroxyapatite
- D. chalk
- E. fluoride of sodium

32. CM Which components of toothpaste cause teeth whitening:

- A. aluminum compounds
- B. sodium hydrocarbon
- C. triclorozan
- D. pyrophosphates
- E. carbamide

33. CM Which substances in toothpaste change the pH:

- A. laurylsulfonate of sodium
- B. hydrocarbonat of sodium
- C. triclorozan
- D. carbamide
- E. citrate of zinc

34. CM What properties possess the hygienic dental pastes:

- A deodorant
- B. Therapeutic
- C. Polarizer
- D. abrasive
- E. bleaches

35. CM How simple curative-prophylactic individual dental pastes are divided:

- A. antimicrobial
- B. Antiques
- C. antisensitive
- D. intended for smokers
- E. anti inflammatory

36. CS. Which of the following substances used in the treatment of gingivitis and marginal periodontitis, does NOT distort the microbial proteins?

- A Citric acid
- B Chromic acid
- C Potassium permanganate
- D Salicylic acid
- E tannic acid

37. CS Which is the most effective degreasing agent and does not cause undesirable effects on the dental tissues or the soft tissues?

- A. Chloroform
- B. Acetone
- C. Benzons
- D. Alcohol
- E. Distilled oil (neophylline)

38. CM. Which of the following substances are therapeutic agents in the composition of varnishes?

- A the Copal
- B Fluoride
- C Eugenol
- D Timol
- E nitrate of cellulose

39. CM. Antiseptics with antimicrobial action are:

- A Alexidine
- B Chloramine T
- C Chlorhexidine
- D Sanguinarina
- E Marfanil

40. CS What chlorhexidine concentration is used in supragingival irrigation to produce a total inhibition of supragingival plaque formation?

- At 0.2%
- B 0.02%
- C 20%
- D 0.5%
- E 2%

41. CM Which of the following therapeutic procedures in the treatment of recurrent aphthous gingivostomatitis are INDICATED?

- A Washes with antiseptic solutions
- B Infiltration with penicillin and xylin
- C Buccal mucosal staining with 2% methylene blue solution
- D Hydrocortisone infiltration
- E Applications of mouthwashes with antibiotics

42. CS The most effective chemical effect of zinc chloride in 30% concentration is:

- A Vasoconstrictor

- B Astringent
- C Cauterizing
- D Vasodilator
- E bacteriostatic

43. CM Prolonged use of chlorhexidine may be followed by some side effects such as:

- A Allergic reaction
- B Digestive disorders by voluntary or accidental ingestion
- C Parotid tumors
- D Kidney disorders
- E Increased deposition of supragingival tartar

44. CM Which of the following antiseptics distorts microbial proteins

- A permanganate of potassium
- B Citric acid
- C Salicylic acid
- D Aminoalcohol
- E bicarbonate of sodium

45. CM Coagulation necrosis occurs after use of substances such as:

- A Arsenic
- B Phenol
- C Antiformin
- D Papain
- E Tricrezolformaline

46. CM Select characteristics of chlorhexidine:

- A Stimulates the production of superoxide anions by neutrophils
- B It is able to attach to salivary glycosaminoglycans
- C Has a strong anionic load and ability to bond with cationic groups on bacterial and dental surfaces
- D Affects microbial cells by altering the permeability of the cell wall
- E Denatures proteins

Antiseptics and disinfectants

1. CM Select the antiseptics from the colorants group:

- A. formic aldehyde
- B. etacridine
- C. chloramine
- D. hexatidine
- E. silver nitrate

2. CM Select the antiseptics from the oxidant group

- A. hydrogen peroxide
- B. chlorhexidine
- C. Potassium permanganate
- D. nitrofur
- E. iodasept

3. CM Select the antiseptics from the phenol group

- A. chlorhexidine
- B. resorcin

- C. cresol
- D. silver nitrate
- E. policrezulen

4. CM Select the antiseptics from the halogen group

- A. H₂O₂ (hydrogen peroxide)
- B. iodasept
- C. chloramine
- D. polividon - iodine
- E. iodoform

5. CM Select the antiseptics from the group of cationic detergents

- A. nitrofurural
- B. benzalkonium chloride
- C. decualiniu
- D. polividon - iodine
- E. cetrimidine

6. CM Select the antiseptics from the group of anionic detergents

- A. decualinium
- B. sodium ricinoleate
- C. benzalkonium chloride
- D. sodium laurylsulfonate
- E. cetrimidine

7. CM Select the antiseptics in the nitrofurane derivatives group

- A. silver nitrate
- B. nitrofurural
- C. chlorhexidine
- D. furazidine
- E. ambazone

8. CM Select the antiseptics from the thiosemicarbazone derivatives group

- A. pronilid
- B. cetrimidine
- C. Ambazon
- D. nitrofurural
- E. policrezulen

9. CM Select the antiseptics from the heavy metal group

- A. etacridine
- B. silver nitrate
- C. zinc sulphate
- D. collargol
- E. dichloride of mercury

10. CM Select the antiseptics from the aldehyde group

- A. chloramine
- B. methenamine
- C. hexotidina
- D. formic aldehyde
- E. methyltionine

11. CM The mechanism of action of hydrogen peroxide is caused by.

- A. Denaturation of enzyme proteins
- B. oxidation of the structural components of microorganisms
- C. influence on thiol groups
- D. DNA and / or RNA strand breakage by free radicals
- E. mechanical removal of microbes

12. CM Select the effects of hydrogen peroxide

- A. astringent
- B. deodorant
- C. hemostatic
- D. bleaching
- E. cauterized

13. CM What is characteristic for the antiseptic action of hydrogen peroxide:

- A. rapid effect
- B. long-lasting effect
- C. short-term effect
- D. slow effect
- E. very strong effect

14. CM What distinguishes disinfectant antiseptics from:

- A. are used for the processing of instruments
- B. are used for the processing of the hands
- C. are used for processing the eliminations of the patient
- D. are used for wound, combustion processing
- E. has bacteriostatic and bactericidal action

15. CM Select effects of chlor preparations other than antiseptic:

- A. bleaching
- B. hemostatic
- C. deodorant
- D. cauterized
- E. anti-inflammatory

16. CM In which situations chloramine is used as a disinfectant in dentistry:

- A. wound processing
- B. processing of instruments
- C. gargles of mouth cavity
- D. prosthesis processing
- E. Acute inflammatory processes of the oral cavity

17. CM Select the effects of iodine preparations:

- A. emollient
- B. deodorant
- C. antimycotic
- D. expectorant
- E. irritating

18. CM Select the mechanism of antiseptic action of iodine preparations:

- A. interacts with thiol groups (oxidizes)
- B. disrupts cell wall synthesis
- C. coagulates and distorts proteins
- D. disrupts nucleic acid synthesis

E. disrupts the permeability of the cytoplasmic membrane

19. CM Select the indications of the Lugol solution:

- A. stomatitis
- B. hypertrophic gingivitis
- C. Pulpitis
- D. periodontitis
- E. processing of the eliminations of the patient.

20. CM Which properties are characteristic for iodophores:

- A. contain free iod
- B. are complex preparations of iod
- C. rapidly releases iod
- D. slowly release iod
- E. have short-term action

21. CM Select the effects of hydrogen peroxide.

- A. local hemostatic
- B. antiallergic
- C. deodorant
- D. bleaching
- E. cauterized

22. CM Select the effects of potassium permanganate.

- A. antiallergic
- B. astringent
- C. deodorant
- D. irritant
- E. cauterized

23. CM Select common indications for hydrogen peroxide and potassium permanganate:

- A. Morphine poisoning, alkaloids
- B. unpleasant odor from the mouth
- C. processing of wounds
- D. stopping capillary bleeding
- E. gargle in gingivitis

24. CM Select the mechanisms of antiseptic action of chlor preparations:

- A. interaction with thiol groups
- B. formation of atomic oxygen
- C. interaction with aminogroups of proteins in the cytoplasm
- D. disrupts cell wall synthesis
- E. disrupts the permeability of the cytoplasmic membrane.

25. CM Select the effects of antiseptic nucine:

- A regenerating
- B. antibacterial
- C. antimycotic
- D. keratoplasty
- E. hemostatic

26. CS Select the indications of antiseptic nucine in dentistry:

- A. Bacterial and fungal diseases of the oral cavity
- B. sterilization of instruments
- C. processing of the hands and the operating field
- D. bacterial and fungal vaginal disorders
- E. disinfection of the eliminations of the patients

27. CM Select the mechanisms of action of the dyes.

- A. release of atomic oxygen and oxidation of substrates
- B. deregulation of ion exchange in microbial cells
- C. causes alteration of cellular proteins
- D. disrupts nucleic acid synthesis
- E. competes with enzymes for hydrogen ions

28. CM Select methyltione indications (methylene blue in dentistry)

- A. periodontitis
- B. pyodermitis, boils
- C. combustion
- D. cystitis, urethritis
- E. inflammatory processes of the oral cavity

29. CM Methyltione (methylene blue) is used as an antidote for poisoning with:

- A. morphine
- B. carbon oxide
- C. atropine
- D. cyanides
- E. pilocarpine

30. CM Select the effects of hexatidine (stomatidine).

- A. anti inflammatory
- B. deodorant
- C. astringent
- D. bleaching
- E. hemostatic

31. CM Select the indications for hexatidine:

- A. oral candidiasis
- B. cyanide poisoning
- C. gingival bleeding
- D. oral cavity hygiene
- E. morphine intoxication

32. CM Select the mechanisms of antiseptic action of aldehydes:

- A. Possesses bactericidal effect through competition with enzymes for hydrogen ions
- B. disrupts cell wall synthesis
- C. interacts with proteins causing their coagulation and precipitation
- D. disrupts nucleic acid synthesis
- E. disrupts the permeability of the cytoplasmic membrane

33. CM Select the particularities of the antiseptic and disinfectant action of the aldehydes:

- A. slightly thioxic
- B. possesses universal action
- C. can be used systemically
- D. Inactivates microbial toxins
- E. has antimicrobial, virucidal, sporocidal activity

34. CM Select the effects of phenols:

- A. anti inflammatory
- B. local anesthetic
- C. irritant
- D. astringent
- E. cauterized

35. CM Select the effects of polycresuen (vagotil)

- A hemostatic
- B. antiallergic
- C. astringent
- D. antitrichomonazic
- E. analgesic

36. CM Select the indications of polycresulen (vagotil) in dentistry:

- A. sterilization of instruments
- B. Cauterization of granulations
- C. capillary haemorrhages
- D. processing of the operating field and the hands
- E. instillations in periodontal pockets

37. CM Select the indications of resorcin in dentistry:

- A. hyperhidrosis
- B. impregnation and filling of the corneal ducts
- C. oral candidiasis
- D. Cauterization of granulations in the dental channels
- E. disinfection of instruments

38. CM Select the effects of antiseptics of the acid group.

- A hemostatic
- B. anti inflammatory
- C. astringent
- D. local anesthetic
- E. cauterized

39. CM Select the indications of salicylic acid as an antiseptic.

- A. treatment of pulp gangrene
- B. capillary haemorrhages
- C. mouthwashes
- D. filling of the corneal ducts
- E. irrigation of wounds

40. CM Select the basic indications of antiseptics of the group ethereal oils.

- A. processing of the hands and the operating field
- B. unpleasant odor from the mouth
- C. treatment of the pulpitis and periodontitis
- D. preparation of toothpaste
- E. hyperhidrosis

41. CM Select the antiseptic effects of the etheric oil group.

- A. local anesthetic
- B. hemostatic
- C. deodorant
- D. antifungal
- E. antiseptic

42. CM Select the mechanisms of antiseptic action of heavy metal salts.

- A. disruption of cell wall synthesis
- B. protein denaturation with albuminate formates
- C. deregulation of nucleic acid synthesis
- D. blockade of thiol groups of microbial enzymes
- E. disruption of cytoplasmic membrane permeability

43. CM In which cases the cauterizing effect of nitrate silver is used.

- A. small gingival polyps
- B. thrush and mouth ulcers
- C. mouth ulcers
- D. filling of dental channels
- E. oral candidiasis

44. CM What effects are caused by the formation of dense, superficial albuminates of heavy metal salts:

- A. cauterizing
- B. astringent
- C. irritant
- D. anti inflammatory
- E. deodorant

45. CM Which effects are caused by the formation of loose, deep, soluble albumin of heavy metal salts:

- A. Cauterizing
- B. astringent
- C. irritant
- D. anti inflammatory
- E. deodorant

46. CM Select the mechanisms of the antiseptic effect of chlorhexidine?

- A. non-specific interaction with membrane phospholipids
- B. disruption of nucleic acid synthesis
- C. decrease in membrane enzyme activity
- D. Decreased ion transport
- E. blockade of thiol groups

47. CM Select the specific indications of chlorhexidine in dentistry:

- A. hyperhidrosis
- B. Disinfection of mobile dental prostheses
- C. for the mouth cavity gargle
- D. decrease of bacterial film formation in the postoperative period
- E. corneal canal processing in the treatment of dental caries

48. CM Select the mechanisms of antiseptic action of ethyl alcohol.

- A. blockade of thiol groups
- B. dehydration of microbial cells
- C. oxidation of substrates
- D. protein denaturation
- E. deregulation of nucleic acid synthesis

49. CM Select ethyl alcohol indications in dentistry.

- A. oral candidiasis
- B. decrease the pain of the exposed pulp
- C. sterilization of dental cavities
- D. inflammatory diseases of the oral cavity

E. hard dental tissue processing

50. CM Select the mechanisms of antiseptic action of anionic detergents.

A. decrease of surface tension

B. blockade of thiol groups

C. lipid emulsification

D. foam formation with mechanical removal

E. protein denaturation

51. CM Select the mechanisms of antiseptic action of cationic detergents.

A. blockade of thiol groups

B. disturbance of cell membrane permeability

C. decrease of surface tension

D. inhibition of enzymatic systems

E. the osmolarity disorder

52. CM Select the indications of cationic benzolconium chloride detergent in dentistry.

A. irrigation of the cavity

B. inflammatory diseases of the oral cavity

C. irrigation of root canals

D. cauterization of the corneal canal granulations

E. gingival bleeding

53. CM Select preparations with deodorant action:

A. septelete

B. cetrimidine

C. laripront

D. hexaliz

E. pronilid

54. CM Select the main indications of nitrofurans in dentistry:

A. mouth gargoyles in dental interventions

B. Oral viral diseases

C. processing of wounds and channels in osteomyelitis

D. inflammatory and infectious diseases of the oral cavity

E. filling of the corneal ducts

55. CM Select the priorities of nitrofurans as antiseptics and disinfectants:

A. active against viruses

B. active against anaerobes

C. resistance to them does not develop

D. effective in the presence of pus, blood

E. does not affect the immunity of the macro-organism

56. CM Select the mechanisms of antiseptic action of nitrofurans.

A. blockade of thiol groups

B. reduction of nitrogroup

C. formation of toxic metabolites for cells

D. decrease of surface tension

E. formation of nucleic acid complexes with the disorder of protein synthesis.

57. CM Select the effects of pronilide as an antiseptic used in dentistry:

A. deodorant

B. hemostatic

C. revulsive

D. weak anesthetic

E. cauterized

58. CM Select the indications for pronilide (der. of thiosemicarbazone).

- A. oral candidiasis
- B. inflammatory disorders of the oral cavity and pharynx
- C. unpleasant odor from the mouth
- D. gingival bleeding
- E. preparation for manipulations in the oral cavity.

Metabolism (vitamins, calcium, flour)

1. CM The total late prosthetic stomatopathies at the total prosthesis edentate have a series of general conditions such as:

- A. Avitaminosis, especially those in group B
- B. Anemia
- C. diabetes melitus
- D. Ischemic heart diseases
- E. chronic kidney diseases

2. CM Deficiency in vitamin A can cause the following disruptions in the formation of the organic enamel matrix:

- A. atrophy the enamel organ
- B. cessation of enamel formation
- C. narrowing of the predentine area
- D. integral mineralization of dentin of the first permanent molar
- E. microhemorrhages in the enamel organ

3. CM The medicines that can delay the healing of the postextraction wound are:

- A. Growth Hormones
- B. Anticoagulants
- C. Vitamin A
- D. Vitamin E
- E. glucocorticoids

4. CM The treatment of recurrent aphthous gingivitis and gingivostomatitis includes:

- A. Wash with mild antiseptic solutions
- B. Applications of paste or adhesive gels containing corticosteroids
- C. Administration of vitamins A and vitamin D
- D. Penicillin infiltration
- E. infiltration with hydrocortisone

5. CM Enzyme therapy in simple pulp gangrene presents the following advantages:

- A. To facilitate the diffusion of antiseptics, antibiotics and chemotherapies in the secondary channels
- B. Fluidification of purulent secretions or collections
- C. Decreased collateral circulation
- D. The presence of the phenomenon of microbial resistance
- E. Possibility of alternative use with antiseptics

6. CM In gingivitis due to vitamin C deficiency, vitamin C deficiency has the effect:

- A. Increased collagen synthesis
- B. Decreased collagen synthesis
- C. Increased pathogenicity of bacterial plaque
- D. Decreased leukocyte chemotactism
- E. Lower permeability of the buccal mucosa

7. What are the indications of chemotrypsin?

- a) pregnancy;
- b) stenocarditis.
- c) enterobiosis;
- d) duodenal ulcer;
- e) purulent and necrotic processes;

8. CS For folic acid it is characteristic:

- a) inhibits the central nervous system;
- b) acts on the coagulation of blood;
- c) intervenes in the formation of purine and pyrimidine nucleotides;
- d) stimulates the central nervous system;
- e) acts directly on plasminogen.

9. CS What is the mechanism of trypsin, like as proteolytic action?

- a) direct action on the bronchial glands;
- b) fluidizes the sputum, depolymerizing the proteins;
- c) stimulates the bronchiolar muscles and the ciliated epithelium;
- d) increases sputum secretion and fluidization;
- e) intensifies the secretion of the bronchial glands in mod

10. CM Select vitamins used in the treatment of stomatitis:

- a) vitamin B1 (thiamine).
- b) vitamin B2 (riboflavin).
- c) vitamin B6 (pyridoxine).
- d) vitamin E (tocopherol);
- e) vitamin K (vikasol);

11. CM Select the vitamins used in the treatment of stomatitis:

- a) vitamin PP (nicotinic acid).
- b) pantoteic acid.
- c) calcium pangamate.
- d) vitamin E (tocopherol);
- e) vitamin K (vikasol);

12. CM Select the vitamins used in the treatment of periodontosis:

- a) vitamin B1 (thiamine).
- b) vitamin B2 (riboflavin).
- c) vitamin B12 (cyanoblobalamine).
- d) vitamin PP (nicotinic acid);
- e) vitamin A (retinol);

13. CM Select the vitamins used in the treatment of periodontosis:

- a) vitamin B12 (cyanoblobalamin).

- b) pantothenic acid.
- c) vitamin E (tocopherol).
- d) vitamin A (retinol);
- e) vitamin PP (nicotinic acid);

14. CM Vitamins used in the treatment of trigeminal nerve neuralgia:

- a) vitamin B1 (thiamine).
- b) vitamin B12 (cyanoblobalamine).
- c) vitamin D (ergocalciferol);
- d) vitamin E (tocopherol);
- e) vitamin K (vikasol);

15. CM Vitamins used in the treatment of trigeminal nerve neuralgia:

- a) vitamin B12 (cyanoblobalamin).
- b) vitamin B6 (pyridoxine).
- c) pantothenic acid.
- d) vitamin K (vikasol);
- e) vitamin D (ergocalciferol);

16. CM Select the vitamins used in the treatment of cheilites:

- a) vitamin B1 (thiamine).
- b) vitamin B6 (pyridoxine).
- c) vitamin B2 (riboflavin).
- d) vitamin B15 (calcium pangamate);
- e) vitamin K (vikasol);

17. CM Select the vitamins used in the treatment of cheilites:

- a) vitamin PP (nicotinic acid).
- b) pantothenic acid.
- c) vitamin D (ergocalciferol).
- d) vitamin A (retinol);
- e) vitamin B15 (calcium pangamate);

18. CM Select the vitamins used in the treatment of neurites:

- a) vitamin B1 (thiamine).
- b) pantothenic acid.
- c) vitamin B6 (pyridoxine).
- d) vitamin D (ergocalciferol);
- e) vitamin B15 (calcium pangamate);

19. CM Select the vitamins used in the treatment of multiple caries:

- a) vitamin B1 (thiamine).
- b) vitamin C.
- c) vitamin B15 (pangamate calcium).
- d) vitamin P (routine);
- e) vitamin B6 (pyridoxine);

20. CM Select the vitamins used in the treatment of gingivitis:

- a) vitamin B2 (riboflavin)
- b) vitamin C.
- c) vitamin B12 (cyanoblobalamine).

- d) vitamin K (vikasol);
- e) vitamin B15 (calcium pangamate);

21. CM Select the vitamins used in the treatment of gingivitis:

- a) vitamin P (routine).
- b) vitamin D (ergocalciferol).
- c) vitamin A (retinol).
- d) vitamin K (vikasol);
- e) vitamin B6 (pyridoxine);

22. CM Select the vitamins used in the treatment of glossitis:

- a) vitamin B2 (riboflavin).
- b) vitamin B6 (pyridoxine).
- c) pantothenic acid;
- d) vitamin D (ergocalciferol);
- e) vitamin K (vikasol);

23. CM Select the vitamins used in the treatment of periodontitis:

- a) vitamin K (vikasol).
- b) vitamin C.
- c) vitamin P (routine).
- d) vitamin D (ergocalciferol);
- e) vitamin E;

24. CM Select the vitamins used in the treatment of glossalgias:

- a) vitamin B1 (thiamine).
- b) vitamin B12 (cyanocobalamin).
- c) vitamin C.
- d) vitamin B15 (calcium pangamate);
- e) vitamin B6 (pyridoxine);

25. CM Select the enzymes used in dental practice:

- a) trypsin.
- b) fibrinolysin;
- c) chymotrypsin.
- d) lidase (hyaluronidase).
- e) streptolysin;

26. CM Select the enzymes used in dental practice:

- a) chemopain.
- b) pancreatin;
- c) ronidaza.
- d) ribonucleases.
- e) urokinase;

27. CM Indicate the biogenic stimulants that contribute to the regeneration of the oral mucosa:

- a) acidin-pepsin;
- b) aloe extract.
- c) peloid distillate.
- d) propolis.

- e) cytochrome C;

28. CM Select the calcium hydroxide preparations used in the biological method of deep caries and pulpitis treatment:

- a) boric acid;
- b) calcine;
- c) calmecine;
- d) borax;
- e) magnesium carbonate

29. CM What are the mechanisms of the therapeutic action of the contrical (aprotinin) in acute pancreatitis?

- a) depress the secretion of pancreatic juice;
- b) facilitates excretion of pancreatic juice in the duodenum;
- c) stimulates the activity of proteolytic enzymes in the blood;
- d) inhibits proteolytic enzymes in the blood;
- e) inhibits the proteolytic enzymes in the pancreas.

30. CM Name the indications for cyanocobalamin:

- a) pernicious anemia;
- b) megaloblastic anemia due to cyanocobalamin deficiency;
- c) neuritis;
- d) iron deficiency anemia;
- e) myocardial infarction.

31. CM Select specific actions for cyanocobalamin:

- a) intervenes in the synthesis of nucleoproteids;
- b) activates the blood coagulation process;
- c) intervenes in the conversion of folic acid into folinic acid;
- d) intervenes in the normal process of erythrocyte maturation;
- e) blocks the conversion of folic acid into dehydrofolic acid

32. CM What influence does thiamine have on metabolic processes?

- a) stimulates the decarboxylation of keto-acids.
- b) inhibits the decarboxylation of keto-acids;
- c) reduces pyruvemia.
- d) stimulates acetylcholine synthesis.
- e) increases pyruvemia;

33. CM Calcium pantothenate exerts the following effects:

- a) stimulates acetylcholine synthesis.
- b) stimulates the synthesis of glucocorticoids.
- c) stimulates the tone of the smooth muscles of the gastrointestinal tract.
- d) inhibits acetylcholine synthesis;
- e) inhibits glucocorticoid synthesis;

34. CM Which of the following effects characterizes the influence of cyanocobalamin on metabolic processes?

- a) stimulates methionine synthesis.
- b) depresses methionine synthesis;
- c) participates in the synthesis of myelin.

- d) stimulates the synthesis of nucleic acids.
- e) depresses the synthesis of nucleic acids;

35. CM Select folic acid basic indications:

- a) hypochromic anemia;
- b) megaloblastic anemia.
- c) aplastic anemia;
- d) macrocytic anemia.
- e) stenocardia;

36. CM Name the vitamin preparations used in pernicious anemia:

- a) cyanocobalamin;
- b) riboflavin;
- c) nicotinic acid;
- d) tocopherol acetate;
- e) folic acid.

37. CM Nicotinic acid has the following indications:

- a) pellagra;
- b) atherosclerosis;
- c) blood vessel spasm;
- d) rickets;
- e) sterility.

38. CM Select the pharmacological properties of ascorbic acid:

- a) increases vascular permeability;
- b) decreases vascular permeability.
- c) increases the adaptation possibilities of the organism.
- d) reduces trivalent iron in the intestine to bivalent.
- e) depress glucocorticoid synthesis;

39. CM Calcium pangamate causes the following effects:

- a) reduces oxygen uptake by tissues;
- b) intensifies the assimilation of oxygen by tissues;
- c) reduces creatinine phosphate content in muscles;
- d) increases creatinine phosphate content in muscles;
- e) reduces the glycogen content in the liver and muscles.

40. CM Name the fat-soluble vitamins:

- a) ergocalciferol;
- b) retinol;
- c) tocopherol;
- d) pyridoxine;
- e) cyanocobalamin.

41. CM In what conditions is retinol used?

- a) hemeralopia.
- b) pellagra;
- c) xerophthalmia.
- d) keratomalacia.
- e) rickets;

42. CM How does ergocalciferol influence phosphocalcial metabolism?

- a) increases the calcium and phosphate content in the blood;
- b) stimulates the absorption of calcium in the intestine;
- c) favors the deposit of calcium in the bone tissue;
- d) prevents the deposit of calcium in the bone tissue;
- e) increases the renal elimination of calcium and phosphates.

43. CM Select the indications of ergocalciferol:

- a) rickets;
- b) atherosclerosis;
- c) osteomalacia;
- d) hypoparathyroid tetanus;
- e) iron deficiency anemia..

44. CM Name the preparations used in the treatment of rickets:

- a) cyanocobalamin;
- b) ergocalciferol;
- c) tocopherol;
- d) fish lard;
- e) retinol.

45. CM Which vitamins preparations have antioxidant properties?

- a) retinol;
- b) tocopherol.
- c) ergocalciferol;
- d) ascorbic acid.
- e) thiamine;

46. CM The associations of remineralization therapy in the prophylaxis and treatment of multiple caries are made up of:

- a) fluorides;
- b) phosphates;
- c) calcium;
- d) Mercury;
- e) silver.

47. CM To improve the metabolic processes in the internal hard and injectable dental tissues are used:

- a) calcium preparations.
- b) astringents drugs;
- c) fluoride preparations.
- d) vitamins (D, C, B1, B6, B5).
- e) mucilaginous drugs;

Antibiotics and chimioterapics

-SC-

1. SC. Penicillins will be indicated in:

- A. Preoperative - patients with positive anamnesis of endocarditis
- B. Dental extraction in children

- C. Chronic algal tooth syndrome
 - D. gingivitis
 - E. stomatitis
2. **SC. In which case the macrolides in stomatology will be indicated:**
- A. Of election in any inflammatory dental process
 - B. In case of beta lactamine allergy
 - C. In infections with *Pseudomonas aeruginosa*
 - D. In case of resistance to carbapenems
 - E. Of election in anaerobic infections
3. **SC. Which group of antibiotics is used as first choice in infections of the bones?**
- A. penicillins
 - B. carbapenems
 - C. cephalosporins
 - D. macrolides
 - E. lincosamides
4. **SC Which is the basic indication of lincosamides in Dentistry:**
- A. Inflammatory processes of the oral cavity mucosa
 - B. Acute gingivitis
 - C. Chronic algal tooth syndrome
 - D. Periodontal infectious inflammatory processes
 - E. Trigeminal nerve neuralgia
5. **SC. What is the duration of treatment with Lincomycin in case of osteomyelitis:**
- A. 7 days
 - B. 5-7 days
 - C. Up to 3 weeks
 - D. 3 weeks and more
 - E. Maximum 10 days
6. **SC. What is characteristic for tetracyclines:**
- A. It is not used in dentistry
 - B. It is used in dentistry only systemically
 - C. It is used in dentistry only locally
 - D. It is used in pediatric dentistry after 8 years
 - E. It has no hepatotoxic action
7. **SC. What is characteristic in oral administration of tetracyclines:**
- A. Reduced toxicity
 - B. Low absorption in the gut
 - C. Does not produce photosensitization
 - D. It can produce candidomycosis, glossitis, gingivitis
 - E. First choice - children.
8. **SC. What is characteristic for chloramphenicol:**
- A. In dentistry, it is mainly used locally - in ointments
 - B. The first choice in dental, respiratory and intestinal infections
 - C. It is used in the prophylaxis of infection diseases
 - D. It has no neurotoxicity
 - E. First-line antibiotic in oro-maxillofacial infections
9. **SC. In which case Amoxicillin + clavulanic acid is of choice:**
- A. Treatment of stomatitis of any genesis
 - B. Systemic periodontal antibacterial treatment systemic

- C. Treatment of gingivitis
 - D. Treatment of osteomyelitis
 - E. Treatment of infected dental
- 10. SC. What is the drug of choice in actinomycosis:**
- A. Polimixin
 - B. gentamicin
 - C. phenoxymethylpenicillin
 - D. Nystatin
 - E. Amantadine
- 11. SC. Which is the antibiotic of choice in Vincent ulcerative necrotic gingivostomatitis:**
- A. chloramphenicol
 - B. Nystatin
 - C. Metro nidazole
 - D. acyclovir
 - E. Aztrienam
- 12. SC. In the case of highly contaminated wounds it is recommended:**
- A. Antibiotic prophylaxis + 8-24 hours
 - B. Antibiotic prophylaxis + 24-48 hours
 - C. Antibiotic therapy + antibiotic prophylaxis
 - D. Antibiotic prophylaxis in case of risk factors
 - E. The use of antibiotics is not recommended
- 13. SC. In which case sulfamides will be used:**
- A. Superficial dental caries
 - B. Gangrenous stomatitis
 - C. Periodontitis of baby teeth
 - D. Patients allergic to furosemide and acetazolamide
 - E. Patients with a history of psychoses
- 14. CS. Which is the main indication for Metronidazole:**
- A. Deep dental caries
 - B. Ulcerative gingivitis caused by anaerobic flora
 - C. Periodontitis of the baby teeth
 - D. Acute gingivitis during pregnancy
 - E. Periodontal abscess
- 15. CS. What is the main indication of association beta-lactam and metronidazole:**
- A. Ulcerative gingivitis
 - B. Odontogenic infections - pulpitis , periodontitis
 - C. Postoperative infection prophylaxis of infected wound caused by protozoal
 - D. Inflammatory diseases of the oral cavity caused by prosthesis
 - E. Deep dental caries
- 16. SC. What is characteristic for fluorquinolones:**
- A. Their use in dentistry is limited
 - B. The first choice drug in the treatment of oral cavity infections
 - C. Low bioavailability for internal administration
 - D. Rapid elimination from the body
 - E. Accumulates on long-term administration
- 17. SC. In which case is used amphotericin B:**
- A. Is used parenterally in hair mycosis

- B. Is used parenterally in easy and moderate systemic mycoses
 - C. Local - first choice in skin mycoses
 - D. Local – is used in case of resistance to others antifungal drugs
 - E. Local - is used at least one month
- 18. SC. What is the drug of choice in orofacial herpetic infection:**
- A. saquinavir
 - B. ribavirin
 - C. acyclovir
 - D. polymyxin
 - E. amantadine
- 19. SC. What is the duration of treatment with acyclovir in primary herpetic stomatitis:**
- A. 5 to 10 days
 - B. At least 2 weeks
 - C. At least one month
 - D. 1 - 3 months
 - E. More than 3 months
- 20. SC. What is the mechanism of action of deoxyribonuclease as antiviral drug:**
- A. It stimulates viral replication and their spread
 - B. Suppresses the development of DNA - depending viruses
 - C. Suppresses the development of RNA - depending viruses
 - D. It inhibits viral neuraminase
 - E. Inhibits N-glycosylation
- 21. SC. What is the indication of valaciclovir in Dentistry:**
- A. Herpes simplex and zoster infection
 - B. Bacterial infections
 - C. Influenza infection
 - D. Mycotic stomatitis
 - E. Chronic periodontitis
- 22. SC. Which antibiotic group is mainly used as antituberculosis:**
- A. macrolides
 - B. tetracyclines
 - C. ansamicines
 - D. polymyxins
 - E. penicillins
- 23. SC. Which antibiotic used as an anti-tuberculosis drug is considered to be the most effective:**
- A. amikacin
 - B. clarithromycin
 - C. streptomycin
 - D. polymyxin
 - E. rifampicin
- 24. SC. What is the cause of isoniazid neurotoxicity:**
- A. antagonism with folic acid
 - B. cyanocobalamin antagonism
 - C. antagomism with ascorbic acid
 - D. pyridoxine antagonism
 - E. antagonism with riboflavin .

25. SC. Determine the mechanism of action of the single-component sulfamides:

- A. inhibits cell wall synthesis
- B. disrupts the permeability of the cytoplasmic membrane
- C. inhibits dihydrofolic acid synthesis
- D. inhibits mycolic acid synthesis
- E. inhibits DNA-gyrase

26. SC. What is the mechanism of action of the combined sulfamides:

- A. inhibits cell wall synthesis
- B. disrupts the permeability of the cytoplasmic membrane
- C. inhibits dihydrofolic acid synthesis and its conversion to tetrahydrofolic acid
- D. inhibits mycolic acid synthesis
- E. inhibits DNA-gyrase

27. SC. Which sulfamide group is mainly used in the treatment of toxoplasmosis:

- A. Azo compounds
- B. combined sulfamides
- C. ultra-long sulfamides
- D. intestinal action sulfamides
- E. topical sulfamides

28. SC. The bacteriostatic effect of nitrofurans is determined by the following mechanism:

- A. disruption of cell wall synthesis
- B. inhibits the synthesis of nucleic acids and proteins
- C. inhibits ergosterol synthesis in the cytoplasmic membrane
- D. manifest antagonism with paraaminobenzoic acid
- E. inhibits mycolic acid synthesis

29. SC. Nitrofurantoin derivatives with resorbing action are indicated mainly in:

- A. ENT infections
- B. respiratory infections
- C. ophthalmological infections
- D. urinary tract infections
- E. giardiasis

30. SC. The mechanism of action of nitroimidazole derivatives is reduced to the following action:

- A. prevents the formation of folic acid
- B. prevents the production of hydrogen ions and affects nucleic acids
- C. prevents ergosterol synthesis
- D. prevents cell wall synthesis
- E. prevents the formation of microtubules

31. SC. For the mechanism of action of metronidazole, the statement is characteristic:

- A. increases folic acid synthesis
- B. prevents cell wall synthesis
- C. stimulates ergosterol synthesis

- D. increases the formation of the free radical NO
- E. prevents the formation of microtubules

32. SC. Which nerve may be affected by nitroxoline:

- A. the vagus nerve
- B. the trigeminal nerve
- C. the glossopharyngeal nerve
- D. oculomotor nerve
- E. facial nerve

33. SC. Which antibiotic can produce apnea through the neuro-muscular block?

- A. gentamicin;
- B. tetracycline ;
- C. erythromycin;
- D. ceftriaxon ;
- E. amoxicilline

34. SC. Which azole derivative is used exclusively in the treatment of systemic mycoses:

- A. clotrimazole
- B. fluconazole
- C. econazole
- D. sulconazole
- E. isoconazole

35. SC. What is the mechanism of action of nystatin, amphotericin B and natamycin:

- A. inhibits ergosterol synthesis
- B. is irreversibly coupled with ergosterol
- C. inhibits peptidoglycan synthesis
- D. inhibits nucleic acid synthesis
- E. inhibits protein synthesis

36. SC. Which echinocandin derivative is used as antifungal:

- A. fluonilide
- B. flucytosine
- C. amorolfine
- D. Naphthifine
- E. capsofungine

37. SC. Which drug is active against adenoviruses:

- A. amantadine
- B. zanamivir
- C. acyclovir
- D. lamivudine
- E. ribavirin

38. SC. Which antiherpetic drug is analogous to thymidine:

- A. acyclovir
- B. foscarnet

- C. vidarabine
- D. trifluridine
- E. maribavir

39. SC. Which antiherpetic drug is analogous to adenosine:

- A. cidofovir
- B. brivudine
- C. vidarabine
- D. trifluridine
- E. maribavir

40. SC. Explain the antiherpetic action of docosanol:

- A. blocks AND.polymerase
- B. blocks the fusion of viral and cellular membranes and entry of the virus into the cell
- C. blocks mRNA synthesis
- D. blocks the decapsulation of the virus
- E. blocks viral protein kinase

41. SC. Explain the antiherpetic action of nucleoside analogues:

- A. inhibits viral DNA polymerase
- B. blocks the decapsulation of the virus
- C. inhibits viral proteinokinase
- D. blocks the fusion of viral and cellular membranes
- E. inhibits reverse transcriptase

42. SC. What is the main indication of trifluridine:

- A. orofacial herpes
- B. genital herpes
- C. cytomegalic virus infection
- D. Epstein-Barr virus infection
- E. herpetic keratitis

43. SC. What is the main indication of docosanol:

- A. recurrent orolabial herpes
- B. genital herpes
- C. i infection with the cytomegalic virus
- D. Epstein-Barr virus infection
- E. herpetic keratitis

44. SC. What is the main indication of maribavir:

- A. ocular herpetic infection
- B. systemic herpetic infection
- C. cytomegalic virus infection
- D. Epstein-Barr virus infection
- E. infection with varicella-zosterian virus

- 45. CS. What is the main indication of ganciclovir:**
- A. Epstein-Barr virus infection
 - B. infection with varicella-zosterian virus
 - C. systemic herpetic infection
 - D. cytomegalic virus infection
 - E. genital herpes infections
- 46. CS. What is the importance of anti-herpes drugs that have a longer half-life in cells than in plasma:**
- A. have a higher bioavailability
 - B. have a stronger coupling with plasma proteins
 - C. have a more lasting effect
 - D. have a shorter effect
 - E. it is metabolized more intensely
- 47. SC. Which antiherpetic drug is an inhibitor of viral protein-kinase:**
- A. cidofovir
 - B. brivudine
 - C. vidarabine
 - D. trifluridine
 - E. maribavir
- 48. SC. Which antiherpetic drug is inhibiting viral fusion:**
- A. docosanol
 - B. fomivirsen
 - C. maribavir
 - D. foscarnet
 - E. cidofovir
- 49. SC. Which antibiotic is an obligatory component of the combined anti-tuberculosis drugs:**
- A. isoniazid
 - B. ethambutol
 - C. streptomycin
 - D. rifampicin
 - E. pyrazinamide
- 50. SC. Which group of antibiotics should be used as antituberculosis :**
- A. macrolides
 - B. tetracyclines
 - C. ansamycins
 - D. polymyxins
 - E. penicillins
- 51. SC. What is the common characteristic for the absorption of triazole derivatives: C**
- A. reduced absorption
 - B. good absorption , influenced by food
 - C. high absorption , not influenced by food
 - D. good absorption, but is inactivated in the intestinal wall
 - E. they are not absorbed from the digestive tract

52. SC. What is the mechanism of antimycotic action of imidazole and triazole derivatives:

- A. inhibits ergosterol synthesis
- B. inhibits nucleic acid synthesis
- C. inhibits protein synthesis
- D. inhibits protein synthesis
- E. inhibits peptidoglycan synthesis

53. SC. What is the route of elimination for amoxicillin?

- A. pulmonary;
- B. gall;
- C. liver;
- D. intestinal;
- E. kidney.

54. SC. What is the main indication of metronidazole in dentistry

- A. fungal infections
- B. anaerobic infections
- C. infections with mycobacteria
- D. viral infections
- E. aerobic infections

55. SC. Why are fluorquinolones contraindicated in children up to puberty (18 years)?

- A. leukopenia
- B. photosensitization
- C. convulsions
- D. cartilage lesions and erosions
- E. angioneurotic edema

-MC-

1. MC. What is characteristic for acyclovir and ganciclovir:

- A. Have a poor bioavailability in the internal administration
- B. Acyclovir is used mainly in herpetic infections
- C. Ganciclovir is used mainly in cytomegaloviral infections
- D. Ganciclovir has a higher systemic toxicity than acyclovir
- E. Acyclovir has a higher systemic toxicity than ganciclovir

2. MC. What is characteristic for lincosamides :

- A. Have an affinity towards bones and accumulates in destructive bone sites
- B. They are widely used in dentistry, especially in osteomyelitis
- C. It is completely absorbed from the gastrointestinal tract
- D. Cross the placental barrier
- E. Easily penetrates the blood-brain barrier

3. MC. What are the indications of penicillins in dentistry:

- A. Acute odontogenic infections
- B. Chronic odontogenic infections - in acutisation

- C. periostitis
 - D. Tooth-alveolar abscesses
 - E. Preoperative - all groups of patients
4. **MC. What are the indications of cephalosporins in dentistry:**
- A. Inflammatory processes - purulent in the maxillofacial region
 - B. Preparing patients for traumatic dental interventions with positive anamnesis of valvulopathy and/or diabetes
 - C. Acute odontogenic infections
 - D. Trigeminal nerve neuralgia
 - E. Postoperative infections prophylaxis
5. **MC. What are the indications of macrolides in Dentistry:**
- A. Acute odontogenic infection
 - B. Pericoronitis
 - C. Periodontal infections in acutisation
 - D. Chronic periodontal infections - long-term treatment
 - E. Prophylaxis of oro-maxillofacial infectious – purulent processes
6. **MC. Which drug combinations are used in dentistry:**
- A. Clarithromycin + metronidazole - in odontogenic infections
 - B. Spiramycin + metronidazole - in periodontitis
 - C. The use of drug combinations is definitely not recommended
 - D. Imipenem + cefazoline - in oro-maxillofacial inflammatory processes
 - E. Azithromycin + clarithromycin – in postoperative infection prophylaxis
7. **MC. In which cases Azithromycin will be used:**
- A. As alternative drug for the therapy of acute purulent odontogenic infections
 - B. Infection - to patients allergic to penicillins
 - C. Postoperative bacterial infection prophylaxis – patients from risk group
 - D. A drug of choice in the treatment of acute purulent odontogenic infections
 - E. Infections caused by aerob-anaerob flora penicillinase-producing
8. **MC. What are the indications for lincosamides:**
- A. Osteomyelitis, alveolitis
 - B. Mandibular-temporal arthritis
 - C. Prophylaxis of infectious complications in endodontics
 - D. Periodontal inflammatory processes
 - E. Fungal stomatitis fungal of oral cavity
9. **MC. What are the specific dental side effects of clindamycin:**
- A. Dyspeptic syndrome
 - B. Skin rash
 - C. Vertigo, sometimes headache
 - D. glossitis
 - E. stomatitis
10. **MC. What is characteristic for aminoglycosides:**
- A. High toxicity
 - B. It is indicated only in serious infections with polyresistant flora G-
 - C. It may be associated with vancomycin or ampicillin
 - D. Is of choice in prophylaxis of postoperative dental infections

- E. High efficacy - for oral administration.
11. **MC. What are the peculiarities for tetracyclines:**
- A. High concentrations in the gingival fluid
 - B. Possess non-specific adsorption to the root of the tooth
 - C. Possesses specific adsorption to the receptors for bacterial plaque
 - D. Of choice - children preschool age
 - E. Produces dental enamel hypoplasia
12. **MC. Tetracyclines, in dentistry, will be used in:**
- A. Odontogenic sepsis
 - B. Odontogenic sinusitis
 - C. Dental pain in pregnant women and children
 - D. Bacterial infection prophylaxis to patients from the risk group
 - E. Dental eruptions in infants
13. **MC. What are the characteristic side effects for tetracyclines:**
- A. Ulcerative stomatitis
 - B. Gingivitis, glossitis
 - C. Brown coloration of the teeth
 - D. Enamel hypoplasia of the teeth
 - E. Osteoporosis.
14. **MC. What are the indications for Levomecol:**
- A. Treatment of gingivitis
 - B. Treatment of corneal periodontitis
 - C. Treatment of periodontitis - in acute phase
 - D. Treatment of purulent wounds and cavities in oro - maxillofacial region
 - E. Infection Treatment with germs sensitive to other chemotherapeutic agents.
15. **MC. To which groups of patients is indicated prophylaxis of bacteremia:**
- A. Patients with serious somatic pathology
 - B. Patients with craniofacial trauma
 - C. Pregnant women and children
 - D. Patients with immunosuppression or after mandibular radiation
 - E. All groups of patients
16. **MC. In which cases antibiotic associations will be used:**
- A. Mycotic stomatitis
 - B. Acute gingivitis
 - C. Ulcer-necrotic and gangrenous stomatitis
 - D. Gangrenous necrotic stomatitis
 - E. Chronic periodontal disease.
17. **MC. In which cases is of choice amoxicillin :**
- A. Peri implant infectious complications treatment
 - B. Dentoalveolar abscess
 - C. fungal stomatitis
 - D. Acute and chronic periodontitis
 - E. Infected dental caries
18. **MC. What are the indications for fusidine in dentistry:**
- A. The first choice - the treatment of suppurative inflammatory processes in oro-maxillofacial region

- B. -Purulent inflammatory processes of the oro-maxillo-facial region caused by staphylococci resistant to other antibiotics
- C. Treatment of all forms of periodontitis
- D. Treatment of abscess forms of periodontitis
- E. Prophylaxis of postoperative bacterial complications

19. MC. What groups of drugs are considered to be less effective in Dentistry:

- A. macrolides
- B. sulfonamides
- C. polymyxins
- D. Nitrofurans derivatives
- E. quinolones

20. MC. What are the new forms of antimicrobial local treatment in periodontal infections:

- A. Biopolymers matrix
- B. Cryogel medications
- C. ointments
- D. Paste, gel
- E. liniment

21. MC. What are the advantages of the biopolymer matrix:

- A. Provides constant release of antibiotic
- B. Increased risk of anaphylaxis
- C. Provides long-term release of antibiotic
- D. It does not create systemic concentrations
- E. Low risk of side effects

22. MC: What are the therapeutic effects of the cryogel medication:

- A. Prolonged release of the drug
- B. Hemostatic and drainage effect
- C. Stimulates the processes of regeneration and epithelialization
- D. Stimulates lipid peroxidation in gingival tissue
- E. Assures adsorption of toxic metabolites, bacteria and their toxins.

23. MC. What are the drugs of choice used in oral cellulitis

- A. Amoxicillin / clavulanic acid
- B. cefotaxime
- C. ciprofloxacin
- D. erythromycin
- E. Co-trimoxazole

24. MC. In which cases antibiotic therapy + antibiotic prophylaxis will be used:

- A. Extraction of 2 molars III mandibular in the presence of the local inflammatory process and / or an associated disease
- B. Implantation of multiple implants (4-8) in the patient with compromised local / systemic status
- C. Implantation of 9-10 implants under standard conditions
- D. Extraction of the III mandibular molar under standard terms
- E. 1-3 Dental implants -

25. MC. How many types of perioperative antibiotic prophylaxis with amoxicillin + clavulanic acid may be:

- A. ultrashort
- B. Short

- C. prolong
 - D. Antibioticoprophylaxis + antibiotic therapy
 - E. Medium
- 26. MC. What are the indications for sulfonamides in dentistry:**
- A. Treatment of infectious inflammatory diseases of the pulp
 - B. Treatment of peridontal infectious inflammatory diseases
 - C. Prevention of postoperative complications
 - D. Treatment of superficial caries
 - E. Treatment of aphtous and ulcerative stomatitis
- 27. MC. In which cases will be used Metronidazole:**
- A. Anaerob infection of oral cavity
 - B. Peridontal ulcerative conditions
 - C. Acute ulcero-necrotic gingivitis Vensan
 - D. Aphtous stomatitis
 - E. G + infection of oral cavity
- 28. MC. What are the combined drug from the nitroimidazole derivatives?**
- A. tinidazole
 - B. Clion - D
 - C. Metrogil - dent
 - D. Co - trimoxazole
 - E. Medozol.
- 29. MC. Local Metrogil - Denta is indicated in:**
- A. Acute and chronic gingivitis
 - B. Aphtous stomatitis
 - C. Postextractive alveolitis
 - D. Post – operator infection prevention caused by anaerob flora
 - E. Post – operator infection treatment caused by anaerob flora
- 30. MC. What are the forms of delivery of nystatin that are used in dentistry:**
- A. Solution for injections
 - B. Ointment
 - C. tablets
 - D. Drinking suspension
 - E. Vaginal suppositories
- 31. MC. What are the indications for Miconazole:**
- A. Pseudomembranous candidiasis
 - B. Atrophic candidiasis
 - C. Acute and chronic hyperplastic candidiasis
 - D. Angular cheilitis
 - E. Candidiasis of the new-borns
- 32. MC. What is characteristic for Ketoconazole :**
- A. It is indicated in mycoses of the skin and mucous membranes that do not respond to local treatment
 - B. It is more advantageous to use in chronic forms of mycosis due to the slow effect
 - C. It indicated in mycosis during pregnancy
 - D. It is indicated in the oral candidiasis of the newborn
 - E. It is indicated for systemic fungal infections
- 33. MC. Which drugs are used in fungal infections of the oral cavity:**

- A. Levorine
 - B. Acyclovir
 - C. Naphtifine
 - D. terbinafine
 - E. amantadine
- 34. MC. Which drugs are indicated for the treatment of herpetic stomatitis:**
- A. acyclovir
 - B. Valaciclovir
 - C. zanamivir
 - D. Amphotericin B
 - E. ketoconazole
- 35. MC. What is characteristic for Oxolin:**
- A. It is indicated in herpetic stomatitis
 - B. Oxolinic ointment has lor irritative character
 - C. First intention in herpetic infection
 - D. It is indicated for long-term as antiviral treatment
 - E. It is used in herpetic stomatitis as ointment
- 36. MC. What are the indications of interferons in Dentistry:**
- A. Easy forms of herpetic stomatitis
 - B. Latent herpetic infection
 - C. Severe herpetic stomatitis with severe local injuries of oral cavity
 - D. Severe viral stomatitis
 - E. Easy viral infection
- 37. MC. What drugs are indicated in viral infections of the mucosa of oral cavity:**
- A. acyclovir
 - B. valaciclovir
 - C. Bonafton
 - D. trifluridine
 - E. Clotrimazole
- 38. MC. What are the major tuberculosis drugs or the first choice:**
- A. streptomycin
 - B. isoniazid
 - C. amikacin
 - D. ethionamide
 - E. ethambutol
- 39. MC. Which aminoglycosides are mainly used as antituberculosis:**
- A. gentamicin
 - B. amikacin
 - C. streptomycin
 - D. tobramycin
 - E. kanamycin
- 40. MC. Which antibiotics are antituberculous (minor):**
- A. cycloserine
 - B. amikacin
 - C. streptomycin
 - D. lomefloxacin
 - E. viomicine

- 41. MC. Which neurotoxic disorders can be found when using isoniazid:**
- A. polyneuropathy
 - B. encephalopathy
 - C. ototoxicity
 - D. psychomotor excitation
 - E. optical neuritis
- 42. MC. Choose the systemic action sulfamides combined:**
- A. sulfacetamide
 - B. sulfaton
 - C. co-trimoxazol
 - D. sulfamethoxazole
 - E. co-trimazine
- 43. MC. What are the mechanism of action of co-trimoxazole:**
- A. inhibits dihydropteroatsynthesis by inhibiting folic acid synthesis
 - B. disrupts the permeability of the cytoplasmic membrane
 - C. inhibits dihydrofolate reductase by disrupting tetrahydrofolic acid synthesis
 - D. inhibits mycolic acid synthesis
 - E. inhibits DNA-gyrase
- 44. MC. Which allergic reactions caused by sulfamides are at greater risk:**
- A. rashes
 - B. angioneurotic edema
 - C. Stevens-Johnson syndrome
 - D. itching
 - E. Lyela syndrome
- 45. MC. The bactericidal effect of nitrofurans is determined by the following mechanisms:**
- A. It forms toxic substances that affect the cell wall
 - B. inhibits nucleic acid synthesis
 - C. inhibits biochemical processes by disrupting the permeability of the cytoplasmic membrane
 - D. shows antagonism with paraaminobenzoic acid
 - E. inhibits mycolic acid synthesis
- 46. MC. The bacteriostatic effect of nitrofurans is determined by the following mechanism:**
- A. disruption of cell wall synthesis
 - B. inhibits protein synthesis
 - C. inhibits ergosterol synthesis in the cytoplasmic membrane
 - D. they form complexes with nucleic acids and inhibit their synthesis
 - E. inhibits mycolic acid synthesis
- 47. MC. Metronidazole is metabolized by the following pathways:**
- A. hydrolysis
 - B. conjugation with glucuronic acid
 - C. methylation
 - D. oxidation
 - E. conjugation with sulfuric acid

48. MC. Nitroimidazole derivatives are contraindicated in :

- A. organic brain disorders
- B. kidney disease
- C. association with alcohol
- D. severe liver disease
- E. cardiovascular disease

49. MC. The most common metronidazole reactions are:

- A. sensory neuropathies
- B. metallic taste
- C. headache
- D. encephalopathy
- E. anorexia

50. MC. Symptoms of the antabus reaction to the use of metronidazole with alcohol are :

- A. headache
- B. encephalopathy
- C. flushes
- D. abdominal pain
- E. paresthesia

51. MC. What are the antibiotics of choice in the treatment of osteomyelitis?

- A. aminoglycosides;
- B. penicillins;
- C. cephalosporins;
- D. macrolides;
- E. rifampicin.

52. MC. Which antibiotics can be used during pregnancy?

- A. benzyl penicillin;
- B. lincomycin;
- C. chloramphenicol;
- D. tetracyclines;
- E. rifampicin.

53. MC. What are the antibiotics of choice in the treatment of Pseudomonas infections?

- A. carbenicillin;
- B. ticarcillin;
- C. erythromycin
- D. benzylpenicillin ;
- E. mezlocilin .

54. MC. What are the mechanisms of the appearance of antibacterial resistance?

- A. the production of enzymes that inactivate the antimicrobial substance;
- B. changing the permeability of the microorganism for the drug;
- C. development of an altered target structure;

- D. producing a metabolite that bypasses the drug inhibited reaction;
- E. the production of a specific and drug-sensitive enzyme .

55. MC. What are the principles of antibiotic dosing?

- A. infection localization;
- B. known or presumed pathogen;
- C. the result of the antibioticogram;
- D. the physiological and pathological particularities of the patient;
- E. Avoid using small doses.

56. MC. What are the most common complications in using macrolides?

- A. hepatic insufficiency;
- B. nausea;
- C. allergic rashes;
- D. renal insufficiency;
- E. fever.

57. MC. What are the most common complications when using aminoglycosides?

- A. Allergic reactions;
- B. Nephrotoxicity ;
- C. Hepatotoxicity ;
- D. Ototoxicity;
- E. Hematotoxicity.

58. MC. What are the necessary measures to prevent the installation of antibiotic resistance?

- A. administration of small doses;
- B. administering adequate doses ;
- C. administration at well calculated time intervals;
- D. duration of treatment well oriented;
- E. antibacterial associations;

59. MC. What are the principles of antibiotic prophylaxis ?

- A. it is only practiced in people who have certainly infected contacts;
- B. targets only pathogens where resistance is slowly installed;
- C. targets only pathogens where resistance is rapidly installed;
- D. is performed for a short time;
- E. it is performed on a long-term basis;

60. MC. What are the requirements for antibiotics used in local therapy?

- A. Can not be used orally or parenterally;
- B. have low allergenic capacity;
- C. are well supported by tissues;
- D. acts bactericidal;
- E. it acts bacteriostatically;

61. MC. What are the mistakes in antibiotic therapy?

- A. errors in collecting materials for analysis;
- B. diagnostic errors;
- C. the presence of uncorrected circulatory insufficiency;
- D. neglecting aseptic and antiseptic;

- E. purulent collections are surgically evacuated;
- 62. MC. The side effects of chloramphenicol are:**
 - A. neuro-muscular block;
 - B. gray syndrome;
 - C. agranulocytosis;
 - D. ototoxicity;
 - E. dysbacteriosis.
- 63. MC. What are the characteristics for benzylpenicillin?**
 - A. bactericidal action;
 - B. bacteriostatic action;
 - C. is inactivated by penicillinase;
 - D. is inactivated in the acidic environment of the stomach;
 - E. is acid-resistant.
- 64. MC. Amoxicillin has the following properties:**
 - A. broader spectrum of activity than benzylpenicillin;
 - B. resistant to the action of penicillinase;
 - C. is acid-resistant;
 - D. concentrates in the gall;
 - E. it rarely causes allergic reactions.
- 65. MC. For acyclovir the following pharmacokinetic parameters are characteristic:**
 - A. it is eliminated unchanged by the kidneys
 - B. undergo intense metabolism in the liver
 - C. it is widely distributed throughout the body
 - D. is strongly coupled with plasma proteins
 - E. practically does not metabolize
- 66. MC. What are the indications for nystatin:**
 - A. systemic candidiasis
 - B. oropharyngeal candidiasis
 - C. vulvovaginal candidiasis
 - D. aspergillosis
 - E. cutaneous candidiasis
- 67. MC. For the treatment with amphotericin B, it is necessary to monitor the following parameters:**
 - A. electrolytes
 - B. electrocardiogram
 - C. kidney function
 - D. the picture of peripheral blood
 - E. pulmonary functions
- 68. MC. What are the pharmacokinetic parameters of fluconazole for internal administration:**
 - A. low bioavailability
 - B. high bioavailability
 - C. high volume of distribution
 - D. small volume of distribution
 - E. it is mainly eliminated unchanged through the urine
- 69. MC. What drugs have broad spectrum antiviral action:**
 - A. ribavirin

- B. acyclovir
- C. interferons
- D. lamivudine
- E. nevirapine

70. MC. What are the groups of anti-flu drugs:

- A. viral transcription inhibitors
- B. viral protein kinase inhibitors
- C. neuraminidase inhibitors
- D. M2 protein inhibitors
- E. nucleoside analogues

71. MC. Acyclovir is indicated for the following infections:

- A. herpes infections
- B. infections with Epstein-Barr virus
- C. cytomegalic virus infections
- D. infections with orthomixoviruses
- E. infections with varicella-zosterian virus

72. MC. What are the indications of idoxuridine:

- A. cytomegalovirus infections
- B. keratitis with herpes simplex virus
- C. genital herpes
- D. infections with Epstein-Barr virus
- E. herpes zoster area

73. MC. What are the components of the mechanism of action of interferons:

- A. interacts with specific membrane receptors
- B. inhibits DNA polymerase
- C. activates the JAK-STAT signal translation path
- D. inhibits reverse transcriptase
- E. inhibits viral protease

74. MC. What may be the neurological adverse reactions caused by interferons:

- A. amnesia
- B. depression
- C. anxiety
- D. hallucinations
- E. behavioral and memory disorders

75. MC. What may be the hepatic adverse reactions caused by interferon preparations:

- A. increased transaminases
- B. increased alkaline phosphatase
- C. increased bilirubin

- D. decreased lactate dehydrogenase
- E. increased creatinine kinase

76. MC. Which side effects are characteristic for tetracyclines:

- A. urticaria;
- B. severe hepatic impairment;
- C. anemia;
- D. leukopenia;
- E. vitamin B₁₂ absorption deficiency.

77. MC. Which antibiotic groups have bacteriostatic action?

- A. amphenicols ;
- B. macrolides;
- C. aminoglycosides;
- D. tetracyclines;
- E. penicillins;

78. MC. Which antibiotics have bactericidal action?

- A. amoxiciclin
- B. tobramycin
- C. amikacin;
- D. chloramphenicol;
- E. cephalexin

79. MC. What are the indications of zanamivir:

- A. prophylaxis and treatment of influenza type A and B
- B. treatment and prophylaxis of influenza type A
- C. prophylaxis of influenza type A and B in patients at risk for epidemics, adjuvant
- D. seasonal prophylaxis of influenza A as an alternative to vaccination
- E. prophylaxis and treatment of type B influenza

80. MC. What are the side effects to the use of amantadine as anti - flu drug:

- A. insomnia
- B. confusion
- C. anxiety
- D. extrapyramidal disorders
- E. concentration difficulties

81. MC. What are the contraindications of interferons:

- A. Decompensated cardiovascular disease
- B. Kaposi's syndrome in HIV patients
- C. uncontrolled seizures
- D. psychosis
- E. multiple sclerosis

82. MC. What may be hematopoietic side effects caused by interferons:

- A. leukocytosis
- B. anemia
- C. thrombocytopenia
- D. lymphocytosis
- E. agranulocytosis

83. MC. Which antifungal agents inhibit the synthesis of nucleic acids:

- A. iodine
- B. fluocitozin
- C. capsofungin
- D. grizeofulvin
- E. terbinafine

84. MC. Which antimycotic groups act by inhibiting the synthesis of ergosterol?

- A. imidazole derivatives
- B. allylamine derivatives
- C. halogenated thiocarbons
- D. antibiotics
- E. echinocandins

85. MC. What side effects can be seen in the treatment with nystatin and natamycin:

- A. dyspeptic disorders
- B. neurological disorders
- C. rash
- D. hematopoietic disorders
- E. Stevens-Johnson syndrome

86. MC. What are the indications of interferons other than viral hepatitis:

- A. chronic granulocytic leukemia
- B. papillomavirus infections
- C. herpetic keratitis
- D. fungal diseases
- E. multiple sclerosis

87. MC. Which are the groups of antibiotic that are used as anti-tuberculosis drugs :

- A. penicillins
- B. ansamicines
- C. polymyxins
- D. aminoglycosides
- E. cephalosporins

88. MC. Which are the effective anti-tuberculosis agents :

- A. rifabutin
- B. ethambutol
- C. thioacetazone
- D. isoniazid
- E. amikacin

89. MC. Which antituberculosis agents are less effective:

- A. viomicine
- B. aminosalicilic acid
- C. cycloserine
- D. thioacetazone
- E. ofloxacin

90. MC. Which antibiotics are minor antituberculous drugs:

- A. cycloserine
- B. amikacin
- C. streptomycin
- D. lomefloxacin
- E. viomicine

91. MC. Rifampicin may cause the following side effects:

- A. coloring some secrets in red-orange
- B. anaphylactic shock

- C. hemopoiesis disorder
- D. hepatotoxicity
- E. ototoxicity

92. MC. Which are the most common side effects using ethionamide :

- A. increased transaminases
- B. anorexia
- C. metallic taste in the mouth
- D. jaundice
- E. nausea, vomiting

93. MC. To which groups of antibiotics is installed slow resistance?

- A. cephalosporins;
- B. penicillins;
- C. tetracyclines;
- D. aminoglycosides;
- E. polymyxin;

94. MC. What hematological disorders can be found when using sulfamides?

- A. Iron deficiency anemia
- B. haemolytic anemia**
- C. Thrombocytopenia
- D. leukocytosis
- E. aplastic anemia

CNS tests

CS

1. CS. Which drug below is of choice in seizures of unknown genesis:

- A. Phenobarbital
- B. felbamate
- C. acetazolamide
- D. clonazepam
- E. diazepam

2. CS . Choose the most effective drug used in status epilepticus

- A. chlorpromazine
- B. oxazepam
- C. diazepam
- D. magnesium sulfate
- E. lamotrigine

3. CS. Which mechanism explains extrapyramidal antipsychotic disorders:

- A. M-cholinomimetic
- B. GABA-mimetic
- C. Dopaminoblocker
- D. dopaminomimetic
- E. Adrenomimetic

4. CS. Which mechanism explains the anxiolytic effect of benzodiazepines:

- A. M-colinoblocker
- B. GABA-lytic
- C. Dopaminolytic
- D. GABA - allosteric mimetic

- E. Alfa-adrenolytic
5. **CS. Which of the following drugs is part of the CNS excitatory group?**
- A. piracetam;
 - B. baclofen;
 - C. amphetamine;
 - D. Valproic acid;
 - E. Promethazine.
6. **CS. Which mechanism explains the antivomitive effect of antipsychotics :**
- A. M-cholinomimetic
 - B. GABA-mimetic
 - C. Dopaminoblocker
 - D. dopaminomimetic
 - E. Adrenomimetic
7. **CS. Choose the group of sedative drugs that are used in Dentistry:**
- A. Benzodiazepines , low doses
 - B. Antagonistic of GABA
 - C. methylxanthines
 - D. phenylalkylamines
 - E. Nootrope
8. **CS. What is the specific side effect after long bromides administration:**
- A. Hypersensitivity
 - B. anaphylaxis
 - C. Bromism
 - D. Tolerance
 - E. idiosyncrasy
9. **C S. What is the characteristic of Phenobarbital:**
- A. In large doses - sedative effect
 - B. Inhibits liver enzymes
 - C. In small doses - hypnotic effect
 - D. It induces liver enzymes
 - E. No matter the dose - psychostimulant effect.
10. **CS. Which drug from the barbiturates group is a short-term hypnotic:**
- A. pentobarbital
 - B. Phenobarbital
 - C. Ciclobarbital
 - D. amobarbital
 - E. barbital
11. **CS. What is the correct statement for benzodiazepines :**
- A. Benzodiazepines less influences the sleep structure
 - B. Benzodiazepines marked influences the sleep structure
 - C. Benzodiazepines quickly develop tolerance
 - D. Benzodiazepines regardless of their duration of action can be used in any type of insomnia
 - E. Benzodiazepines have a more intense postaction syndrome
12. **CS. What group of hypnotic drugs do not show post-action phenomenon**
- A. benzodiazepines
 - B. H1-histaminoblocker
 - C. Non-benzodiazepine derivatives
 - D. Nootrope

- E. analeptics
- 13. CS. What group of drugs are of choice in premedication for surgical intervention:
 - A. barbiturates
 - B. benzodiazepines
 - C. Non-benzodiazepine derivatives
 - D. phenylalkylamines
 - E. Antagonist of GABA.
- 14. CS. In which cases in dentistry is Phenobarbital used :
 - A. Elders before dental intervention
 - B. In children before intervention, surgery
 - C. Of choice – to all groups of patients
 - D. It is used for long-term treatment of depression
 - E. It is indicated in postnatal depression.
- 15. CS. What is characteristic for the derivatives of gamma – aminobutyric acid:
 - A. It does not cross the blood-brain barrier
 - B. It has no anesthetic action
 - C. No influence on breath, blood pressure.
 - D. Enhances the the action of anesthetics and analgesics
 - E. Resistance of the heart to hypoxia decreases
- 16. CS. Chloralhydrat is characteristic:
 - A. It has a gastroprotective effect
 - B. No interaction with benzodiazepines
 - C. Therapeutic index - high
 - D. It is used in the composition of materials to decrease pain after dental extraction
 - E. Drug of choice in the treatment of insomnia.
- 17. CS. What is characteristic for "Denta" drops:
 - A. It is a drug from the barbiturates group
 - B. It is used for systemic effects
 - C. It has strong anti-inflammatory effect
 - D. It has local anesthetic effect
 - E. It is used in chronic dental pain.
- 18. CS. What is characteristic for Flunitrazepam:
 - A. It is indicated for long-term treatment of insomnia
 - B. The injectable forms are used for preanesthesia
 - C. It is not used for anesthesia induction
 - D. Doesn't maintain general anesthesia
 - E. Doesn't develop dependence physique and mental
- 19. CS. What is the indication of neuroleptics in stomatology :
 - A. headache
 - B. The treatment of paradontosis
 - C. Enhancing the effect of analgesics in intense pain
 - D. Sleep disorders in children
 - E. Anxiety / restless in preoperative period
- 20. CS. Which antidepressant drug is used in trigeminal neuralgia :
 - A. fluoxetine
 - B. Amitriptyline
 - C. nialamide
 - D. pirlindole

- E. moclobemide
- 21. CS. What is the main indication in dentistry for amitriptyline:
 - A. Acute dental pain
 - B. For neuroleptanalgesia
 - C. Chronic overload
 - D. Trigeminal nerve neuralgia
 - E. Preanesthetic.premedication
- 22. CS. In dentistry, MidaZolam is used in wich case:
 - A. Chronic dental pain
 - B. Depression
 - C. Premedication for surgical dental intervention
 - D. insomnia
 - E. Sleep disorders
- 23. SC. What drug will you indicate to the patient with depression with anxiety ?
 - A. diazepam
 - B. alprazolam
 - C. amitriptyline
 - D. droperidol
 - E. chlorpromazine
- 24. SC. Which drug is used for neuroleptanalgesia:
 - A. diazepam
 - B. amitriptyline
 - C. droperidol
 - D. piracetam
 - E. barbital
- 25. SC. By what explains the effect of antiparkinsonian effect of levodopa ?
 - A. stimulation of cholinergic processes in the central nervous system;
 - B. depression of cholinergic processes in the central nervous system;
 - C. stimulation of dopaminergic processes in the central nervous system;
 - D. depressing dopaminergic processes in the central nervous system;
 - E. stimulation of serotonergic processes in the central nervous system

-CM-

- 1. CM. In dentistry, sedatives are used in the following cases:
 - A. In case of neurotic inadequate reactions
 - B. In the complex treatment of paradontosis
 - C. Trigeminal nerve neuralgia
 - D. seizures
 - E. Hypertension.
- 2. CM. What are the effects of valerian extract:
 - A. antipsychotics
 - B. Sedative
 - C. spasmogen
 - D. hypertension
 - E. Coronarodilators
- 3. CM. What are the disadvantages of using barbiturates:
 - A. It causes the rebound phenomenon
 - B. Causes dependence

- C. Hypertensive effect
 - D. It causes enzyme induction
 - E. Psychostimulant effect
4. **CM. What are the characteristics of Zolpidem:**
 - A. It's of choice in short-term treatment of insomnia
 - B. It is indicated for long-term treatment of insomnia
 - C. It does not possess anxiolytic action
 - D. It is not given to children
 - E. Has a miorelaxant action
 5. **CM. What are the indications of bromides in Dentistry:**
 - A. Herpetic stomatitis
 - B. Paradontitis
 - C. Trigeminal nerve neuralgia
 - D. Pre and postoperative period in children
 - E. The drug of choice - insomnia in the elderly.
 6. **CM. What are the indications of anxiolytics in Dentistry:**
 - A. Treatment of diseases of the maxillofacial complex with the contraction of the mimetic muscles
 - B. Treatment of the fear and the restless before dental surgery
 - C. Treatment of chronic diseases of the oro-maxillofacial region
 - D. Maxillofacial diseases in the first trimester of pregnancy
 - E. Of choice in the treatment of maxillofacial diseases during lactation.
 7. **CM. What are the side effects of benzodiazepine anxiolytics :**
 - A. Drug addiction
 - B. GIT disorders
 - C. Decreased libido
 - D. Retrograde amnesia
 - E. Anorexigen effect
 8. **CM. Indications of neuroleptics in dentistry are:**
 - A. Neuroleptanalgesia
 - B. Trigeminal nerve neuralgia
 - C. Neuritis of the facial nerve
 - D. Preoperative anxiety
 - E. In children - preoperative
 9. **CM. What are the side effects of neuroleptics :**
 - A. extrapyramidal disorders
 - B. Increased prolactin level
 - C. Agranulocytosis
 - D. hallucinations
 - E. Malignant neuroleptic syndrome
 10. **CM. What are the pharmacokinetic parameters of antiepileptics:**
 - A. Good absorption
 - B. High bioavailability
 - C. Active metabolites
 - D. Reduced metabolism
 - E. Induces microsomal enzymes
 11. **CM. What are the mechanisms of action of antiepileptic drugs:**
 - A. Block calcium channels
 - B. Activation of the GABA system
 - C. Antagonism with adenosine in the brain

- D. Stimulating glutamate release
 - E. Inhibits carboanhydrase from the epileptic foci
- 12. CM. Which antiepileptic drug may most clearly inhibit the respiratory center:**
- A. ethosuximide
 - B. phenytoin
 - C. Magnesium sulphate
 - D. diazepam
 - E. Phenobarbital
- 13. CM. What are the mechanisms of action of antidepressants:**
- A. inhibits acetylcholine reuptake
 - B. inhibits the reuptake of serotonin and norepinephrine
 - C. inhibits MAO
 - D. inhibits acetylcholinesterase
 - E. accelerates the release of catecholamines
- 14. CM. Select nootropic drugs:**
- A. piritinol
 - B. caffeine
 - C. piracetam
 - D. gamma-aminobutyric acid
 - E. zolpidem
- 15. CM. Choose antipsychotic drugs with anti-vomiting effect:**
- A. chlorpromazine
 - B. diazepam
 - C. haloperidol
 - D. amitriptyline
 - E. droperidol
- 16. CM. In which clinical situations is the enzymatic induction effect of barbiturates useful?**
- A. Treatment of seizures
 - B. Gilbert's syndrome
 - C. Neonatal jaundice
 - D. Epilepsy
 - E. Krigle-Naiara Syndrome
- 17. CM. What are the mechanisms underlying the anxiolytic effect of benzodiazepines?**
- A. stimulation of GABA-ergic processes by allosteric mechanism;
 - B. depressing GABA-ergic processes by allosteric mechanism ;
 - C. stimulation of benzodiazepine receptors;
 - D. blockade of benzodiazepine receptors ;
 - E. stimulation of serotonergic processes in the central nervous system
- 18. CM. Which group of drugs is part of psycholeptics?**
- A. Antipsychotics ;
 - B. Psychostimulants;
 - C. Spinal stimulants;
 - D. Nootrope
 - E. anxiolytics
- 19. CM. What are the peculiarities of GABA analogues as antiepileptic drugs:**
- A. Very wide use as an antiepileptic

- B. Adjuvant in refractory forms of epilepsy
 - C. Association with phenytoin, carbamazepine - does not change their concentration in the blood
 - D. Side effects - mainly neurological
 - E. Contraindications - children up to 12 years
- 20. CM. What are the principles of rational use of antiepileptic drugs:**
- A. Indicates when epileptic seizures are common
 - B. It is recommended to combine antiepileptic drugs
 - C. The suspension of treatment is abrupt at any time
 - D. There is a correlation BETWEEN plasmatic concentration and therapeutic or toxic effects
 - E. Treatment efficacy depends on compliance with the administration regimen
- 21. CM. Choose the drugs used as antiparkinsonian:**
- A. levodopa
 - B. nialamide
 - C. Phenobarbital
 - D. bromocriptine
 - E. Sinemet
- 22. CM. What are the clinical manifestations of the sedative effect of antipsychotics:**
- A. produces apathy towards the environment
 - B. Removes hallucinations, cravings
 - C. removes psychomotor excitement
 - D. vegetative disorders
 - E. restores interest in the environment
- 23. CM. What are the effects of hypnotic drugs from the barbiturates group:**
- A. Non-selectively depresses the central nervous system
 - B. It selectively depresses the central nervous system
 - C. Doesn't change the structure of physiological sleep
 - D. Reduces attention and concentration
 - E. Dose-dependent effect
- 23. CM. What drugs are used in case of fear of dental intervention:**
- A. clonazepam
 - B. alprazolam
 - C. ketamine
 - D. Clodiazepoxid
 - E. midazolam
- 24. CM. What side effects are characteristic for anxiolytics:**
- A. Metabolic syndrome
 - B. Retrograde amnesia
 - C. Tolerance
 - D. Addiction
 - E. Insomnia and restlessness

25. MC. Which drugs have sedative effect:

- A. diazepam
- B. levodopa
- C. diphenhydramine

- D. selegiline
- E. phenobarbital

26. MC. Which of the following drugs is part of the group of excitatory CNS?

- A. piracetam
- B. baclofen
- C. amphetamine
- D. valproic acid
- E. caffeine

27. MC. Name the basics indications of sedatives:

- A. increased irritability
- B. sleep disorders
- C. psychosomatic diseases
- D. delirium
- E. depression

28. MC. Which benzodiazepines are mainly used as myorelaxants ?

- A. diazepam
- B. nitrazepam
- C. tetrazepam
- D. alprazolam
- E. bromazepam

ANALGESICS, GENERAL AND LOCAL ANESTHETICS

MULTIPLE CHOICE

1. From which groups according chemical structure are local anesthetics?
 - A. benzodiazepines
 - B. acetanilide (amide)
 - C. phenothiazines
 - D. paraaminobenzoic acid derivatives (esters)
 - E. Butyrophenones
2. Which nerve fibers are most sensitive to local anesthetics?
 - A. myelinated
 - B. unmyelinated
 - C. large diameter
 - D. small diameter
 - E. somatic fibers
3. How does the acid environment (pH 5-6) influence the effect of local anesthetics?
 - A. It reduces the effect
 - B. It increases the effect
 - C. It increases the proportion of the ionized form of the preparation
 - D. It increases the fat solubility
 - E. It decreases the proportion of the ionized form of the preparation
4. How does epinephrine influence the action of local anesthetics?
 - A. It enhances their action
 - B. It reduces their action

- C. It reduces their absorption
- D. It increases their absorption
- E. it increases their metabolism

6. Determine the mechanism of action of local anesthetics:

- A. they stabilizes the nerve fiber membrane
- B. they open the sodium channels
- C. they penetrates into the cell block the sodium channels
- D. they block calcium channels
- E. they increase the concentration of potassium

7. What CNS effects can be observed after absorption of local anesthetics in toxic doses?

- A. excitation
- B. inhibition
- C. tremor
- D. respiratory depression
- E. hypertensive crisis

8. What cardiovascular system effects can be seen when local anesthetics are administered in high doses?

- A. bradycardia
- B. tachycardia
- C. decrease in conductivity
- D. decrease of contractility
- E. increased contractility

9. What causes more intense absorption of local anesthetics?

- A. intense vascularization
- B. low concentrations
- C. large volume
- D. poor vascularization
- E. small volumes

10. Which pharmacokinetic parameters are characteristic for paraaminobenzoic acid derivatives (esters):

- A. They are hydrolyzed intensely
- B. They have a short duration of action
- C. They are less coupled with plasma proteins compared to amides
- D. They are coupled intensely with proteins
- E. have a long duration of action

11. Which pharmacokinetic parameters are characteristic for acetanilide (amide) derivatives?

- A. They binds more intensely with proteins compared to esters
- B. They are hydrolyzed by butyrylcholinesterase
- C. They are spreaded faster in intensely vascularized organs
- D. They more easily penetrates the blood-brain barrier
- E. They are quickly eliminated

12. Determine benzocaine indications:
- A. periodontitis
 - B. glossitis
 - C. pulpitis
 - D. stomatitis
 - E. dental extractions
13. Determine the local anesthetics that have high lipophilicity:
- A. bupivacaine
 - B. etidocaine
 - C. procaine
 - D. prilocaine
 - E. tetracaine
14. Determine the local anesthetics with the rapid onset of action:
- A. benzocaine
 - B. lidocaine
 - C. tetracaine
 - D. mepivacaine
 - E. Procaine
15. Determine short-acting local anesthetics:
- A. tetracaine
 - B. bupivacaine
 - C. procaine
 - D. lidocaine
 - E. cocaine
16. Determine local anesthetics with long-term toxicity:
- A. cocaine
 - B. bupivacaine
 - C. cinchocaine
 - D. procaine
 - E. tetracaine
17. Determine local anesthetics with low toxicity, low activity and short acting:
- A. procaine
 - B. tetracaine
 - C. Cinchocaine (dibucaïne)
 - D. cocaine
 - E. chlorprocaine
18. Determine the local anesthetics used concurrently for superficial, infiltrative and conductive anesthesia:
- A. tetracaine
 - B. procaine
 - C. lidocaine
 - D. trimecaina
 - E. articaine

19. Determine local anesthetics with medium toxicity and duration of action:
- A. tetracaine
 - B. benzocaine
 - C. lidocaine
 - D. mepivacaine
 - E. trimecaine
20. Determine the local anesthetics with rapid onset of action:
- A. tetracaine
 - B. lidocaine
 - C. bupivacaine
 - D. articaine
 - E. etidocaine
21. What are the side effects of cocaine compared to other local anesthetics?
- A. allergic reactions
 - B. methemoglobinemia
 - C. euphoria
 - D. dizziness
 - E. psychological dependence
22. Initial symptoms of local anesthetics toxicity which cross blood-brain barrier are:
- A psychomotor excitation
 - B hyperreflexia
 - C tremor
 - D respiratory depression
 - E. loss of consciousness.
23. Clinical manifestations of allergy during local anesthetic use are:
- A skin erythema
 - B angioedema
 - C bronchospasm
 - D hypertension
 - E collapse
24. Select cocaine-specific side effects:
- A. Psychological dependence
 - B. Physical dependence
 - C. Hypertension
 - D. Bradycardia
 - E. Vasodilation with hypotension
25. Select the correct statements about lidocaine:
- A. It acts faster than procaine
 - B. It has a lower potency compared to procaine
 - C. Efficacy is increased in infected or inflamed regions
 - D. It is used as an antiarrhythmic agent in cardiology
 - E. Causes vasoconstriction

26. Select local synthetic anesthetics:

- a) benzocaine.
- b) bupivacaine.
- c) etidocaine.
- d) cocaine;
- e) lidocaine;

27. Select effects developed by Nitrous oxide (N_2O) :

- A. analgesia
- B. anxiolysis
- C. anesthesia
- D. hypertension
- E. anxiety

28. Nitrous oxide (N_2O) in subanesthetic doses produces predominantly:

- A. Analgesic effect without loss of consciousness
- B. Anxiolytic effect without loss of consciousness
- C. Analgesic effect with loss of consciousness
- D. Anxiolytic effect with loss of consciousness
- E. Depression of breath

29. For what purpose are opioid analgesics used in dental practice?

- a) severe pain in the postoperative period;
- b) premedication;
- c) neuroleptanalgesia;
- d) as antitussive remedies;
- e) in case of constipation.

30. Select the indications for the use of non-opioid analgesics in dental practice:

- a) as sedative remedies;
- b) to inhibit the excretion of uric acid;
- c) dental pain;
- d) myalgia,
- e) neuralgia of the maxillofacial area;

31. Select the medicines used for neuroleptanalgesia:

- A. sodium thiopental
- B. halothane
- C. fentanyl
- D. droperidol
- E. midazolam

32. Select the effects of baralgin:

- a. analgesic
- b. anti-inflammatory
- c. antipyretic
- d. spasmolytic
- e. sedative

33. Select the remedies that prevent pain perception in the CNS:

- a. General anesthetics
- b. Opioid analgesics

- c. Local anesthetics
- d. Spasmolytics
- e. Non-opioid analgesics

34. Select strong agonists of the opioid receptors μ and κ :

- a. morphine
- b. methadone
- c. fentanyl
- D. buprenorphine
- E. pentazocine

35. Select the medium-potency agonists of the opioid receptors μ and κ :

- a. morphine
- b. methadone
- d. fentanyl
- d. codeine
- e. tilidine

36 . Select the correct statements about acetylsalicylic acid :

- A. it mainly inhibits COX at the periphery
- B. it has no anti-inflammatory effect
- C. it inhibits platelet aggregation
- D. it has anti-aggregant effect in high doses
- E. it has anti-aggregant effect in small doses

37 . For which of the following conditions could acetylsalicylic acid be used prophylactically?

- A. noncardiogenic pulmonary edema
- B. peptic ulcers
- C. myocardial infarction
- D. metabolic acidosis
- E. arterial thrombosis

38 . All of the following are undesirable effects of acetylsalicylic acid :

- A. gastritis
- B. tolerance and physical dependence
- C. bleeding due to decreased platelet aggregation
- D. reversible renal failure
- E. depressed breathing

39 . Characteristic symptoms of salicylism include:

- A. headache, mental confusion and drowsiness
- B. tinnitus and hearing difficulties
- C. hyperthermia, sweating, thirst, hyperventilation, vomiting and diarrhea
- D. tolerance
- E. withdrawal syndrome

40 . Morphine causes the following effects:

- a) constipation
- b) dilation of the bile ducts
- c) urinary retention

- d) bronchial constriction
- e) mydriasis

Simple choice

41 . Which of the following effects does NOT occur in salicylate poisoning?

- A. hyperventilation
- B. hypothermia
- C. metabolic acidosis
- D. respiratory alkalosis
- E. tinnitus

42 . Which of the following drugs is not useful in dysmenorrhea?

- A. acetylsalicylic acid
- B. colchicine
- C. ibuprofen
- D. rofecoxib
- E. naproxen

43. Rhinorrhea, lacrimation, chills, gooseflesh, hyperventilation, hyperthermia, mydriasis, muscular aches, vomiting, diarrhea, anxiety, and hostility are effects of:

- A Opioid tolerance
- B Opioid overdose
- C Drug interactions between opioid analgesics and sedative-hypnotics
- D Withdrawal syndrome
- E All the above

44. The diagnostic triad of opioid overdose is :

- A Midriasis , coma, and hyperventilation
- B Coma, respiratory depression and miosis
- C Miosis, tremor and hypertermia
- D Mydriasis, chills and abdominal cramps
- E Miosis, tremor and vomiting

45. Which of the following opioid agents is used in the treatment of acute opioid overdose?

- A pentazocine
- B methadone
- C naloxone
- D remifentanyl
- E buprenorphine

46. Indicate the pure opioid receptor antagonist with a half-life of 10 hours:

- A naloxone
- B naltrexone
- C tramadol
- D pentazocine
- E tramadol

47. Which of the following drugs has weak μ agonist effects and inhibitory action on norepinephrine and serotonin reuptake in CNS?

- A looperamide
- B tramadol
- C fluoxetine
- D butorphanol
- E nalbuphine

48. Mu (μ) receptors are associated with:

- a) Analgesia, euphoria, respiratory depression, physical dependence
- b) Spinal analgesia, mydriasis, sedation, physical dependence
- c) Dysphoria, hallucinations, respiratory and vasomotor stimulation
- d) Analgesia, euphoria, respiratory stimulation, physical dependence
- e) Dysphoria, respiratory depression, physical dependence

49 . Which of the following types of opioid receptors is responsible for euphoria and respiratory depression?

- a) kappa receptors
- b) delta receptors
- c) mu (μ) receptors
- d) GABA-A receptors
- e) benzodiazepine receptors

50 . Indicate the type of opioid receptor that is responsible for dysphoria and vasomotor stimulation:

- a) kappa receptors
- b) delta receptors
- c) mu (μ) receptors
- d) alpha areno- receptors
- e) GABA-A receptors

51 . List the opioid analgesic , which is a natural agonist:

- a) Meperidine
- b) Fentanyl
- c) Morphine
- d) Naloxone
- e) Sufentanil

52 . Which of these opioids may cause disforia, anxiety and hallucinations ?

- a) Morphine
- b) Fentanyl
- c) Pentazocine
- d) Methadone
- e) Naloxone

53 . Indicate the opioid analgesic, which has 80 times analgesic potency and respiratory depressant properties of morphine, and is more effective than morphine in maintaining hemodynamic stability?

- a) Fentanyl
- b) Pentazocine
- c) Codeine

- d) Loperamide
- e) Tilidine

54 . Which of the following opioid analgesics is used in combination with droperidol in neuroleptanalgesia?

- a) Morphine
- b) Buprenorphine
- c) Fentanyl
- d) Morphine
- e) Tilidine

55 . Which of the following opioid analgesics can cause increased pulmonary blood pressure and heart work ?

- a) Morphine
- b) Pentazocine
- c) Codeine
- d) Methadone
- e) Fentanyl

56 . Select the paraaminophenol derivative:

- A. paracetamol
- B. tramadol
- C. morphine
- D. ketamine
- E. diazepam

57. Which of the following opioid analgesics is a partial mu receptor agonist?

- a) Morphine
- b) Methadone
- c) Buprenorphine
- d) Sufentanyl

58. Indicate a partial mu receptor agonist, which has 20-60 times analgesic potency of morphine, and a longer duration of action:

- a) Pentazocine
- b) Buprenorphine
- c) Nalbuphine
- d) Naltrexone

59. Which of the following opioid analgesics is a strong kappa receptor agonist and a mu receptor antagonist?

- a) Naltrexone
- b) Methadone
- c) Nalbuphine
- d) Buprenorphine

60. Which of the following drugs has weak mu agonist effects and inhibitory action on norepinephrine and serotonin reuptake in the CNS?

- a) Loperamide
- b) Tramadol

- c) Fluoxetine
- d) Butorphanol
- e) Nalbuphine

61. What is the mechanism of action of paracetamol?

- a. Inhibits COX-3 in the CNS
- b. Inhibits 5-lipoxygenase
- c. Stimulates opioid receptors
- d. Non-selectively inhibits COX-1 and COX-2
- e. It inhibits nerve impulse transmission through nerve fibers.

62. Select general anesthetic – barbiturate derivatives:

- F. sodium thiopental
- G. halothane
- H. morphine
- I. ketamine
- J. diazepam

62. Select the general anesthetic from the benzodiazepine group:

- D. sodium thiopental
- E. halothane
- F. morphine
- G. ketamine
- H. midazolam

63. Select the general anesthetic - NMDA receptor antagonist:

- A. sodium thiopental
- B. halothane
- C. Morphine
- D. ketamine
- E. midazolam

6 4. In children over 4 years, the maximum dose of articaine is :

At 2 mg / kg body weight

B 3 mg / kg body weight

C 6 mg / kg body weight

D 7 mg / kg body weight

E 9 mg / kg body weight

6 5. Which drug most likely can cause urinary retention?

- A. morphine;
- B. lidocaine;
- C. acetylsalicylic acid;
- D. ketorolac;
- E. nitrous oxide.

6 6. Which central action analgesic has a mixed (opioid/non-opioid) mechanism of action ?

- a. pentazocine ;
- b. fentanyl;
- c. tramadol;
- d. tilidine;

e. butorphanol.

66. Determine the most potent opioid analgesic:

- A. Codeine;
- B. Pentazocine;
- C. Morphine;
- D. Fentanyl;
- E. Trimeperidine.

67. Name the morphine antagonist:

- A. Codeine;
- B. Pentazocine;
- C. Morphine;
- D. Naloxone;
- E. Trimeperidine.

68. Which of the following opioid analgesics is used in the treatment of acute pulmonary edema?

- a) Morphine
- b) Codeine
- c) Fentanyl
- d) Loperamide
- e) Pentazocine

70 . Choose the pyrazolone derivative:

- a) Indomethacin
- b) Metamizole
- c) Paracetamol
- d) Ketoralac
- e) Acetylsalicylic acid

71 . In case of acetylsalicylic acid, unlike indomethacin, it is more pronounced:

- A. analgesic effect;
- B. anti-aggregant effect;
- C. anti-inflammatory effect
- D. inhibition of prostoglandin synthesis
- E. the antipyretic effect

72 . What is the duration of the analgesic effect of morphine (at subcutaneous injection)?

- a) 20–30 min;
- b) 4-5 hours;
- c) 8-12 hours;
- d) 12-24 hours;
- e) 1-2 hours.

73 . Peripheral non-opioids are especially effective against pain associated with:

- A. inflammation or tissue damage
- B. trauma
- C. myocardial infarction
- D. surgery
- E. Cancer

74 . Peripheral non-opioid analgesics cause:

- A. respiratory depression
- B. antipyretic effect
- C. euphoria
- D. physical dependence
- E. psychic addiction

75 . Which of the following non-opioid agents predominantly inhibits cyclooxygenase (COX) in the CNS?

- A. paracetamol
- B. ketorolac
- C. acetylsalicylic acid
- D. ibuprofen
- E. carbamazepine

76 . List the non-opioid analgesic , which has no anti - inflammatory effect :

- A. ibuprofen
- B. paracetamol
- C. metamizole
- D. acetylsalicylic acid
- E. indomethacin

77. Select drug for first-line treatment of trigeminal neuralgia:

- A. ibuprofen
- B. paracetamol
- C. metamizole
- D carbamazepine
- E. ketorolac

78. Select the drug - tricyclic antidepressant, used as analgesic:

- A. amitriptyline
- B. ketorolac
- C. acetylsalicylic acid
- D. ibuprofen
- E. carbamazepine

79. Select the drug - antiepileptic used as analgesic:

- A. amitriptyline
- B. ketorolac
- C. acetylsalicylic acid
- D. ibuprofen
- E. gabapentine

80. Select the antidote used in paracetamol intoxication:

- A. amitriptyline
- B. acetylcysteine
- C. ascorbic acid
- D. activated charcoal
- E. dexamethasone

81. What analgesic drug, most likely, cause liver necrosis:

- A. amitriptyline
- B. pregabalin
- C. gabapentin
- D. ibuprofen
- E. paracetamol

82. Select the general intravenous anesthetic used as analgesic:

- A. propofol
- B. sodium thiopental
- C. midazolam
- D. ketamine
- E. diazepam

83. Select an adverse reaction which is the main cause of metamizol withdrawal in many countries:

- a . methemoglobinemia
- b . agranulocytosis
- c . thrombocytopenia
- d . liver necrosis
- e. drug addiction

84. Which non-steroidal anti-inflammatory irreversibly blocks cyclooxygenase?

- a) Indomethacin
- b) Metamizole
- c) Paracetamol
- d) Ketoralac
- e) Acetylsalicylic acid

85. Which non-steroidal anti-inflammatory drugs is associated with an increased risk of Reye syndrome developing?

- a) Indomethacin
- b) Metamizole
- c) Paracetamol
- d) Ketoralac
- e) Acetylsalicylic acid

Multiple choice

86 . CM Select the anticonvulsant drugs used as analgesics:

- A. amitriptyline
- B. pregabalin
- C. gabapentin
- D. ibuprofen
- E. carbamazepine

87 . CM Why NSAIDs are contraindicated in the last trimester of pregnancy:

- a . premature closure of ductus arteriosus
- b . prolong labor
- c . risk of postpartum bleeding

- d . causes teratogenic effect
- e . induce a state of hypercoagulability

88. Morphine can produce any of the following effects :

- 1) depression of the cough center
- 2) respiratory depression
- 3) bradycardia
- 4) bronchospasm
- 5) bronchodilation

89 . NSAID are indicated in the following cases :

- a) tendinitis
- b) fever
- c) arthralgias
- d) acute pancreatitis
- e) myositis

90 . Choose salicylates side effects:

- a) ulceration of the gastric mucosa
- b) bone marrow toxicity
- c) Reye syndrome
- d) bronchospasm
- e) coagulation disorders

91 . What side effects are typical for opioid analgesics?

- a) physical dependence
- b) tachycardia
- c) tolerance
- d) bronchospasm
- e) anxiolytic effect

92 . What are characteristic for analgesic effect of opioids?

- a) inhibit prostaglandin synthesis in peripheral tissues and, consequently, reduce the sensitivity of nociceptors
- b) influence on the psychological component of pain and its evolution
- c) disturb the transmission of impulses at the level of the posterior horns of the spinal cord
- d) decrease the production of bradykinin
- e) block opioid receptors

ANTI-INFLAMMATORY, ANTI-ALLERGIC

MULTIPLE CHOICE

1. Which of the following statements about glucocorticoids, used in marginal periodontitis, are true?

- A Reduce inflammation
- B Reduce inflammatory exudate
- C Increase the repair processes of the damaged tissues
- D The frequency and severity of bacterial infections increase
- E They are effective allergic manifestations

2. Select the conditions in which indomethacin can be used:

- a) pulpitis.
- b) glossitis
- c) periodontitis
- d) parotiditis;
- e) neuralgias.

3. What effects of glucocorticoids are beneficial in dental practice?

- a) anti-inflammatory;
- b) hyperglycemic;
- c) antiallergic;
- d) stimulation of erythropoiesis;
- e) water retention.

4. In the treatment of allergic drug reactions as symptomatic remedies, the following are used:

- a) antihistamines;
- b) epinephrine;
- c) glucocorticoids;
- d) non-steroidal anti-inflammatory drugs;
- e) atropine.

5. Choose antipyretic analgesics:

- a) metamizole;
- b) ketorolac;
- c) dexamethasone ;
- d) prednisolone ;
- e) paracetamol.

6. Name the side effects characteristic of salicylates:

- a) dyspeptic phenomena;
- b) allergic reactions;
- c) stomach bleeding;
- d) leukopenia;
- e) gastrointestinal ulcers.

7. Select COX-2 selective inhibitors:

- a) acetylsalicylic acid ;
- b) nimesulide ;
- c) simcoxib ;
- d) celecoxib ;
- e) diclofenac .

10. CM Select the anti-inflammatory preparations used topically (solutions) in the treatment of oral mucosal diseases and periodontal tissues:

- a) sodium mephenamine.
- b) metamisole;
- c) ketoprofen lysine
- d) lornoxicam;
- e) aspirine;

11. CM Which of the following glucocorticoids are active in both systemic and local administration?

- a) betamethasone;
- b) prednisone;
- c) prednisolone;
- d) triamcinol;
- e) hydrocortisone hemisuccinate

12. CM Which of the following glucocorticoids can be given intravenously?

- a) hydrocortisone acetate;
- b) prednisolone sodium phosphate;
- c) triamcinolone acetonide;
- d) dexamethasone sodium phosphate;
- e) beclomethasone dipropionate.

13. CM Which side effects can be produced by glucocorticoids?

- a) increase in blood pressure;
- b) increase in intraocular pressure;
- c) stimulation of the central nervous system;
- d) hyperkalaemia;
- e) gynecomastia.

14. CM Choose glucocorticoid indications:

- a) Addison's disease;
- b) autoimmune diseases;
- c) allergic reactions;
- d) hypertension;
- e) gastric ulcer.

15. CM List glucocorticoids with low systemic effect:

- a) flumetazone.
- b) hydrocortisone acetate;
- c) beclomethasone.
- d) fluocinolone.
- e) dexamethasone;

16. CM Indicate the complications of glucocorticoid therapy:

- a) edema;
- b) hypertension;
- c) osteoporosis;
- d) diabetes;
- e) hypoglycemia

17. CM Select the preparations used in the treatment of anaphylactic shock:

- a) epinephrine.
- b) cimetidine;
- c) disodium chromoglycate.
- d) dexamethasone.
- e) orciprenaline;

18. CM Name the anti-inflammatory remedies with steroid structure:

- a) hydrocortisone;
- b) prednisone;
- c) dexamethasone;
- d) indomethacin;
- e) phenylbutazone.

19. CM Name the typical effects for steroid anti-inflammatory remedies:

- a) anti-inflammatory;
- b) immunostimulatory;
- c) anti-allergic;
- d) immunodepressant ;
- e) cholinomimetic.

20. CM List the possible mechanisms of the anti-inflammatory action of steroid remedies:

- a) Depression of prostaglandin synthesis by inhibition of phospholipase A2 .
- b) inhibition of leukotrienes synthesis.
- c) depression of protein kinases;
- d) depressing prostaglandin synthesis by inhibiting cyclooxygenase;
- e) activation of cAMP;

21. The effects of NSAIDs are :

- A. Anti-inflammatory
- B. Analgesic
- C. Antipyretic
- D. H1 histamine blocking activity
- E. Cholinoblocking activity

22. The effects of NSAIDs are :

- A. Anti-aggregant
- B. Decreasing synthesis of the clotting factors
- C. Gastroprotective
- D. Analgesic
- E. Spasmolytic

23. The mechanism of action of non-steroidal anti-inflammatory drugs consists of :

- A. inhibits cyclooxygenase-1 (COX1);
- B. inhibits cyclooxygenase-2 (COX2);
- C. stimulates thromboxane synthesis;
- D. inhibits prostaglandin formation;
- E. prevents the formation of free radicals.

24. The following statements are correct for indomethacin :

- A. is a non-steroidal anti-inflammatory;
- B. inhibits non-selective COX;
- C. is a platelet anti-aggregant;
- D. specifically blocks COX2;
- E. produces marked hydrosaline retention

25. The following side effects are specific to corticosteroids :

- A. trunk obesity;
- B. hydro-electrolytic retention;
- C. gastric ulcers;
- D. cataract;
- E. hypoglycemia .

26. The following therapeutic indications are specific for glucocorticoids :

- A. adrenal insufficiency;
- B. anti-inflammatory in rheumatic diseases;
- C. antiallergic;
- D. osteoporosis;
- E. anaphylactic shock.

27 . What complications arise from prolonged use of steroid anti-inflammatory drugs?

- a) high blood pressure
- b) low blood pressure
- c) ulceration of the stomach mucosa
- d) osteoporosis
- e) hypoglycemia

28 . Choose steroid anti-inflammatory drugs:

- A. prednisone
- B. indomethacin
- C. dexamethasone
- D. ranitidine
- E. ketoprofen

29 . NSAIDs are used in the treatment of the following conditions:

- A. rheumatoid arthritis
- B. gastroduodenal ulcer
- C. osteoarthritis
- D. ankylopoietic spondylitis
- E. migraine access

30. The adverse effects of corticosteroids are:

- A. delaying the growth of children
- B. osteoporosis
- C. psychosis
- D. candidiasis
- E. hypothyroidism

31. Glucocorticoids achieve anti-inflammatory effect through the following mechanisms:

- A. decreased permeability and increased capillary resistance
- B. stabilization of lysosomal membranes
- C. decreases collagenase activity
- D. stimulation of phagocytosis and migration of leukocytes into the inflammatory area
- E. induction of lipocortin synthesis

32 . Name the adverse reactions of non-steroidal anti-inflammatory drugs (NSAIDs) :

- A. gastroduodenal ulcer
- B. gastritis
- C. Hypersensitivity
- D. Hypoglycemia
- E. hydro-saline retention

33 . Ibuprofen has the following effects :

- A. analgesic
- B. anti-inflammatory
- C. antirheumatic
- D. antispastic
- E. can cause gastric ulcer

34 . The following statements about piroxicam are true:

- A. it is an anti-inflammatory and analgesic drug
- B. it stimulates PG synthesis and leukocyte migration into the inflammatory area
- C. it is administered only parenterally
- D. it produces gastrointestinal adverse effects
- E. it is administered in rheumatoid arthritis

35. Select the correct statements about prednisolon:

- A. It has effects close to the prednisone
- B. it is used locally
- C. it has long duration of action
- D. It has more anti-inflammatory effect than hydrocortisone
- E. depresses the hypothalamo-pituitary-adrenal axis more pronounced than dexamethasone

36. Diclofenac:

- A. it inhibits phospholipase A2
- B. it has analgesic properties
- C. it is contraindicated in degenerative joint disorders
- D. it is used in the treatment of asthma in those sensitized to aspirin
- E. it decreases prostaglandin synthesis

37. Glucocorticoids:

- A. they cause acute suprarenal failure if suddenly stopped after prolonged treatment
- B. they speed up wound healing
- C. they produce erythropenia and anemia
- D. they can produce glaucoma and cataracts
- E. they decrease the number of lymphocytes and inhibit the formation of antibodies

38. Select non-steroidal anti-inflammatory drugs that can be given topically:

- A. aspirin
- B. diclofenac
- C. ketorolac
- D. phenylbutazone
- E. indomethacin

39. Phenylbutazone enhances the effects of:

- A. loop diuretics

- B. oral hypoglycemic agents
- C. coumarin anticoagulants
- D. captopril
- E. salbutamol

40. Adverse effects of indomethacin:

- A. gastric ulcer
- B. Agranulocytosis
- C. More often than other NSAIDs, it causes central nervous disorders
- D. Does not produce headaches at high doses
- E. Has diuretic effect

41. Basic antirheumatic drugs (DMARD) have the following characteristics:

- A. have anti-inflammatory effect
- B. delay progression of the rheumatic process
- C. the effect persists months or years after stopping the therapy
- D. have symptomatic-pathogenic action
- E. the effect occurs immediately after administration

42. When using NSAIDs , the following principles will be respected:

- A. The patients respond individually to NSAIDs
- B. two NSAIDs are usually associated to obtain a better effect
- C. only one substance is used up to the maximum tolerated dose, and if a favorable effect is not obtained , it is changed to another substance
- D. if the patient has responded to a NSAID, check if the dose can be reduced
- E. if the patient does not respond to NSAIDs, glucocorticoids must be associated

43. Which of the following substances are inhibitors of mast cell degranulation:

- a) sodium cromoglycate
- b) nedocromil
- c) ketotifen
- d) ketoprofen
- e) dexketoprofen

44. These categories of histamine H1 antagonists are noted for sedative effects:

- a) Loratadine,
- b) Diphenhydramine
- c) Chloropyramine
- d) Promethazine
- e) Fexofenadine

45. Which category of histamine H1 antagonists is noted for antiemetic action?

- a) Cetirizine
- b) Doxylamine
- c) Hydroxyzine,
- d) Loratadine
- e) Cyclizine

46. These categories of histamine H1 antagonists are noted for the anticholinergic effect:

- a) Loratadine

- b) Diphenhydramine
- c) Chloropyramine
- d) Cetirizine
- e) Promethazine

47. Indication for administration of histamine H1 antagonists is:

- a) Prevention or treatment of the symptoms of allergic reactions (rhinitis, urticaria)
- b) Motion sickness and vestibular disturbances
- c) Nausea and vomiting in pregnancy ("morning sickness")
- d) Gastric ulcer
- e) Prevention of the NSAID side effects

48. Antiallergic effect of glucocorticoids is caused by:

- a) Suppression of leukocyte migration and stabilizing lysosomal membranes
- b) Reverse the capillary permeability associated with histamine release
- c) Suppression of the immune response by inhibiting antibody synthesis
- d) Suppression of the nucleic acid synthesis
- e) Activation of phospholipase A2 and reducing prostaglandin and leukotriene synthesis

49. The immunosuppressive agents are:

- a) Corticosteroids
- b) Cyclosporine
- c) Tacrolimus
- d) Levamisole
- e) Interferon

Simple choice

50. Side effect of first-generation histamine H1 antagonists is:

- A. aplastic anemia
- B. vomiting, tinnitus, decreased hearing
- C. sedation
- D. gastric ulcers
- E. tolerance

51. Which category of histamine H1 antagonists is noted for the alpha-adrenoreceptor-blocking effect?

- a) Loratadine
- b) Diphenhydramine
- c) Chloropyramine
- d) Promethazine
- e) Cetirizine

52. Which category of histamine H1 antagonists is noted for the highest local anesthetic effect?

- a) Loratadine
- b) Fexofenadine
- c) Chloropyramine
- d) Promethazine
- e) Cetirizine

53. Which category of histamine H1 antagonists is recognized as second-generation antihistamines?

- a) Loratadine
- b) Diphenhydramine
- c) Chloropyramine
- d) Promethazine
- e) Dezloratadine

54. Which of histamine H1 antagonists is noted for the serotonin-blocking effect?

- a) Chloropyramine
- b) Cyproheptadine
- c) Promethazine
- d) Diphenhydramine
- e) Cetirizine

55. Which of the following histamine H1 antagonists is a long-acting (up to 24h) antihistamine drug?

- a) Chloropyramine
- b) Cyproheptadine
- c) Promethazine
- d) Diphenhydramine
- e) Loratadine

56. Side effect of glucocorticoids used by inhalation:

- A) oral candidiasis
- B) vomiting, tinnitus, decreased hearing
- C) sedation
- D) gastric ulcers and upper gastrointestinal bleeding
- E) hoarse voice

57. Contraindication of first-generation histamine H1 antagonists are:

- a) While driving or operating machinery
- b) Motion sickness
- c) Insomnia
- d) Gastric ulcers
- e) Conjunctivitis

58. Immunosuppressive effect of glucocorticoids is caused by

- a) Reducing concentration of lymphocytes (T and B cells) and inhibiting function of tissue macrophages and other antigen-presenting cells
- b) Suppression of cyclooxygenase II expression that results in reducing amount of an enzyme available to produce prostoglandins
- c) Suppression of cyclooxygenase I expression that results in reducing amount of an enzyme available to produce prostoglandins
- d) Activation of phospholipase A2 and reducing prostaglandin and leukotriene synthesis
- e) Suppression of the nucleic acid synthesis

Complication and interaction of drug treatment

SC

1. Idiosyncratic drug reactions is:
 - a. Unpredictable reaction to drug
 - b. Usually not concentration dependent
 - c. concentration dependent
 - d. the extend of pharmacodynamic effects
 - e. a variety of tolerance

2. Which of the following reactions fall into the group of idiosyncratic drug reactions:
 - A. mutations induced by alkylating cytostatics
 - B. hepatic cytolysis produced by isoniazid
 - C. hypertension caused by epinephrine
 - D. aplastic anemia produced by cytostatics
 - E. agranulocytosis produced by metamizole

3. Abrupt discontinuation of the following drugs may cause acute suprarenal failure:
 - A. beta-blockers
 - B. glucocorticoids
 - C. H1 histamine blockers
 - D. central anticholinergic drugs
 - E. barbiturates

4. Which drug can induce fetal hydantoin syndrome, if is used during pregnancy?
 - A. benzodiazepine tranquilizers
 - B. phenytoin
 - C. antineoplastic
 - D. lithium
 - E. coumarin anticoagulants

5. Which of the following compounds may cause oral candidiasis:
 - a. Ibuprofen
 - b. Amphotericin B
 - c. Fluticasone spray
 - d. Nistatine
 - e. Salbutamol spray

6. The following drugs may increase the risk of osteonecrosis of the jaw:
 - A. Intravenous bisphosphonates
 - B. Ibuprofen
 - C. Ascorbic acid
 - D. Antiseptics
 - E. Fat-soluble vitamins

7. The following drugs can stain the enamel black:
 - A. Iron salts in liquid
 - B. Iron salts in liquid in tablets
 - C. Ascorbic acid
 - D. Antiseptics

E. Fat-soluble vitamins

8. Tetracyclines will affect the teeth if given at any time from:

- A. about the fourth month in utero until the age of twelve years;
- B. about the fourth month in utero until the age of two years;
- C. between 2 and 5 years
- D. between 2 and 18 years
- E. about the fourth month in utero until the age of twenty years;

9. Tetracyclines are contra-indicated:

- A. during pregnancy
- B. in breastfeeding women
- C. in children under 12 years
- D. in children under 2 years
- C. in children under 18 years

CM

10. Which drugs can produce brown, yellow-brown teeth discoloration:

- A. benzodiazepins
- B. cytostatic
- C. phenothiazine neuroleptics
- D. tetracycline
- E. minocycline

11. The following drugs produce ototoxic effects:

- A. kanamycin
- B. minocycline
- C. amikacin
- D. furosemide
- E. salicylates > 6 g / day

12. Which of the following drugs are contraindicated in pregnant women?

- A. opioids
- B. folic acid
- C. tetracycline
- D. iron-based preparations
- E. fluoroquinolones

13. Which of the following compounds may cause hypoagulability?

- A. aspirin
- B. glucocorticoids
- C. oral contraceptives
- D. oral anticoagulants
- E. fibrinolytics

14. Which of the following compounds can increase the bleeding time after dental extraction:

- A. Chloramphenicol
- B. Warfarin

- C. Clopidogrel
- D. Amikacin
- E. Haloperidol

15. Benzodiazepine anxiolytics can produce:

- A. miorelaxant effect
- B. hypertension
- C. sedation
- D. hypersalivation
- E. xerostomia

16. Hypersalivation may be caused by:

- A. Aceclidine
- B. Aspirin
- C. Neostigmine
- D. Scopolamine
- E. Galantamine

17. The following drugs have hepatotoxic action:

- A. Aminoglycosides
- B. Penicillin G
- C. Corticosteroids
- D. NSAID
- E. Oral contraceptives

18. The following drugs can produce taste changes:

- A. Oral antidiabetic drugs,
- B. Metronidazol
- C. D-penicillamine
- D. NSAIDs
- E. Heparine

19. The following drugs can produce taste changes:

- A. Amiodarone hydrochloride
- B. Clarithromycin
- C. Metformin hydrochloride
- D. NSAIDs
- E. Heparine

20. The following drugs can produce taste changes:

- A. Lithium salts
- B. Protease inhibitors
- C. Terbinafine
- D. Zopiclone
- E. Heparin

21. The following drugs can produce salivary glands hypertrophy:

- A. iodides
- B. phenothiazines
- C. antithyroid drugs

- D. sulfonamides
- E. Neuroleptics

22. The following drugs may develop nephrotoxic action:

- A. sulfamides
- B. aminoglycosides
- C. tetracyclines
- D. antiseptics
- E. Fat-soluble vitamins

23. The following drugs may develop pain in the salivary glands:

- A. clonidine hydrochloride
- B. methyl dopa
- C. vinca alkaloids
- D. antiseptics
- E. Fat-soluble vitamins

24. The following drugs may develop periodontium gingival overgrowth:

- A. Nifedipine
- B. Phenytoin
- C. Cyclosporin
- D. Antiseptics
- E. Fat-soluble vitamins