

CATALOGUE OF COMPETENCY

In the specialty "Orthopedic dentist"

POSTGRADUATE LEVEL

Catalogue of competency in the specialty "Orthopedic dentist"

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Explanatory note

Currently, the Kyrgyz Republic is undergoing an active reform in the medical industry, which is aimed at optimizing the work of all levels of health care, as a result of which the system of medical education is undergoing significant changes, as one of the fundamental divisions that provide practical health care with professional personnel. The task of health education organizations within the framework of the reforms carried out in the health care system and medical education is to improve the quality of training of specialists corresponding to the changing needs of the population.

In this regard, the proposed new catalog of competencies of an orthopedic dentist has been developed. The duration of postgraduate training in the specialty "general practice dentist" is 2 years, which corresponds to the new document approved by the order of the Ministry of Health of the Kyrgyz Republic of 18.05.2015. No. 248 "Strategy for the development of postgraduate and continuing medical education in the Kyrgyz Republic for 2014-2020". When developing the document, the standards of training of general practice dentists in international educational institutions, in particular in the Russian Federation and the Republic of Belarus, were also taken into account.

Chapter 1.

General provisions

1.1. Definition of concepts

Orthopedic dentistry is a field of clinical medicine that studies the etiology and pathogenesis of diseases, anomalies, deformities and injuries of the teeth, jaws and other organs of the oral cavity and maxillofacial region. "Orthopedic dentist" is a specialist who is engaged in prosthetics of teeth with complete and partial loss, as well as restoration of the integrity of the dentition with healthy roots using modern orthopedic methods, who has completed training under the program of postgraduate professional education in clinical residency or professional retraining in the specialty

"Orthopedic Dentistry", which is required to master the medical manipulations of the orthopedic dental profile, that is, to be able to provide qualified orthopedic dental care to the population in dental diseases and to carry out basic medical and diagnostic measures, as well as to master the methods of forming a healthy lifestyle and strictly comply with the requirements of medical ethics and medical deontology when conducting health - improving, preventive, medical and

diagnostic and rehabilitation measures among the population in outpatient settings.- polyclinic conditions.

1.2. Basic principles of the work of a specialist dentist orthopedist

- Open and unrestricted access to medical care, restoration of dentition and prosthetics, as well as restoration of full-fledged

chewing, speaking ability, improvement of the appearance of the patient's face are the main tasks for the orthopedic dentist. Modern

dentistry is constantly evolving, and the orthopedic dentist is obliged to improve their skills, to be aware of various new techniques, in order to

to help your patients as much as possible in the return of the lost functions of the chewing apparatus;

- Simultaneous treatment of both acute and chronic diseases. The orthopedic dentist studies various factors that provoke anomalies and deformations of the

structure of the dentoalveolar apparatus. He is engaged in the supervision, rehabilitation of his patients after prosthetics, develops preventive methods aimed at combating complications after orthopedic intervention, and to preserve the health of the dentition as a whole;

- Preventive focus of care;

- Duration and continuity of care based on the needs of each patient;

- Coordination of medical care to the patient;

- The principle of economic efficiency and expediency of assistance.

1.3. Purpose of the document

This Catalog of competencies should become part of the regulations for postgraduate training of a dentist orthopedist

Based on this catalog: Determine:

The purpose and content of postgraduate training of a dentist orthopedist

- the level of professional competence, knowledge and practical skills of an orthopedic dentist

Developed:

Training programs for the dentist orthopedist;

criteria for assessing the quality of training of a dentist orthopedist;

standard requirements for certification of a dentist orthopedist

standards of examination, treatment, rehabilitation and follow-up of patients; Organized by:

educational process;

professional orientation of graduates of medical universities; Conducted:

certification of "dentists and orthopedists".

1.4. Users of the document

According to the purpose of the document, the users are:

- Ministry of Health of the Kyrgyz Republic
- Educational organizations
- Health organizations
- Professional associations
- Medical practitioners
- Residents
- Other stakeholders

Chapter 2.

General tasks

2.1. Dentist as a medical specialist/expert

An orthopedic dentist is a doctor who has received special training to provide orthopedic dental care to the population. As a specialist, he provides dental care to patients within the limits of his professional competence, observing the principles of medical care. The professional competencies of an orthopedic dentist are described in a special part of the document.

General competencies

"Orthopedic dentist" as a specialist must have general cultural (GC) and professional competencies (GC) General cultural competencies (GC) are characterized by

The ability and willingness to analyze socially significant problems and processes, to use in practice the methods of achieving the humanities, natural sciences, biomedical and clinical sciences in various types of their professional activities as an orthopedic dentist.

Ability and readiness for logical and reasoned analysis, public speech, conducting discussions and polemics, editing texts professional therapeutic content, the implementation of educational and pedagogical activities, cooperation and conflict resolution, tolerance;

The ability and willingness to use management methods, organize the work of performers, find and make responsible management decisions in the context of different opinions and within the framework of their professional competence as an orthopedic dentist.

The ability and willingness to carry out their activities in accordance with the moral and legal norms accepted in the society, to comply with the rules of medical ethics, laws and regulations on working with confidential information, to maintain medical secrecy.

As a specialist, an orthopedic dentist is able to:

-take care of the health of patients and society (assess the risks to the health of patients, give advice on maintaining and promoting health, maintaining a healthy lifestyle, both in general and dental terms, recommend screening tests and vaccination in accordance with national protocols);

- advise, accompany and care for patients in cooperation with representatives of other specialties, duly respecting their right to self-determination;
- conduct collection of anamnesis;
- conduct an examination (clinical examination) of the patient;
- interpret the information obtained during the collection of anamnesis and clinical examination, establish a preliminary diagnosis and differential diagnosis, and develop a patient management plan using the results of an objective examination;
- perform routine tests and additional procedures taken in dentistry;
- assign appropriate diagnostic and therapeutic measures, explain their essence to the patient and interpret the results;
- care of properly and long-term for patients with chronic, incurable, progressive diseases;
- advise patients and their families on the formation of a healthy lifestyle and the prevention of diseases;
- perform all diagnostic and dental activities, taking into account the cost/reasonable utility ratio and guarantee the safety of patients, applying the principles of efficiency, expediency and cost-effectiveness;
- store and protect medical information in properly;
- maintain and expand the professional competence.

2.2. Communication skills

"Orthopedic dentist" manages effectively and in accordance with the situation to have relationships with patients, families, contact persons and other specialists involved in the treatment. It is based in decisions and communication of information on mutual understanding and trust.

The competence of

the "Orthopedic dentist" is capable of:

- build trusting relationships with patients,
 - get important information from patients and their environment, discuss it, and share elements of the knowledge gained, taking into account the patient's situation; сообщить communicate the risks and benefits of diagnostic and therapeutic measures in a form that is understandable to the patient and obtain informed consent;
 - make a decision about diagnostic and therapeutic procedures for disabled and underage patients by discussing these procedures with the appropriate representatives of these patient groups;
 - document the information received during the consultation within the required time frame;
- empathize the reporting bad news and is responsible to report complications and mistakes.

2.3. Skills of working in cooperation (in a team)

The orthopedic dentist collaborates with patients, contact persons and other treatment participants from a wide variety of professional groups, taking into account their experience and opinions.

Competencies

The orthopedic dentist is able to: сотрудничать

- cooperate with other specialists and experts of other professional groups, with nurses, especially, to provide long-term care to patients with various diseases;
- recognize differences of interest, accept other opinions, and avoid conflicts and resolve them through cooperation.

2.4. Management skills (manager)

An orthopedic dentist becomes a member of the healthcare system and contributes to the optimization of the work of the healthcare organization in which he works. It carries out its management tasks within the framework of its inherent functions. It sets priorities and consciously decides how to use limited health resources.

Competencies

As a manager, an orthopedic dentist is able

- successfully manage their professional activities and take on management tasks that correspond to their professional position;
- find a balance between your professional and private activities;
- use effectively the limited health care resources for the benefit of the patient, taking into account efficiency, adequacy and cost-effectiveness;

- provide and improve the quality of medical care and patient safety

2.5. Health promotion and healthy lifestyle promotion skills

An orthopedic dentist can promote a healthy lifestyle among patients and the public. It can help patients navigate the healthcare system and get appropriate care in a timely manner.

Competencies

The orthopedic dentist is able to: описать

- describe the factors that affect the health of a person and society and contribute to the preservation and strengthening of general and dental health;
- recognize problems that affect the general and dental health of the patient and take the necessary measures.

2.6. Research Scientist

During his professional activity, an orthopedic dentist strives to acquire significant knowledge in his specialty, monitors their development and promotes them.

Competencies

As a research scientist, an orthopedic dentist is able to:

- constantly improve the skills aimed at his professional activity;
- critically comprehend specialized medical information and its sources and take it into account when making decisions;
- inform patients, medical students, other doctors, government officials, and other people who actively care about their health, and support them in their actions to learn;
- promote the development, dissemination and implementation of new knowledge and methods.

2.7. Knowledge in the field of professional ethics

The orthopedic dentist carries out his practical activities in accordance with ethical norms and principles, quality standards of medical care and regulatory legal acts in the field of healthcare.

Competencies

As a professional, an orthopedic dentist is able to:

- carry out his professional activities in accordance with high quality standards, demonstrating a responsible and careful attitude; to patients
- practice ethically and responsibly, while respecting the legal aspects of the activities of medical professionals.

Chapter 3.

Special tasks

Types of activities of a dentist orthopedist

The orthopedic dentist is obliged to master the following types of activities and their corresponding personal tasks for providing orthopedic dental care to the population, in accordance with the regulatory legal documents of the Kyrgyz Republic:

- diagnosis, treatment and prevention of the most common dental diseases;
- provision of emergency and emergency medical care;
- provision of specialized orthopedic dental care;
- rehabilitation of dental patients;
- performing dental manipulations;
- referral for consultation and treatment to other specialists;
- organizational work.

A doctor who is engaged in orthopedic dentistry treats such pathologies as:

- Anomalies of the dentoalveolar system
- Partial and complete defects of the crown part of the teeth
- Pathological erasability of hard tooth tissues:
- Periodontal diseases
- Partial adentia (primary and secondary):
- Complete absence of teeth
- Injuries, defects and deformities of the maxillofacial region
- Diseases of the temporomandibular joint

In accordance with the educational requirements for the specialty "dentist-orthopedist", a specialist who has completed training in a clinical residency must have the following competencies.

. An orthopedic dentist should know:

1. Organization of orthopedic dental care for the population;
2. modern theories of the etiology and pathogenesis of pathological conditions (compensated, subcompensated and decompensated) of the maxillary system caused by anomalies in the development of the jaw bones, acquired partial or complete defects of the teeth and dentition, as well as defects and deformities of the maxillofacial region in adults, the elderly and senile age;
3. the theory of articulatory balance and functional pathology of the dentoalveolar system;
4. biomechanics of the maxillary system: system components and their functional interaction (movements of the lower jaw in the sagittal, frontal and horizontal planes); contacts of teeth during occlusal movements of the lower jaw, factors affecting the nature of occlusal contacts;
5. preparation of the oral cavity for orthopedic treatment: therapeutic, surgical, orthodontic;
6. modern principles of complex, orthodontic and prosthetic treatment of pathological conditions of the dentoalveolar system (compensated, subcompensated and decompensated), caused by anomalies in the development of the jaw bones or acquired partial or complete defects of the teeth and dentition, as well as defects and deformities of the maxillofacial region in adults, the elderly and senile age.
7. theoretical foundations of odontopreparation; requirements for properly prepared teeth for various types of dentures; principles of preparation, tools and stages of preparation; modern methods of preparation of teeth;

8. clinical and biological aspects of the protection of prepared teeth with the use of temporary dentures;
9. etiology, clinical manifestations and theoretical foundations of orthopedic treatment of partial and complete defects of dental crowns, complicated by root and root canal anomalies, intracortical resorption, periodontitis with the use of modern methods. Metal, composite, ceramic and ceramic inlays (inlay, onlay, overlay, pinlay), including those made by computer modeling. Restoration of the complete defect of the dental crowns with the help of various types of stump pin structures, including metal, titanium, carbon, composite, anchor pins in combination with composite materials. Indications, contraindications, methods of making veneers;
10. etiology, clinical manifestations, differential diagnosis and theoretical foundations of orthopedic treatment of compensated, subcompensated and decompensated forms of partial adentia, complicated by malocclusion, deformities of the dentition, unfixated bite, distal displacement of the lower jaw, deep incisor overlap, traumatic occlusion, parafunctions, pathological erosion, periodontitis, arthrosis or dysfunction of the temporomandibular joints, post-traumatic deformity of the prosthetic bed and field;
11. biomechanical and clinical aspects of treatment of patients with fixed prosthesis structures;
12. theoretical foundations of orthopedic treatment with the use of metal-free ceramic dentures made using various technologies: firing of porcelain mass on a refractory model, firing on an aluminum oxide frame, injection molding, slip casting;
13. biomechanical and clinical aspects of the treatment of patients with removable dentures with various clamp and non-clamp fixation methods (telescopic, friction, rotary locks, magnetic clamps, etc.);
14. theoretical foundations of the structure of articulators: types, selection, installation of models; facial arch; adjustment to an individual function;
15. etiology, clinic of pathological occlusion of dentition: types of premature contacts, complications, treatment;
16. etiology, clinical manifestations and theoretical foundations of orthopedic treatment of pathological (increased) erasability of hard tooth tissues, complicated by a decrease in interalveolar height, arthrosis or dysfunction of the temporomandibular joints, partial adentia, deformities of the dentition, periodontitis, habitual shift of the lower jaw, malocclusion anomalies;
17. indications for use, types of occlusal splints and bite plates, errors in their application;
18. periodontal aspects of occlusion: masticatory loads and their effect on the bone tissue of the alveolar process; the significance of occlusive trauma in the pathogenesis and etiology of periodontitis; treatment of traumatic occlusion;
19. etiology, clinical manifestations, differential diagnosis and theoretical foundations of methods of research and orthopedic treatment of periodontal diseases: gnathodinamometry, polarography, laser and ultrasound Doppler flowmetry, periostometry, reoparodontography, selective grinding of teeth, temporary splinting, orthodontic treatment, direct prosthetics, permanent splinting;
20. theoretical bases of complex treatment of periodontal diseases: therapeutic, orthodontic, orthopedic, surgical;

21. theoretical foundations of planning the design of splinting prostheses: modern structural elements and their purpose; parallelometry;

22. clinic and theoretical foundations of orthopedic treatment of patients with complete adentia; classification of toothless jaws according to the degree of atrophy of the alveolar processes and the body of the jaw, the nature of the mucous membrane of toothless jaws; indications and contraindications to the use of implants;

23. regularities of occlusion and articulation of dentition in different types of occlusion; their restoration in dentures for toothless jaws by methods of anatomical setting of teeth;

24. the laws of articulation; creation of dynamic occlusion on the working and balancing sides; construction of artificial dentition;

25. problems of aesthetics and phonetics in the orthopedic treatment of patients with complete adentia;

26. gerontostomatological aspects of orthopedic treatment, including patients with complete adentia;

27. clinical manifestations and theoretical foundations of orthopedic treatment of complete absence of teeth, complicated by significant atrophy of the alveolar processes of the jaw bones, anomalies of the jaw bones, post-traumatic deformation of the prosthetic bed and prosthetic field, diseases of the mucous membrane, small vestibule of the oral cavity and high attachment of the frenules, parafunctions, maladaptation to removable dentures, dysfunction of the temporomandibular joints;

28. etiology, clinic, theoretical foundations of differential diagnosis, treatment and prevention of diseases caused by the materials of dentures: galvanosis, allergic stomatitis, toxic-chemical stomatitis;

29. tactical and technical errors in orthopedic treatment (dental defects, partial adentia, pathological erasability of hard tooth tissues, periodontal diseases, complete absence of teeth) and ways to prevent them;

30. clinical manifestations and theoretical foundations of orthopedic treatment of defects and deformities of the maxillofacial region (maxillofacial orthopedics): fractures of the jaw bones, the consequences of jaw injuries (treatment of patients with incorrectly fused jaw fractures, orthopedic treatment with microstomy, orthopedic treatment of contractures), defects after jaw resection (after resection of the alveolar process of the upper jaw, after unilateral resection of the upper jaw, after resection of the lower jaw, after resection of the chin of the lower jaw, after resection of half of the lower jaw, after removal of the entire lower jaw, after resection of the lower jaw and bone grafting), acquired and congenital defects of the hard and soft palate (median

defects of the hard palate in the presence of teeth on the upper jaw, median defects of the hard palate on the toothless upper jaw, anterior and lateral defects of the hard palate, defects of the soft palate, combined defects of the hard and soft palate, congenital defects of the hard and soft palate), defects of the face (orbit, zygomatic and buccal areas, nose, auricle, combined maxillofacial prostheses), reconstructive surgery of the face and jaws (with bone plastic of the lower jaw, with facial plastic, with vestibule plastic oral cavity, with plastic palate, with plastic nose).

31. clinical manifestations and theoretical foundations of orthopedic treatment of habitual dislocations of the lower jaw.

2. An orthopedic dentist should be able to:

1. perform early diagnosis of the pathological condition of the maxillofacial system caused by anomalies in the development of the jaw bones, acquired partial or complete defects of the teeth and dentition, as well as defects and deformities of the maxillofacial region in adults, the elderly and senile age;
2. determine the scope and sequence of special diagnostic measures, evaluate their results;
3. draw up and justify the plan of complex dental treatment and the plan of orthopedic treatment, formulate indications and contraindications to orthopedic dental treatment;
4. choose the most appropriate method of orthopedic treatment of the dentoalveolar system and perform it in full;
5. to assess the volume of surgical trauma during odontopreparation in order to choose an adequate method of anesthesia;
6. to evaluate the psychoemotional status of a dental patient in order to choose an adequate method of its correction;
7. organize adequate management of the process of adaptation to dentures, taking into account the individual characteristics of the patient;
8. determine the need for the participation of doctors of related specialties in the complex treatment of a dental patient in the case when the orthopedic dentist is the attending physician;
9. organize medical examinations, rehabilitation of patients after the orthopedic treatment of the dental system.

In accordance with the activities of the dentist orthopedist professional competencies are organized into the following categories:

- 3.1 Common symptoms and syndromes (List 1)
- 3.2 Common diseases and conditions (List 2)
- 3.3 Medical manipulations (List 3)
- 3.4 Emergency conditions (List 4)

3.1. List 1 - the most common symptoms and syndromes in the practice of an orthopedic dentist

Tooth hard tissue defect
Changing the color of teeth
Bleeding gums
Aphthous lesion of the OM (oral mucosa)
Tooth mobility
Pathological dentoalveolar pockets
Bad breath (halitosis)
Pain under artificial crowns
Pain under the bridges
Pain under removable types of prostheses
Dryness, burning of the oral mucosa
Metallic taste in the mouth

Diastema and trema of the teeth
Convergence and divergence of teeth
Exposing the necks of the teeth
Quincke syndrome.
Xerostomia syndrome.
Macroglossia syndrome.
Costen's Syndrome
Increased body temperature
Headache
Vertigo
Edema of the soft tissues of the face
Chills
Difficult and limited opening of the mouth
Enlarged lymph nodes
Crunch when moving in the TMJ (temporomandibular joint)
Tumors and neoplasms
Congenital and acquired defects and deformities of the jaw
Malocclusion
Toothache from various irritants

To indicate the level of competence that must be achieved by the end of training in this discipline, the following gradation is used:

Level 1-indicates that the resident can independently diagnose and treat the majority of patients with this disease or condition accordingly; if necessary, determine the indications for hospitalization.

Level 2-indicates that the resident is guided in this clinical situation, makes a preliminary diagnosis and redirects the patient to the secondary or tertiary level for final verification of the diagnosis and selection of therapy; subsequently, controls the prescribed therapy (medical examination).

The letter " H " - means that the condition or disease is urgent and indicates the need for emergency diagnosis and / or treatment. The resident is able to assess the patient's condition and begin to provide emergency care and organize urgent hospitalization.

3.2. List 2 – the most common diseases and conditions in the practice of a general dentist

Diseases and pathological conditions	Level	H
Pathology of the hard tissues of the teeth:		
- partial defect of the crown part of the tooth of carious etiology;	1	
- partial defect of the crown part of the tooth caused by fluorosis;	1	
- partial defect of the crown part of the tooth caused by enamel hypoplasia;	1	
- partial defect of the crown part of the tooth caused by chronic or acute trauma;	1	
- wedge-shaped defect of the crown part of the tooth;	1	
- partial defect of the crown part of the tooth caused by erosion of the hard tissues	1	

of the tooth;		
- partial defect of the crown part of the tooth caused by necrosis of the hard tissues of the tooth;	1	
- complete defect of the crown part of the tooth;	1	
- complete defect of the crown part of the tooth, complicated by anomalies of the roots and root canals;	1	
- complete defect of the crown part of the tooth, complicated by intracortical resorption;	1	
- complete defect of the crown part of the tooth, complicated by periodontitis;	1	
- defects of teeth caused by anomalies of development and eruption;	1	
- defects of teeth caused by changes in their color.	1	
Partial adentia (primary and secondary):		
- compensated form of partial adentia;	1	
- subcompensated form of partial adentia;		
- decompensated form of partial adentia;	1	
- included dentition defects;	1	
- unilateral terminal defect of the dentition;	1	
- bilateral end defect of the dentition;	1	
- partial adentia on the background of anomalies of the dentition and bite;	1	
- partial adentia, complicated by deformity of the dentition;	1	
- partial adentia, complicated by an unfixated bite;	2	
- partial adentia, complicated by distal displacement of the lower jaw;	2	
- partial adentia complicated by deep incisor overlap;	1	
- partial adentia complicated by traumatic occlusion;	1	
- partial adentia, complicated by parafunctions:	1	
- partial adentia, complicated by increased erasability of the hard tissues of the teeth;	1	

<ul style="list-style-type: none"> - partial adentia, complicated by focal periodontitis, generalized periodontitis, periodontal disease; - partial adentia, complicated by arthrosis; - partial adentia, complicated by dysfunction of the temporomandibular joints; - partial adentia, complicated by post-traumatic deformity of the prosthetic bed and field; - partial adentia complicated by galvanosis caused by denture materials; - partial adentia complicated by allergic stomatitis caused by denture materials ; - partial adentia, complicated toxic-chemical stomatitis caused by the materials of dentures; - partial adentia on the background of chronic diseases of the oral mucosa. 	<p style="text-align: center;">2</p> <p style="text-align: center;">1</p> <p style="text-align: center;">1</p> <p style="text-align: center;">2</p>	
<p>Complete secondary adentia.</p> <ul style="list-style-type: none"> - complete absence of teeth on one jaw; - complete absence of teeth on both jaws; - complete absence of teeth, complicated by significant atrophy of the alveolar processes of the jaw bones; - complete absence of teeth on the background of anomalies of the jaw bones; - complete absence of teeth, complicated by post-traumatic deformity of the prosthetic bed and prosthetic field; - complete absence of teeth on the background of diseases of the oral mucosa mouth; - complete absence of teeth, complicated by a small vestibule of the oral cavity and high attachment of the bridles; - complete absence of teeth, complicated by parafunctions; - complete absence of teeth, complicated by maladaptation to removable dentures; - complete absence of teeth, complicated by dysfunction of the temporomandibular joints; - complete absence of teeth, complicated by 	<p style="text-align: center;">1</p> <p style="text-align: center;">1</p> <p style="text-align: center;">2</p>	

<ul style="list-style-type: none"> - pathological erasability of solid materials - pathological erasure of the hard tissues of the teeth, complicated by Sagittal shift of the lower jaw. - pathological erasability of the hard tissues of the teeth, complicated by dysfunction of the temporomandibular joint; - pathological erasability of the hard tissues of the teeth tooth tissue, complicated by osteoarthritis of the temporomandibular joints; - pathological erasure of hard tooth tissues, complicated by periodontitis; - pathological erasure of hard tooth tissues, complicated by parafunctions - pathological erasure of hard tooth tissues against the background of anomalies of the dentition and bite. 	<p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p>	
<p>Anomalies of the dentoalveolar system.</p> <p>1. Jaw abnormalities:</p> <ul style="list-style-type: none"> - macrognathia (upper, lower, combined); - micrognathia (upper, lower, combined); - asymmetry. <p>2. Anomalies in the position of the jaws in the skull:</p> <ul style="list-style-type: none"> - prognathia (upper, lower); - retrognathia (upper, lower); - asymmetry; - tilt of the jaws. <p>3. Anomalies of the ratio of dental arches:</p> <ul style="list-style-type: none"> - distal bite; - mesial bite; - excessive incisor overlap ; - deep bite; - open bite (front, side); - cross bite (one – sided-two types; two-sided-two types); <p>4. Anomalies in the shape and size of dental arches:</p> <ul style="list-style-type: none"> - narrowed dental arch (symmetrical, U shaped, V-shaped, O-shaped, saddle-shaped, asymmetric); - flattened anterior (trapezoidal) dental arch. - enlarged dental arch; - reduced dental arch. <p>5. Anomalies of individual teeth:</p> <ul style="list-style-type: none"> - violation of the number of teeth (adentia, hypodontia, hyperodontia); - anomalies in the size and shape of teeth (macrodentia, microdentia, fused teeth, 	<p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>2</p>	

jaw;		
- defect after resection of the jaw bones with bone grafting;	2	
- acquired median defect of the hard palate, in the presence of teeth;	2	
- acquired median defect of the hard palate, with complete absence of teeth;	2	
- acquired anterior and lateral defects of the hard palate;	2	
- acquired soft palate defect;	2	
- combined acquired defect of the hard and soft palate;	2	
- birth defects of the hard and soft palate;	2	
- acquired defects of the face (nose, orbits, auricles, combined);	2	

The list of listed diseases and conditions is not exhaustive. The tasks are classified according to the competencies that must be achieved by the end of the training in this discipline.

3.3. PRACTICAL SKILLS (List 3)

The orthopedic dentist prescribes the following instrumental methods of examination:

Orthopantomogram. X-ray panoramic image of the jaw.

Targeted X-ray image of the tooth. Computed tomography (CT) allows you to see the condition of the roots, gums, and crowns of the teeth. Ultrasound examination (ultrasound). Allows you to visualize the salivary glands, regional lymph nodes, the condition, the degree of inflammation. Occlusiogram. It is used to determine occlusion (the ability of teeth to close between the lower jaw and the upper jaw). It is carried out with the help of wax plates or special paper. In practice, an orthopedic dentist must have general and special manipulations (skills).

General manipulations:

The orthopedic dentist should evaluate:

the morphological and biochemical parameters of the tests;

- parameters of the anthropobiometric study of diagnostic models of the jaws

- radiation research methods: sighting and survey radiography of teeth and jaws, visiography, orthopantomography, telorentgenography, multispiral computed tomography, TMJ radiography; sialography;

- MFA muscle functions with evaluation of electromyography, myotonometry, and mastication data;

- indicators of TMJ function with evaluation of arthrography, orthopantomography data;

- to study face photos in full face and profile

- results of biometric study of plaster, stereometric, and virtual jaw models;

- functional and clinical samples used in dentistry

Be able to:

- injections (i / m, i / v, n / a).
- determination of blood type
- stop external bleeding.
- gastric lavage.
- take material for microscopic, bacteriological studies (from the throat, nose, wounds, rectum, etc.)
- use personal protective equipment (type 1 anti-plague suit)

Special manipulations

Be able to perform orthopedic manipulations:

- Determination of the degree of mobility.
- Determination of the pliability of the oral mucosa.
- Probing of periodontal pockets.
- Electrodontodiagnostics.
- Reading radiographs, orthopantomograms, and visioimages.
- Reading TMJ scans, TMJ computer programs (temporomandibular joint).
- Comparison of tooth rows to determine the type of bite.
- Palpatory examination of the TMJ (temporomandibular joint).
- Local infiltration anesthesia before tooth preparation.
- Conducting anesthesia before preparing the teeth.
- Production of individual spoons for defects in the dentition.
- Obtaining impressions (impressions) from teeth, dentition and jaws with alginate, zinc oxide, ethylene, silicone and polyvinylsiloxane masses:
 - anatomical
 - functional
 - two-layer
 - determination and registration of central occlusion.
 - determination and registration of the central ratio. Preparation of the oral cavity for orthopedic treatment (alignment of the prosthetic plane with the methods of grinding super contacts and shortening teeth).

- preparation of crowns and roots of teeth for orthopedic treatment (preparation, filling of channels, packing of pins).
- preparation of cavities for tabs (inlay, onlay, overlay, pinlay)
- preparation of cavities for porcelain, metal, composite, combined inlays;
- preparation of teeth when using stamped, solid-cast, metal-ceramic, metal-composite, metal-free artificial crowns;
- temporary protection of prepared teeth with provisional artificial crowns;
- preparation of teeth (without a ledge and with ledges of various types when using solid-cast, metal-ceramic, metal-composite and metal-free crowns)
- preparation of teeth when using veneers;
- preparation of teeth with the use of individual cast pin-stump inserts, standard anchor pins;
- packing and fixing tabs on different types of fixing materials, depending on the construction material of the tabs;
- packing and fixing of pin structures;
- packing and fixing of stamped, solid-cast, metal-ceramic, metal-composite and metal-free crowns;
- packing and fixing of stamped-soldered, solid-cast, metal-ceramic, metal-composite and metal-free bridges;
- fitting and fixing of bridges with support on tabs;
- fitting and fixing of adhesive bridges;
- fitting and fixing of bridges with support on implants;
- production of rigid individual spoons;
- packing of rigid individual spoons;
- determination of the height of the lower part of the face with complete adentia;
- determination of the prosthetic plane at full adentia;
- determination and registration of the central jaw ratio;
- determination of the smile line, midline of the face, and canine line;
- selection of the size and color of artificial teeth when using removable dentures;
- checking the design of removable dentures in the oral cavity;
- applying removable dentures to the prosthetic bed;
- correction of removable dentures;
- managing the process of adaptation to removable dentures with complete adentia;

- study of plaster models of jaws in a parallelometer to determine the volume and places of preparation of teeth for clamp fixation;
- preparation of supporting teeth for clamp fixation ;
- planning of the design of the clasp prosthesis on plaster models;
- fitting the frames of clasp prostheses with various types of clamp-on and clamp-free fixation (lock, telescopic, magnetic);
- choosing the color of artificial teeth when using clasp prostheses;
- fitting and applying of clasp prostheses;
- correction of clasp prostheses;
- prepackaging and applying a removable plate prosthesis in the partial absence of teeth;
- fitting and applying removable dentures with two-layer bases ;
- relocation of removable dentures;
- aesthetic and phonetic modeling of a removable prosthesis;
- elimination of errors that occurred when determining the central ratio of the jaws;
- determining articulation parameters using facial arcs and transferring them to an individualized articulator ;
- removal of impressions (impressions) with alginate and silicone masses in case of false joints and incorrectly fused fractures of the jaws with preserved dentition and in case of partial or complete loss of teeth ;
- packing and fixing of fixed structures and applying removable structures for maxillofacial deformities ;
- removal of casts (impressions) by various masses with defects of the hard and soft palate;
- fitting and applying prostheses with hard and soft obturators;
- removal of casts (impressions) by various masses after resection of the alveolar processes, parts of the upper and lower jaw;
- fitting and applying prostheses that compensate for defects in the bone tissue of the alveolar process, parts of the upper and lower jaws;
- correction and relocation of dentofacial prostheses;
- removal of casts (impressions) and clinical stages of manufacturing prostheses for facial defects;
- removal of casts (impressions) for the production of boxing mouthguards;
- applying and correcting boxing mouthguards;
- planning of orthopedic treatment with dental implants ;
- taking impressions (impressions) in the presence of dental implants;

- design dentures based on dental implants
- perform permanent fixation of non-removable dentures on implants;
- conduct and recommend oral hygiene measures in the presence of dental implants.

3.4 PROVISION OF EMERGENCY (EMERGENCY) MEDICAL ASSISTANCE. (List 4)

An orthopedic dentist should be able to independently diagnose and provide emergency (emergency) care at the pre-hospital stage, as well as determine the tactics of providing further medical care in the following emergency conditions

1. Fainting.
2. Collapse.
3. Shock (anaphylactic, toxic, traumatic, hemorrhagic, cardiogenic, hypovolemic, septic, etc.).
4. Edema and stenosis of the larynx.
5. Quincke's edema.
6. Hypertensive crisis.
7. Myocardial infarction.
8. External bleeding.
9. Concussions, bruises, compression of the brain.
10. Convulsive states, epileptic status.
11. Psychomotor agitation (panic attack, acute reaction to stress).
12. Chemical and thermal burns, frostbite.
13. Electric shock, lightning, heat and sunstroke.
14. Poisoning.
15. Drowning, suffocation.
16. Bites and stings.
17. Traumatic eye injuries, including removal of foreign bodies.
18. Clinical death.

Manipulations for emergency care:

- Injections (i / m, i / v, n / a).
- Gastric lavage.
- Stopping external bleeding
- pressure bandage
- applying a tourniquet
- Cardiopulmonary resuscitation:
 - indirect heart massage
 - mouth-to-mouth, mouth-to-nose breathing

- restoration of airway patency
- using the Ambu bag
- tongue fixation and duct insertion

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