**KHARKIV NATIONAL MEDICAL UNIVERSITY**

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DEPARTMENT OF THERAPEUTIC DENTISTRY

**WORK BOOK**

**«METHODS OF EXAMINATION IN DENTISTRY.**

**LESIONS OF HARD TISSUES OF TEETH»**

**for 3rd year students**

**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**group number \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Kharkiv 2015**

**MINISTRY OF THE HEALTH OF UKRAINE**

**KHARKIV NATIONAL MEDICAL UNIVERSITY**

DEPARTMENT OF THERAPEUTIC DENTISTRY

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**«METHODS OF EXAMINATION FOR IN DENTISTRY.**

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**for 3rd year students**

Adopted

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**Topical Plan of Practical classes**

**for 3rd year students 5 term (Therapeutic dentistry department)**

|  |  |  |
| --- | --- | --- |
| **№** | **TOPICS** | **№ of practical classes** |
|  | The organization of dental health service in Ukraine. Structure of the dental clinics and medical departments. Tasks of dentistry, correlation with general clinical and dental disciplines. | 1 |
|  | The equipment of a dentist’s workplace: universal dental units and chairs. Safety facilities. Ethics and deontology in dentistry. Iatrogenic diseases. |
|  | The scheme of examination of dental patients. Subjective examination: complaints, medical history and patient’s anamnesis. Characteristics of pain syndrome in various lesions of teeth. | 2 |
|  | Clinical methods of examination, their importance in diagnosing oral diseases: external inspection, patient's face, vestibule of the mouth, the oral cavity proper, and dentitions. |
|  | The examination of a disease site (Locus morbi): inspection of the affected tooth, probing, percussion and palpation. |
|  | Auxiliary methods of examination: thermodiagnosis, electroodontometry (EOD), application of caries detectors: procedure, interpretation of the results. | 3 |
|  | X-ray study, fluorescent and transfluorescent diagnosis. Indications, particularities of procedure. Diagnostic tests: with anesthesia and for preparation. Technique of determination of trigger areas and examination of sites where the peripheral branches of the trigeminal nerve come out. Laboratory methods of examination. Interpretation of the results. |
|  | Medical documents of therapeutic reception: how to fill in and write out directions, and so on. The medical card of a dental patient (f.043/O) is a medical, scientific, and legal document. |
|  | The dental hygiene and its importance in the comprehensive prevention of diseases of the mouth and body as a whole. Determination of Hygiene Index of Fedorov-Volodkina and Green-Vermillion (standard and simplified procedure), and the index of effectiveness of oral hygiene. | 4 |
|  | Dental plaque and calculus. Mechanism of formation. Structure, physical properties, chemical composition, microflora. Removal methods. Carrying out the professional oral hygiene. Evaluating the effectiveness of removal of dental plaque and calculus. |
|  | Attestation 1. “Admission to the clinic” | 5 |
|  | Dental caries. Definition of the term. Statistical indicators of dental caries. Classification. |
|  | The concept of structural and functional resistance of dental hard tissues. Determination of enamel resistance (TER-test). |
|  | Modern concepts about etiology and pathogenesis of dental caries. The scientists’ contributio: Miller, D.A. Entin, I.G. Lukomski, A.E. Sharpenak, A.I. Rybakov, E.V. Borowski, P.A. Leus, V.K. Leontiev, V.R. Okushko, etc.). | 6 |
|  | Morphological changes in dental hard tissues at different stages of caries process according to the data of electronic, radiation and transfluorescent microscopy. |
|  | Acute and chronic caries in the spot stage. Pathomorphology, clinical features, diagnosis, differential diagnosis. | 7 |
|  | Treatment of acute and chronic initial caries. Medications and techniques of remineralizing therapy: groups, properties, characteristics of use. |
|  | Acute and chronic superficial caries: pathomorphology, clinical picture, diagnosis, differential diagnosis, treatment. |
|  | Acute and chronic median caries: pathomorphology, clinical picture, diagnosis, differential diagnosis, treatment. | 8 |
|  | Acute deep caries: pathomorphology, clinical features, diagnosis, inside and outside nosological differential diagnosis. |
|  | One and two treatment sessions of acute deep caries. Therapeutic pastes: groups, properties, techniques of use. |
|  | Chronic deep caries: pathomorphology, clinical picture, diagnosis, differential diagnosis, treatment. |
|  | Rampant caries: causes of development, pathomorphology, clinical picture,diagnosis | 9 |
|  | General and local treatment of multiple dental caries. Medicines: groups, dosages, methods of use. |
|  | Secondary caries of pulpless and vital teeth: causes, clinical features, diagnosis, differential diagnosis. Treatment and prophylaxis.  |
|  | Prevention of dental caries. The importance of individual and social prevention. Prophylaxis. Organization of prevention of dental caries during pregnancy, in conscripts and the workers of some industries. The assessment of effectiveness. |
|  | Non-carious lesions of teeth. The Patrikeyev’s classification. Pathomorphology, clinical picture and diagnosis of non-carious lesions occurring before teething: hypo-, hyperplasia, endemic fluorosis. Classification of dental fluorosis according A.K. Nikolishin. | 10 |
|  | Pathomorphology, clinical picture and diagnosis of non-carious lesions occurring after the eruption of teeth. Traumatic or chemical injuries. Hyperesthesia of hard dental tissues. Elimination of hyperesthesia by means of modern desensitizers: composition, properties, methods of use. | 11 |
|  | Pathomorphology, clinical picture, diagnosis and treatment of enamel erosion, wedge-shaped defects. |
|  | Errors and complications while diagnosing and treating dental caries. | 12 |
|  | The use of physical methods in treating and preventing dental caries and non-carious lesions of teeth. |
| 32. | Attestation 2 “Caries and non-carious lesions of teeth” | 13 |

**Themes for independent work of students which is submitted for the module control 1:**

|  |  |
| --- | --- |
| 1. | Special methods of examination of periodontal tissues and oral mucosa. |
| 2. | Discoloration and methods for their elimination. |
| 3. | Writing the expanded map of outpatients with different forms of caries and non-carios leasions. |

**Topical Plan of Lectures**

**for 3rd year students 5 term (Therapeutic dentistry department)**

|  |  |  |
| --- | --- | --- |
| № | Lecture topics | Number of hours |
| 1. | Dental examination of patients: subjective and objective basic and additional techniques. Medical documents of therapeutic dental reception. A case history is a medical, legal and scientific document.  | 2 |
| 2. | Dental caries. Definition. Epidemiology of dental caries: prevalence and intensity of caries, increase in the intensity. Epidemiological survey map of WHO. Etiology and pathogenesis of dental caries. Modern ideas about the causes of occurrence and theories of development of dental caries: the core, advantages and disadvantages. The concept of functional and structural resistance of hard dental tissues.  | 2 |
| 3. | Dental caries. Classification. Morphological changes of hard dental tissues at different stages of carious process according to data of radiation, electron and polarization microscopy. Clinical features, diagnosis and differential diagnosis of dental caries. The use of physical methods in diagnosing caries. | 2 |
| 4. | Treatment of caries: types, selection of the method based on the clinical form. Remineralization therapy. Stages of surgical treatment. Particularities of treatment of deep caries. General and local treatment of multiple caries. Medications and physical methods in the complex therapy of dental caries. Anesthetics in therapeutic dentistry. | 2 |
| 5. | Non-carious lesions of teeth. Classification according to Patrikeev. Pathomorphology, clinical features and diagnosis of lesions occurring before and after teething. Treatment. | 2 |
|  | Total | 10 |

**«The examination of dental patients with odontopathology».**

**Topic 1: « The organization of dental care in Ukraine. The structure of the dental clinics and medical departments. Tasks dentistry, the relationship with the general clinical and dental disciplines ».**

Control questions of the subject:

1. Therapeutic dentistry, as the basic dental discipline.
2. Tasks of therapeutic dentistry, the relationship with the general clinical and dental disciplines.
3. Sections of therapeutic dentistry.
4. The structure of the dental clinics and medical departments.

In the workbook to write:

1. To write the relationship therapeutic dentistry with the general clinical and dental disciplines.

**Topic 2: « The equipment of a dentist’s workplace: universal dental units and chairs. Safety facilities. Ethics and deontology in dentistry. Iatrogenic diseases ».**

Control questions of the subject:

1. Requirements for the dental office.
2. Equipment of medical personnel. Special equipment of dental office.
3. Workplace dentist. The device is a universal dental unit and dental chair.
4. Instruments and apparatus to remove dental plaque.
5. Basic dental instruments and tools for preparation of the teeth. Tools for endodontics.
6. Pre-sterilization processing and sterilization of dental instruments.
7. Safety regulations of the dentist.
8. Ethics and deontology of dentistry. Iatrogenic diseases in dentistry.

In the workbook to write:

1. To prescribe in workbook requirements for dental office.

**Topic 3: « The scheme of examination of dental patients. Subjective examination: complaints, medical history and patient’s anamnesis. Characteristics of pain syndrome in various lesions of teeth ».**

Control questions of the subject:

1. The scheme of examination of dental patients (goals, objectives).The notion of basic and advanced survey methods.
2. Identify basic clinical examination methods of dental patient.
3. Subjective examination: inquiry of the patient's complaints, medical history, individual history.
4. Characteristics of complaints in various diseases of the oral cavity.
5. Characteristics of anamnesis, medical history, allergic history.

In the workbook to write:

1. List the main methods of examination of the patient.
2. Identify subjective methods of examination of the patient (give a brief description).

**Topic 4: « Clinical examination methods and their importance for the diagnosis of oral diseases: survey (the extra oral examination the patient's face, the oral vestibule, the actual oral teeth rows) ».**

Control questions of the subject:

1. List the main methods of examination of patients in clinical dentistry
2. External inspection of the patient.
3. Examination of the face. The order (sequence), the diagnostic value.
4. Examination of regional lymph nodes, the technique, diagnostic value.
5. Investigation of the TMJ, the order of the method, the diagnostic value.
6. Examination of the vestibule of the mouth.
7. Inspection of the oral vestibule, Sequence, technique, the diagnostic value
8. Examination of teeth. The sequence of inspection. diagnostic value
9. System of designation of teeth.

In the workbook to write:

1. To write the basic methods of the examination of the patient in the dental clinic.
2. To write the sequence of extra-oral examination of the patient.
3. To write the sequence of intra-oral examination of the patient.

**Topic 5: «The examination of a disease site (Locus morbi): inspection of the affected tooth, probing, percussion and palpation ».**

Control questions of the subject:

1. Examination of the disease location, examination of the causal tooth.
2. Probing, percussion, palpation. Purpose and methods of implementation.
3. Subsidiary methods of patient’s examination.
4. Thermodiagnostics. Purpose and methods of implementation.

In the workbook to write:

* 1. Probing, percussion, palpation. Purpose and methods of implementation.

**Topic 6: «Auxiliary methods of examination: thermodiagnosis, electroodontometry (EOD), application of caries detectors: procedure, interpretation of the results».**

Control questions of the subject:

1. Auxiliary methods of examination of the causal tooth.
2. EOD. Indications, methods of implementation.
3. Using caries detectors. Methods of implementation. Valuation of results.

In the workbook to write:

1. To describe the technique implementation of EOD.
2. To write down in workbook detectors in dental caries.

**Topic 7: « X-ray study, fluorescent and transfluorescent diagnosis. Indications, particularities of procedure. Diagnostic tests: with anesthesia and for preparation. Technique of determination of trigger areas and examination of sites where the peripheral branches of the trigeminal nerve come out. Laboratory methods of examination. Interpretation of the results ».**

Control questions of the subject:

1. The nature of X-rays and their basic properties.
2. Indications for intraoral and extraoral x-ray images.
3. Panoramic radiography and a orthopantomography.
4. Computed tomography and indications for its use.
5. X-ray analysis. Radiographic signs of pathological processes (atrophy, hyperostosis, destruction, deformation, osteolysis, osteonecrosis, osteoporosis, osteosclerosis).
6. Fluorescent and transluminescence diagnostics. Indications, conditions for their implementation.
7. Laboratory Methods. Indications for use.
8. Trigerr zone. Methods of determining of trigger points and the definition of places of output of the peripheral branches of the trigeminal nerve.

In the workbook to write:

1. To write radiographic signs of pathological processes (atrophy, hyperostosis, destruction, deformation, osteolysis, osteonecrosis, osteoporosis, osteosclerosis).
2. To write the indicators of blood and urine of clinical/ biochemical normal tests.

**Topic 8: « Medical documents of therapeutic reception: how to fill in and write out directions, and so on. The medical card of a dental patient (f.043/O) is a medical, scientific, and legal document ».**

Control questions of the subject:

1. Medical documentation for therapeutic dentistry, principles of completing.
2. Medical card of dental patient (f. 043/0) - medical, scientific, legal document.
3. Sheet everyday accounting of work for dentist (f. 037/0) (dental clinic, department, cabinet).
4. Diary accounting of work for dentist (f. 039-2/0) (dental clinic, department, cabinet).
5. Dispensary card of dental patient (f.30).
6. Recipe. Regulation of completing.
7. Directions. Regulation of completing.
8. Concept of conditional units of labor input (CUL). Classification of procedures.

In the workbook to write:

1. To complete medical card of dental patient(f. 043/0)**.**

**Topic 9: «The dental hygiene and its importance in the comprehensive prevention of diseases of the mouth and body as a whole. Determination of Hygiene Index of Fedorov-Volodkina and Green-Vermillion (standard and simplified procedure), and the index of effectiveness of oral hygiene ».**

Control questions of the subject:

1. Hygiene of oral cavity. Methods and general means.
2. Individual oral hygiene.
3. Professional oral hygiene.
4. Means and methods of individual oral hygiene: toothpaste, brush, thread (dental floss), brushes, dental rinses, balms, elixirs.
5. Hygienic indexes. Definition hygiene index according to Fedorov-Volodkina, Green-Vermillion (standard and simplified procedure).
6. Meaning of oral hygiene in the comprehensive prevention of diseases of the oral cavity.
7. Meaning of oral hygiene in the complex prevention of general disease.

In the workbook to write:

* 1. To write a workbook procedure execution hygiene index, according to Fedoro-Volodkina and Green-Vermillion and their qualitative assessment.

**Topic 10: «Dental plaque and calculus. Mechanism of formation. Structure, physical properties, chemical composition, microflora. Removal methods. Carrying out the professional oral hygiene. Evaluating the effectiveness of removal of dental plaque and calculus ».**

Control questions of the subject:

1. The classification of dental deposits:

2. Mineralized dental deposits:

3. The theories of formation of mineralized dental deposits, the types of mineralization:

4. Professional oral hygiene:

5. Ways to remove dental deposits:

6. The assessment of the effectiveness of dental plaque using color-test.

In the workbook to write:

1. To write recipes of antiseptics used in the removal of dental plaque.

**«Caries and non-carious lesions of teeth».**

**Topic 12: « Dental caries. Definition of the term. Statistical indicators of dental caries. Classification ».**

Control questions of the subject:

1. Caries of the tooth. Definition.
2. Epidemiology of dental caries: prevalence, intensity, increase the intensity. Methodology for their determination.
3. Named the classifications of dental caries: clinical, anatomic classification (WHO) on localization, current, intense

In the workbook to write:

1. To write down in the workbook definition of statistical indicators of dental caries (prevalence, intensity, increase the intensity).

**Topic 13: « The concept of structural and functional resistance of dental hard tissues. Determination of enamel resistance (TER-test) ».**

Control questions of the subject:

* + - 1. The concepts of structural and functional resistance of enamel;
* resistance of enamel
* enamel permeability.

2. Test of enamel resistance. Essence, the technique of the interpretation of results.

3. Test of enamel resistance(TER). Essence of the technique, interpretation of the results.

4. Clinical evaluation of enamel remineralization rate.

In the workbook to write:

1. To describe in workbook test enamel resistance of enamel remineralization rate and their clinical evaluation.

**Topic 14: « Modern concepts about etiology and pathogenesis of dental caries. The scientists’ contributio: Miller, D.A. Entin, I.G. Lukomski, A.E. Sharpenak, A.I. Rybakov, E.V. Borowski, P.A. Leus, V.K. Leontiev, V.R. Okushko, etc.) ».**

Control questions of the subject:

1. The theory of caries by Miller. The essence, advantages and disadvantages of this theory.

2. The theory of caries by D.A. Entin. The essence, advantages and disadvantages of this theory.

3. The theory of caries by A.I. Rybakov. The essence, advantages and disadvantages of this theory.

4. The interpretation of the etiology and pathogenesis of dental caries by I.G. Lukomsky, A.E. Sharpenak, V.K. Leontiev, G.I. Pakhomov, V.R. Okushko.

5. The modern interpretation of the etiology of dental caries.The theory .of caries by E.V. Borowsky and P.A. Leus. The essence, advantages and disadvantages of this theory.

In the workbook to write:

1. To represent the modern conception schematically the etiology and pathogenesis of dental caries.

**Topic 15: « Morphological changes in dental hard tissues at different stages of caries process according to the data of electronic, radiation and transfluorescent microscopy ».**

Control questions of the subject:

1. The most informative methods of research in the study of morphological changes in various stages of the caries process.
2. Morphological changes in enamel caries in the stage of a polarizing light spots:
3. Micro radiography results of studies of enamel;
4. Morphological changes in enamel caries in the stage of spots according to electron microscopic study.
5. Morphological changes in the enamel at a destructive process.
6. Morphological changes of dentin. Types of reactions of dentine in caries process.
7. Stage of development of carious process in dentin. Zone of changes in the dentin.
8. Scheme of destroying the tooth structure with tooth decay.

In the workbook to write:

* 1. To write scheme of changes zones in the hard tissues of tooth caries.

**Topic 16: « Acute and chronic caries in the spot stage. Pathomorphology, clinical features, diagnosis, differential diagnosis ».**

Control questions of the subject:

1. Clinic and diagnosis of caries in stage spots (acute course).

2. Clinic and diagnosis of caries under spot (chronic course).

3. Pathological changes in initial caries.

4. Differential diagnosis of caries in stage spots with: superficial caries; hypoplasia (spotted form); fluorosis (spotted form).

In the workbook to write:

1. Compose scheme of differential diagnosis of initial caries and: surface caries; hypoplasia (spotted form); fluorosis (spotted form).

2. Prescribe drugs for the method of vital staining of teeth.

**Topic 17: « Treatment of acute and chronic initial caries. Medications and techniques of remineralizing therapy: groups, properties, characteristics of use ».**

Control questions of the subject:

1. The concept of demineralization and remineralization therapy of dental hard tissues.

2. Remineralizing therapy. Indications for using.

3. Medicinal products for the local remineralizing treatment. The composition of using. Properties

4. Mechanism of anticaries action of fluoride.

5. Methods of remineralizing therapy with calcium and fluorine-containing drugs.

6. Increasing the efficiency of remineralizes therapy.

7. Evaluation of remineralizing therapy.

In the workbook to write:

* + - 1. Indications for remineralizes therapy
			2. Technique of application of remineralizing means (fluoride varnish, fluoride gels).

**Topic 18: « Acute and chronic superficial caries: pathomorphology, clinical picture, diagnosis, differential diagnosis, treatment ».**

Control questions of the subject:

1. Clinic and diagnosis of acute and chronic superficial caries.
2. Differential diagnosis of superficial caries.
3. Pathological changes in the enamel, dentin, pulp, with surface caries.
4. Operative treatment of dental caries.
5. Treatment of superficial caries.

In the workbook to write:

1. To make a table of differential diagnosis of superficial caries whith: fluorosis (erosive form); erosion of dental hard tissues; a wedge-shaped defect; an acid necrosis.

**Topic 19: « Acute and chronic median caries: pathomorphology, clinical picture, diagnosis, differential diagnosis, treatment ».**

Control questions of the subject:

1. Manifestation of middle caries, features of acute and chronic course.

2. Pathologic anatomy of middle caries, pulpal reaction to caries process.

3. Differential diagnosis of middle caries with other stages of caries, complications of caries, non-carious lesions of hard tissues of teeth.

4. Methods of treatment of middle caries. The features of the anesthesia. The preparation and the filling of the cavities with middle caries.

5. Mistakes and complications in the diagnosis and treatment of middle caries. Prevention of mistakes and complications in the diagnosis and treatment of middle caries.

In the workbook to write:

1. Prescription of antiseptics for the treatment of middle caries.

2. To make the differential diagnosis of chronic middle caries and chronic periodontitis fibrosis.

**Topic 20: « Acute deep caries: pathomorphology, clinical features, diagnosis, inside and outside nosological differential diagnosis ».**

Control questions of the subject:

1. Clinic of acute deep caries.
2. Pathological anatomical changes in the dental hard tissues and pulp in deep caries.
3. Differential diagnosis of acute deep caries with an average (medium) caries.
4. Differential diagnosis of acute deep caries with acute focal pulpitis.
5. Differential diagnosis of acute deep caries with a chronic fibrous pulpitis.
6. The principles of treatment of deep caries.

In the workbook to write:

1. To write in the workbook scheme of the differential diagnosis of acute deep caries with: medium caries; acute focal pulpitis; chronic fibrous pulpitis.

**Topic 21: « One and two treatment sessions of acute deep caries. Therapeutic pastes: groups, properties, techniques of use ».**

Control questions of the subject:

1. Treatment of the deep caries.
2. Methods and means of anesthesia for treatment of the deep caries.
3. Features preparation and medicating application of carious cavity for treatment of the deep caries.
4. Methodology for treatment of the deep caries in the one visit or two visits.
5. Difference between control land hermetic bandages.
6. Groups of medical liners for treatment of the deep caries, there functions.

In the workbook to write:

1. To write prescriptions of pastes for treatment of the deep caries.
2. Indications for treatment of caries in the one or two visits.

**Topic 22: « Chronic deep caries: pathomorphology, clinical picture, diagnosis, differential diagnosis, treatment ».**

Control questions of the subject:

1. The clinical picture of chronic deep caries.

2. Pathological picture of chronic deep caries.

3. Differential diagnosis of chronic deep caries with the following diseases:

4. Treatment of chronic deep caries. Particularities of medical treatment; applied antiseptic solution.

In the workbook to write:

1. Write down in workbook scheme differential diagnosis of chronic deep caries with the following diseases : a) chronic secondary caries; b) chronic fibrous pulpitis; c) chronic fibrous periodontitis.

**Topic 23: « Rampant caries: causes of development, pathomorphology, clinical picture, diagnosis ».**

Control questions of the subject:

1. The etiology of rampant (blooming, multiple) caries.

2. Features of pathological changes in dentin in rampant caries.

3. Clinic of rampant caries

4. Differential diagnosis of rampant caries.

6. Meaning laboratory indicators of saliva and blood in the diagnosis of rampant caries.

In the workbook to write:

1. Describe the features of clinical manifestations of rampant caries.

2. Make a differential diagnosis of rampant caries with non-carious lesions (hypoplasia, fluorosis).

**Topic 24: « General and local treatment of multiple dental caries. Medicines: groups, dosages, methods of use ».**

Control questions of the subject:

1. Principles of treatment multiple caries.

2. Choosing tactics of local treatment of multiple (rampant,blooming) caries.

3. Preparation cavities taking into account individual caries and tooth vitality, filling materials properties.

4. treatment of multiple (rampant, blooming) caries. Group of drugs, their purpose, dosing.

In the workbook to write:

1. Prescriptions of drugs for general treatment of multiple caries.

**Topic 25: « Secondary caries of pulpless and vital teeth: causes, clinical features, diagnosis, differential diagnosis. Treatment and prophylaxis ».**

Control questions of the subject:

1. The concept of secondary caries and recurrence caries of teeth with removal pulp;

2. The etiology of secondary or recurrent caries.

3. Clinic and treatment of secondary caries.

4. Clinic and treatment of recurrent caries of teeth with removal pulp.

5. Prophylaxis of secondary caries.

In the workbook to write:

1. Prevention of secondary caries and recurrence of tooth caries.

**Topic 26: « Prevention of dental caries. The importance of individual and social prevention. Prophylaxis. Organization of prevention of dental caries during pregnancy, in conscripts and the workers of some industries. The assessment of effectiveness ».**

Control questions of the subject:

1. Dental prophylaxis. Types of preventive arrangements of caries.
2. Classification of preventive arrangements by WHO.
3. Endogenous medicinal and medicinalless prophylaxis.
4. Exogenous medicinal and medicinalless prophylaxis.
5. Meaning of general caries prophylaxis (role of nutrition).
6. Meaning of individual caries prophylaxis (methods of increase of enamel resistance).
7. Hygiene of oral cavity (professional, individual).
8. Role sealing of fissures in the caries prophylaxis.
9. Organization of prevention of dental caries pregnant, conscripts, employees.
10. Evaluating the effectiveness of caries prevention.

In the workbook to write:

1. To write types of preventive measures of dental caries (endogenous medicinalless and medicinal prophylaxis, exogenous medicinalless and medicinal prophylaxis).

**Topic 27: « Non-carious lesions of teeth. The Patrikeyev’s classification. Pathomorphology, clinical picture and diagnosis of non-carious lesions occurring before teething: hypo-, hyperplasia, endemic fluorosis. Classification of dental fluorosis according A.K. Nikolishin ».**

Control questions of the subject:

1. The classification of non-carious lesions of hard tooth tissues (Patrikeev VK, 1968).

2. System enamel hypoplasia: etiology, pathogenesis, clinical presentation, differential diagnosis, treatment and prevention.

3. Local enamel hypoplasia: etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment and prevention.

5. Enamel hyperplasia: etiology, clinical manifestations, treatment.

6. Dental fluorosis: etiology, pathogenesis, classification. Clinical manifestations, diagnosis, differential diagnosis, treatment and prevention.

In the workbook to write:

1. Classification of non-carious lesions by Patrikeyev V.K. (1956).

2. Measures of individual and collective prevention of dental fluorosis

3. Teeth whitening techniques, recipes, medicines for bleaching teeth

**Topic 28: « Pathomorphology, clinical picture and diagnosis of non-carious lesions occurring after the eruption of teeth. Traumatic or chemical injuries. Hyperesthesia of hard dental tissues. Elimination of hyperesthesia by means of modern desensitizers: composition, properties, methods of use ».**

Control questions of the subject:

1. Traumatic lesions of hard dental tissues. Acute injury of teeth. The reason, clinic, diagnosis, treatment.

2. Chronic trauma teeth. The reason, clinic, diagnosis, treatment.

3. Chemical affections of hard tooth tissues. Etiology, type.

4. Hyperesthesia of hard tooth tissues. Classification, etiology, pathogenesis, morbid anatomy, clinical diagnosis.

5. The principles of general and local treatment, prevention of chemical and traumatic affections of hard tooth tissues.

6. The removal of hyperesthesia with the help of modern desensitizers (their composition, properties, the method of using).

In the workbook to write:

1. To describe a complex of measures for the prevention of acid necrosis of hard tooth tissues.
2. To write prescriptions for medicinal drags for the local and general treatment of hyperesthesia.

**Topic 29: « Pathomorphology, clinical picture, diagnosis and treatment of enamel erosion, wedge-shaped defects ».**

Control questions of the subject:

1. Etiology and pathological changes of enamel erosion.

2. Clinic and differential diagnosis of enamel erosion.

3. Etiology and pathomorphology of wedge-shaped defects.

4. Clinic and differential diagnosis of wedge-shaped defects.

5. Treatment of wedge-shaped defects and of enamel erosion.

In the workbook to write:

1. Make a table of differential diagnosis of wedge-shaped defect with: superficial caries; secondary caries; erosion of dental hard tissues.

2. Make a table of differential diagnosis of erosion of dental hard tissues with: necrosis of the hard tissues of the tooth; erosive hypoplasia, fluorosis.

**Topic 30: « Errors and complications while diagnosing and treating dental caries ».**

Control questions of the subject:

1. Available diagnostic errors during the examination of patients with caries.

2. Errors and complications arising during the preparation of cavity. Methods of prevention and elimination.

3. Errors and complications arising during the filling of cavities. Methods of prevention and elimination.

4. Errors and complications arising after treatment of caries. Methods of prevention and elimination.

In the workbook to write:

1. To list errors during the preparation of cavity.

2. To list errors during the filling of cavities.

**Topic 31: « The use of physical methods in treating and preventing dental caries and non-carious lesions of teeth ».**

Control questions of the subject:

1. Medicinal electrophoresis (ionic medication). The mechanism of action, indications, contraindications. Technique of procedure.
2. Electroanesthesia. The mechanism of action, indications, contraindications. Technique of procedure.
3. Electroodontodiagnosis (electric pulp test). The mechanism of action, indications, contraindications. Procedure.
4. UV radiation. The mechanism of action, indications, contraindications. Procedure.
5. Physiotherapy and medicines used in case of dental caries.
6. Physiotherapy and drugs used for non-carious lesions of dental hard tissues.

In the workbook to write:

1. To list the physical methods for the treatment and prevention of dental caries.
2. To list the physical methods for the treatment and prevention of non-carious lesions.

**Topic 32: « Writing the expanded map of outpatients with different forms of caries and non-carios leasions ».**

Control questions of the subject:

1. Writing the expanded map of outpatients depending on the type of dental hard tissue lesions.

**Oriented List of Theoretical Questions**

**to Attestation 1 «Dental examination of a patient with odontopathy».**

1. Therapeutic dentistry is a main stomatological discipline. The objectives of therapeutic dentistry, its correlation with general clinical and dental disciplines. Branches of therapeutic dentistry. The contribution of E.M. Hofunh, I.O. Novik in solving actual problems of dentistry.

2. The structure of dental polyclinic and its therapeutic department. Equipment of a dentist’s workplace. Ethics and deontology in dentistry. Iatrogenic diseases.

3. Occupational diseases of a dentist and their prevention.

4. Urgent conditions in therapeutic dentistry: causes of development, clinical manifestations. Emergency medical care.

5. Principles and scheme of inspection of dental patients. Importance and information value of the subjective method, the sequence of its application.

6. Basic methods of physical examination of dental patients: technique of conduction, their information value and importance.

7. Additional methods of physical examination of dental patients: methods of conduction, interpretation of results.

8. Medical documents of a therapeutic reception: rules for filling in. The medical card of a dental patient (f. 043/O) is a medical, scientific and legal document.

9. Oral hygiene. Means and methods. The importance of a dental plaque in the pathogenesis of dental caries.

10. Definition of the hygiene index according to Fedorov-Volodkina, qualitative and quantitative characteristics, interpretation of results.

11. Definition of the hygiene index by Green-Vermillion, interpretation of results.

12. Dental layers. Types, composition. The mechanism of formation of dental plaque and calculus. The role of dental plaque in caries formation.

13. The concept of professional dental cleaning. Determination, methods of removing dental plaque, ways and tools.

**Attestation 2 «Dental caries and non-carious lesions of teeth».**

1. Dental caries. Definition. Epidemiology of dental caries: prevalence, intensity, increase in the intensity; techniques of their determination.

2. Dental caries. Definition. Classification of dental caries (working).

3. Miller’s theory of the origin and development of caries. The core, advantages and disadvantages.

4. The theory of the origin and development of caries according to D.A. Entin. The gist, advantages and disadvantages.

5. The theory of the origin and development of caries of A.I. Rybakov. The core, positive and negative sides.

6. Theories of the origin and development of caries according to E.V. Borowski. The core, positive and negative sides.

7. Modern interpretations of the etiology of dental caries. Species of microorganisms of the oral cavity. Factors causing their cariogenicity.

8. Enamel resistance test. The core, technique of carrying out, interpretation of results.

9. The concept of structural and functional resistance of enamel. The conception and importance of dental liquor.

10. The conception of resistance of hard dental tissues. Technique of conduction and interpretation of TER-test.

11. Pathomorphology, clinical features, diagnosis of acute initial caries (in the stage of white spot lesions).

12. Treatment of acute initial caries (white spots). Drugs and technique of conduction.

13. Pathomorphology, clinical features, diagnosis of acute superficial caries.

14. Pathomorphology, clinical features, diagnosis of chronic superficial caries.

15. Pathomorphology, clinical features, diagnosis of acute middle caries.

16. Sequence and stages of treatment of acute middle caries.

17. Pathomorphological changes of dental tissues in case of chronic middle caries.

18. Clinical features, diagnosis of chronic middle caries.

19. Pathomorphology, clinical features, diagnosis of acute deep caries.

20. Treatment of acute and chronic middle caries.

21. Methods of isolating teeth from saliva. The set for application of cofferdam: composition, purpose. The application of cofferdam depending on a clinical situation.

22. Sequence and particularities of the stages of treatment of acute deep caries in one visit. Medicinal pastes: groups, composition, properties, mechanisms of action, particularities of preparation and application.

23. Treatment of acute deep caries in two visits. Sequence and particularities of stages.

24. Pathomorphology, clinical features, diagnosis of chronic deep caries.

25. Treatment of chronic deep caries. Sequence of stages and features of treatment.

26. Blooming caries: definition, causes of development, clinical manifestations and diagnosis.

27. The choice of strategy of preparing carious cavities taking into account individual caries-resistance and vitality of a tooth, as well as the properties of filling materials.

28. Treatment of blooming caries. Groups of drugs, particularities of administration and dosage.

29. Pathomorphology, clinical features and diagnostics of secondary chronic deep caries.

30. Causes of development and prevention of secondary caries.

31. Non-carious dental lesions. Classification according to Patrikeev. Pathomorphology, clinical features and diagnostics of non-carious lesions occurring before teething: hypoplasia, hyperplasia, endemic fluorosis. Classification of dental fluorosis suggested by A.K. Nikolishin.

32. Pathomorphology, clinical manifestations, diagnostics of non-carious lesions arising after teething: traumatic and chemical injuries.

33. Dental hyperesthesia: causes of development, types.

34. Treatment of hyperesthesia: groups of modern desensitizers, composition, properties, techniques of application.

35. Pathomorphology, clinical features, diagnosis and treatment of wedge-shaped defects.

36. Pathomorphology, symptoms, diagnosis and treatment of erosions of dental enamel.

37. Discoloration and methods for its elimination.

38. The conception of dental restoration. Planning of the conduction of restoration. Tools and accessories used to carry out and finish this process.

39. Methods and means of anesthesia used in the treatment of dental caries.

40. Prevention of dental caries. Definition. Types of prophylaxis. The value of individual and social prevention.

41. The application of physical methods in the complex treatment of dental caries: indications, contraindications, mechanism of action and techniques of conduction.

**Oriented List of Practical Skills**

**Learnt in Attestation 1 «The examination of dental patients with odontopathy».**

1. To be able to equip a dental office and ensure its operation in compliance with hygiene requirements and fundamentals of ergonomics in dentistry.

2. To comply with the safety precautions in dealing with electrical appliances, universal dental units and chairs, potent medications, small endodontic instruments.

3. To provide medical aid in case of fainting, collapse, shock, allergic reactions, hypertensive crisis.

4. To carry out the subjective inspection of a patient: to ask complaints, to take anamnesis of the disease and life.

5. To conduct the basic methods of objective examination: external inspection of a patient, the inspection of the oral vestibule and the whole mouth.

6. To examine the site of disease: examination of the carious cavity, probing, percussion, palpation.

7. To carry out additional methods of examination: thermodiagnosis, electric pulp test, the use of caries-detector dyes (vital staining) and others.

8. To evaluate the results of additional methods of examination: thermodiagnosis, electric pulp test, the use of caries-detector dyes (vital staining) and others.

9. To evaluate the results of clinical tests of blood and urine.

10. To fill in both the outpatient card of a dental patient and the sheet of patients’ daily records.

11. To administer X-ray and allergic examinations as well as the procedures in the physiotherapy room, to address to other specialists.

12. To find out the hygiene index according to Fedorov-Volodkina and evaluate the condition of the oral hygiene.

13. To determine the hygiene index by Green-Vermillion and evaluate the state of the oral hygiene.

14. To remove dental plaque and calculus in different ways: mechanical, physical and chemical.

15. To carry out the professional oral hygiene.

16. To evaluate the effectiveness of the oral hygiene.

**Attestation 2 «Dental decay and non-carious lesions of teeth».**

1. To diagnose non-carious lesions arising before teething: hypoplasia, hyperplasia, dental fluorosis and others.

2. To diagnose non-carious lesions occurring after teething: traumatic lesions, chemical destruction, erosions of enamel, hyperesthesia, and wedge-shaped defects.

3. To determine the prevalence, intensity and increase in the intensity of caries.

4. To identify the resistance of enamel (TER-test).

5. To diagnose acute and chronic initial, superficial, middle and deep caries, using basic and additional methods of examination.

6. To carry out the differential diagnosis of various forms of dental decay grounding on interior symptoms.

7. To diagnose secondary caries of pulpless and vital teeth, using basic and supplementary methods of examination.

8. To diagnose blooming caries applying basic and additional methods of examination.

9. To administer the general treatment of blooming caries.

10. To administer and carry out the non-operational treatment of acute initial caries (remineralization therapy).

11. To administer and conduct the surgical treatment of various forms of dental decay.

12. To perform application, infiltration, conduction, intraligamental, subperiosteal anesthesia.

13. To administer and conduct the treatment of acute deep caries in one visit using odontotropic pastes.

14. To administer and carry out the treatment of acute deep caries in two visits applying odontotropic pastes.

15. If indicated to prescribe physical methods in the complex treatment of caries and non-carious lesions of teeth.

16. To prescribe the preventive measures and carry out prophylactic manipulations to prevent caries.

17. To find out errors and complications in diagnosing and treating dental caries, using basic and additional methods of inspection, and eliminate them.

**WORKING BOOK**

**«METHODS OF EXAMINATION FOR DENTAL PATIENT.**

**LESIONS OF HARD TISSUES OF TEETH»**

**for 3rd year students**

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