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Department of Dentistry №3

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VALUATION FUND

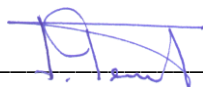
in the discipline "Clinical application of modern dental materials used in therapeutic dentistry"
the main professional educational program of higher education - specialist's programs in the
specialty 31.05.03 Dentistry,
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for 5th year students
Faculty of Dentistry

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Head of the Department of Dentistry No. 3

MD



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Vladikavkaz, 2022

STRUCTURE OF FOS

1. Title page
2. Structure of the FOS
3. Passport of evaluation tools
4. A set of evaluation tools:
 - list of questions on practical skills
 - situational tasks
 - benchmarks of test tasks
 - questions to offset
 - tickets to offset

Passport of the Fund of Evaluation Funds by discipline

Clinical application of modern dental materials used in restorative dentistry

No. p/n	Name of the controlled section (topic) of the specialty / module	Code of the formed competence (stage)	Name of the evaluation tool
one	2	3	four
Type of control	offset		
1.	<p>Aesthetic restoration of the tooth.</p> <p>Modern approaches to diagnosing the pathology of hard tissues of teeth of various etiologies.</p> <p>Modern composite materials designed to restore defects in hard tissues of teeth of carious and non-carious origin. Criteria of choice.</p>	UC-1, UC-6, GP -1, GP -5, GPC-6, PC-1, PC-2	C, TT, ST
2.	Modern methods of preparation of hard tissues of teeth. Preparation of the frontal group of teeth for highly aesthetic composite veneers.	UC-1, UC-6, GP -1, GP -5, GPC-6, PC-1, PC-2	C, TT, ST
3.	Restoration of defects in hard tissues of teeth with primary hard filling materials. Mistakes and complications in the treatment of defects in hard dental tissues.	UC-1, UC-6, GP -1, GP -5, GPC-6, PC-1, PC-2 2	C, TT, ST
4.	Endodontic revision of root canals. Modern methods of root canal treatment. The method of permanent obturation of root canals. Indications. Required set of tool materials	UC-1, UC-6, GP -1, GP -5, GPC-6, PC-1, PC-2	C, TT, ST
5.	Features of the post-endodontic restoration of the tooth crown.	UC-1, UC-6, GP -1, GP -5, GPC-6, PC-1, PC-2	C, TT, ST

Note: C - colloquium, TT - test tasks, ST - situational tasks

List of questions on practical skills

1. Restoration algorithm using nanocomposite materials.
2. Restoration algorithm using packable composite materials, ormokers.
3. Rules for working with glass ionomer cements.
4. Adhesive preparation of the carious cavity before restoration.
5. Tooth isolation: relative and absolute.
6. Matrix systems: purpose, methods of application.
7. Gingival retraction: mechanical, chemical, chemomechanical.
8. Rules for the polymerization of composites using polymerization shrinkage compensation methods.
9. Finishing restoration.
10. Postoperative sensitivity: causes, methods of prevention.
11. Algorithm for making veneers: indications, manufacturing by direct method.
12. The use of a silicone key during restoration.
13. The manufacture of a bridge prosthesis by a dentist (Maryland bridge). Teeth whitening.
14. Pink aesthetics (the use of materials that mimic the color of the gums).

Situational tasks

Task #1. Patient K., 20 years old, came to the clinic with complaints of an aesthetic defect, short-term pain from chemical irritants, which stopped after their elimination. On examination: on the medial contact surfaces of teeth 1.2 and 2.1, old fillings with marginal pigmentation are determined; on the medial contact surface of tooth 2.2 there is a carious cavity of medium depth.

Questions and tasks: 1. What is the reason for the development of marginal pigmentation around fillings? 2. What class do these carious cavities belong to? 3. Tell us about the classifications of caries. 4. Tell us about the features of the preparation of carious cavities of this class. 5. Name the filling materials used for aesthetic restoration.

Sample answer to problem number 1. The reason for the development of marginal pigmentation may be a violation of the marginal fit and the development of secondary caries. 2. The carious cavities shown in Figure 1 belong to the III class of the Black classification 3. According to the ICD-10 classification: Other specified caries of the teeth 1.1 and 2.1., III class. by Blake. After preparation, the depth of the cavity can be determined. Clinical and topographic classification of caries: initial caries, superficial caries, medium caries, deep caries. 4. Class III carious cavities

are prepared within the contact surface with the removal of overhanging enamel and the creation of a fold. When preparing a class III cavity, it is preferable to create a palatal access, remove enamel, devoid of underlying dentin. It is allowed to preserve vestibular enamel, devoid of underlying dentin, if it does not have cracks and signs of demineralization. 5. Aesthetic restorations require the complete removal of discolored dentine for restoration. The main requirements for the restoration material in class III: aesthetics. Can be used: aesthetic glass ionomer cements (ChemFil Superior, Ketac N100, Vitremer, Cemion); chemical and light curing composites: hybrid (Prisma, Prismafil), microhybrid (Filtek Z250 Charisma), nanocomposites (Filtek Ultimat, Grandio, Esthet-X)

Task number 2. Patient A., aged 18, came to the clinic with complaints of aesthetic defects in her teeth. According to the patient, permanent teeth erupted already with stains. On external examination: the skin without visible pathology. When examining the oral cavity: multiple chalky spots on all surfaces of the teeth, the enamel is smooth.

Questions and tasks. Make a diagnosis. Specify the cause of this disease. Perform differential diagnosis. Propose an algorithm for therapeutic and preventive measures.

Sample answer to task number 2. Diagnosis: spotted form of fluorosis according to Patrikeev's classification. K003.0 Endemic (fluorous) mottling of enamel [dental fluorosis] - according to ICD-s. Increased concentration of fluoride in drinking water. With focal demineralization of enamel, spotty form of hypoplasia. Two weeks before the start of treatment, the patient should undergo professional oral hygiene, including the removal of dental plaque. It is possible to suggest microabrasion of the enamel in the area of the smile line - 20 teeth. The patient should be given advice on oral care. For home use, it is advisable to prescribe, for example: toothpaste with hydroxyapatite and rinsing with 10% calcium gluconate solution (2 times a day for 2 weeks). In addition, after enamel microabrasion for two weeks, coloring foods should be excluded from the patient's diet: black tea, coffee,

Task #3. Patient A., 38 years old, came to the clinic with complaints of an aesthetic defect in the area of teeth 1.1, 2.1, short-term pain from chemical and thermal stimuli when eating. He considers himself practically healthy, he has not been to the dentist for more than 3 years. On examination - on the medial surface of tooth 1.1 - a carious cavity within the enamel, on the medial surface of tooth 2.1 - a carious cavity of medium depth, filled with dense pigmented dentin, probing the enamel-dentin border is slightly painful.

Questions and tasks. 1) Make a preliminary diagnosis. 2) Aesthetic restoration of teeth. Give a definition. 3) Stages of direct restorations Adhesive restoration technique. 4) Features of the choice of material for aesthetic restoration 5) Modern classification of composite materials.

Sample answer to problem number 3: Carious cavities belong to the IV class according to the Black classification. According to the MMSI classification: tooth 1.1 - superficial caries, tooth 2.1 - medium caries. According to the ICD classification: tooth 1.1 - caries of enamel, tooth 2.1 - caries of dentin. Aesthetic restoration is the final stage in the treatment of caries, its

complications and non-carious lesions of the teeth, associated with the restoration of a defect in tooth tissues with filling materials that correspond to aesthetic, strength and biomechanical characteristics. Aesthetic restoration allows you to restore the integrity and functional value of the tooth, as well as restore or improve its aesthetic characteristics. Light curing composites are used for esthetic restoration. Stages of restoration of hard dental tissues: 1. Cleaning the tooth surface 2. Determining the color of the tooth and choosing the shade of the composite material 3. Isolation of the surgical field 4. Preparation 5. Drug treatment and drying of the carious cavity 6. Application of the components of the adhesive system 7. Insertion of layers of composite material and its curing 8. Final processing of the restoration 9. Recommendations for the patient sites. It is obligatory to form an enamel bevel on the vestibular and palatal surfaces, which should be 2 times larger than the defect in area. The adhesive restoration technique involves the micromechanical bonding of the composite material to enamel and dentin using an effective adhesive system. Acid etching of enamel and dentin with a 35-37% phosphoric acid solution is a mandatory step when using 4th and 5th generation adhesive systems. As a result of this stage, the enamel becomes rough, the smear layer on the dentin surface dissolves and is completely removed, the surface dentin demineralizes, and the dentinal tubules open. Promotes better penetration of the adhesive and the formation of a full-fledged hybrid layer. When working with adhesives of the 6th generation, conditioning is not carried out. When choosing a material for aesthetic restoration, preference is given to light-curing composites. The modern classification of composite restorative materials is based on the following points: A. The size of the filler particles. B. Method of curing. C. Consistency D. Purpose dentinal tubules open. Promotes better penetration of the adhesive and the formation of a full-fledged hybrid layer. When working with adhesives of the 6th generation, conditioning is not carried out. When choosing a material for aesthetic restoration, preference is given to light-curing composites. The modern classification of composite restorative materials is based on the following points: A. The size of the filler particles. B. Method of curing. C. Consistency D. Purpose dentinal tubules open. Promotes better penetration of the adhesive and the formation of a full-fledged hybrid layer. When working with adhesives of the 6th generation, conditioning is not carried out. When choosing a material for aesthetic restoration, preference is given to light-curing composites. The modern classification of composite restorative materials is based on the following points: A. The size of the filler particles. B. Method of curing. C. Consistency D. Purpose The modern classification of composite restorative materials is based on the following points: A. The size of the filler particles. B. Method of curing. C. Consistency D. Purpose The modern classification of composite restorative materials is based on the following points: A. The size of the filler particles. B. Method of curing. C. Consistency D. Purpose

Task #4. Patient K., 48 years old. Complaints of discomfort in the area of the lower frontal teeth when chewing, bleeding gums when brushing teeth. Suffering from enterocolitis. Over the past five years, she periodically turned to the dentist, after treatment there was a short-term improvement. On examination: a significant amount of soft plaque on all teeth, the gums in the area of teeth 4.3, 4.2, 4.1, 3.1, 3.2, 3.3 are hyperemic, slightly swollen, periodontal pockets up to 4 mm are determined during probing, tooth mobility is 4.2, 4.1, 3.1, 3.2 - I degree. Questions and tasks Suggest additional research methods to clarify the diagnosis. Make a diagnosis based on clinical and radiographic data (Fig. 1, 2, 3). Make a plan for examination and treatment.

Temporary splinting of teeth with reinforcing materials. Stages of reinforcing splinting (direct method). Disadvantages of the method of reinforcing splinting.

Sample answer to task number 4: Chronic generalized mild periodontitis. Examination and treatment plan: 1. Correction and control of individual oral hygiene 2. Professional oral hygiene 3. Elimination of local factors that support inflammation in the periodontium. 4. Local anti-inflammatory therapy 5. Splinting of mobile teeth using materials based on fiberglass or polyethylene. 6. Consultation of a gastroenterologist. When performing temporary splinting of teeth, reinforcing materials based on an inorganic matrix - fiberglass - GlasSpan, Fiberkore (USA), Fiber Splint ML (Switzerland), EverStick PERIO (Finland) or based on an organic matrix - polyethylene - Ribbond, Connect, DVA (USA). Stages of reinforcing splinting (direct method): 1. Mechanical removal of plaque, polishing of the surface of the teeth. 2. Determination of electrical excitability of splinted teeth; 3. Determination of occlusal contacts, do not allow occlusal contact to fall on the edges of the tire; 4. Choice of composite material color; 5. Preparation of splinted teeth from the lingual surface. 6. Isolation of the surgical field. 7. Obtaining a tire template, according to the dimensions of which a strip of reinforcing fiber is cut and impregnated with an adhesive; 8. Etching the prepared tooth surface with acid; 9. Application of the adhesive (according to the manufacturer's instructions) and its polymerization; 10. Applying a flowable composite to the prepared tooth surface (do not light cure!); 11. Introduction of reinforcing fiber and its careful adaptation; 12. Polymerization is carried out at each tooth throughout the tire; 13. Apply a layer of flowable composite, completely covering the reinforcement and polymerize the entire structure. fourteen. Grinding, finishing polymerization and polishing of the tire; Disadvantages of the technique of reinforcing splinting: - The reinforcing material is in a passive state; - The main load falls on the composite material.

Task number 5. Patient K., 48 years old, turned to the dentist with complaints of burning sensation in the oral cavity when eating irritating food, a feeling of roughness, tightness, and an unusual appearance of the buccal mucosa. All changes appeared 2 years ago after the transferred stress. Concomitant diseases: chronic enterocolitis, chronic cholecystitis. On external examination: the skin without visible pathology. Examination of the oral cavity revealed single artificial crowns made of dissimilar metals. On the mucous membrane of the cheeks in the middle and posterior sections, against a hyperemic background, there are areas of altered whitish epithelium in the form of stripes, laces that do not disappear when scraped. Questions and tasks Make a preliminary diagnosis. Name the elements of the lesion, pathological processes in the epithelium. Perform differential diagnosis. Specify the causes of the disease. Make a plan for examination and treatment.

Sample answer to problem number 5: Lichen planus exudative-hyperemic form. Papule. Parakeratosis, hyperkeratosis. Differential diagnosis is carried out with leukoplakia, candidiasis. The disease is polyetiological. Of the general somatic pathology, the state of stress, diseases of the gastrointestinal tract matter. Intolerance to dental materials, increased level of microcurrents, chronic mechanical injury are revealed. Examination: consultation of a dentist-orthopedist, gastroenterologist. General treatment: correction of psycho-emotional status, treatment of general somatic pathology, vitamin "A" inside. Local treatment: sanitation of the oral cavity,

antiseptic treatment of affected areas, application of vitamin A to affected areas, rational prosthetics using homogeneous metals or non-metal orthopedic structures.

Task number 6. Patient M, 29 years old, complained of spontaneous, throbbing, paroxysmal pain in the tooth in the lower jaw on the right, the duration of pain attacks was about 30 minutes. The pain radiates to the temple, ear, intensifies at night. From the anamnesis: pain appeared 3 days ago, tooth 3.6 was not previously treated. On examination: on the chewing surface of the tooth 3.6, a deep carious cavity is determined, filled with softened pigmented dentin. When probing, a sharp pain is determined along the entire bottom of the carious cavity. Comparative percussion of the tooth 3.6, palpation along the transitional fold in the area of the projection of the apex of the root of the tooth 3.6 painless. On the targeted radiograph in the periapical region of tooth 3.6, no changes are detected.

Task: 1. Make a diagnosis. 2. List the diseases with which it is necessary to conduct a differential diagnosis. 3. What method of treatment can be applied to this patient. 4. List the main stages of endodontic treatment. 5. List the possible complications in the medical treatment of root canals.

Task number 7. Familiarize yourself with the situation and give detailed answers to the questions. Patient P, 34 years old, complained of recurring pains due to hot in tooth 2.6. From the anamnesis: tooth 2.6 was not previously treated. About a year ago, the patient noted the appearance of intense spontaneous pain in this tooth, as well as pain from all kinds of irritants. He did not go to the doctor, he took painkillers on his own, against which the pain disappeared after a few days. On examination: on the medial proximal surface of the tooth 2.6 with the transition to the chewing one, a deep carious cavity is determined, filled with softened pigmented dentin, after the removal of which communication with the tooth cavity is determined. Zoding in the area of communication, comparative percussion of the tooth 2.6, palpation along the transitional fold in the area of the projection of the apex of the tooth root 2.6 are painless.

Task: 1. make a preliminary diagnosis. 2. what additional diagnostic methods are required for this patient. 3. list the diseases with which it is necessary to conduct a differential diagnosis. 4. List the possible complications at the stage of creating an endodontic access. 5. Describe the algorithm of actions for canal filling using the lateral condensation method.

Samples of test tasks

in the discipline "Clinical application of modern dental materials used in therapeutic dentistry"

by specialty _31.05.03. Dentistry

1. CHEMICALLY CURING MACRO-FILLED COMPOSITE MATERIALS INCLUDED:

- a) Composite
- b) Simulate
- c) a) and b) are correct
- d) Fuji IX

2. THE MAIN FORM OF PRODUCTION OF MODERN COMPOSITE MATERIALS OF CHEMICAL CURING:

- a) pasta
- b) powder-liquid
- c) paste-powder
- d) paste-liquid

3. FINISHING LIGHT POLYMERIZATION IS CARRIED OUT:

- a) at the end of the polishing of the filling
- b) after fixing the last portion of the light-curing composite filling material
- c) after polymerization of the last portion of the composite
- d) after applying the polishing paste

4. THE EFFICIENCY AND CORRECT POLISHING OF THE RESTORATION IS DETERMINED:

- a) the presence of a mirror gloss of the dried surface of the restoration, which is indistinguishable in terms of gloss from natural tooth enamel
- b) subjective feelings of the patient
- c) the presence of dullness of the dried surface
- d) match the shade of the restoration and tooth tissues in the wet state

5. INDICATE THE CATALYST ACTIVATED FOR CHEMICAL POLYMERIZATION IN CHEMICALLY CURING COMPOSITES:

- a) camphorquinone
- b) benzoyl peroxide and amine
- c) urea peroxide
- d) camphor

6. WHEN SELECTING THE COLOR OF THE FILLING MATERIAL, IT IS NECESSARY TO CONSIDER:

- a) the depth and localization of the existing defect in the hard tissues of the tooth
- b) the location of the restored tooth in the dental arch
- c) constitutional, gender, age characteristics
- d) everything is correct

7. MICRORETENTION OF THE FILLING MATERIAL IS

- a) fixation of the filling due to the convergence of the walls of the carious cavity
- b) fixation of the filling material in the retention points
- c) penetration of the adhesive and filling material into the microspaces of the etched enamel
- d) fixing the seal due to anchors, pins, posts

8. FLUID LIGHT-CURING COMPOSITES ARE:

- a) Revolution
- b) Tetric
- c) Dyract
- d) Fuji IX

9. INDICATE THE REASONS FOR THE PHOTOCOMPOSITE SEAL LOSS:

- a) improper formation of a carious cavity
- b) the ingress of saliva or blood on the treated surface of the tooth
- c) no bond
- d) single-stage polymerization of large volumes of photocomposite
- d) everything is correct

10. ACTION OF DENTINE ADHESIVE ON DENTIN

- a) increases the flow of dental cerebrospinal fluid
- b) fills the dentinal tubules
- c) stops the flow of dental cerebrospinal fluid
- d) wets and disinfects
- e) true c) and d)

11. LIST THE MOST COMMON MISTAKE WHEN USING COMPOSITE MATERIALS:

- a) the use of microfilled composites for the restoration of surfaces of 1.2 classes, the cutting edges of the anterior teeth
- b) ignoring the rules for directing the rays of a polymerization lamp
- c) contact with the glued surface of the oral or gingival fluid
- d) true b, c
- d) everything is correct

12. THE DENTIN SURFACE IS TREATED WITH A DENTINE ADHESIVE FOR THE PURPOSE:

- a) improving the bonding of dentin and composite
- b) increasing the mechanical strength of thinned dentin
- c) reducing the sensitivity of dentin to irritants
- d) all of the above are true

13. WHEN USING 5th GENERATION ADHESIVE SYSTEMS, THE FOLLOWING IS CARRIED OUT:

- a) only etching of dentin
- b) total etching
- c) enamel etching only
- d) tissue etching is not carried out

14. COMPOSITE MATERIALS WITH A PARTICLE SIZE OF THE INORGANIC FILLER MORE THAN 1 μm , ARE RELATED TO:

- a) macro-filled
- b) hybrid
- c) microfilled
- d) mini-filled

15. FLOWABLE COMPOSITES ARE USED FOR

- a) fissure sealing
- b) filling cavities of the 2nd class
- c) filling cavities of the 5th class
- d) all of the above are true

16. INDICATIONS FOR THE USE OF COMPOMERS:

- a) carious cavities of 3 and 5 classes
- b) small carious cavities of 1 and 2 classes
- c) non-carious lesions of hard dental tissues
- d) all of the above are true

17. TO INCREASE ENAMEL CARIES RESISTANCE, IV AND V GENERATION ADHESIVE SYSTEMS CONTAIN:

- a) fluorine compounds
- b) calcium compounds
- c) potassium compounds

d) all of the above are true

18. UNACCEPTABLE COMBINATIONS OF FILLING MATERIALS

a) eugenol-containing materials - light-cured composite material

b) zinc phosphate cement - chemically cured composite material

c) glass-ionomer cement - light-curing composite material

d) polymer medical pad - light-cured composite material

19. THE MECHANISM OF THE COMPOSITE CURE IS BASED ON THE PROCESS

a) crystallization

b) polymerization

c) dissolution

d) all of the above are true

20. ETCHING OF HARD TISSUES OF THE TOOTH IS CARRIED OUT WITH THE PURPOSE:

1. remineralization

2. caries diagnostics

3. improve adhesion

4. anesthesia

5. sclerosis

21. INTRODUCTION OF A CHEMICALLY CURED COMPOSITE IS RECOMMENDED TO BE CARRIED OUT:

a) in layers

b) one or two portions, carefully pressing the material to the bottom and walls of the cavity, with some excess material

c) in small portions with careful condensation of each portion

d) application technique does not matter

22. HARDENING TIME OF CHEMICAL CURING COMPOSITE:

a) 10 minutes

b) 3-5 minutes

c) 1-2 minutes

d) 8-10 minutes

23. CHEMICALLY CURING COMPOSITES ARE:

a) Talan

b) Charisma PPF

c) Consize

d) Degufil

d) everything is correct

24. SPECIFY THE CATALYST ACTIVATED FOR CHEMICAL POLYMERIZATION IN CHEMICALLY CURING COMPOSITES:

a) camphorquinone

b) benzoyl peroxide and amine

c) urea peroxide

d) camphor

25. MICRORETENTION OF THE FILLING MATERIAL IS

a) fixation of the filling due to the convergence of the walls of the carious cavity

b) fixation of the filling material in the retention points

c) penetration of the adhesive and filling material into the microspaces of the etched enamel

d) fixing the seal due to anchors, pins, posts

26. APPLIED LAYERS OF LIGHT-CURING CPM SHOULD NOT EXCEED THE THICKNESS OF MORE THAN:

a) 1mm

b) 2-Zmm

c) 0.5 mm

d) 5 mm

27. LIST CONTRAINDICATIONS TO THE USE OF PHOTOCOMPOSITES:

- a) exudative inflammation of the marginal gums, bleeding
- b) subgingival spread of caries
- c) poor oral hygiene
- d) everything is correct

28. ACTION OF DENTINE ADHESIVE ON DENTIN

- a) increases the flow of dental cerebrospinal fluid
- b) fills the dentinal tubules
- c) stops the flow of dental cerebrospinal fluid
- d) wets and disinfects
- e) true c) and d)

29. THE DENTIN SURFACE IS TREATED WITH A DENTINE ADHESIVE FOR THE PURPOSE:

- a) improving the bonding of dentin and composite
- b) increasing the mechanical strength of thinned dentin
- c) reducing the sensitivity of dentin to irritants
- d) all of the above are true

40. APPLICATION OF 4, 5 GENERATIONS ADHESIVE SYSTEM PROMOTES EDUCATION:

- a) hybrid zone
- b) smeared layer
- c) oxygen-inhibited layer
- d) all of the above are true

41. WHEN USING THE 5th GENERATION ADHESIVE SYSTEM, THE ROLE OF A PRIMER IS PERFORMED BY:

- a) the first portion of the adhesive system liquid
- b) the second portion of the adhesive system liquid
- c) 5th generation adhesive system does not contain a primer
- d) pickling system

42. THE RESULT OF VOLUME SHRINKAGE OF A PHOTOCOMPOSITE

- a) discoloration of the tissues of the tooth
- b) inflammation of the gingival margin
- c) fractures of the walls of the tooth
- d) hypersensitivity of tooth tissues

3. Etching of enamel is carried out before applying a filling from:

- 1. JIC
- 2. composite
- 3. polycarboxylate cement
- 4. silver amalgam
- 5. silicophosphate

44. Halogen light lamps are used for:

- 1. surgical field disinfection
- 2. drying of the mouth
- 3. enamel remineralization
- 4. cabinet disinfection
- 5. composite polymerization

45. When filling carious cavities using the “closed sandwich” method, the gasket:

- 1. covered with composite
- 2. not covered by composite
- 3. not used
- 4. superimposed on the edges of the cavity

5. applied to walls and edges
46. Macro-filled composite materials have positive properties:
 1. strength, radiopacity
 2. strength, poor polishability
 3. low color fastness
 4. accumulation of plaque on the surface
 5. toxicity
47. Bonding systems include:
 1. orthophosphoric acid
 2. primer and adhesive
 3. hydrochloric acid
 4. hydrofluoric acid
 5. polyacrylic acid
48. Shrinkage of the chemically cured composite occurs towards:
 1. oral
 2. vestibular
 3. light source
 4. tooth cavity
 5. uniform in volume
49. THE GROUP OF MATERIALS FOR THERAPEUTIC PADS INCLUDES:
 - a) Calmecin
 - b) life
 - c) calcipulpe
 - d) all of the above are true
50. AS A MEDICAL PAD USE:
 1. artificial dentin
 2. pastes based on calcium hydroxide
 3. dentin paste
 4. resorcinol-formalin paste
 5. phosphate cement
51. GASKET MATERIALS BASED ON CALCIUM HYDROXIDE HAVE POSITIVE PROPERTIES:
 1. hardness, strength
 2. odontotropic action
 3. aesthetic qualities
 4. solubility
 5. shrinkage
52. METHOD OF PREVENTIVE CARIOUS CAVITY EXPANSION SUGGESTED:
 - a) I.G. Lukomsky
 - b) Black
 - c) E.V. Borovsky
 - d) Fisher
53. REQUIREMENTS FOR THERAPEUTIC PAD MATERIALS
 - a) long curing time
 - b) short mixing time
 - c) have an odontotropic effect
 - d) have an anesthetic effect
54. Composite to avoid the development of abfraction defects in the carious cavities of the cervical region of the teeth:
 - a) low viscosity composite (flowable composite)
 - b) chemical curing composite
 - c) chemically cured macro-filled composite

d) all of the above are true

55. In microfilled composites, filler particles have a size (μm)

1. 1-100
2. fifty
3. more than 1
4. one
5. less than 1

56. Fluid composites are introduced into the cavity:

1. trowel
2. plugger
3. syringe
4. syringe and spatula
5. amalgamator

57. Shrinkage of the light-cured composite occurs to the side:

1. light source
2. tooth cavity
3. vestibular
4. oral
5. occlusal

58. For the adhesion of the composite material during the restoration of cavities, the following is used:

1. phosphate cement
2. bonding system
3. 37% phosphoric acid
4. calcium hydroxide paste
5. artificial dentin

59. For finishing fillings made of composite materials in class II cavities, the following are used:

1. steel ball burs
2. carbide ball burs
3. carbide cylindrical burs
4. fine diamond heads and strips
5. carborundum stones

60. UNACCEPTABLE COMBINATIONS OF FILLING MATERIALS

- a) eugenol-containing materials - light-cured composite material
- b) zinc phosphate cement - chemically cured composite material
- c) glass-ionomer cement - light-curing composite material
- d) polymer medical pad - light-cured composite material

61. THE MECHANISM OF CURE COMPOSITES IS BASED ON THE PROCESS

- a) crystallization
- b) polymerization
- c) dissolution
- d) all of the above are true

62. LIST THE ADVANTAGES OF PHOTOCOMPOSITE FILLING MATERIALS:

- a) matching the color and transparency of the enamel and dentin of the tooth
- b) color fastness
- c) enough time to model the restoration
- d) everything is correct

63. INDICATIONS FOR THE USE OF COMPOMERS:

- a) carious cavities of 3 and 5 classes
- b) small carious cavities of 1 and 2 classes
- c) non-carious lesions of hard dental tissues
- d) all of the above are true

64. LAYER OF DENTIN, THE SURFACE OF COLLAGEN FIBERS WHICH COVERED WITH RESIN, IS CALLED:

- a) hybrid
- b) lubricated
- c) chalky
- d) shiny

65. COMPOSITE MATERIAL OF INCREASED FLUIDITY TO CREATE ADAPTIVE LAYER IS INTRODUCED INTO A CAVITY THICKNESS:

- a) 4-5 mm
- b) 0.5-1 mm
- c) 1-1.5 mm
- d) flowable composites are not used to create an adaptive layer

66. MATERIALS FOR FILLING CAVITIES OF CLASS I ARE:

- a) compomers
- b) JIC
- c) ormokers
- d) hybrid composite filling materials
- d) everything is correct

57. WHEN RECOVERING THE LOWER MOLAR MOLAR, IT IS NECESSARY TO REMEMBER:

- a) marginal enamel ridges are restored powerful and rounded
- b) buccal tubercles are restored smoother and more powerful, lingual - pointed
- c) weakened tubercles and thinned walls are covered with restorative material
- d) everything is correct

58. IMPROPER BEVERING AND SMOOTHING OF ENAMEL CAN CAUSE:

- a) to deterioration of adhesion
- b) to violation of the marginal fit
- c) worsening aesthetics
- d) all of the above are true

59. THE USE OF THERAPEUTIC AND INSULATING PAD WHEN USING MODERN ADHESIVES IS RECOGNIZED:

- a) necessary
- b) redundant
- c) preferably only if there is a danger of opening the tooth cavity
- d) it is necessary when the cavity of the tooth is opened
- e) all are true except a)

60. PRIMER IS A SUBSTANCE:

- a) with high wetting ability, facilitating the penetration into the pores and deepening of the dentin and enamel of the filling material
- b) providing adhesion of the composite and dentin (base lining)
- c) dissolves the mineral structures of enamel
- d) all of the above are true

61. COMPOSITE MATERIALS WITH A PARTICLE SIZE OF INORGANIC FILLER MORE THAN 1 μm ARE:

- a) macro-filled
- b) hybrid
- c) microfilled
- d) mini-filled

62. TOO THICK ADHESIVE PROMOTES:

- a) better adhesion of the filling material to the hard tissues of the tooth
- b) the formation of a line of weakness of the restoration

- c) the formation of a hybrid zone
- d) the formation of a smeared layer

63. INTRODUCTION OF A CHEMICALLY CURED COMPOSITE IS RECOMMENDED TO BE CARRIED OUT:

- a) in layers
- b) one or two portions, carefully pressing the material to the bottom and walls of the cavity, with some excess material
- c) in small portions with careful condensation of each portion
- d) application technique does not matter

64. SPECIFY THE FINAL STAGE OF THE FINAL PROCESSING OF THE RESTORATION:

- a) contouring of the restoration
- b) finishing the restoration
- c) polishing with pastes
- d) processing with carborundum stone

65. MAIN FORM OF PRODUCTION OF MODERN COMPOSITE MATERIALS OF CHEMICAL CURING:

- a) pasta
- b) powder-liquid
- c) paste-powder
- d) paste-liquid

66. MICRORETENTION OF THE FILLING MATERIAL IS

- a) fixation of the filling due to the convergence of the walls of the carious cavity
- b) fixation of the filling material in the retention points
- c) penetration of the adhesive and filling material into the microspaces of the etched enamel
- d) fixing the seal due to anchors, pins, posts

67. FLUID LIGHT-CURING COMPOSITES ARE:

- a) Revolution
- b) Tetric
- c) Dyract
- d) Fuji IX

68. ACTION OF DENTINE ADHESIVE ON DENTIN

- a) increases the flow of dental cerebrospinal fluid
- b) fills the dentinal tubules
- c) stops the flow of dental cerebrospinal fluid
- d) wets and disinfects
- e) true c) and d)

69. A BRILLIANT, "MOIST", EASILY REMOVABLE LAYER ON THE SURFACE OF THE COMPOSITE IS CALLED:

- a) smear layer
- b) layer inhibited by oxygen
- c) hybrid layer
- d) insulating layer

70. LIST THE MOST COMMON MISTAKE WHEN USING COMPOSITE MATERIALS:

- a) the use of microfilled composites for the restoration of surfaces of 1.2 classes, the cutting edges of the anterior teeth
- b) ignoring the rules for directing the rays of a polymerization lamp
- c) contact with the glued surface of the oral or gingival fluid
- d) true b, c
- e) everything is correct

71. 5th GENERATION ADHESIVE SYSTEMS CONTAIN PRIMER AND ADHESIVE:

- a) in the form of two liquids
- b) do not contain a primer

- c) in "one" vial
- d) do not contain adhesive

72. TOTAL ETCHING IS RECOMMENDED FOR SUBSEQUENT USE OF ADHESIVE SYSTEMS:

- a) 3 generations
- b) 4-5 generations
- c) 1st generation
- d) 2 generations

73. INSULATING VARNISHES ARE THIN-LAYER GASKETS INTENDED TO PROTECT THE TOOTH PULP FROM THE TOXIC EFFECT OF FILLING MATERIALS, OTHERWISE THEY ARE CALLED:

- a) primers
- b) silanes
- c) compomers
- d) sealants
- e) liners

74. LIST THE ADVANTAGES OF PHOTOCOMPOSITE FILLING MATERIALS:

- a) matching the color and transparency of the enamel and dentin of the tooth
- b) color fastness
- c) enough time to model the restoration
- d) everything is correct

75. INDICATIONS FOR THE USE OF COMPOMERS:

- a) carious cavities of 3 and 5 classes
- b) small carious cavities of 1 and 2 classes
- c) non-carious lesions of hard dental tissues
- d) all of the above are true

76. When filling carious cavities using the "open sandwich" method, a gasket:

- 1. covered with composite
- 2. not covered by composite
- 3. superimposed on the bottom and walls
- 4. superimposed on the edges of the cavity
- 5. applied to walls and edges

77. Shrinkage of the light-cured composite occurs to the side:

- 1. light source
- 2. tooth cavity
- 3. vestibular
- 4. oral
- 5. occlusal

78. THERAPEUTIC PADDING IS APPLIED:

- a) pointwise in the projection area of the pulp horn
- b) on the bottom and walls of the carious cavity, repeating the contours of the cavity
- c) on the bottom of the cavity to the enamel-dentin border
- d) on the walls of the carious cavity

79. MEDICAL PADS:

- a) calcicur
- b) calcipulp
- c) septocalcin
- d) all of the above are true

80. FOR TREATMENT OF A CARIOUS CAVITY IT IS NOT RECOMMENDED TO USE:

- a) dioxidine
- b) alcohol
- c) sodium hypochlorite

d) hydrogen peroxide

81. The opening of the tooth cavity in the premolars of the upper jaw is carried out with a bur in the direction:

- a) anterior-posterior
- b) along the axis of the tooth
- c) buccal-palatal
- d) bucco-posterior
- e) anterior-buccal

82. Opening of the tooth cavity is carried out:

- a) finisher
- b) carborundum head
- c) fissure bur
- d) spherical bur No. 1
- e) disk

83. Arsenic paste (g) is sufficient for pulp necrosis:

- a) 0.0008
- b) 0.001
- c) 0.01
- d) 0.1
- e) 1.0

84. When filling the root canal, use the tool:

- a) H-file
- b) spreader
- c) sweep
- d) pulp extractor
- e) pin

85. For antiseptic treatment of the root canal, the following is used:

- a) maleic acid
- b) distilled water
- c) 37% phosphoric acid
- d) 3% sodium hypochlorite
- e) nitric acid

86. Determination of the working length of the tooth is carried out by the method:

- a) radiography
- b) subjective feelings
- c) thermodiagnosics
- d) electroodontodiagnosics
- e) ultrasonic

87. Devitalizing effect has:

- a) zinc eugenol paste
- b) paraformaldehyde paste
- c) resorcinol-formalin liquid
- d) cresophene
- e) camphor-phenol

88. Opening of the tooth cavity of intact premolars of the upper jaw is performed:

- a) in the middle of the longitudinal fissure
- b) in the region of the buccal tubercle
- c) in the region of the palatine tubercle
- d) in the cervical region
- e) from the vestibular side

89. The modern way of root canal filling is:

- a) method of lateral condensation of gutta-percha

- b) application of one paste
 - c) the use of phosphate cement
 - d) the use of a silver pin
 - e) application of gutta-percha without sealer
90. Indications for impregnation methods are:
- a) well-traversed channels
 - b) channels in the stage of resorption of the apical part
 - c) poorly passable and obliterated canals
 - d) canals of single-rooted teeth
 - e) inflammation in the periodontium
91. The first step in the instrumental expansion of the root canal is:
- a) antiseptic treatment
 - b) expansion of the apical foramen
 - c) determining the length of the root canal
 - d) expansion of the mouths of the root canal
 - e) use of H-files
92. Number and name of root canals in the first upper molars:
- a) 2-buccal, palatine
 - b) 3 - palatine, anterior-buccal, posterior-buccal
 - c) 3 - posterior, anterior-lingual, anterior-buccal
 - d) 3 - palatine, anterior-lingual, posterior-lingual
 - e) 5 - anterior, posterior-buccal, palatine
93. WHEN WORKING WITH A HEADSTREAM FILE (DRILL), IT IS REQUIRED:
- a) insert the instrument into the canal by rotating until it stops
 - b) carry out scraping movements from the top to the mouth of the canal
 - c) at minimum pressure, insert the instrument into the canal and rotate it clockwise
 - d) everything is correct
94. FEATURES OF THE NEEDLE OF THE ENDODONTIC SYRINGE IS:
- a) the needle has a flat cut on the side surface
 - b) the needle has several exit holes at the end
 - c) the needle has a sharp end
 - d) all of the above are true
95. SPECIFY REQUIREMENTS FOR PREPARATIONS FOR MEDICATIONAL TREATMENT OF ROOT CANALS:
- a) should not irritate periodontal tissues
 - b) must have a bactericidal effect on microorganisms
 - c) must be capable of deep diffusion into the dentinal tubules
 - d) all of the above are true
100. ENDODONTIC INSTRUMENT BREAKAGE IN THE ROOT CANAL LEADS
- a) no x-ray of the tooth
 - b) work in a wet channel
 - c) repeated sterilization of the instrument
 - d) all of the above are true
101. SODIUM HYPOCHLORITE CONCENTRATION FOR ROOT CANAL TREATMENT:
- a) 6% solution
 - b) 2.5-3% solution
 - c) 0.06% solution
 - d) 10% solution
102. HYDROGEN PEROXIDE CONCENTRATION FOR ROOT CANAL TREATMENT:
- a) 3% solution
 - b) 6% solution
 - c) 0.03% solution

d) 10% solution

103. REQUIREMENTS FOR MATERIALS FOR ROOT CANALS

a) do not irritate periodontal tissues

b) have a long curing time

c) have a chemical bond with dentin

d) all of the above are true

104. PLUGGER USE:

a) for lateral condensation of gutta-percha pins

b) for vertical condensation of gutta-percha pins

c) for the introduction of the sealer

d) all of the above are true

105. The opening of the tooth cavity in the molars of the lower jaw is carried out with a drill in the direction:

a) buccal-lingual

b) along the axis of the tooth

c) anterior-posterior

d) posterior-lingual

e) posterior buccal

106. Arsenic paste of the classic recipe in 3.7 tooth is superimposed on the time:

a) 24 hours

b) 48 hours

c) 3 days

d) 5-6 days

e) 7 days

107. It is recommended to remove infected predentin from the walls of the canal of the tooth:

a) root needle

b) pulp extractor

c) K-file

d) channel filler

e) excavator

108. Devitalizing effect has:

a) zinc eugenol paste

b) paraformaldehyde paste

c) resorcinol-formalin liquid

d) cresophene

e) camphor-phenol

109. Opening of the tooth cavity of intact central incisors is performed from the oral surface at the level of:

a) cutting edge

b) the upper third of the crown

c) middle third of the crown

d) lower third of the crown

e) neck of the tooth

110. In the treatment of pulpitis by the method of devital extirpation, the following is performed on the first visit:

a) opening of the tooth cavity

b) removal of coronal pulp

c) removal of root pulp

d) opening the cavity of the tooth

e) full endodontic treatment

111. The mouths of the channels determine:

a) periodontal probe

- b) excavator
- c) spherical bur
- d) endodontic probe
- e) scanner

112. The working length of the root canal is determined by:

- a) according to the subjective feelings of the doctor
- b) according to the patient's feelings
- c) orthopantomogram
- d) x-ray with a needle
- e) EDI

113. Preparations based on EDTA mainly act in the environment:

- a) sour
- b) alkaline
- c) neutral
- d) sodium hypochlorite
- e) salty

114. IN THE PROCESS OF MEASURING THE LENGTH OF THE ROOT, TO AVOID ERRORS, IT IS NECESSARY:

- a) exclude contact of the active electrode with metal (crown, amalgam filling)
- b) avoid contact of the electrode with saliva
- c) remove the pulp from the canal
- d) everything is correct