federal state budgetary educational institution of higher education "Privolzhsky Research Medical University" Ministry of Health of the Russian Federation

# BANK OFASSESSMENT TOOLS IN THE DISCIPLINE "Non-carious lesions of hard dental tissues"

Direction of training (specialty): 31.05.03 "Dentistry"

**Department: Therapeutic Dentistry** 

Mode of study: full-time

Nizhny Novgorod 2021

# **1**. Bank of assessment tools for the current monitoring of academic performance, midterm assessment of students in the discipline "therapeutic dentistry"

This Bank of Assessment Tools (BAT) for the discipline "Non-carious lesions of hard tissues of the teeth " is an integral application to the work program of the discipline "Non-carious lesions of the hard tissues of the teeth ". This FOS is subject to all the details of the approval presented in the RPD for this discipline.

(Funds of evaluation funds allow you to evaluate the achievement of the planned results stated in the educational program.

Evaluation means - a fund of control tasks, as well as a description of the forms and procedures designed to determine the quality of learning by students of educational material.)

### 2. List of evaluation tools

To determine the quality of learning by students of educational material in the discipline "therapeutic dentistry" the following evaluation tools are used:

No. p / p	Estimator	Brief description of the evaluation tool	Presentation of the evaluation tool in the BAT
1	Test	A system of standardized tasks that allows you to automate the procedure measuring the level of knowledge and skills of the student	test fund assignments
2	Situational tasks	A method of control that allows you to assess the criticality of thinking and the degree of assimilation of the material, the ability to apply theoretical knowledge in practice.	Task List
3	Colloquium	A means of monitoring the assimilation of the educational material of a topic, section or sections of a discipline, organized as a training session in the form of an interview between a teacher and students.	Questions on topics / sections of the discipline

# **3.** List of competencies indicating the stages of their formation in the process of mastering the educational program and types of assessment tools

Competence code and wording*	Stage formation of competence	Controlled sections of the discipline	Evaluation tools
UK-1 (the ability to carry out a critical analysis of problem situations based on a systematic approach, to develop an action strategy)	Current, Intermediate	Section 3 Non-carious lesions of hard tissues of teeth that occur after eruption: abrasion of hard tissues	Test Situational tasks Colloquium offset

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		linked to the gene)	
PC-2 (with the ability and readiness to conduct preventive medical examinations, medical examination of various categories of citizens and the implementation of dispensary observation of patients with dental pathology)	Current, Intermediate	~	Test Situational tasks Colloquium offset
PC-6 ( willingness to collect, analyze complaints and other information from the patient (relatives / legal representatives), his medical history, interpretation of the results of the examination, laboratory, instrumental, pathoanatomical and other studies in order to recognize the condition or establish the presence or absence of a dental disease , symptoms, syndromes of dental diseases, the establishment of nosological forms in accordance with the International Statistical Classification of	Current, Intermediate		Test Situational tasks Colloquium offset

Diseases and Related Health Problems, and other regulatory documents of the Ministry of Health of the Russian Federation (Procedure for the provision of medical care, Standard of Medical Care, Clinical Recommendations on the provision of medical care, etc)			
PC-7 (with the ability to determine the tactics of managing patients with various dental diseases in accordance with the Clinical recommendations and other regulatory documents of the Ministry of Health of the Russian Federation on an outpatient basis and in day hospital conditions, taking into account the age of the patient)	Current, Intermediate		Test Situational tasks Colloquium offset
PC-12 (willingness to participate in scientific research, analysis and public presentation of medical information based on evidence-based medicine and to participate in the implementation of new methods and techniques aimed at protecting public health and reducing dental morbidity)	Current, Intermediate	Section 1 Non-carious lesions of hard tissues of the teeth that occur after eruption: hyperesthesia of the teeth, necrosis of hard tissues. Section 2 Non-carious lesions of hard tissues of the teeth that occur after eruption: enamel erosion, wedge-shaped defects. Section 3 Non-carious lesions of hard tissues of teeth that occur after eruption: abrasion of hard tissues.	Test Situational tasks Colloquium offset

**4.** The content of evaluation means of input, current control Input / current control is carried out by the teacher of the discipline when conducting classes in the form of: testing, solving situational problems, colloquium.

Tasks for assessing the competence of "UK-1" :

# Task 1.

A 19-year-old patient complains of pigmented spots on her teeth. Anamnesis: stains on teeth since childhood. Relatives and acquaintances who have long lived in the Tver region have the same spotty teeth. The content of fluorides in drinking water in this area is increased. Examination of the oral cavity: physiological bite. The enamel of all teeth is matte with a yellow tint and multiple brown spots on all surfaces of the teeth.

1) Make a diagnosis?

2) Is the damage to the teeth local or systemic?

#### Task 2.

Patient N., 46 years old, went to the doctor with complaints of increased sensitivity of the teeth of the upper jaw on the right and left in the area of the premolars.

Painful sensations occur when brushing your teeth; minor, short term

pain from sweet, cold. The patient notes the darkening of a group of teeth in the cervical

areas. The patient is under dispensary registration in the district polyclinic with

diagnosis: nodular non-toxic goiter. Previously, there was a slight

soreness only during brushing, but over time, the intensity of these

manifestations intensified. As a result of examination on the vestibular surface 16, 15, 14, 13,

23, 24, 25, 26, in the cervical region, defects of the coronal part in the form

wedges formed by planes converging at an angle of 40-45 degrees within

dentin. The surface of the defect is smooth and shiny; exposed dentin is pigmented,

stains well with 5% tincture of iodine; probing the walls is painful; hyperesthesia

expressed moderately.

Questions.

1) Additional examination methods

2) Preliminary diagnosis, substantiate it.

3) Etiology and pathogenesis of this pathology.

4) Differential diagnosis.

5) Tactics of conducting this patient.

6) Prevention and medical examination.

Tasks for assessing the competence of "PC-2" :

#### Task 3.

Patient Z., 37 years old, complained of pain when taking cold water in the area of tooth 44 According to the patient, he is practically healthy, only one visits the dentist

once a year. Objectively: tooth 4.4 is on the vestibular surface in the cervical area

a focus of enamel demineralization and a carious cavity of medium depth are determined,

made with pigmented and softened dentin. Probing painful

along the walls of the carious cavity. Percussion of the tooth is painless. reaction to cold

short-term.

Questions.

1) Make a diagnosis, justify it.

2) Etiology and pathogenesis of this disease.

3) Additional examination methods.

4) Differential diagnosis.

5) Tactics of conducting.

6) Justify the choice of materials.

7) Prevention (methods and means) and clinical examination.

#### Task 4.

A 16-year-old patient is concerned about yellow coloration and smaller crowns 44, 45, 46 teeth (in comparison with other teeth), these teeth erupted later similar groups teeth, the radiograph shows a shortening of the roots roots of these teeth and wide channels.

Questions.

1) Make a diagnosis, justify it.

- 2) Etiology and pathogenesis of this disease.
- 3) Additional examination methods.
- 4) Differential diagnosis.
- 5) Tactics of conducting.
- 6) Justify the choice of materials.
- 7) Prevention (methods and means) and clinical examination.

Tasks for assessing the competence of "PC-6" :

# Task 5.

Examination of a 20-year-old patient revealed a change in the enamel of all incisors and premolars in the form of dull white areas, dense in consistency and occupying 1/3

incisal surfaces of incisors and occlusion surfaces of premolars. Changes

enamels are marked from the moment of teething. What additional methods

examinations and data of the anamnesis allow to specify the diagnosis?

Questions.

- 1) Preliminary diagnosis. Rationale.
- 2) Additional research methods.
- 3) Tactics of conducting this pathology.
- 4) The reason for this pathology.
- 5) Exodus. Medical examination.

#### Task 6.

The child is 6 years old. The mother complains of progressive shortening of her teeth. There were 2 broken hands. the blue shade of the sclera attracts attention.

eye. The teeth are small in size, bluish-gray in color with yellowness. Enamel easily separates from dentin. The dentin is gone. On the radiograph, the roots of the teeth are underdeveloped, thin.

Questions.

1) Preliminary diagnosis. Rationale.

- 2) Additional research methods.
- 3) Tactics of conducting this pathology.
- 4) The cause of this pathology.
- 5) Exodus. Medical examination.

Tasks for assessing the competence of "PC-7" :

#### Task 7.

A 26-year-old patient complains of pigmented spots on her teeth. Anamnesis: stains on teeth since childhood. Relatives and acquaintances who have long lived in the Tver region have the same spotted teeth. The content of fluorides in drinking water in this area is increased. Examination of the oral cavity: physiological bite. The enamel of all teeth is matte with a yellow tint and multiple brown spots on all surfaces of the teeth.

1) Make a diagnosis?

2) Is the damage to the teeth local or systemic?

#### Task 8.

Examination of a 25-year-old patient revealed a change in the enamel of all incisors and premolars in the form of dull white areas, dense in consistency and occupying 1/3

incisal surfaces of incisors and occlusion surfaces of premolars. Changes

enamels are marked from the moment of teething. What additional methods

examinations and data of the anamnesis allow to specify the diagnosis?

Questions.

1) Preliminary diagnosis. Rationale.

- 2) Additional research methods.
- 3) Tactics of conducting this pathology.
- 4) The reason for this pathology.
- 5) Exodus. Medical examination.

Tasks for assessing the competence of "PC-12" :

#### Task number 9

Patient Z., 25 years old, three years ago was treated by a dentist for tooth 4.7 due to caries. At the moment, the patient presents for the presence of a defect in the filling in the tooth 4.7.

*OBJECTIVE:* there is a shallow carious cavity on the distal contact-masticatory surface, probing is painful along the walls. When conducting a "cold" test - the pain is quickly passing.

QUESTIONS:

- 1. Make a preliminary diagnosis.
- 2. Perform differential diagnosis.
- 3. The choice of filling material for cavities of class II Black .
- 4. List possible medical errors.
- 5. Rules for the reflection of filling material.

#### Task number 10

Patient N., 30 years old, underwent restoration of tooth 2.1 according to Class V Black from a heliocomposite (" Prismafil ").

After 2 days, the patient returned to the doctor with complaints of pain in the tooth when brushing teeth and chewing solid food.

*OBJECTIVE:* tooth 2.1 is a filling on the labial surface with a good marginal fit. Probing the enamel along the perimeter of the filling is sharply painful. Percussion is painless.

QUESTIONS:

- 1. Make a diagnosis.
- 2. What mistakes did the dentist make when placing a filling?
- 3. Your tactics for this tooth.

#### Task number 11

Patient M., 40 years old, came to the clinic with complaints of pain in the lower jaw on the left.

*OBJECTIVE:* gingival mucosa is hyperemic, edematous, bleeding on probing. Tooth 3.6 has a deep carious cavity filled with food debris. EOD -  $20 \mu$ A, tooth 3.5 - intact, II degree mobility, swelling of the gums, pathological periodontal pocket 7 mm, pus is released, percussion is painful.

QUESTIONS:

1. Make a preliminary diagnosis.

2.Perform differential diagnostics.

3. Make an examination plan.

4. Your treatment tactics.

**5.** Choice of anesthesia method.

# 4.2. Tests for assessing the competence of "PC-2" :

# SYSTEMIC DENTAL HYPOPLASIA IN CHILDREN DEVELOPS IN PERMANENT TEETH

maternal illness during pregnancy

traumatic injuries of milk teeth

violations of the optimal composition of microelements in water

illnesses of the child after birth

#### DISCOLORATION OF "TETRACYCLINE" TEETH IS POSSIBLE ON SURFACES

palatine and lingual molars vestibular molars vestibular incisors

palatine and lingual incisors and canines

#### POSSIBLE CHANGES IN LOCAL ENAMEL HYPOPLASIA

pigmented spot on enamel

obliteration of the tooth cavity

"grooved" teeth

damage to the enamel of all molars and anterior teeth

#### CLINICAL CHARACTERISTICS OF TOOTH ENAMEL IN HEREDITARY AMELOGENESIS IMPERFECT

horizontal grooves parallel to the cutting edge on a group of teeth of the same period of mineralization vertical grooves from the incisal edge to the necks of the teeth

Enamel is worn away, exposed dentin is watery

the presence of white spots and specks

# GROUPS OF TEETH THAT ARE MOST OFTEN AFFECTED WITH SYSTEMIC ENAMEL HYPOPLASIA frontal premolars first molars and anterior teeth all groups of teeth

#### CLINICAL MANIFESTATIONS OF FLUOROSIS

pigmented spot and depression in the enamel of one tooth white spots and specks on the surface of the enamel on the teeth of different periods of mineralization sloughing of enamel with exposure of dentin on all teeth chalk-like spots in the cervical region of the teeth of different periods of mineralization

# FACTORS AFFECTING THE DEVELOPMENT OF SYSTEMIC HYPOPLASIA OF ENAMEL OF PERMANENT TEETH

maternal illnesses in the second half of pregnancy illnesses of the child after birth, violation of the diet of the child multiple lesions of milk teeth complicated by caries maternal illnesses in the first half of pregnancy

CAUSES OF IMPERFECT DEVELOPMENT AND STRUCTURE OF ENAMEL AND DENTIN maternal illnesses in the first half of pregnancy maternal illnesses in the second half of pregnancy illnesses of the child in the first half of the first year of life genetic factors

CLINICAL FORMS OF FLUOROSIS bowl-shaped chalk -speckled furrowed "gypsum" teeth

COMPLAINTS OF A PATIENT WITH LOCAL ENAMEL HYPOPLASIA pain on percussion cosmetic defect pain from a hot stimulus

night pains

Tests for assessing the competence of "PC-6" : CAUSES OF LOCAL ENAMEL HYPOPLASIA maternal illness during pregnancy child's illness after birth traumatic injury to the tooth germ milk tooth pulpitis

ON THE RADIOGRAPH WITH IMPERFECT DENTINOGENESIS REVEAL expansion of the periodontal gap at the root apex roots of teeth of normal length wide lumen of the root canal root canals and cavities of the teeth are obliterated shortly after tooth eruption

DISEASES THAT ARE HEREDITARY fluorosis systemic enamel hypoplasia amelogenesis imperfecta "tetracycline" teeth

NON-CARIOUS DISEASES OF HARD TISSUES OF TEETH ARE pulpitis periodontitis periodontitis imperfect development of dentin

MAJOR CAUSE OF SYSTEMIC ENAMEL HYPOPLASIA OF PERMANENT TEETH hereditary factor

maternal illness during pregnancy fetal injury diseases of the child in the first year of life

DISEASE IN WHICH ONE TOOTH OF AN ALTERED SHAPE ECUTTS: fluorosis systemic hypoplasia local hypoplasia stenton capdepon syndrome

FACTORS, THE IMPACT OF WHICH CHANGES THE COLOR OF "TETRACYCLINE" TEETH compliance with the rules of oral hygiene daylight taking vitamins by mouth fluorescent light

REASON FOR FLUOROSIS insufficient fluoride content in water transmission of disease by inheritance excess fluoride in water lack of fluoride in water

Tests for assessing the competence of "PC-7" : DISEASE THAT IS HEREDITARY systemic hypoplasia fluorosis local hypoplasia dentinogenesis imperfecta

IN IMPERFECT AMELOGENESIS, THERE ARE DISTURBANCES IN THE STRUCTURE only dentine only enamels enamel and dentin pulp

CLINICAL CHARACTERISTICS OF TOOTH ENAMEL IN SYSTEMIC HYPOPLASIA staining teeth crowns yellow discoloration of tooth enamel of different periods of mineralization in different parts of the tooth crown symmetrical spots and defects on the crowns of the teeth of the same period of mineralization chalk-like spots in the cervical region of the teeth of different periods of mineralization

CLINICAL FORM OF ENAMEL HYPOPLASIA "corrugated" enamel Capdepon's dysplasia striated enamel chalky mottled enamel

CHANGES DETECTED ON RADIOGRAPH IN IMPERFECT DENTINOGENESIS no changes the tooth cavity and root canals are obliterated the cavity of the tooth and the lumen of the canals are expanded roots are short, canals are wide

HEREDITARY DISEASES OF HARD TISSUES OF THE TOOTH ARE

fluorosis "tetracycline" teeth imperfect structure of enamel and dentin systemic enamel hypoplasia

#### FOR THE DIAGNOSIS OF "INCOMPLETE DENTINOGENESIS" IT IS ENOUGH TO HAVE

"gypsum" enamel color vertical grooves from the cutting edge to the necks of the teeth abrasion and watery dentin exposure changes on x-ray

# CAUSE ADVERSE FACTORS OF DEVELOPMENT OF SYSTEMIC HYPOPLASIA OF ENAMEL OF PERMANENT TEETH

chronic periodontitis of a milk tooth fluoride intoxication diseases that violate mineral metabolism during the formation of enamel hereditary transmission of hard tissue pathology

SYSTEMIC ENAMEL HYPOPLASIA MOSTLY AFFECTS TEETH milk molars

permanent incisors, canines and first molars milk incisors premolars

ON THE CLINICAL MANIFESTATION OF SYSTEMIC HYPOPLASIA, IT IS POSSIBLE TO IDENTIFY heredity timing of eruption of the affected tooth group age at which the child had the causative disease diseases that led to the formation of hypoplasia

Tests for assessing the competence of "UK-1" : EXAMINATION OF THE PATIENT START WITH THE APPLICATION OF METHODS: radiological laboratory thermometric major cytological

THE MAIN SURVEY METHODS ARE: interview, x-ray survey, inspection inspection, EDI EDI, radiography percussion, EDI

INTERVIEWING A PATIENT BEGINS WITH FINDING OUT: life stories medical history past illnesses complaints allergy history

THE MUCOSA OF THE ORAL CAVITY IS NORMAL: pale, dry pale pink, dry pale pink, evenly hydrated bright red, richly moisturised hyperemic, edematous

EXAMINATION OF THE PATIENT BEGINS WITH:

filling in the dental formula bite definitions external examination examination of the dentition percussion teeth

#### WHEN EXAMINING LYMPH NODES, THE METHOD IS USED: percussion sounding palpation radiography auscultation

AT PALPATION OF THE SUBMANILLIBLE LYMPH NODES, THE PATIENT'S HEAD SHOULD BE: tilted back deflected to the left deflected to the right tilted forward tilted back and to the left

ADDITIONAL EXAMINATION METHODS INCLUDED x-ray examination definition of EDI sounding palpation

#### ORDER THE PATIENT EXAMINATION SCHEME IN THE RIGHT ORDER

- 1 history of present illness
- 2 patient complaints
- 3 official history
- 4 data from an objective study
- 5 preliminary diagnosis
- 6 anamnesis of the patient's life
- 7 treatment plan and its examination
- 8 differential diagnosis
- 9 clinical (final) diagnosis
- 10 diary
- 11 additional research methods
- 12 forecast

13 - epicrisis correct answer is 3,2,1,6,4,5,11,8,9,7,10,12,13

EMERGENCY CONDITIONS (URGENT ) IN DENTISTRY IS: fainting; papillitis ; post-filling pain; anaphylactic shock; collapse.

TO ELIMINATE POST-FILLING PAIN THE METHODS OF PHYSIOTHERAPEUTIC TREATMENT ARE USED: electrophoresis; laser therapy; fluctuorization ; coagulation; FTL is not used.

COLOR CHANGES OF THE TOOTH CROWN AFTER TREATMENT IS POSSIBLE DUE TO: poor drug treatment of canals; low-quality necrectomy ; papillitis ; filling of root canals with resorcinol-formalin paste; breakage of the instrument in the root canal. WHEN THE INSTRUMENT IS BREAKED BEHIND THE ROOT TIP IN THE PERIAPIICAL TISSUES, IT IS NECESSARY TO CARRY OUT:

resection of the root apex;

leave the fragment in the canal and seal the canal with resorcinol-formalin paste; use the ultrasonic tip to get the instrument; the lasso technique; the technique of using a hollow needle and an H-file.

MATERIAL FOR CLOSURE OF PERFORATIONS IS: " Calcept " Pro root AIT » "MTA Angelus" Metapex \_ \_ " Trioxidant "

Tests for assessing the competence of "PC-12" : EXAMINATION OF THE PATIENT START WITH THE APPLICATION OF METHODS: radiological laboratory thermometric major cytological

THE MAIN SURVEY METHODS ARE: interview, x-ray survey, inspection inspection, EDI EDI, radiography percussion, EDI

INTERVIEWING A PATIENT BEGINS WITH FINDING OUT: life stories medical history past illnesses complaints allergy history

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FLUIT DEPTH EQUAL (MM):

0.1-0.2 0.5-1 2-3 3-4 4-5

DURING EXTERNAL EXAMINATION OF THE PATIENT'S FACE, THE DOCTOR NOTES: skin turgor, eye color facial symmetry, nasolabial folds, skin color nose shape, eye color age spots, hair color integrity of the dentition

WHEN EXAMINING THE ORAL CAVITY, PROBING OF THE TEETH IS CARRIED OUT:

on all surfaces in the cervical region in the area of contact surfaces in fissures in the region of the tubercles

COLORING OF THE POINT OF ENAMEL DEMINERALIZATION WITH A SOLUTION OF METHYLENE BLUE OCCURRS AS A RESULT OF lowering the pH of plaque increase the permeability of enamel in the affected area violations of the Ca / P ratio of enamel destruction of the surface layer of enamel colonization of bacteria on the tooth surface

IN DENTAL PRACTICE FOR THE PRIMARY EXAMINATION THE INSTRUMENTS ARE USED: mirror, ironing board mirror, probe mirror, tweezers tweezers, probe probe, plugger

ANGLE BURS ARE LONG (CM):

3.0 2.7

2.5

2.2

1.0

EXCAVATOR DIMENSIONS:

0-3 0-4

0-8

1-4

1-8

ADDITIONAL EXAMINATION METHODS INCLUDED x-ray examination definition of EDI sounding palpation

DENTAL PATIENT MEDICAL CARD FORM 028/u 037-1/y 039-2/u-88 043/y 030/y

Final test on the SDO "PIMU" portal

https://sdo.pimunn.net/mod/resource/view.php?id=193995 https://sdo.pimunn.net/mod/resource/view.php?id=193996 4.3. Questions for colloquia, interviews :

1. Norms and requirements for the organization of a dental office. (UK-1, PC-2, PC-6, PC-7, PC-12).

2. Basic principles of asepsis in therapeutic dentistry (UK-1, PC-2, PC-6, PC-7, PC-12).

3. Infection control (UK-1, PC-2, PC-6, PC-7, PC-12).

4. Ergonomics and deontological principles in the treatment of caries and non-carious lesions of hard tissues - teeth. (UK-1, PC-2, PC-6, PC-7, PC-12).

5.Medical card of a dental patient, filling rules. Sections of the medical card (UK-1, PC-2, PC-6, PC-7, PC-12).

6. Lesions of teeth that occur during the period of follicular development of their tissue is hypoplasia, anomalies in the size and shape of teeth, fluorosis (speckled teeth), hereditary disorders of the structure of the tooth; symptoms of late congenital syphilis; color change in the process of tooth formation (UK-1, PC-2, PC-6, PC-7, PC-12). Etiology, pathogenesis. Clinic diagnostics, differential diagnostics, treatment, prevention (UK-1, PC-2, PC-6, PC-7, PC-12).

7. Lesions of the teeth that occur after their eruption: pigmentation of the teeth and plaque, erasure of hard tissues, abrasion (wedge-shaped defect), erosion of the teeth, hyperesthesia, tooth trauma (UK-1, PC-2, PC-6, PC-7, PC-12).

8. Changes in the color of the tooth. Teeth whitening (UK-1, PC-2, PC-6, PC-7, PC-12).

9. Restoration of teeth. Mistakes and complications in the treatment of diseases of hard tissues - teeth (UK-1, PC-2, PC-6, PC-7, PC-12).

10. New technologies for the treatment of caries and diseases of hard tissues - teeth (UK-1, PC-2, PC-6, PC-7, PC-12).

11. Methods for diagnosing caries and non-carious lesions of hard tissues - teeth (UK-1, PC-2, PC-6, PC-7, PC-12).

12. Planirovaniye of medical actions. Informed consent (UK-1, PC-2, PC-6, PC-7, PC-12).

13. Determining the need for dental restoration (UK-1, PC-2, PC-6, PC-7, PC-12).

14. Stages of aesthetic - restoration. A comprehensive approach to the treatment of dental caries and non-carious lesions of hard tissue teeth (UK-1, PC-2, PC-6, PC-7, PC-12).

15. The choice of methods for the treatment of caries and non-carious lesions of hard tissue - teeth, the use of various preparation techniques, the choice of filling material (UK-1, PC-2, PC-6, PC-7, PC-12).

4.4. Assignments (assessment tools) submitted for offset .

Situational tasks for assessing the competence of "PC-7" :

Situational task in therapeutic dentistry No. 1

Patient T., 39 years old, came to the dental clinic with complaints of malaise, headache. Body temperature 38 <sup>0</sup>

С.

**Objectively** : there is hyperemia of the gingival mucosa, severe bleeding in the area 3.2, 3.1, 2.1, 2.2, 1.4, 1.5, suppuration from periodontal pockets, II degree mobility in the area 3.2, 3.1, 2.1, 2.2; III degree in the area of 3.6 teeth. In area 3.6, on the vestibular side, along the transitional fold, an infiltrate that was sharply painful on palpation was found. From the anamnesis it was revealed that a week ago the patient had the flu.

In the cervical region of teeth 1.1, 2.1, 2.2, 3.3 there are bowl-shaped defects with smooth surfaces, the bottom is dense, probing is uncomfortable.

### **Questions:**

1. Make a preliminary diagnosis.

2. What additional research methods need to be carried out?

3. Carry out differential diagnostics.

4. Assign a treatment plan.

#### Situational task in therapeutic dentistry No. 2

Patient T., aged 58, asked for help from a dentist with complaints of a violation of aesthetics. History: atherosclerosis.

Objectively: the mucous membrane of the gums is pale pink, there is retraction of the gums on the lower jaw in the area of 2.3, 2.4, 2.6, 3.5, 3.6, 4.4, 4.5, 4.6 by 1/2, wedge-shaped defects in the area of 2.3, 2.4, 2.6, 3.3, 3.5, 3.6, 4.3, 4.4, 4.5, 4.6. The teeth are stable.

3.6 - the crown of the tooth is changed in color, on the chewing surface there is a filling with a broken marginal fit, percussion is painless, the transitional fold in the area of 3.6 is without pathology. On the R-gram of tooth 3.6, the root canals are filled up to the physiological tops, in the area of the top of the medial root there is destruction of bone tissue with clear contours  $5 \times 5$  mm in diameter.

# Questions:

1. Make a preliminary diagnosis.

- 2. What additional research methods need to be carried out?
- 3. Perform differential diagnosis.
- 4. Assign a treatment plan.

#### Situational tasks for assessing the competence of "PC-6" :

#### Situational task in therapeutic dentistry No. 3

**Patient N., 36 years old,** applied to the department of therapeutic dentistry . with complaints about feeling of discomfort when biting on a tooth in the upper jaw on the right, pain when eating hot food bad breath. And also with complaints about the aesthetic defects of the front teeth.

**Anamnesis of the disease** : These complaints appeared a week ago, earlier there were aching pains from thermal stimuli. The tooth has not been previously treated, so he did not go to the dentist. On the front teeth, cosmetic defects are noted from the moment of eruption of permanent teeth; during life, the size, shape and color of the spots did not change. **History of life :** Works as a salesperson. As a child, he often suffered from severe infectious diseases. Bad habits are denied. Allergic reactions are denied. The presence of infectious diseases (HIV, syphilis, hepatitis) denies.

**Objective status:** facial configuration is not changed, regional lymph nodes are not enlarged, painless on palpation. Condition of the oral mucosa, gums, alveolar processes and palate: pale pink, moderately moist. Bite: orthognathic .

2.6 tooth - deep carious is determined on the chewing surface a cavity filled with softened dentin; probing the bottom of the carious cavity is painless, communication with the tooth cavity is determined. Vertical percussion of the 2.6 tooth is slightly painful. The index of pulp sensitivity during electroodontometry of the 2.6 tooth was registered over 100  $\mu$ A.

When probing teeth 1.1 and 2.1, the surface of the enamel is smooth.

#### Questions:

- 1. Make a preliminary diagnosis.
- 2. Perform differential diagnosis.
- 3. Make a final diagnosis.
- 4. Make a treatment plan.

5. Chronic periodontitis. Clinic, diagnostics, differential diagnostics, choice of treatment method, modern methods of treatment.

#### Situational task in therapeutic dentistry No. 4

**Patient S., aged 22,** applied to the Department of Therapeutic Dentistry . with complaints of food jamming in the area of 4.7 teeth, discoloration of 4.7 teeth. And also on aesthetic defects of teeth.

Anamnesis of the disease : These complaints appeared about 1 month ago. Didn't go to the dentist. According to the patient, permanent teeth have already erupted with stains.

Anamnesis of life : Lives in the city of Krasnogorsk. Student. Bad habits: denies. Allergic reactions are denied. The presence of infectious diseases (HIV, syphilis, hepatitis) denies.

**Objective status:** facial configuration is not changed, palpation of regional lymph nodes is painless. The condition of the mucous membrane of the mouth, gums, alveolar processes and palate: the mucous membrane is pale pink, moderately moistened. Bite: orthognathic .

There are multiple chalky spots on all surfaces of the teeth, smooth enamel has a matte tint, against which pigmented brown spots are noted on the anterior surface of the upper central incisors.

4.7 tooth - on the occlusal surface there is a deep carious cavity that communicates with the cavity of the tooth. The carious cavity is filled with softened dentin.

When probing, a deep carious cavity communicating with the tooth cavity is determined. The carious cavity is filled with softened dentin. Probing is painless. Vertical percussion of 4.7 teeth is slightly painful. There is no pain reaction of the 4.7 tooth to thermal stimuli. The index of pulp sensitivity during electroodontometry of 4.7 teeth was registered above  $100 \mu A$ .

At the reception: during the treatment of the patient after anesthesia, the doctor saw the following: the patient had a pronounced swelling of the tissues, the skin turned pale and cold, the patient had problems with breathing. *Questions:* 

- 1. Make a preliminary diagnosis.
- 2. Perform differential diagnosis.
- 3. Make a final diagnosis.
- 4. Make a treatment plan. What emergency condition has developed in the patient?

5. Periapical abscess without fistula. Clinic, differential diagnosis, treatment. Mistakes and complications, methods of their prevention and elimination .

#### Situational tasks for assessing the competence of "PC-2" :

#### Situational task in therapeutic dentistry No. 5

**Patients U. 42 years old** complained of a feeling of "grown tooth", pain when biting 3.6 teeth. And also for the presence of enamel defects on the upper incisors and canines. Sensitivity of these teeth to hot and cold, quickly disappearing after removal of the stimulus.

Anamnesis of the disease : 3.6 tooth was injured about a year ago. And also the patient has recently noted an increase in hyperesthesia.

Anamnesis of life: heredity is not burdened, allergy history is not burdened, concomitant diseases: chronic gastritis, chronic tonsillitis, tuberculosis, hepatitis, HIV denies.

Objective status: facial configuration is not changed, palpation of regional lymph nodes is painless. The condition of the mucous membrane of the mouth, gums, alveolar processes and palate: the mucous membrane is pale pink, moderately moistened. Bite: orthognathic .

On the vestibular surface of the central incisors of the upper jaw there are rounded enamel defects, the bottom of the defects is pigmented, but smooth.

3.6 tooth - on the occlusal surface there is a deep carious cavity that communicates with the cavity of the tooth. The carious cavity is filled with softened dentin. The color is changed, the tooth is intact. Vertical percussion is sharply painful.

At the reception: the doctor after anesthesia during tooth treatment saw: severe pallor, cyanosis, profuse sweat, tachycardia, blood pressure dropped sharply; there was a tingling sensation, itching of the skin of the face, a feeling of fear, a feeling of heaviness behind the sternum and shortness of breath.

#### Questions:

- Make a preliminary diagnosis. 1.
- 2. Perform differential diagnosis.
- 3. Make a final diagnosis.
- 4. Make a treatment plan. What emergency condition has developed in the patient? 5.
  - Imperfect amelo and dentinogenesis . Clinic, diagnostics, differential diagnostics, treatment.

# Situational task in therapeutic dentistry No. 6

Patient V., 28 years old, applied to the Department of Therapeutic Dentistry . with complaints about constant severe pain in the area of 3.6 tooth; cheek swelling, fever, headache. As well as a violation of aesthetics and increased sensitivity to cold air and chemical irritants in the region of the incisors of the upper jaw.

Medical history : 3.6 tooth was treated 6 months ago for caries. Days ago there was constant severe pain. Didn't go to the dentist.

History of life : Works as a salesman in a toy store. Considers himself healthy. Bad habits: denies. Allergic reaction to chocolate. The presence of infectious diseases (HIV, syphilis, hepatitis) denies.

**Objective status:** facial configuration is not changed, palpation of regional lymph nodes is painless. Examination of the oral cavity. The condition of the mucous membrane of the mouth, gums, alveolar processes and

palate: the mucous membrane is pale pink, moderately moistened. Bite: orthognathic .

Small rounded enamel defects, gradually turning into normal enamel, located transversely on the most convex part of the vestibular surface of the crown 1.2, 1.1, 2.1, 2.2. The enamel in the hearth is smooth and shiny. There is a filling

on the occlusal surface of 3.6 teeth. After the filling was removed, a deep carious cavity was found. When probing, a deep carious cavity communicating with the tooth cavity is determined. The carious cavity is filled with softened dentin. Probing is painless. Vertical percussion of the 3.6 tooth is sharply painful. There is no pain reaction of the 3.6 tooth to thermal stimuli. On the radiograph - the root canals are not obturated, in the periapical tissues there is a "blurring" of the bone pattern.

#### Questions:

- Make a preliminary diagnosis. 1.
- 2. Perform differential diagnosis.
- 3. Make a final diagnosis.
- 4. Make a treatment plan.

5. Periapical abscess with fistula. Clinic differential diagnosis, treatment. Mistakes and complications in treatment, methods for their prevention and elimination.

#### Situational tasks for assessing the competence of "PC-12" :

#### Situational task in therapeutic dentistry No. 7

Patient K., 48 years old, applied to the department of therapeutic dentistry . with complaints about feeling of discomfort when biting on a tooth 4.6, pain when eating hot food bad breath. And also complains of a sharp sensitivity of teeth 1.4, 1.5, 1.6 from sour and cold food.

Anamnesis of the disease : These complaints appeared a week ago, the tooth was previously treated.

Anamnesis of life: bad habits denies. Allergic reactions are denied. The presence of infectious diseases (HIV, syphilis, hepatitis) denies.

Objective status: facial configuration is not changed, regional lymph nodes are not enlarged, painless on palpation. Necks of teeth 1.4, 1.5, 1.6 are exposed by 1-3 mm, sharply painful during probing. Bite: orthognathic . 4.6 tooth - deep carious is determined on the chewing surface a cavity filled with softened dentin; probing the bottom of the carious cavity is painless, communication with the tooth cavity is determined. Vertical percussion of the 4.6 tooth is slightly painful. The index of pulp sensitivity during electrodontometry of the 4.6 tooth was registered over 100  $\mu$ A.

#### Questions:

- Make a preliminary diagnosis. 1.
- 2. Perform differential diagnosis.

- 3. Make a final diagnosis.
- 4. Make a treatment plan.
- 5. Chronic generalized periodontitis, abscess phase . Clinic. Modern methods of treatment.

#### Situational task in therapeutic dentistry No. 8

**Patient O., 22 years old,** came to the dental clinic with a complaint of tooth sensitivity when eating. And periodic pain in the tooth 2.6 when eating sweet food.

From the anamnesis : 22, 2.3 were treated about a year ago. The patient is a Coca-Cola lover.

**Objectively :** On the vestibular side there are defects in hard tissues of teeth 1.4-2.1, 3.3-3.4, 4.3-4.4. Fillings with violation of the marginal fit in the area of teeth 2.2 and 2.3. Defects on the vestibular side are oval, located within the dentin. The bottom of the defects is smooth, yellow, crepites during probing. In tooth 2.6 on the chewing surface there is a carious cavity according to Black's class I , probing is painful along the enamel-dentin border, percussion is painless. There are no radiological data.

#### Questions:

- 1. Make a preliminary diagnosis.
- 2. Perform differential diagnosis.
- 3. Make a final diagnosis.
- 4. Make a treatment plan.
- 5. Periapical abscess without fistula. Clinic, diagnostics, differential diagnostics, choice of treatment method, modern methods of treatment.

Situational tasks for assessing the competence of "UK-1" :

Situational task in therapeutic dentistry No. 9

Patient K., 31 years old, patient K., 49 years old, came to the dentist with complaints of increased tooth sensitivity to temperature stimuli, a decrease in the length of the crown of the front teeth, and an aesthetic defect.

From the anamnesis : the patient was diagnosed with atherosclerosis about 9 years ago, and vegetative-vascular dystonia was diagnosed in childhood . The patient had previously been treated for bruxism, but treatment was not continued.

**Objectively:** bite is straight, teeth are missing 3.6, 4.6, pathological abrasion of teeth: the length of crowns 1.3, 1.2, 1.1, 2.1, 2.2, 2.3, 3.3, 3.2, 3.1, 4.1, 4.2, 4.3 is reduced by 1/3, there is an exposure of dentin with sides of the cutting edge, in teeth 1.7, 1.6, 1.5, 1.4, 2.4, 2.5, 2.6, 2.7, 3.7, 3.5, 3.4, 4.4, 4.5, 4.7, pathological abrasion of the bumps of the masticatory surface is observed. Exposing the necks of the teeth by 2 mm in the area of 3.3-3.5. The gums are pale pink, there is no plaque. The patient underwent an x-ray examination on the day of admission.

#### Questions:

- 1. Make a preliminary diagnosis and describe the x-ray picture.
- 2. Perform differential diagnosis.
- 3. Make a final diagnosis.
- 4. Make a treatment plan.
- 5. Ulcerative pulpitis. Clinic, diagnostics, differential diagnostics, choice of treatment method, modern methods of treatment.

#### Situational task in therapeutic dentistry No. 10

**Patient K., 33 years old,** at the appointment with a dentist complains of an aesthetic defect in the area of teeth 1.3, 1.4, 2.3, 2.4.

**From the anamnesis it is known that the patient brushes her teeth with** President White Plus whitening toothpaste for 6 months 2 times a day, with a hard brush.

**Objectively:** teeth 1.3, 1.4, 2.3, 2.4 are intact, in the cervical region there are defects in the form of a wedge, shiny, when probing the walls are dense, smooth, probing is painless, percussion is painless. The bite is mesial, KPU 5. The protrusion of the bone along the transitional fold in the projection of the teeth 1.7, 1.6, 1.5, the mucous membrane is not changed. On palpation, a "parchment crunch" is determined. On the chewing surface of tooth 1.6 there is a carious cavity filled with softened dentin. The cavity of the tooth is opened, probing is painless. Percussion is painless. On the Rg - picture - a focus of rarefaction of bone tissue with clear contours up to 2 cm in size. Roots 1.6 will stand in this cavity. *Questions:* 

- 1. Make a preliminary diagnosis and describe the x-ray picture.
- 2. Perform differential diagnosis.
- 3. Make a final diagnosis.
- 4. Make a treatment plan.
- 5. Purulent pulpitis. Clinic, diagnostics, differential diagnostics, choice of treatment method, modern methods of treatment.

# 5. The content of the evaluation means of intermediate certification

Intermediate certification is carried out in the form of a credit lesson .

5.1 List of control tasks and other materials required to assess knowledge, skills, abilities and experience

5.1.2. Questions for the test in the discipline "Non-carious lesions of hard dental tissues ".

1. Norms and requirements for the organization of a dental office. (UK-1, PC-2, PC-6, PC-7, PC-12).

2. Basic principles of asepsis in therapeutic dentistry (UK-1, PC-2, PC-6, PC-7, PC-12).

3. Infection control (UK-1, PC-2, PC-6, PC-7, PC-12).

4. Ergonomics and deontological principles in the treatment of caries and non-carious lesions of hard tissues - teeth. (UK-1, PC-2, PC-6, PC-7, PC-12).

5.Medical card of a dental patient, filling rules. Sections of the medical card (UK-1, PC-2, PC-6, PC-7, PC-12).

6. Lesions of teeth that occur during the period of follicular development of their tissue is hypoplasia, anomalies in the size and shape of teeth, fluorosis (speckled teeth), hereditary disorders of the structure of the tooth; symptoms of late congenital syphilis; color change in the process of tooth formation (UK-1, PC-2, PC-6, PC-7, PC-12). Etiology, pathogenesis. Clinic diagnostics, differential diagnostics, treatment, prevention (UK-1, PC-2, PC-6, PC-7, PC-12).

7. Lesions of the teeth that occur after their eruption: pigmentation of the teeth and plaque, erasure of hard tissues, abrasion (wedge-shaped defect), erosion of the teeth, hyperesthesia, tooth trauma (UK-1, PC-2, PC-6, PC-7, PC-12).

8. Changes in the color of the tooth. Teeth whitening (UK-1, PC-2, PC-6, PC-7, PC-12).

9. Restoration of teeth. Mistakes and complications in the treatment of diseases of hard tissues - teeth (UK-1, PC-2, PC-6, PC-7, PC-12).

10. New technologies for the treatment of caries and diseases of hard tissues - teeth (UK-1, PC-2, PC-6, PC-7, PC-12).

11. Methods for diagnosing caries and non-carious lesions of hard tissues - teeth (UK-1, PC-2, PC-6, PC-7, PC-12).

12. Planirovaniye of medical actions. Informed consent (UK-1, PC-2, PC-6, PC-7, PC-12).

13. Determining the need for dental restoration (UK-1, PC-2, PC-6, PC-7, PC-12).

14. Stages of aesthetic - restoration. A comprehensive approach to the treatment of dental caries and non-

carious lesions of hard tissue teeth (UK-1, PC-2, PC-6, PC-7, PC-12). 15. The choice of methods for the treatment of caries and non-carious lesions of hard tissue - teeth, the use of

various preparation techniques, the choice of filling material (UK-1, PC-2, PC-6, PC-7, PC-12).

Final test on the PIMU SDO portal https://sdo.pimunn.net/mod/quiz/view.php?id=204400

Learning	Evaluation criteria		
Outcomes	Not credited	Passed	
Completeness of knowledge	The level of knowledge is below the minimum requirements. There were gross errors.	The level of knowledge in the amount corresponding to the training program. Minor errors may be made	
Availability of skills	When solving standard problems, the basic skills were not demonstrated. There were gross errors.	Demonstrated basic skills. Typical tasks are solved, all tasks are completed. Minor errors may be made.	
Availability of skills (possession of experience)	When solving standard problems, basic skills were not demonstrated. There were gross errors.	Demonstrated basic skills in solving standard problems. Minor errors may be made.	
Motivation (personal attitude)	Educational activity and motivation are poorly expressed, there is no qualitative readiness to solve the assigned tasks	Learning activity and motivation are manifested, readiness to perform the assigned tasks is demonstrated.	
Characteristics of the formation of competence*	Competence is not fully formed. The available knowledge, skills and abilities are not enough to solve practical (professional) problems. Re- learning required	The formation of competence meets the requirements. The available knowledge, skills and motivation are generally sufficient to solve practical (professional) problems.	
Competence level*	Short	Medium/High	

# 6. Criteria for evaluating learning outcomes

For testing:

Rating " 5" ( Excellent) - points (100-90%) Rating "4" ( Good) - points (89-80%) Grade "3" (Satisfactory) - points (79-70%) *Less than 70 % - Unsatisfactory - Grade "2"* 

Developer(s):

1. Uspenskaya O.A., Doctor of Medical Sciences, Associate Professor, Head. Department of Therapeutic Dentistry;

2. Spiridonova S.A., Candidate of Medical Sciences, Associate Professor of the Department of Therapeutic Dentistry.