



“Confirmed”

First Vice-Rector

of scientific and pedagogical work  
Assoc. Prof. Iryna Solonyenko

*Iryna Solonyenko*

2023

## CURRICULUM OF THE EDUCATIONAL DISCIPLINE

(type of the discipline – elective)

### EC 3.5.3 Surgical Dentistry

training of specialists of the second (master's) level of higher education

Sphere of Knowledge 22 «Healthcare»

Specialty 221 «Dentistry»

faculty, year: Dentistry, V

individual profile elective course of practical training (IPCPT)

*"Pediatric Dentistry"*

Discussed and approved  
at educational-methodical meeting  
of the department of surgical dentistry  
and maxillofacial surgery

Protocol № 11

Dated from «13» 06 2023

Head of Chair,

prof. Yan Vares *[Signature]*

Approved

by the Profile Methodical Commission  
on stomatological disciplines

Protocol № 2

Dated from «16» 06 2023

Head of the Profile

Methodical Commission

prof. Yan Vares *[Signature]*

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DEVELOPED AND CONTRIBUTED: Lviv national medical university named after Danylo Halytskyi

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Discussed and recommended for approval at the interdepartmental meeting of specialists of the single-specialty departments

In dental disciplines

“ \_\_\_\_\_ ” \_\_\_\_\_ 2022, protocol No\_\_

## INTRODUCTION

### CURRICULUM Surgical Dentistry

According to Standard of Second level of higher education second (master's degree)

Sphere of Knowledge 22 «Healthcare»

Specialty 221 «Dentistry»

educational program of Master of Dentistry

**Educational program description (abstract).** The discipline involves the study of surgical dentistry in its main sections: "Propaedeutics of surgical dentistry", "Inflammatory diseases of the maxillo-facial area gland", "Oncology of the maxillo-facial area", "Traumatology of the maxillo-facial area", "Reconstructive and restorative surgery of the maxillo-facial area", with emphasis on pathology, clinics, diagnostics, emergency treatment and prevention of the main and most common diseases of maxillo-facial area (MFA).

Special attention is paid to the formation of students' skills of anamnesis collection, examination and differential diagnosis of maxillo-facial area (MFA) diseases with various clinical course and their complications, modern approaches to diagnostics, principles of treatment and prophylaxis on the basis of evidence-based medicine and urgent conditions are studied in practical surgical dentistry. Students participate in the diagnostic and treatment process of outpatient, inpatient patients under the guidance of assistants and associate professors of the department. There is also an introduction to the treatment-and-prophylactic measures that are most commonly used in surgical dental practice.

The study of the discipline "surgical dentistry" helps to form a holistic view of the structure and functioning of the organs of the maxillo-facial area; deepening of theoretical and practical preparation, acquisition of professional practical skills for independent medical activity.

Structure of the discipline	Number of credits, hours, including			Year of study/ semester	Test type	
	Total	In class				Self-study
		Lectures (hours)	Practical (hours)			
<b>Name of the discipline: Surgical Dentistry</b> <b>Number of content modules: 2</b>	<b>5 credits / 150 hours</b>	<b>0</b>	<b>78</b>	<b>72</b>	<b>V course (IX, X semesters)</b>  <b>Credit</b>	
<b>content module 1</b>	<b>1,5 credits / 45 hours</b>	<b>0</b>	<b>18</b>	<b>27</b>		
<b>content module 2</b>	<b>3,5 credits / 105 hours</b>	<b>0</b>	<b>60</b>	<b>45</b>		

**The subject of study of the discipline are** pathological processes of maxillo-facial area, related to the competence of surgical dentistry and maxillofacial surgery, features of their clinical course, the main diagnostic and therapeutic manipulations used in the practice of the dental surgeon.

**Interdisciplinary relations:** therapeutic dentistry, pediatric dentistry, orthopedic dentistry, normal anatomy, histology, normal physiology, pathological physiology, topographic anatomy and surgery, microbiology, biochemistry, pharmacology, internal diseases, endocrinology, endocrinology, endocrinology otolaryngology, ophthalmology, medicine of extreme conditions.

#### 1. The purpose and objectives of the discipline

1.1. **The purpose of teaching** the discipline (surgical dentistry) is to provide a comprehensive and highly-specialized training of a dentist, which involves mastering the theory and practice of all sections of surgical dentistry and basics of MFD, from organization of surgical department of dental clinic and maxillofacial hospital to the ability of providing urgent care in extreme conditions and qualified surgical dental and reconstructive-restoration assistance in MFD.

1.2. **The main tasks** of surgical dentistry are to educate a professional surgical dentist who is able to provide a thorough examination of the patient, diagnose the main symptoms and syndromes of MFA pathologies, to substantiate and formulate the preliminary diagnosis; to analyze the results of the examination and conduct differential diagnosis, to formulate a clinical diagnosis of major diseases, to identify the manifestations of somatic diseases in the oral cavity, to define the principles of integrated treatment in the clinic of surgical dentistry, to identify various clinical variants and complications of the most common diseases of the MFA, to be aware of the measures of primary and secondary prevention the most common surgical dental diseases.

As a result of studying the discipline, the student must

## **Know:**

- Features of the examination of patients with thyroid pathology, participation of related specialists in the examination.
- Methods of examination of patients with trauma to the maxillofacial area. Organizational principles of assistance to the victims with injuries of the maxillofacial area.
- Principles of deontology and medical ethics in surgical dentistry and maxillo-facial surgery.
- Principles of organization of dental care in Ukraine.
- Basic methods of general and local anesthesia, sedation in the practice of the dental surgeon (demonstrations, contraindications, features of conducting).
- General and local complications in the practice of surgical dentistry and maxillo-facial surgery (MFS). Cardiopulmonary resuscitation.
- Tooth extraction operation. Modern methods of tooth extraction.
- Diseases of teeth eruption (diagnosis, treatment).
- Inflammatory processes of hard tissues of the MFA. Periodontitis, periostitis, alveolitis, osteomyelitis (diagnosis, treatment).
- Inflammatory processes of the soft tissues of the MFA. Abscesses, phlegmons, lymphadenitis, boils, carbuncles, erysipelas (diagnosis, treatment).
- Odontogenic sinusitis. Modern methods of diagnosis and treatment.
- Inflammatory and reactive-dystrophic diseases of the salivary glands. Salivary stone disease (diagnosis and treatment).
- Specific inflammatory diseases of the MFA. Actinomycosis, tuberculosis, syphilis, diphtheria, HIV (diagnosis and treatment).
- Temporomandibular joint dysfunction. Inflammatory and destructive processes of the TMJ. Modern methods of diagnosis and treatment.
- Complications of inflammatory processes of the MFA (sepsis, mediastinitis, brain abscess, cavernous sinus thrombosis, etc.). Diagnosis and treatment.
- Traumatic damage of the teeth. Classification, indications for the preservation of injured teeth. First aid for dental injuries in children and adults.
- Traumatic injuries of soft tissues of MFA. Types of surgical treatment of wounds, principles of care for different types of wounds MFA.
- Traumatic injuries of hard tissues of MFA. Types of fractures of the jaw bones.
- Differential diagnosis, participation of related specialists in the treatment of patients. Types of conservative and surgical treatment.
- Traumatic disease (pathogenesis, clinical symptoms, assistance during the evacuation stages).
- Thermal (burns, frostbite), chemical (acids, alkalis, heavy metal salts), physical (electric shock) facial damage.
- Combined damage of the maxillofacial area. Clinic, diagnosis, treatment. Traumatic disease.
- Organization of dental care in the Armed Forces of Ukraine.
- Principles of medical sorting and stage treatment of the injured in the maxillofacial area.
- General characteristics, clinical course, diagnosis of gunshot wounds, burns, combined lesions of the maxillofacial area.
- Early and late complications of traumatic injuries of the maxillofacial area. Clinic, diagnosis, treatment.
- Organization of oncostomatological care.
- Tumors and tumor-like lesions of the soft tissues and bones of the maxillofacial area.
- Jaw cysts.
- Benign odontogenic tumors of the jaws: ameloblastoma (adamantinoma), odontoma, cementoma, epulid.
- Benign nonodontogenic tumors of the jaws (osteoblastoma, osteoclastoma, osteoma, osteoid-osteoma, chondroma, hemangioma, fibroma, etc.).
- Osteogenic tumors of the jaws (fibrous osteodysplasia, parathyroid osteodystrophy, Paget's disease, eosinophilic granuloma).
- Benign tumors of the soft tissues of the MFA (skin, adipose, connective tissue, muscular tissue, nerves, blood and lymphatic vessels).
- Precancerous diseases of the skin of the face, mucous membrane of the mouth and tongue.
- Malignant tumors of soft tissue of the MFA and neck. Cancer and sarcoma of jaws.
- Benign tumors and cysts of the salivary glands.
- Factors in the development of congenital malformations. Classification of defects, clinical symptoms, methods of treatment, terms of plastic surgery, principles of rehabilitation of patients, participation of a speech therapist.

- Acquired defects and deformations of the soft tissues of the maxillofacial localization and neck, bones of the facial skeleton.
- Principles of reconstructive facial surgery.
- Dysplastic diseases of maxillofacial localization. Dystrophic diseases of periodontal tissues. Sialose. Dysplastic diseases of the soft tissues of the head and neck.
- Modern principles of diagnosis and surgical treatment of periodontal diseases.
- Age-related changes in the soft tissues of the face and neck, vertical and horizontal atrophy of the alveolar processes of the jaw bones, adentia, recession of the gums.
- Preparation of the oral cavity for prosthetics.
- Cosmetic defects and deformations of organs and tissues of the head and neck. Aesthetic facial surgery.

**To be able to:**

- Collect anamnesis and to examine the patient for the specified pathology of MFA.
- Make a plan and carry out an examination of the patient with trauma to the maxillofacial area.
- Plan additional research methods and be able to interpret their results.
- Analyze and interpret the results of the X-ray examination in the Surgical Dentistry Clinic and establish an appropriate clinical diagnosis based on them.
- Fill in appropriate medical records.
- Perform diagnostic puncture of inflammatory focus of the MFA.
- To collect the inflammatory exudate for the antibiotic susceptibility test (study of the nature of the microflora and its antibiotic susceptibility).
- To collect the material from the wound surface for cytological examination (imprint, swab) and for further smear production on the specimen glass.
- To prescribe an individual scheme of premedication, depending on the psycho-somatic state of the patient, the nature and extent of surgical intervention.
- To demonstrate the techniques of preoperative preparation of the surgeon's hands by modern methods.
- To perform a phantom-based technique for antiseptic preparation of the surgical site.
- To make a plan for comprehensive screening and treatment for AIDS patients.
- To make the plan of complex treatment of patients with the specified pathologies.
- To perform a phantom-based technique of application anesthesia.
- To perform a phantom-based technique of topical anesthesia.
- To perform a phantom-based technique of infiltration anesthesia.
- To perform a phantom-based technique of mandibular anesthesia.
- To perform a phantom-based technique of torus anesthesia.
- To perform a phantom-based technique of mental anesthesia.
- To perform a phantom-based technique of lingual nerve block.
- To perform a phantom-based technique of buccal anesthesia.
- To perform a phantom-based technique of canine anesthesia.
- To perform a phantom-based technique of palatal anesthesia.
- To perform a phantom-based technique of tuberal anesthesia.
- To perform a phantom-based technique of infraorbital anesthesia.
- To perform a phantom-based technique of central anesthesia.
- To remove certain groups of teeth on the upper and lower jaws (phantom).
- To perform atypical tooth extraction as in case of pericoronitis (phantom).
- To open the subperiosteal abscess (phantom).
- To close oro-antral communication (phantom).
- To perform radical sinusotomy (phantom).
- To perform sequestrectomy (phantom).
- To perform cystotomy.
- To perform different stages of the operation - to open an abscess and phlegmon of various anatomical and topographic areas of the MFA (using the phantom).
- To perform drainage the wound.
- Perform primary surgical treatment of the wound.
- Demonstrate the technique of applying of surgical knot.
- Provide a tooth replantation.
- Make temporary immobilization of the fragments of the lower and upper jaws.
- Make temporary tires and provide fixation of the jaw fractures.

- Make ligature fixation of the teeth.
- Make a smooth arch bar.
- Carry out permanent immobilization of fragments of the lower and upper jaws.
- Provide fixation of the bimaxillary arch bars as one of the permanent immobilization methods.
- Reposit the dislocation of the mandible.
- Apply maxillofacial devices (repositioning, shaping, substitutivet and fixation).
- Make a plan and carry out an examination of the patient with the presence of a neoplasm, appoint additional methods of diagnostics.
- Collect material (smears and biopsies) for cytological and pathomorphological studies.
- Make an oncodiagnosis based on the results of the examinations.
- Develop a plan for the treatment of a patient with cancer of the MFA.
- To plan a comprehensive treatment of patients with these pathologies.
- To diagnose local and general complications in the practice of a dental surgeon.
- To perform cardiopulmonary resuscitation (indirect heart massage and artificial respiration) (using the phantom).
- Assist in urgent conditions in the practice of MFD according to the corresponding algorithms.

### **To demonstrate:**

- ability to abstract thinking, analysis and synthesis.
- ability to learn and be modernly trained.
- knowledge and understanding of the subject area and understanding of professional activity.
- ability to apply knowledge in practical situations.
- skills of using information and communication technologies.
- ability to search, process and analyze information from various sources.
- ability to identify, pose and solve problems.
- ability to choose a communication strategy.
- ability to work in a team.
- interpersonal skills.
- ability to act on the basis of ethical considerations (motives), security orientation.
- possession of moral and deontological principles of a medical specialist and the principles of professional subordination.
- ability to evaluate and ensure the quality of work performed.
- ability to act socially responsible and civic conscious.

### **1.3 Competence and course results.**

In accordance with the requirements of the Standard of Higher Education, the discipline "Surgical Dentistry" provides students with the acquisition of competences:

- Integral (the ability to apply acquired general and professional competences to solve complex tasks of a dentist's professional activity and practical problems in the field of health care in the relevant position, the scope of which is provided by defined lists of syndromes and symptoms of diseases, dental diseases, physiological conditions and somatic diseases, which require special tactics of patient management, emergency conditions, laboratory and instrumental research, medical and dental manipulations; and/or implementation of innovations.

the ability to solve complex problems in the field of health care in the specialty "Dentistry" in professional activity or in the process of study, which involves research or innovation).

- General (ability to abstract thinking, analysis and synthesis; ability to learn and to be trained in accordance with the newest educational tools; ability to apply knowledge in practical situations; skills of using information and communication technologies; ability to search, process and analyze information from different sources; ability to identify, set and solve the problem; the ability to choose a communication strategy; the ability to work in a team; interpersonal skills; the ability to follow the labour safety regulations; the ability to evaluate and provide high quality results).

- Special (professional, subject) (collection of medical information about the patient (history); evaluation of results of laboratory and instrumental research; clinical diagnostics of a dental disease; diagnosis of urgent conditions; identification of the nature and treatment principles of dental diseases; tactics of dealing with dental patients with somatic pathology; performing the range of medical and dental manipulations; treatment of major dental diseases; dealing with medical documentation).

Detailing competencies in the NQF descriptor in the form of "Competency matrix":

## **Marking**

NQF -National Qualifications Framework;

GC- general competencies;

GLO- general learning outcomes;

SC - special (professional, subject) competencies;

SLO- special (professional, subject) learning outcomes;

N- normative type of educational activity within the specialty;

S- selective educational activity.

### **General competencies according to the requirements of the NQF:**

1. Ability to abstract thinking, analysis and synthesis.
2. Knowledge and understanding of the subject area and understanding of professional activity.
3. Ability to apply knowledge in practice.
4. Ability to communicate in the state language both orally and in writing.
5. Ability to communicate in English.
6. Skills in the use of information and communication technologies.
7. Ability to search process and analyze information from various sources.
8. Ability to adapt and act in a new situation.
9. Ability to identify, pose and solve problems.
10. Ability to be critical and self-critical.
11. Ability to work in a team.
12. The desire to preserve the environment.
13. The ability to act socially responsibly and consciously.
14. The ability to exercise their rights and responsibilities as a member of society, to realize the values of civil (free democratic) society and the need for its sustainable development, the rule of law, human and civil rights and freedoms in Ukraine.
15. Ability to preserve and increase moral, cultural, scientific values and achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and technology, use different types and forms of motor activities for active recreation and a healthy lifestyle.

### **Special (professional, subject) competencies according to the requirements of the National Qualifications Framework (NQF):**

1. Ability to collect medical information about the patient and analyze clinical data.
2. Ability to interpret the results of laboratory and instrumental research.
3. Ability to diagnose: determine the preliminary, clinical, final, concomitant diagnosis, emergencies.
4. Ability to plan and implement measures for the prevention of diseases of organs and tissues of the oral cavity and maxillofacial area.
5. Ability to design the process of providing medical care: to determine approaches, plan, types and principles of treatment of diseases of organs and tissues of the oral cavity and maxillofacial area.
6. Ability to determine the rational mode of work, rest, diet in patients in the treatment of diseases of organs and tissues of the oral cavity and maxillofacial area.
7. Ability to determine the tactics of management of patients with diseases of organs and tissues of the oral cavity and maxillofacial area with concomitant somatic diseases.
8. Ability to perform medical and dental manipulations.
9. Ability to treat major diseases of organs and tissues of the oral cavity and maxillofacial area.
10. Ability to organize and conduct medical and evacuation measures.
11. Ability to determine tactics, methods and provide emergency medical care.
12. Ability to organize and conduct screening examinations in dentistry.
13. Ability to assess the impact of the environment on the health of the population (individual, family, population).
14. Ability to maintain regulatory medical records.
15. Processing of state, social and medical information.
16. Ability to organize and conduct rehabilitation measures and care for patients with diseases of the oral cavity and thyroid gland.
17. Ability to legally support their own professional activities.
18. Ability to provide home care according to the protocols of tactical medicine.

Detailing competencies in the NQF descriptor in the form of "Competency matrix".

**Competency matrix of the educational component Surgical dentistry**

<b>Program competencies</b>	<b>Surgical Dentistry (CC 3.5)</b>
<i><b>General competencies</b></i>	
<b>GC1</b> Ability to abstract thinking, analysis and synthesis.	+
<b>GC 2.</b> Knowledge and understanding of the subject area and understanding of professional activity.	+
<b>GC 3</b> Ability to apply knowledge in practice.	+
<b>GC 4</b> Ability to communicate in the state language both orally and in writing.	+
<b>GC 5</b> Ability to communicate in English.	+
<b>GC 6</b> Skills in the use of information and communication technologies.	+
<b>GC 7</b> Ability to search process and analyze information from various sources.	+
<b>GC 8</b> Ability to adapt and act in a new situation.	+
<b>GC 9</b> Ability to identify, pose and solve problems.	+
<b>GC 10</b> Ability to be critical and self-critical.	+
<b>GC 11</b> Ability to work in a team.	+
<b>GC 12</b> The desire to preserve the environment.	+
<b>GC 13</b> The ability to act socially responsibly and consciously.	+
<b>GC 14</b> The ability to exercise their rights and responsibilities as a member of society, to realize the values of civil (free democratic) society and the need for its sustainable development, the rule of law, human and civil rights and freedoms in Ukraine.	+
<b>GC 15</b> Ability to preserve and increase moral, cultural, scientific values and achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and technology, use different types and forms of motor activities for active recreation and a healthy lifestyle.	+
<i><b>Special (professional) competencies</b></i>	
<b>SC 1</b> Ability to collect medical information about the patient and analyze clinical data.	+
<b>SC 2.</b> Ability to interpret the results of laboratory and instrumental research.	+
<b>SC 3</b> Ability to diagnose: determine the preliminary, clinical, final, concomitant diagnosis, emergencies.	+
<b>SC 4</b> Ability to plan and implement measures for the prevention of diseases of organs and tissues of the oral cavity and maxillofacial area.	+
<b>SC 5</b> Ability to design the process of providing medical care: to determine approaches, plan, types and principles of treatment of diseases of organs and tissues of the oral cavity and maxillofacial area.	+
<b>SC 6</b> Ability to determine the rational mode of work, rest, diet in patients in the treatment of diseases of organs and tissues of the oral cavity and maxillofacial area.	+
<b>SC 7</b> Ability to determine the tactics of management of patients with diseases of organs and tissues of the oral cavity and maxillofacial area with concomitant somatic diseases.	+
<b>SC 8</b> Ability to perform medical and dental manipulations.	+
<b>SC 9</b> Ability to treat major diseases of organs and tissues of the oral cavity and maxillofacial area.	+
<b>SC 10</b> Ability to organize and conduct medical and evacuation measures.	+
<b>SC 11</b> Ability to determine tactics, methods and provide emergency medical care.	+

<b>SC 12</b> Ability to organize and conduct screening examinations in dentistry.	+
<b>SC 13</b> Ability to assess the impact of the environment on the health of the population (individual, family, population).	+
<b>SC 14</b> Ability to maintain regulatory medical records.	+
<b>SC 15</b> Processing of state, social and medical information.	+
<b>SC 16</b> Ability to organize and conduct rehabilitation measures and care for patients with diseases of the oral cavity and thyroid gland.	+
<b>SC 17</b> Ability to legally support their own professional activities.	+
<b>SC 18</b> Ability to provide home care according to the protocols of tactical medicine.	+

### Learning outcomes

**Integrative final program learning outcomes, the formation of which is facilitated by the discipline:  
Normative and variable content of training, formulated in terms of learning outcomes**

#### **Program learning outcomes**

Code of result of the learning outcome	The content of the learning outcome	Reference to the competency matrix code
<i>Kn1, Kn2, Scl1, Scl2, Com1, Com2, Aut1, Aut2</i>	Identify and identify the leading clinical symptoms and syndromes (according to list 1 of educational and professional program – EPP); according to standard methods, using preliminary data of the patient's anamnesis, data of the patient's examination, knowledge about the person, his organs and systems, to establish a probable nosological or syndromic preliminary clinical diagnosis of dental disease (according to list 2 of EPP).	<i>PRE1</i>
<i>Kn1, Kn2, Scl1, Scl2, Com1, Com2, Aut1, Aut2</i>	Collect information about the general condition of the patient, evaluate the psychomotor and physical development of the patient, the condition of the organs of the maxillofacial area, based on the results of laboratory and instrumental studies to assess information about the diagnosis (according to list 5 of EPP).	<i>PRE 2</i>
<i>Kn1, Kn2, Scl1, Scl2, Com1, Com2, Aut1, Aut2</i>	Prescribe and analyze additional (mandatory and optional) examination methods (laboratory, radiological, functional and / or instrumental) according to the list 5 of EPP, patients with diseases of organs and tissues of the oral cavity and maxillofacial region for differential diagnosis of diseases (according to the list 2 of EPP).	<i>PRE 3</i>
<i>Kn1, Kn2, Scl1, Scl2, Com1, Com2, Aut1, Aut2</i>	Determine the final clinical diagnosis in accordance with the relevant ethical and legal norms, by making an informed decision and logical analysis of the obtained subjective and objective data of clinical, additional examination, differential diagnosis under the supervision of a supervising doctor in a medical institution (according to list 2.1 of EPP).	<i>PRE 4</i>
<i>Kn1, Kn2, Scl1, Scl2, Com1, Com2, Aut1, Aut2</i>	Establish a diagnosis of emergencies under any circumstances (at home, on the street, in a medical institution), in an emergency, martial law, lack of information and limited time (according to list 4 of EPP).	<i>PRE 5</i>
<i>Kn1, Kn2, Scl1, Scl2, Com1, Com2, Aut1, Aut2, Aut3</i>	Plan and implement measures to prevent dental diseases among the population to prevent the spread of dental diseases.	<i>PRE 6</i>
<i>Kn1, Kn2, Scl1, Scl2, Com1, Com2, Aut1, Aut2, Aut3</i>	Analyze the epidemiological situation and carry out measures of mass and individual, general and local medicament and non-medicament prevention of dental diseases.	<i>PRE 7</i>
<i>Kn1, Kn2, Scl1, Scl2, Com1, Com2, Aut1, Aut2</i>	Determine the approach, plan, type and principle of treatment of dental disease (according to list 2 of EPP) by making an informed decision according to existing algorithms and standard schemes.	<i>PRE 8</i>

<i>Kn1, Kn2, Scl1, Scl2, Com1, Com2, Aut1, Aut2</i>	Determine the nature of work, rest and the necessary diet in the treatment of dental diseases (according to list 2 of EPP) on the basis of preliminary or final clinical diagnosis by making an informed decision according to existing algorithms and standard schemes.	<i>PRE 9</i>
<i>Kn1, Kn2, Scl1, Scl2, Com1, Com2, Aut1, Aut2</i>	Determine the tactics of treatment of the dental patient with somatic pathology (according to list 3 of EPP) by making the decision according to existing algorithms and standard schemes.	<i>PRE 10</i>
<i>Kn1, Kn2, Scl1, Scl2, Com1, Com2, Aut1, Aut2</i>	Carry out treatment of major dental diseases according to existing algorithms and standard schemes under the supervision of a doctor-manager in a medical institution (according to list 2.1 of EPP).	<i>PRE 11</i>
<i>Kn1, Kn2, Scl1, Scl2, Com1, Com2, Aut1, Aut2, Aut3</i>	Organize medical and evacuation measures among the population, servicemen, in emergency situations, including martial law, during the detailed stages of medical evacuation, taking into account the existing system of medical and evacuation support.	<i>PRE 12</i>
<i>Kn1, Kn2, Scl1, Scl2, Com1, Com2, Aut1, Aut2</i>	Determine the tactics of emergency medical care, using the recommended algorithms, under any circumstances on the basis of a diagnosis of emergency in a limited time (according to list 4 of EPP).	<i>PRE 13</i>
<i>Kn1, Kn2, Scl1, Scl2, Com1, Com2, Aut1, Aut2, Aut3</i>	Analyze and evaluate government, social and medical information using standard approaches and computer information technologies.	<i>PRE 14</i>
<i>Kn1, Kn2, Scl1, Scl2, Com1, Com2, Aut1, Aut2, Aut3</i>	Assess the impact of the environment on the health of the population in a medical institution by standard methods.	<i>PRE 15</i>
<i>Kn1, Kn2, Scl1, Scl2, Com1, Com2, Aut1, Aut2, Aut3</i>	Form goals and determine the structure of personal activity based on the result of the analysis of certain social and personal needs.	<i>PRE 16</i>
<i>Kn1, Kn2, Scl1, Scl2, Com1, Com2, Aut1, Aut2, Aut3</i>	Adhere to a healthy lifestyle, use the techniques of self-regulation and self-control.	<i>PRE 17</i>
<i>Kn1, Kn2, Scl1, Scl2, Com1, Com2, Aut1, Aut2, Aut3</i>	To be aware of and guided in their activities by civil rights, freedoms and responsibilities, to raise the general cultural level.	<i>PRE 18</i>
<i>Kn1, Kn2, Scl1, Scl2, Com1, Com2, Aut1, Aut2</i>	Adhere to the requirements of ethics, bioethics and deontology in professional activities.	<i>PRE 19</i>
<i>Kn1, Kn2, Scl1, Scl2, Com1, Com2, Aut1, Aut2, Aut3</i>	Organize the necessary level of individual safety (personal and carers) in case of typical dangerous situations in the individual field of activity.	<i>PRE 20</i>
<i>Kn1, Kn2, Scl1, c2, Com1, Com2, Aut1, Aut2</i>	Perform medical manipulations on the basis of preliminary and / or final clinical diagnosis (according to lists 2, 2.1 of EPP) for different segments of the population and in different conditions (according to list 6 of EPP).	<i>PRE 21</i>
<i>Kn1, Kn2, Scl1, Scl2, Com1, Com2, Aut1, Aut2</i>	Perform medical dental manipulations on the basis of preliminary and / or final clinical diagnosis (according to lists 2, 2.1 of EPP) for different segments of the population and in different conditions (according to list 7 of EPP).	<i>PRE 22</i>
<i>Kn1, Kn2, Scl1, Scl2, Com1, Com2, Aut1, Aut2</i>	Perform manipulations of emergency medical care, using standard schemes, under any circumstances on the basis of a diagnosis of emergency (according to list 4 of EPP) in a limited time (according to lists 6, 7 of EPP).	<i>PRE 23</i>

Matrix of correspondence of the competencies defined by the Standard to descriptors of NQF

<b>Classification of competencies by NQF</b>	<b>Knowledge</b>  <b>Kn 1</b> Specialized conceptual knowledge acquired in the process of learning and / or professional activity at the level of the latest achievements, which are the basis for original thinking and innovation, in particular in the context of research work  <b>Kn 2</b> Critical understanding of problems in teaching and / or professional activities and at the border of subject areas	<b>Skills</b>  <b>Sc1 1</b> Solving complex problems and issues that require updating and integrating knowledge, often in conditions of incomplete / insufficient information and conflicting requirements  <b>Sc1 2</b> Conducting research and / or innovation activities	<b>Communication</b>  <b>Com 1</b> Clear and unambiguous communication of one's own conclusions, as well as the knowledge and explanations that substantiate them, to specialists and non-specialists, in particular to students  <b>Com 2</b> Use of foreign languages in professional activities	<b>Autonomy and responsibility</b>  <b>Aut 1</b> Making decisions in difficult and unpredictable conditions, which requires the application of new approaches and forecasting  <b>Aut 2</b> Responsibility for the development of professional knowledge and practices, assessment of strategic development of the team  <b>Aut 3</b> Ability to further study, which is largely autonomous and independent
<b>General competencies</b>				
1. Ability to abstract thinking, analysis and synthesis.	<b>Kn 1</b> <b>Kn 2</b>	<b>Sc1 1</b>		<b>Aut 1</b>
2. Knowledge and understanding of the subject area and understanding of professional activity.	<b>Kn 1</b>	<b>Sc1 1</b>	<b>Com 1</b>	<b>Aut 2</b>
3. Ability to apply knowledge in practice.	<b>Kn 1</b>	<b>Sc 1</b>	<b>Com 1</b>	<b>Aut 1</b>
4. Ability to communicate in the state language both orally and in writing.			<b>Com 1, Com 2</b>	
5. Ability to communicate in English.			<b>Com 1</b>	
6. Skills in the use of information and communication technologies.	<b>Kn 1</b>		<b>Com 1, Com 2</b>	<b>Aut 2</b>
7. Ability to search process and analyze information from various sources.	<b>Kn 1</b>		<b>Com 1</b>	<b>Aut 2</b>

8. Ability to adapt and act in a new situation.		<b>Scl 1</b>		<b>Aut 1</b>
9. Ability to identify, pose and solve problems.	<b>Kn 1</b>	<b>Scl 1</b>	<b>Com 1</b>	<b>Aut 1</b>
10. Ability to be critical and self-critical.	<b>Kn 2</b>			<b>Aut 1</b>
11. Ability to work in a team.	<b>Kn 2</b>		<b>Com 1, Com 2</b>	<b>Aut 2</b>
12. The desire to preserve the environment.	<b>Kn 1</b>	<b>Scl 1</b>		<b>Aut 1</b>
13. The ability to act socially responsibly and consciously.	<b>Kn 1</b>			<b>Aut 1</b>
14. The ability to exercise their rights and responsibilities as a member of society, to realize the values of civil (free democratic) society and the need for its sustainable development, the rule of law, human and civil rights and freedoms in Ukraine.	<b>Kn 1</b>	<b>Scl 1</b>	<b>Com 1</b>	<b>Aut 3</b>
15. Ability to preserve and increase moral, cultural, scientific values and achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and technology, use different types and forms of motor activities for active recreation and a healthy lifestyle.	<b>Kn 1</b>	<b>Scl 2</b>		<b>Aut 3</b>
<b>Special (professional) competencies</b>				
1. Ability to collect medical information about the patient and analyze clinical data.	<b>Kn 2</b>	<b>Scl 1</b>	<b>Com 1, Com 2</b>	
2. Ability to interpret the results of laboratory and instrumental research.	<b>Kn 1</b>	<b>Scl 1</b>		<b>Aut 1</b>
3. Ability to diagnose: determine the preliminary, clinical, final, concomitant diagnosis, emergencies.	<b>Kn 1</b>	<b>Scl 1</b>		<b>Aut 1</b>
4. Ability to plan and implement measures for the prevention of diseases of organs and tissues of the oral cavity and maxillofacial area.	<b>Kn 2</b>	<b>Scl 1</b>	<b>Com 1</b>	<b>Aut 1</b>
5. Ability to design the process of providing medical care: to determine approaches, plan, types and principles of treatment of diseases of organs and tissues of the oral cavity and maxillofacial area.	<b>Kn 1</b>	<b>Scl 1</b>		<b>Aut 1</b>

6. Ability to determine the rational mode of work, rest, diet in patients in the treatment of diseases of organs and tissues of the oral cavity and maxillofacial area.	<b>Kn 1, Kn 2</b>	<b>Scl 1</b>	<b>Com 1</b>	
7. Ability to determine the tactics of management of patients with diseases of organs and tissues of the oral cavity and maxillofacial area with concomitant somatic diseases.		<b>Scl 1</b>		<b>Aut 1, Aut 2</b>
8. Ability to perform medical and dental manipulations.	<b>Kn 1</b>	<b>Scl 1</b>		<b>Aut 1</b>
9. Ability to treat major diseases of organs and tissues of the oral cavity and maxillofacial area.	<b>Kn 1</b>	<b>Scl 1</b>	<b>Com 1</b>	<b>Aut 1, Aut 2</b>
10. Ability to organize and conduct medical and evacuation measures.	<b>Kn 1, Kn 2</b>	<b>Scl 1</b>	<b>Com 1</b>	<b>Aut 1, Aut 2</b>
11. Ability to determine tactics, methods and provide emergency medical care.	<b>Kn 1, Kn 2</b>	<b>Scl 1</b>		<b>Aut 1, Aut 2</b>
12. Ability to organize and conduct screening examinations in dentistry.	<b>Kn 1</b>	<b>Scl 2</b>	<b>Com 1</b>	<b>Aut 2</b>
13. Ability to assess the impact of the environment on the health of the population (individual, family, population).	<b>Kn 2</b>	<b>Scl 2</b>		
14. Ability to maintain regulatory medical records.			<b>Com 1</b>	<b>Aut 1</b>
15. Processing of state, social and medical information.	<b>Kn 2</b>		<b>Com 1, Com 2</b>	<b>Aut 1, Aut 2</b>
16. Ability to organize and conduct rehabilitation measures and care for patients with diseases of the oral cavity and thyroid gland.	<b>Kn 1</b>	<b>Scl 1</b>	<b>Com 1</b>	
17. Ability to legally support their own professional activities.	<b>Kn 1</b>		<b>Com 1</b>	<b>Aut 2</b>
18. Ability to provide home care according to the protocols of tactical medicine.	<b>Kn 2</b>	<b>Scl 1</b>	<b>Com 1</b>	<b>Aut 1, Aut 2</b>

**Matrix of compliance with the learning outcomes and competencies defined by the Standard**

Program learning outcomes	Competencies																																					
	Integral competency	General competencies													Special (professional) competencies																							
		GC1	GC2	GC3	GC4	GC5	GC6	GC7	GC8	GC9	GC10	GC11	GC12	GC13	GC14	GC15	SC1	SC2	SC3	SC4	SC5	SC6	SC7	SC8	SC9	SC10	SC11	SC12	SC13	SC14	SC15	SC16	SC17	SC18				
PRE1	+	+	+	+	+		+	+	+	+	+	+				+	+	+		+	+	+					+		+				+					
PRE 2	+	+	+	+	+	+	+	+	+	+	+	+				+	+											+	+	+	+			+				
PRE 3	+	+	+	+	+		+	+	+	+	+	+				+	+											+		+				+				
PRE 4	+	+	+	+	+		+				+					+	+	+		+	+	+						+					+	+				
PRE 5	+	+	+	+	+		+				+					+	+	+															+	+				
PRE 6	+	+	+	+	+		+	+	+	+	+			+	+	+			+		+							+	+	+			+	+				
PRE 7	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+			+		+							+	+	+				+	+			
PRE 8	+	+	+	+			+	+	+	+						+	+			+	+	+				+	+	+										
PRE 9	+	+	+	+	+		+	+	+	+			+			+					+	+			+								+	+				
PRE 10	+	+	+	+			+	+	+	+						+						+	+		+									+	+			
PRE 11	+	+	+	+	+						+	+				+								+	+	+							+	+				
PRE 12	+	+	+	+	+	+	+				+		+	+	+	+										+	+							+	+			
PRE 13	+	+	+	+	+	+	+	+	+	+		+				+										+	+							+	+			
PRE 14	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+												+		+	+			+	+			
PRE 15	+	+	+	+			+	+	+	+	+	+	+	+	+	+			+									+	+	+	+							
PRE 16	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
PRE 17	+	+	+	+			+				+	+	+	+	+				+									+	+						+	+		
PRE 18	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+				+						+		+	+	+	+				+	+		
PRE 19	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
PRE 20	+	+	+	+						+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
PRE 21	+	+	+	+						+	+	+												+	+	+	+										+	
PRE 22	+	+	+	+						+	+	+												+	+	+	+										+	
PRE 23	+	+	+	+						+	+	+												+	+	+	+										+	

**Learning outcomes for the discipline:** professional training of the dentist, which involves mastering the theory and practice of the sections " Propaedeutics of surgical dentistry", "Inflammatory diseases of the maxillo-facial area gland", "Oncology of the maxillo-facial area", "Traumatology of the maxillo-facial area", "Reconstructive and restorative surgery of the maxillo-facial area"; ability to carry out examination of a surgical dental patient, to diagnose the main symptoms of MFA main diseases, to justify and formulate a preliminary diagnosis; analyze the results of the examination and carry out differential diagnosis, formulate a clinical diagnosis, identify and identify manifestations of somatic diseases in the oral cavity, determine the principles of complex treatment, identify different clinical options and complications, know the measures of primary and secondary prevention of surgical dental diseases the study of which is provided in the all content modules.

## **2. Information volume of the discipline.**

**5 ECTS credits of 150 hours** are allocated for studying of the discipline

**During discipline studying, a student has to:**

### **Content module 1:**

**Explain and interpret** the etiology, classification, clinical picture, differential diagnosis of defects and deformations of MFA, the principles of reconstructive surgery in MFA, methods of examination of patients with pathology of MFA, participation of related specialists in the examination.

**To analyze** indications and contraindications, features of application of the basic techniques of restorative-plastic interventions on MFA, features of the general and local anesthesia, sedation in practice of the surgeon-dentist.

**To develop** a plan and conduct an examination of a patient with MFA pathology, make a plan of additional reexamination methods and be able to interpret their results, a plan of comprehensive examination and treatment of patients with defects and deformations of MFA.

**To collect** the anamnesis and examination of the patient for the specified pathology of MFA, to fill in the corresponding medical documentation.

**To carry out** the collection of material for additional research methods (microbiological, cytological, histological); measures for the prevention of pathologies of the thyroid gland.

**To prescribe** an individual scheme of premedication depending on the psycho-somatic condition of the patient, the nature and extent of surgery, drug therapy in the postoperative period, provide appropriate recommendations; prescribe conservative treatment of diseases and pathologies of the MFA.

**To demonstrate** techniques of preoperative preparation of the surgeon's hands according to modern methods, techniques of antiseptic treatment of the operating field, techniques of local plastic surgery.

*Topic №1. Secondary facial soft tissues defects and deformities. The principles of plastic surgery planning. Local plastic surgery. Pedicle flap use. Free dermal transplantation. Soft tissue substitution by means of round Filatov's stem. Salivary gland fistulas surgical treatment. Lip and palate clefts: classification, clinical features, functional disorders. The surgical treatment principles. Jaw deformities: etiology, pathogenesis, classification, clinical signs, diagnostics. Orthognathic surgery: principles and techniques of mono- and bimaxillary surgery. Distraction osteogenesis methods. Total and subtotal maxillary and mandibular defects, clinical and radiological features. Principles of MFA reconstructive surgery by means of craniofacial titanium implants and bone autografts. The principles of rhynoplasty and otoplasty. Basics of ectoprosthetics. TMJ reconstruction.*

The role of the face in human's life. Classification of defects and deformations of the face. Defects and deformations caused by mechanical injuries, gunshot wounds, burns, after inflammatory diseases (osteomyelitis, lupus erythematosus, syphilis, noma, etc.). Defects after removal of tumors of the face and organs of the oral cavity.

Analysis and assessment of facial defect, anatomical, functional and aesthetic changes. Influence of deformities and defects of the maxillofacial area on the general and psycho-emotional status of the patient. Prosthetics and rehabilitation of patients after intervention due to deformation of the jaws.

Typical methods of plastics with local tissues. Elimination of defects of the lips and oral area.

Replacement of lip defects with flaps from the cheeks, nasolabial folds, from the other lip. Elimination of microstomy, plastic corners of the mouth. Surgical interventions in connection with a double lip, reduction of the bridle of the lip, tongue.

Skin distraction. Skin expanders. Action, indications and methods of application, advantages and disadvantages.

Plastic tissue "flap on the leg", taken from closely spaced areas. Ensuring the viability of the flap with a nutritious "leg" used to replace the defect. The use of such flaps to replace defects of the lips, cheeks, chin, the Indian method of rhinoplasty, variants of these types of plastics.

Plastic surgery with pieces of tissue from remote areas. Ability to attract a large number of tissues. Italian method of rhinoplasty.

Development and implementation in practice of the stem flap by V.P. Filatov. Biological substantiation of its application. The use of Filatov's stem to replace defects in various parts of the face and tissues of the oral cavity.

Plastic surgery using free tissue transplantation. Modern ideas about the biological processes that take place in the free transplantation of tissues and organs.

Classification of grafts. Immunological, biological and biomechanical aspects of tissue transplantation: skin, bone, cartilage, etc. The use of auto-, allo-, xenotransplantation of various tissues in maxillofacial surgery. Explantation.

Free skin graft. Biological substantiation. Indications, methods of using different types of skin flaps (thin, split, thick) to close the wound surfaces on the face and in the mouth, their advantages and disadvantages.

Skin graft to eliminate scar deformities, contractures, defects of various parts of the face, mouth, nose.

Prevention and treatment of various types of scars on the face. Features of treatment of keloid scars. Biological substantiation of differentiated application of physical factors depending on the phase of the wound process during skin transplantation and other reconstructive surgical interventions.

Factors in the development of congenital facial defects. Pathogenesis of pathology development in utero. Types of congenital defects.

Differential diagnosis of cleft of the upper lip and palate. Clinical picture of overt and covert nonunions.

Functional and anatomical disorders in children with congenital malformations of the upper lip and palate.

Types of surgical interventions, terms of plastic closure of defects. Methods of cheiloplasty in unilateral and bilateral nonunion of the upper lip. Methods of surgical interventions for congenital nonunion of the palate.

Principles of complex treatment of children with congenital malunions of the upper lip and palate.

The role of orthodontist and speech therapist in postoperative rehabilitation of patients.

Features of medical management of pediatric patients.

Anomalies in the development and deformation of the jaw bones. WHO classification of deformities and anomalies of the jaws: underdevelopment (micrognathia) or excessive development (macrognathia) of the upper and lower jaws or their individual parts (prognathia and retrognathia), open bite. Clinical manifestations, functional and aesthetic disorders. Analysis and assessment of facial defect, anatomical, functional and aesthetic changes. Influence of deformities and defects of the maxillofacial area on the general and psycho-emotional status of the patient.

Indications for surgical treatment. Basic methods of operations for correction of the size and shape of the mandible. Intervention within the body, angle and branch of the mandible. Planes of osteotomy of the jaws. Elimination of open bite.

Surgical correction of the shape, size and position of the upper jaw. Features of operative equipment, immobilization and postoperative management.

Distraction-compression method in the treatment of developmental abnormalities and deformities of the jaws.

History of development, the role of domestic scientists. Biological substantiation of distraction histiogenesis.

Distraction regenerate, the zone of "growth" of bone tissue.

Indications and equipment for distraction-compression of bone tissue, muscles, vessels, nerves, skin. Types of devices, application of external and intraoral devices, rates of distraction-compression of the upper and lower jaws. Achievements of domestic scientists.

Prosthetics and rehabilitation of patients after intervention due to deformation of the jaws.

Classification and causes of defects of the lower and upper jaws. Indications for bone grafting. Biological substantiation of bone grafting, immunological compatibility of tissues. Types of grafts and bone bed.

Possibilities of canned bone application, bone preservation methods. The fate of grafts, types of their reconstruction.

***The list of questions to be studied by the student at the lesson:***

1. Goals and objectives of reconstructive surgery of the maxillofacial area.
2. Examination of patients in need of reconstructive surgery in MFA.
3. Classification of defects and deformations of the maxillofacial area according to the etiology, pathogenesis, localization and nature of dysfunction.
4. Indications for reconstructive surgery on the face.
5. Plastics with local fabrics according to Shymanowski.
6. Plastic counter triangular flaps according to Limberg.
7. Classification of leg flaps.
8. Plastic replacement of defects and deformations of the nose.
9. Plastic replacement of lip defects.
10. Replacement of tissue defects of the middle zone of the face.
11. Replacement of defects of MFA by leg flaps.

12. Replacement of MFA defects by arterialized flaps.
13. Causes, classification of salivary fistulas.
14. Surgical methods of closing salivary fistulas.
15. Conservative treatment of salivary fistulas.
16. Indications for the use of skin and mucous membrane transplants.
17. Classification of methods and techniques for free transplantation of skin and mucous membranes.
18. The main indications and contraindications to the closure of facial defects with Filatov's stem.
19. Requirements for the skin, where they plan to form a stem and in the area of the defect of facial tissues.
20. Methods of stem preparation, the main stages of the operation of stem formation.
21. Basic methods of preparation (training) of the stem for migration.
22. Rules of stalk stratification on the recipient wound.
23. Features of care for patients after plastic surgery.
24. Medical examination of patients after reconstructive operations in MFA.
25. Deontological aspects in working with patients who need reconstructive surgery in MFA.
26. Etiology of congenital malformations and clefts of the face.
27. Classification of congenital clefts of the lips and palate.
28. Clinical picture of congenital clefts of the upper lip and palate.
29. Functional and anatomical disorders in children with congenital malformations of the upper lip and palate.
30. Principles of complex treatment of children with congenital malformations of the upper lip and palate.
31. Terms of surgical treatment of children with congenital clefts of the upper lip and palate.
32. Methods of cheiloplasty in unilateral and bilateral cleft of the upper lip.
33. Methods of surgical interventions for congenital cleft of the palate.
34. Care and feeding of children with congenital cleft of the upper lip and palate.
35. Preparation of children for cheiloplasty and uranostaphyloplasty.
36. Plastic surgery of postoperative defects and deformities of the upper lip, nose and palate.
37. Classification of craniomaxillary deformities.
38. Etiological factors of the specified pathology.
39. Features of examination of patients with facial skull deformities. Special diagnostic methods.
40. Comprehensive treatment of patients with craniofacial deformities, involvement of related specialists.
41. Medical rehabilitation of patients with facial skeletal deformities. Principles of medical examination.
42. Preventive measures aimed at preventing craniofacial deformities.
43. Progeny of the mandible, clinic, methods of treatment.
44. Microgenesis of the mandible, clinic, methods of treatment.
45. Open bite, clinic, methods of treatment.
46. Macrogy of the mandible, clinic, methods of treatment.
47. Unilateral deformities of the mandible, clinic, methods of treatment.
48. Chin deformities, clinic, methods of treatment.
49. Defects of the mandible, clinic, methods of treatment.
50. Micrognathia (retrognathia) of the upper jaw, clinic, methods of treatment.
51. Micrognathia, combined with narrowing of the dentition, clinic, methods of treatment.
52. Prognathia (macrognathia) of the upper jaw, clinic, methods of treatment.
53. Defects of the upper jaw, clinic, treatment methods.
54. Pathophysiological bases and principles of tissue reorganization under the influence of compression and distraction forces.
55. Indications for the use of the distraction method in the treatment of defects and deformations of the bones of the facial skeleton.
56. Features and modes of application of distraction forces depending on the location of defects and the general condition of patients.
57. Methods of application of distraction methods for the purpose of preimplantation preparation of patients with atrophy and defects of alveolar processes.
58. Classification of defects of the maxillofacial area according to the etiology, pathogenesis, localization and nature of dysfunction.
59. Defects of the upper and lower jaw, their clinical and radiological characteristics.
60. Examination of a patient with acquired defects of the maxillofacial area.
61. Comprehensive treatment of patients with craniofacial deformities, involvement of related specialists.
62. Techniques of surgical interventions in the treatment of mandibular defects.
63. Techniques of surgical interventions in the treatment of defects of the upper jaw.
64. Techniques of surgical interventions in the treatment of TMJ defects.
65. Principles of reconstructive surgery of MFA.
66. Medical rehabilitation of patients with facial skeletal defects. Principles of medical examination.

67. Preventive measures aimed at preventing craniofacial deformities.
68. Plastic replacement of defects and deformations of the nose.
69. Plastic replacement of lip defects.
70. Replacement of tissue defects of the middle zone of the face.
71. Plastic surgery of postoperative defects and deformities of the upper lip, nose and palate.
72. Replacement of defects of MFA by leg flaps.
73. Replacement of MFA defects by arterialized flaps.
74. Cutaneous-fascial arterialized flaps on the face.

**Topic №2. Preprosthetic surgery. Soft tissues procedures: dissection of the labial and lingual frenulums, scars, mucous hyperplasia and fibrous inflammatory hyperplastic lesions. Vestibuloplasty: the surgeries principles and techniques. Dental implantation. The history and the main development stages. The types of dental implants. The principles of one and two stage implantation. The concept of immediate and delayed loading. Complications of dental implantation. Endodontic treatment complications and their surgical treatment. Periodontal surgery: the main principles, bone grafting materials. Guided tissue regeneration.**

Conditions of the maxillofacial area that interfere with dental prosthetics. Surgical preparation of the oral cavity for prosthetics: plastic bridle of the lips and tongue, removal of scar deformities and muscle cords, fibrous changes of the oral mucosa.

Deepening of the orifice of the oral cavity by local plastic surgery and with the use of free mucous and skin grafts. Implantation technologies in maxillofacial surgery. Biological bases of dental implantation.

Dental implantation: indications and contraindications, examination of the patient, planning of surgical and orthopedic stages of treatment. Evaluation of jaw bone tissue. Types and materials of implants, one- and two-stage implantation, bone reaction to implantation. Immediate and delayed loading of implants.

Osteointegration, its essence. Technique of dental implantation, complications and their prevention, features of its carrying out on the upper and lower jaw. The results of dental implantation. Directed tissue regeneration, membrane technique.

Methods of surgical treatment of endodontic complications (root perforation, external root resorption, root fracture). Indications for tooth extraction in case of complications after endodontic treatment.

The role and importance of surgical methods in the complex treatment of periodontal diseases.

Curettage of periodontal pockets, gingivotomy, gingivectomy, patch surgery, osteoplasty and compact osteotomy, transplantation of arterialized flaps into the lesion area, osteogenic therapy.

Directed tissue regeneration, materials and methods.

***The list of questions to be studied by the student at the lesson:***

1. Tasks and measures of surgical preparation of the oral cavity for prosthetics.
2. Types of surgery on the soft tissues of the oral cavity.
3. Indications and contraindications to surgical preparation of the oral cavity for prosthetics.
4. Indications for plastic surgery on the soft tissues of the oral cavity.
5. Methods of lengthening the bridles of the lips, cheeks, tongue, indications for these interventions.
6. Indications for plastic soft tissues of the oral cavity.
7. Operative techniques for deepening the shallow dorsum of the oral cavity.
8. Indications for free skin plastic surgery, methods of intervention.
9. Indications for free plasticity of the mucous membrane, the method of intervention.
10. Techniques for applying cosmetic sutures.
11. Features of healing of soft tissues of the oral cavity.
12. Method of removal of the mucous membrane, its characteristics.
13. Possible complications of local plastic surgery.
14. Features of postoperative wound care.
15. Prevention of postoperative complications.
16. Features of the clinical picture of complications of endodontic treatment.
17. Indications and contraindications for appropriate surgical treatment.
18. Principles of granulomectomy in the area of the apex of the tooth root, interradicular septum.
19. Techniques and stages of resection of the apex of the tooth root.
20. Resection (amputation) of the tooth root.
21. Coronary-radicular separation.
22. Hemisection of the tooth.
23. Tooth replantation.
24. Directed tissue regeneration.
25. The main tasks of periodontal reconstructive and reconstructive (plastic) surgery.
26. Indications and contraindications to surgical treatment of periodontal diseases.
27. Surgical intervention planning.

28. Techniques of periodontal reconstructive-reconstructive (plastic) surgery:
  - a. operations within the periodontal, gingival pocket;
  - b. patchwork operations;
  - c. formation of the dorsum of the oral cavity.
29. Bone substitution materials.
30. Features of examination of patients before dental implantation.
31. Indications and contraindications to dental implantation.
32. Types of implants.
33. The structure of implants:
  - a. by type of material;
  - b. by type of construction;
  - c. components of implants.
34. Support areas for implants.
35. Types of bone tissue by density (C.E. Misch).
36. Functional loads on implants after their installation.
37. Basic requirements for the design and materials of implants.
38. Types of dental implantation.
39. Clinical stages of implantation.
40. Planning the application of the method of prosthetic teeth based on implants.
41. Methods of endosseous implantation and features of its implementation on the upper and lower jaws.
42. The main criteria for the design of implants.
43. The main criteria for assessing the condition of the endosseous implant in the bone.
44. Basics of medical tactics when using dental implants.
45. Complications during and after implantation and their treatment.

**Topic №3. TMJ ankylosis: etiology, pathophysiology, classification, clinical signs, diagnostics, treatment, prevention. Arthroscopy: indications and contraindications, arthroscopic techniques. Mandible contracture: etiology, classification, clinical signs, differential diagnostics, treatment, prevention. The trigeminal and facial nerves diseases: clinical signs, diagnostics, treatment. Pain syndrome surgical treatment. TMJ pain dysfunction syndrome. The practical skills algorithms performing: local plastic surgery methods, suturing techniques, alveolotomy conducting. Periodontal abscess incision.**

**Summary lesson of "MFA Reconstructive Surgery" chapter.**

Methods of examination of a patient with TMJ pathology, mandibular contracture. Clinical manifestations of TMJ pathology.

Methods of surgical operations (osteotomy, osteoectomy, resection of the articular process with its simultaneous plasticity) in TMJ ankylosis. Possible complications of operations for TMJ ankylosis. Prevention of TMJ ankylosis.

Classification of mandibular contractures. Etiopathogenesis, clinic, diagnosis of mandibular contracture. Additional methods of examination of patients with mandibular contractures. Differential diagnosis. Modern medical methods of treatment of mandibular contractures. Modern surgical methods of treatment of mandibular contractures. Physiotherapeutic rehabilitation of patients with mandibular contractures. Prevention of mandibular contractures (inflammatory, post-traumatic, post-injection).

Neurology of the maxillofacial area.

Pain, paresthetic and other syndromes.

Facial nerve neuritis. Paresis and paralysis of facial muscles. Indications for surgical treatment (decompression, neurolysis, nerve suturing, facial, muscular, skin plastic, microsurgical plastic surgery of nerves and muscles).

Trigeminal neuralgia. Etiology, clinical manifestations, differential diagnosis. Unlike neuritis and other prosopalgic syndromes and the consequences of occlusion.

Linguistic nerve neuralgia. Frey's syndrome - auriculotemporal syndrome (hyperhemihidrosis).

Gangliolitis, vascular pain. Principles of treatment of neuralgic disorders of the maxillofacial area. Diagnosis and therapeutic blockade with anesthetics. Conservative and surgical methods of treatment, indications, prognosis. Indications for the use of physiotherapy and reflexology.

TMJ pain dysfunction syndrome; etiology, pathogenesis, diagnosis, treatment. Kosten's syndrome.

**The list of questions to be studied by the student at the lesson:**

1. Classification of TMJ ankylosis.
2. Methods of examination of patients with TMJ ankylosis.
3. Ankylosis of the TMJ: etiopathogenesis, clinic, diagnosis, treatment.
4. Differential diagnosis of TMJ ankylosis.
5. Methods of surgical operations (osteotomy, osteoectomy, resection of the articular process with its simultaneous plasticity) in TMJ ankylosis.

6. Possible complications of operations for TMJ ankylosis.
7. Prevention of TMJ ankylosis.
8. Classification of mandibular contractures.
9. Etiopathogenesis, clinic, diagnosis of mandibular contracture.
10. Additional methods of examination of patients with mandibular contractures.
11. Differential diagnosis of mandibular contractures.
12. Modern medical methods of treatment of mandibular contractures.
13. Modern surgical methods of treatment of mandibular contractures.
14. Physiotherapeutic rehabilitation of patients with mandibular contractures.
15. Prevention of mandibular contractures (inflammatory, post-traumatic, post-injection).
16. Causes of neuralgia and neuritis of the trigeminal nerve, painful dysfunction of the TMJ. Factors contributing to the development of diseases.
17. Modern classifications of facial pain, trigeminal neuralgia.
18. Clinical symptoms of neuralgia and neuritis of the trigeminal nerve, painful dysfunction of the TMJ.
19. Diagnosis of neuralgia and neuritis of the trigeminal nerve, painful dysfunction of the TMJ.
20. Modern medical, physiotherapeutic and surgical methods of treatment of neuralgia and neuritis of the trigeminal nerve, painful dysfunction of the TMJ.

***The list of questions that the student must study to master the topics of the content module №1***

1. Classification of TMJ ankylosis.
2. Methods of examination of patients with TMJ ankylosis.
3. Ankylosis of the TMJ: etiopathogenesis, clinic, diagnosis, treatment.
4. Methods of surgical operations (osteotomy, osteoectomy, resection of the articular process with its simultaneous plasticity) in TMJ ankylosis.
5. Possible complications of operations for TMJ ankylosis.
6. Classification of mandibular contractures.
7. Modern medical methods of treatment of mandibular contractures.
8. Modern surgical methods of treatment of mandibular contractures.
9. Physiotherapeutic rehabilitation of patients with mandibular contractures.
10. Prevention of mandibular contractures (inflammatory, post-traumatic, post-injection).
11. Classification of defects and deformations of the maxillofacial area according to the etiology, pathogenesis, localization and nature of dysfunction.
12. Plastics with local fabrics according to Shymanowski.
13. Plastic counter triangular flaps according to Limberg.
14. Replacement of defects of MFA by leg flaps.
15. Replacement of MFA defects by arterialized flaps.
16. Causes, classification of salivary fistulas.
17. Surgical methods of closing salivary fistulas.
18. Conservative treatment of salivary fistulas.
19. Indications for the use of skin and mucous membrane transplants.
20. Classification of methods and techniques for free transplantation of skin and mucous membranes.
21. The main indications and contraindications to the closure of facial defects with Filatov's stem.
22. Requirements for the skin, where they plan to form a stem and in the area of the defect of facial tissues.
23. Methods of stem preparation, the main stages of the operation of stem formation.
24. Basic methods of preparation (training) of the stem for migration.
25. Rules of stalk stratification on the recipient wound.
26. Features of care for patients after plastic surgery.
27. Medical examination of patients after reconstructive operations in MFA.
28. Deontological aspects in working with patients who need reconstructive surgery in MFA.
29. Etiology of congenital malformations and clefts of the face.
30. Classification of congenital clefts of the lips and palate.
31. Clinical picture of congenital clefts of the upper lip and palate.
32. Functional and anatomical disorders in children with congenital malformations of the upper lip and palate.
33. Principles of complex treatment of children with congenital malformations of the upper lip and palate.
34. Terms of surgical treatment of children with congenital clefts of the upper lip and palate.
35. Methods of cheiloplasty in unilateral and bilateral cleft of the upper lip.
36. Methods of surgical interventions for congenital cleft of the palate.
37. Care and feeding of children with congenital cleft of the upper lip and palate.
38. Preparation of children for cheiloplasty and uranostaphyloplasty.
39. Plastic surgery of postoperative defects and deformities of the upper lip, nose and palate.

40. Classification of craniomaxillary deformities.
41. Features of examination of patients with facial skull deformities.
42. Comprehensive treatment of patients with craniofacial deformities, involvement of related specialists.
43. Medical rehabilitation of patients with facial skeletal deformities. Principles of medical examination.
44. Pathophysiological bases and principles of tissue reorganization under the influence of compression and distraction forces.
45. Indications for the use of the distraction method in the treatment of defects and deformations of the bones of the facial skeleton.
46. Features and modes of application of distraction forces depending on the location of defects and the general condition of patients.
47. Methods of application of distraction methods for the purpose of preimplantation preparation of patients with atrophy and defects of alveolar processes.
48. Definition of "regeneration". Classification of tissue regeneration.
49. Characteristic features of the jaws that affect the processes of bone regeneration.
50. Modern methods of bone regeneration research.
51. Methods of bone graft transplantation.
52. Varieties of osteogenesis.
53. Advantages and disadvantages of using different bone grafts.
54. The concept of "osteoinduction" and "osteoconduction".
55. Types of osteoinductive, osteoconductive and osteoneutral materials.
56. Osteogenic and osteoinductive therapy.
57. Indications and contraindications to osteogenic and osteoinductive therapy.
58. Principles and methods of osteogenic and osteoinductive therapy for defects of the upper and lower jaw.
59. Definition of "graft", "implant", "combined graft".
60. Features of the reaction of bone tissue to the introduction of the graft. Types of graft reconstruction.
61. Advantages and disadvantages of using auto-, allogeneic, combined transplants, bone marrow.
62. Methods of preventing graft rejection.
63. Biological principles and methods of bone and cartilage tissue transplantation.
64. Types of artificial materials used to replace bone tissue.
65. Principles of preparation of the maternal bed and donor site for transplantation.
66. Classification of defects of the maxillofacial area according to the etiology, pathogenesis, localization and nature of dysfunction.
67. Defects of the upper and lower jaw, their clinical and radiological characteristics.
68. Examination of a patient with acquired defects of the maxillofacial area.
69. Comprehensive treatment of patients with craniofacial deformities, involvement of related specialists.
70. Techniques of surgical interventions in the treatment of mandibular defects.
71. Techniques of surgical interventions in the treatment of defects of the upper jaw.
72. Techniques of surgical interventions in the treatment of TMJ defects.
73. Principles of reconstructive surgery of MFA.
74. Medical rehabilitation of patients with facial skeletal defects. Principles of medical examination.
75. Preventive measures aimed at preventing craniofacial deformities.
76. Plastic replacement of defects and deformations of the nose.
77. Plastic replacement of lip defects.
78. Replacement of tissue defects of the middle zone of the face.
79. Plastic surgery of postoperative defects and deformities of the upper lip, nose and palate.
80. Replacement of defects of MFA by leg flaps.
81. Replacement of MFA defects by arterialized flaps.
82. Cutaneous-fascial arterialized flaps on the face.
83. Tasks and measures of surgical preparation of the oral cavity for prosthetics.
84. Types of surgery on the soft tissues of the oral cavity.
85. Indications and contraindications to surgical preparation of the oral cavity for prosthetics.
86. Indications for plastic surgery on the soft tissues of the oral cavity.
87. Methods of lengthening the bridges of the lips, cheeks, tongue, indications for these interventions.
88. Indications for plastic soft tissues of the oral cavity.
89. Operative techniques for deepening the shallow dorsum of the oral cavity.
90. Indications for free skin plastic surgery, methods of intervention.
91. Indications for free plasticity of the mucous membrane, the method of intervention.
92. Techniques for applying cosmetic sutures.
93. Features of healing of soft tissues of the oral cavity.
94. Method of removal of the mucous membrane, its characteristics.
95. Possible complications of local plastic surgery.

96. Features of postoperative wound care.
97. Prevention of postoperative complications.
98. Features of examination of patients before dental implantation.
99. Indications and contraindications to dental implantation.
100. Types of implants.
101. The structure of implants:
102. by type of material;
103. by type of construction;
104. components of implants.
105. Support areas for implants.
106. Types of bone tissue by density (C.E. Misch).
107. Functional loads on implants after their installation.
108. Basic requirements for the design and materials of implants.
109. Types of dental implantation.
110. Clinical stages of implantation.
111. Planning the application of the method of prosthetic teeth based on implants.
112. Methods of endosseous implantation and features of its implementation on the upper and lower jaws.
113. The main criteria for the design of implants.
114. The main criteria for assessing the condition of the endosseous implant in the bone.
115. Basics of medical tactics when using dental implants.
116. Complications during and after implantation and their treatment.
117. The concept of "platelet concentrates".
118. Classification of platelet concentrates.
119. Methods of their manufacture.
120. The concept of growth factors and their regenerative potential.
121. Possibilities of application of platelet concentrates and compositions based on them for regeneration of soft tissues of the MFA.
122. The use of platelet concentrates and compositions based on them to stimulate osteogenesis in MFA.
123. Features of the clinical picture of complications of endodontic treatment.
124. Indications and contraindications for appropriate surgical treatment.
125. Principles of granulomectomy in the area of the apex of the tooth root, interradicular septum.
126. Techniques and stages of resection of the apex of the tooth root.
127. Resection (amputation) of the tooth root.
128. Coronary-radicular separation.
129. Hemisection of the tooth.
130. Tooth replantation.
131. Directed tissue regeneration.
132. The main tasks of periodontal reconstructive and reconstructive (plastic) surgery.
133. Indications and contraindications to surgical treatment of periodontal diseases.
134. Surgical intervention planning.
135. Techniques of periodontal reconstructive-reconstructive (plastic) surgery:
136. Bone substitution materials.
137. Causes of neuralgia and neuritis of the trigeminal nerve, painful dysfunction of the TMJ. Factors contributing to the development of diseases.
138. Modern classifications of facial pain, trigeminal neuralgia.

### **Content module 2:**

**To explain** principles of deontology and medical ethics in surgical dentistry and MFS, methods of examination of patients with MFA pathology, participation of related specialists in the examination;

- the etiology of the inflammatory processes of solid tissues of MFA (periodontitis, perioditis, osteomyelitis), inflammatory processes of soft tissues of MFA (abscesses, phlegmons, lymphadenitis, boils, carbuncles,), odontogenic sinusitis, specific inflammatory diseases of MFA (actinomycosis, tuberculosis, syphilis, diphtheria, HIV), inflammatory and destructive processes of TMJ, inflammatory and reactive-dystrophic diseases of the salivary glands, salivary stones, complications of inflammatory processes of MFA (sepsis, mediastinitis, brain abscess, thrombosis of cavernous sinus, etc.);
- the features of traumatic injuries of the MFA, taking into account the aesthetic and functional significance of the face and the topographic proximity of vital organs, the principles of providing emergency assistance to patients with traumatic injuries, the role of specialists in related specialties in the comprehensive examination of the injured;

- the features of gunshot, thermal, chemical injuries of the MFA, taking into account the aesthetic and functional significance of the face and the topographic proximity of vital organs, the principles of emergency care for patients with extreme traumas, the sequencing of diagnostic and treatment measures in such cases;
- the concept of "oncological vigilance" and the principles of organization of antitumor service, medical examination of cancer patients, the role of factors of endogenous and exogenous origin in the occurrence of tumors, to understand the patterns of growth and development of tumors and tumor-like formations, the principles of their differential diagnosis;
- etiology, classification, clinical picture, differential diagnosis of defects and deformations of MFA, principles of reconstructive operations in MFA, methods of examination of patients with pathology of MFA, participation of related specialists in the examination.

**To interpret** the pathogenesis of inflammatory processes of hard tissues of MFA (periodontitis, periostitis, osteomyelitis), inflammatory processes of soft tissues of MFA (abscesses, phlegmons, lymphadenitis, boils, carbuncles, behemic inflammation), odontogenic sinusitis, specific inflammatory diseases of MFA (actinomycosis, tuberculosis, syphilis, diphtheria, HIV), inflammatory and destructive processes of TMJ, inflammatory and reactive-dystrophic diseases of the salivary glands, salivary stones, complications of inflammatory processes of MFA (sepsis, mediastinitis, brain abscess, thrombosis of cavernous sinus, etc.);

- pathogenesis of tumor-like formations of soft tissues and bones of MFA (jaw cysts, soft tissue cysts), benign odontogenic and neodontogenic tumors of the jaws, (ameloblastoma, odontoma, cementoma, epulid, osteoblastoma, osteoclastoma, osteoma, osteoma, osteoma, osteoma) hemangioma, fibroma), osteogenic tumor-like formations of the jaws (fibrous osteodysplasia, parathyroid osteodystrophy, Paget's disease, eosinophilic granuloma), benign tumors of the soft tissues of the MFA, precancerous diseases of the skin, mucous membranes and bones of MFA, benign and malignant tumors of salivary glands and salivary gland cysts;
- pathogenesis of congenital and acquired defects and deformities of MFA.

**To analyze** indications and contraindications, features of application of the basic techniques of the general and local anesthesia, sedation in practice of the surgeon-dentist;

- the indications and contraindications to the application of modern methods of diagnosis and treatment of inflammatory processes of solid and soft tissues of MFA, specific inflammatory diseases of MFA, inflammatory and destructive processes of TMJ, inflammatory and reactive-dystrophic diseases of the salivary glands, salivary stones, complications of inflammatory diseases of MFA, management of oro-antral connections.

- the radiographs of patients with traumatic injuries of the bones of the facial skeleton, to determine the indications for conservative or surgical treatment based on the evaluation of clinical and radiological criteria;

- the complexity of traumatic (fire, thermal, chemical) damage of the MFA, to determine the need for involvement of specialists of related specialties, the priority of providing diagnostic and medical care depending on the nature and type of damage, to understand the principles of medical sorting of victims in case of war conflict;

- clinical signs of benign and malignant tumors, stages of damage according to the TNM system, to understand their tissue affiliation, the principles of classification of tumors and tumor-like formations; indications and contraindications to the use of modern methods of diagnosis and treatment of tumors of soft tissues and bones of the thyroid gland, benign odontogenic and neodontogenic tumors of the jaws, osteogenic tumors of the jaws, benign tumors of soft tissues of the thyroid gland, precancerous diseases of the skin and mucosa, mucosa tongue, malignant tumors of the soft tissues and bones of the thyroid gland and neck, benign and malignant tumors and cysts of the salivary glands;

- indications and contraindications, features of application of the basic techniques of restorative-plastic interventions of MFA, features of the general, local anesthesia and sedation in practice of the surgeon-dentist.

**To develop** a comprehensive plan and to conduct an examination of a patient with MFA pathology, to make a plan of additional research methods and to be able to interpret their results, a plan of complex examination and treatment of AIDS patients;- a comprehensive plan for the examination and treatment of patients with inflammatory diseases of the MFA, to be able to interpret their results;

- a patient's examination with MFA injuries of peacetime, refer to an additional research (if needed) and be able to interpret their results to set primary diagnosis. To make a diagnostic and treatment plan for patients with combined injuries;

- a patient's examination with with MFA injuries after extreme situation or war conflict, refer to an additional research (if needed) and be able to interpret their results to set primary diagnosis. To make a diagnostic and treatment plan for patients with combined injuries;

- a plan and conduct an examination of a patient with a benign or malignant neoplasm, prescribe the necessary additional research methods (radiological, radioisotope, cytological, histological) and be able to interpret their results, justify the scope and sequence of treatment, surgery, radiation therapy, chemotherapy, cryotherapy, etc.) aimed at rehabilitating the patient.

- a plan and conduct an examination of a patient with MFA pathology, make a plan of additional research methods and be able to interpret their results, a plan of comprehensive examination and treatment of patients with defects and deformations of MFA.

**To perform** collection of anamnesis and examination of the patient for the specified pathology of MFA, to fill in the corresponding medical documentation;

- on a phantom diagnostic puncture of the inflammatory center of the MFA, the operation of disclosing the subperiosteal abscess, the operation of closing the oro-antral combination, the operation of radical sinusotomy, sequestration surgery, the stages of the operation - the disclosure of abscesses and phlegmon of different anatomical and topographic sites of the MFA;
- collection of anamnesis and examination results of the patient MFA injuries of peacetime, fill in the relevant medical documentation;
- collection of anamnesis and examination results of the patient with MFA injuries after extreme situation or war conflict, fill in the relevant medical documentation;
- collection of anamnesis and examination of a patient with benign and malignant formation of MFA, fill in the relevant medical documentation, refer the patient to the appropriate diagnostic and treatment depending on the type and stage of cancer.
- collection of anamnesis and examination of a patient with congenital defects and deformities of the MFA, fill in the relevant medical documentation.
- perform cardiopulmonary resuscitation on the phantom.

**To conduct** collection of the material for additional research (microbiological, cytological, histological); preventive measures and emergency care;

- diagnostics of complications of inflammatory processes of MFA; registration of the corresponding medical documentation;
- primary surgical debridement of soft tissue lesions of the MFA, temporary (transport) immobilization in fractures of the upper and lower jaw, assist with emergency conditions;
- primary surgical debridement of soft tissue wounds of the MFA, examination of the wound canal in gunshot wounds of the soft tissues and bones of the facial skeleton, temporary (transport) immobilization in cases of fractures of the upper and lower jaw in extreme situations, to provide assistance in emergency situations;
- puncture, incision and excisional biopsy of the tissues of the thyroid gland, to have the method of diathermocoagulation and cryodestruction;
- measures for prevention of MFA pathologies.

**To assign** an individual scheme of medical treatment depending on the psycho-somatic state of the patient, the nature and extent of the surgical intervention, medication therapy in the postoperative period, provide appropriate recommendations;

- antishock, analgesic and other types of drug therapy at the stages of the evacuation of the victims in the conditions of hostilities, to provide appropriate recommendations;
- comprehensive medical treatment of patients with benign and malignant tumors of the MFA in the pre-, intra- and postoperative periods, to provide appropriate recommendations;
- individual scheme of premedication depending on the psycho-somatic condition of the patient, the nature and volume of surgery, drug therapy in the postoperative period, provide appropriate recommendations, prescribe conservative treatment of diseases and pathologies of the MFA.

**To demonstrate** the techniques of preoperative preparation of the surgeon's hands by modern techniques, the technique of antiseptic treatment of the surgical site, techniques of local anesthesia on the upper and lower jaws; operations for the removal of individual groups of teeth on the upper and lower jaw, pericoronarectomy, atypical tooth extraction;

- the ability to perform diagnostic puncture of the inflammatory center of the MFA, the operation to open the subperiosteal abscess, the operation of closing the oro-antral connections combination, the operation of radical sinusotomy, sequestration surgery, the stages of the operation - the foramen of abscesses and phlegmons of various anatomical and topographic areas of the MFA.
- methods of antiseptic cleaning of wounds, technique of suturing during primary surgical debridement, ligature bonding of teeth, production and imposition of bent aluminum tires, their fixation for temporary or prolonged jaw immobilization;
- the method of antiseptic treatment of gunshot wounds, thermal and chemical lesions of the skin, techniques of suturing during primary surgical debridement, methods of temporary or prolonged jaw immobilization depending on the general condition of the patient and features of damage to the jaw bones, in particular the number of teeth, take measures to prevent asphyxia;
- ability to interpret the results of additional methods of examination aimed at verification of tumors of the MFA, methods of soft and hard tissue biopsy, to make a plan of complex (surgical, radiation, chemotherapeutic) treatment of a cancer patient;
- techniques of local plastic surgery.

**Topic №1. Clinical examination of a surgical dental patient. Curation of outpatients and inpatients. Preparing the patient for surgery. Asepsis and antiseptics in MFS. Classification of anesthesia, types,**

**methods, indications and contraindications. General anesthesia. Premedication. Neuroleptanalgesia. The choice of the method of anesthesia during surgery in a hospital, clinic.**

Organization of work and equipment of the dental polyclinic, maxillofacial department of the hospital, operating room, dressing room.

Special equipment, apparatus and tools for examination of patients and dental interventions.

Medical documentation in the surgical department (office) of the dental polyclinic and in the maxillofacial department of the hospital. Performance indicators of a dental surgeon.

Indications for hospitalization of patients with pathology of the maxillofacial area, features of their examination and rehabilitation.

Features of examination of patients with diseases of the dental system, injuries, inflammatory processes, benign, malignant and tumor-like formations, congenital and acquired defects, deformities of the maxillofacial area.

The importance of personal communication between doctor and patient. Emotional factors associated with diseases, injuries and defects of the face and treatment. Deontology and medical ethics in surgical dentistry and maxillofacial surgery.

Collection of subjective patient data:

Complaints at the time of applying to a healthcare unit.

History of the disease: the development of the disease, its dynamics, previous treatment.

Life history: hereditary, transferred and concomitant diseases, bad habits - drug use, alcohol, smoking; heredity, allergy history.

Objective examination: general condition, consciousness. Examination of organs and systems in the hospital.

Examination of the maxillofacial area. Facial examination. Palpation. Examination of organs and soft tissues of the oral cavity, examination of teeth. General clinical, laboratory and special research methods. Study of the function of motor and sensory nerves. Examination of the salivary glands and their ducts, temporomandibular joints, lymphatic system of the face and neck. Establishing the nature and magnitude of defects and deformations of facial tissues and oral cavity, the condition of surrounding tissues. Assessment of the degree of anatomical, functional and aesthetic disorders.

Objective research methods using modern diagnostic equipment. Radiological: radiography, tomography, panoramic radiography and pantomography. Application of artificial contrast. Computed tomography and magnetic resonance imaging, radioisotope, ultrasound diagnostics, remote and contact thermography. Morphological methods: cytological examination of prints, scrapings, puncture material; histological examination of biopsy material. Methods of functional diagnostics: rheo-, polaro- and electromyography, electroodontodiagnostics. Use of computers in diagnostics: decoding of radiographs, planning of operations, results of treatment.

The volume of examination of patients with pathology of the maxillofacial area during treatment in the clinic and hospital, the participation of related specialists in the examination.

Asepsis and antiseptics for operations on the face and mouth. Preparation of the oral cavity for surgery. Operating field preparation.

Sterilization of tools and dressings, material for suturing (silk, catgut, threads of synthetic materials). Preparing the surgeon's hands for surgery.

Features of care for outpatients and inpatients with inflammatory diseases, injuries and after planned surgical interventions in the maxillofacial area, their nutrition.

Nosocomial infection in a dental clinic and maxillofacial hospital, ways of infection transmission. Protection of patients and medical staff from nosocomial infections, viral hepatitis, HIV and others.

Purpose, types and tasks of anesthesia in dentistry. Organization and provision of anesthesiology and resuscitation services in the dental clinic and hospital.

Pain, its types, components of pain, its significance for the body. The body's response to pain, surgical trauma.

Premedication, its principles, tasks, action. Indications for use. Features of carrying out in the conditions of polyclinic and hospital. Groups and clinical and pharmacological characteristics of drugs used for premedication (analgesics, tranquilizers, antihistamines, etc.). Types of premedication used by a dentist and anesthesiologist.

Potentiation of local anesthesia. Neuroleptanalgesia.

Combined anesthesia. Ataralgesia. Audio anesthesia. Acupuncture. Transcranial electroanalgesia. Percutaneous electroneurostimulation. Hypnotic effect.

General anesthesia for operations in the maxillofacial area. Anesthesia, its types. Indications and contraindications to its conduct.

Preparing of the patient for anesthesia.

***The list of questions to be studied by the student at the lesson:***

1. Principles of organization of dental care for the population of Ukraine.
2. Organization of the surgical department (office) of the dental clinic.
3. Features of the organization and provision of special surgical dental care.
4. Sanitary and hygienic requirements to the surgical department (office) of the dental clinic and hospital.

5. Equipment, medical documentation of the surgical office (department).
6. Subjective examination of a surgical dental patient (complaints, medical history, life history).
7. Methods of examination of the general condition of a surgical dental patient.
8. Methods of local examination (extraoral and intraoral) of a surgical dental patient.
9. Additional methods of examination (electroodontometry, radiography, morphological, microbiological, functional methods).
10. Indications for hospitalization of surgical dental patients.
11. The concept of asepsis, disinfection, sterilization, their methods.
12. General principles and methods of asepsis.
13. Preparation of the premises of the surgical dental department (office) of the clinic and hospital.
14. Preparation of the surgeon's hands.
15. Preparation of the operating field.
16. Methods of processing tools and dressings (disinfection and sterilization), their storage.
17. General principles and methods of antiseptics.
18. Ways of infection transmission in the dental surgery.
19. AIDS: etiology and pathogenesis. Features of the clinical course. Diagnosis, treatment.
20. Prevention of HIV infection, viral hepatitis.
21. The concept of pain, its types. Etiology. Modern theories of pain.
22. The mechanism of perception and transmission of pain signal. Function of the endogenous analgesic system. Interaction of noc - and antinociceptive systems of the body.
23. Components of the human pain response. Factors that affect the sensation of pain.
24. History of anesthesia.
25. The purpose and objectives of medical preoperative preparation of the patient. Premedication, its components. Schemes of premedication. Modern methods for evaluating the effectiveness of premedication.
26. Potentiation of local anesthesia. Neuroleptanalgesia.
27. Combined anesthesia. Ataralgesia. Audio anesthesia. Acupuncture. Transcranial electroanalgesia. Percutaneous electroneurostimulation. Hypnotic effect.
28. General anesthesia during operations in the maxillofacial area. Anesthesia, its types. Indications and contraindications to its conduct.
29. Preparing the patient for anesthesia.
30. Advantages and disadvantages of anesthesia. Modern classifications of anesthesiological risks.
31. Pharmacological drugs used for inhalation and non-inhalation anesthesia. Their features.
32. Stages of anesthesia.
33. Features of anesthesia in dentistry, maxillofacial surgery.
34. Complications of anesthesia. Standards for post-anesthesia patient monitoring.

***Topic №2. Local anesthetics, their properties, side effects. Local anesthesia: application, infiltration anesthesia. Methods of conductive anesthesia of jaws and adjacent tissues. Complications of local anesthesia, their prevention and treatment. Cardiopulmonary resuscitation.***

Types of local anesthesia. Non-injection methods of local anesthesia: chemical, physical, physicochemical, electro anesthesia. Injection methods. Method of needleless injection, use of carpule syringes.

Clinical and pharmacological characteristics of local anesthetics used in dentistry: novocaine, trimecaine, lidocaine, dicaine, pyromecaine, ultracaine, etc. The use of vasoconstrictors in local anesthesia. Dependence of the effectiveness of anesthesia on the general condition of the patient, alcohol consumption and other harmful factors.

Application anesthesia. Technique, indications and contraindications, possible complications.

Infiltrative (terminal) anesthesia for surgery on soft tissues and alveolar processes. Indications and contraindications to use.

Anesthesia during surgery on the upper jaw. Conductive anesthesia. Method of blocking the II branch of the trigeminal nerve near the round hole, near the hyoid hole, the hump of the upper jaw, the large palatine and incisor hole. Internal and external oral methods. Indications and contraindications to use. Errors, complications, their prevention and treatment.

Anesthesia during surgery on the lower jaw. Regional (stem) anesthesia. Method of exclusion of the III branch of the trigeminal nerve near the oval hole, at the entrance to the mandibular canal (mandibular and torus anesthesia), near the mental hole. Intra- and extraoral methods of anesthesia. Indications and contraindications to use.

Combination of conductive and infiltrative anesthesia during surgical interventions on the maxillofacial area, tooth extraction operations. Contraindications to the use of local anesthesia. Acid anesthesia, indications, methods, complications. Intraligamentary anesthesia, indications, methods, advantages and disadvantages, complications. Intrapulpal anesthesia, indications, methods, complications. Intraosseous anesthesia, indications, methods, complications.

Mistakes and complications with local anesthesia: the introduction of tissue toxins, damage to nerves and blood vessels, muscles, infections, and others. Clinical manifestations.

Providing care to the patient in case of complications.

General complications: reactions from the cardiovascular system and CNS - fainting, collapse; anaphylactic shock, other allergic reactions. Providing emergency care.

***The list of questions to be studied by the student at the lesson:***

1. Clinical and pharmacological characteristics:
  - a. anesthetics of the group of esters;
  - b. anesthetics of the amide group;
  - c. vasoconstrictive drugs used with anesthetics for local anesthesia.
2. Separation of anesthetics by duration of action.
3. Requirements to be met by anesthetics for local anesthesia.
4. Forms of release of anesthetics, their synonyms and maximum doses.
5. Rules for the use of anesthetics in ampoules, vials and carpules.
6. Indications and contraindications to the use of anesthetics and vasoconstrictors in the presence of concomitant pathology.
7. Indications and contraindications to local anesthesia.
8. Classification of local anesthesia:
  - a. non-injection
  - b. injection (infiltration, conduction).
9. Advantages and disadvantages of non-injecting and infiltration anesthesia.
10. Classification of conductive anesthesia on mandible.
11. Mandibular anesthesia: the place of the injection of the needle, the direction and depth of needle insertion, the target point of anesthesia, the amount of anesthetic administered. Clinical effect of anesthesia. Zone of anesthesia.
12. Torus anesthesia: the place of the injection of the needle, the direction and depth of the needle insertion, the target point of anesthesia, the amount of injected anesthetic. Clinical effect of anesthesia. Zone of anesthesia.
13. Mental anesthesia: the place of the injection of the needle, the direction and depth of needle insertion, the target point of anesthesia, the amount of injected anesthetic. Clinical effect of anesthesia. Zone of anesthesia.
14. Anesthesia of the lingual nerve: the place of the injection of the needle, the direction and depth of the needle insertion, the target point of anesthesia, the amount of anesthetic administered. Clinical effect of anesthesia. Zone of anesthesia.
15. Anesthetic of the buccal nerve: the place of the injection of the needle, the direction and depth of needle insertion, the target point of anesthesia, the amount of administered anesthetic. Clinical effect of anesthesia. Zone of anesthesia.
16. Extraoral methods of anesthesia on the lower jaw. Indications for conducting.
17. Classification of conduction anesthesia on the upper jaw.
18. Infraorbital anesthesia: the place of the needle, the direction and depth of needle insertion, the target point of anesthesia, the amount of administered anesthetic. Clinical effect of anesthesia. Zone of anesthesia.
19. Tuberal anesthesia: the place of the needle, the direction and depth of needle insertion, the target point of anesthesia, the amount of administered anesthetic. Clinical effect of anesthesia. Zone of anesthesia.
20. Incisor anesthesia: the place of the injection of the needle, the direction and depth of needle insertion, the target point of anesthesia, the amount of administered anesthetic. Clinical effect of anesthesia. Zone of anesthesia.
21. Palatal anesthesia: the place of the injection of the needle, the direction and depth of needle insertion, the target point of anesthesia, the amount of anesthetic administered. Clinical effect of anesthesia. Zone of anesthesia.
22. Extraoral methods of anesthesia on the upper jaw. Indications for conducting.
23. Classification of central conductive anesthesia.
24. Submalar-pterygoid way of anesthesia to the round foramen: the place of the injection of the needle, the direction and depth of needle insertion, the target point of anesthesia, the amount of injected anesthetic. Clinical effect of anesthesia. Zone of anesthesia.
25. Tuberal way of anesthesia to the round foramen: the place of the injection of the needle, the direction and depth of needle insertion, the target point of anesthesia, the amount of anesthetic administered. Clinical effect of anesthesia. Zone of anesthesia.
26. Palatine way: needle position, direction and depth of needle insertion, target point of anesthesia, the amount of injected anesthetic. Clinical effect of anesthesia. Zone of anesthesia.

27. Infrazygomatic-pterygoid way of anesthesia to the oval foramen: place of the injection of the needle direction and depth of needle insertion, the target point of anesthesia, the amount of injected anesthetic. Clinical effect of anesthesia. Zone of anesthesia.
28. Infrazygomatic way of anesthesia to the oval foramen: the place of the injection of the needle, the direction and depth of needle insertion, the target point of anesthesia, the amount of injected anesthetic. Clinical effect of anesthesia. Zone of anesthesia.
29. Suprazygomatic way of anesthesia to the oval foramen: the place of the injection of the needle, direction and depth of needle insertion, the target point of anesthesia, the amount of injected anesthetic. Clinical effect of anesthesia. Zone of anesthesia.
30. Classification of complications of local anesthesia of the maxillofacial area (general and local, immediately during and after some time after anesthesia).
31. Local complications when performing anesthesia on the lower jaw, the causes of their occurrence. Prevention. Clinical manifestations.
32. Assisting the patient in case of complications during anesthesia on the lower jaw.
33. Local complications when performing anesthesia on the upper jaw, the causes of their occurrence. Prevention. Clinical manifestations.
34. Assisting the patient in case of complications during anesthesia on the upper jaw.
35. Local complications during central conduction anesthesia, the causes of their occurrence. Clinical manifestations.
36. Providing assistance to the patient in case of complications during central conduction anesthesia.
37. Fainting: causes, clinic, diagnosis, treatment and prevention.
38. Collapse: causes, clinic, diagnosis, treatment and prevention.
39. Anaphylactic shock: causes, clinic, diagnosis, treatment and prevention.
40. Anesthetic and vasoconstrictor intoxication: causes, clinic, diagnosis, treatment and prevention.
41. Idiosyncrasy: causes, clinic, diagnosis, treatment and prevention.
42. Principles of cardiopulmonary resuscitation in the practice of a dental surgeon.

**Topic №3. Tooth extraction operation. Indications and contraindications. Tools. Stages of the operation. Techniques for removing teeth on the upper and lower jaw. Atypical tooth extraction. Complications during tooth extraction: clinical flow, diagnosis, treatment and prevention. Preparation of patients with concomitant pathology for tooth extraction. Final thematic control № 1. "Propaedeutics of surgical dentistry".**

Tools for teeth extraction, their structure and principles of operation. Indications and contraindications to tooth extraction surgery. Features of patient preparation and surgery in patients with changes in the cardiovascular system, blood diseases and other systemic disorders, pregnant women and children.

Typical tooth extraction: Preparation of the operating field. Method of tooth extraction taking into account anatomical conditions, structure and mechanism of action of tools. Location and position of the doctor and the patient when removing teeth. Tooth extraction tools. Types of tongs, elevators, their structure, mechanism of operation, purpose. Tooth extraction with forceps. Separate stages of tooth extraction with forceps. Features of removal of separate groups of teeth and roots. Technique and mechanics of application of elevators of different types.

Method of removing third molars in case of incomplete eruption or incorrect position. Atypical tooth extraction: indications, methods, anesthesia, tools. Wound treatment after tooth extraction and care.

Wound healing after typical and atypical tooth extraction. Features of alveolar healing. Complications during tooth and root removal. Getting a tooth into the airways and digestive tract. Fracture and dislocation of adjacent teeth, alveolar process, fracture and dislocation of the jaws. Damage to the bottom of the maxillary sinus and pushing the tooth root into it. Bleeding during tooth extraction, their prevention. Therapeutic tactics for these complications, their prevention. Complications after tooth extraction. Bleeding. Etiology. Means to stop bleeding from soft tissue wounds and bones. Surgical, pharmacological and biological methods of postoperative bleeding. Postoperative alveolar pain. Alveolitis, causes, prevention. Treatment of other postoperative complications. Surgical interventions on the alveolar process in preparation for orthopedic treatment.

Principles of deontology and medical ethics in surgical dentistry and MFS, methods of examination of patients with MFA pathology, participation of related specialists in the examination. Drawing up a plan and conducting an examination of a patient with MFA pathology, drawing up a plan of additional research methods, interpretation of their results, a plan of comprehensive examination and treatment of AIDS patients.

Collection of anamnesis and examination of the patient for the specified pathology of MFA, to fill in the corresponding medical documentation; perform cardiopulmonary resuscitation.

Methods of sampling for additional research methods (microbiological, cytological, histological); measures for prevention and assistance in emergencies.

Indications and contraindications, features of application of the basic techniques of the general and local anesthesia, sedation in practice of the surgeon-dentist.

Appointment of an individual scheme of premedication depending on the psycho-somatic condition of the patient, the nature and scope of surgery, drug therapy in the postoperative period, providing appropriate recommendations.

Techniques of preoperative preparation of the surgeon's hands according to modern methods, technique of antiseptic treatment of the operating field, techniques of local anesthesia on the upper and lower jaws; operations of removal of separate groups of teeth on the upper and lower jaws, atypical tooth removal. Complications, causes and prevention.

Providing care to the patient in case of complications.

***The list of questions to be studied by the student at the lesson:***

1. Basic indications before tooth extraction.
2. The main urgent (absolute) indications for the teeth extraction.
3. Relative indications to tooth extraction.
4. Prosthetic, aesthetic, sanitation indications for the teeth extraction.
5. The main general and local contraindications for the teeth extraction.
6. Classification of instruments for tooth extraction on the lower jaw, specificity of forceps and elevators.
7. Classification of instruments for tooth extraction on the upper jaw, specificity of forceps and elevators.
8. The structure of tongs and elevators.
9. Examination of the patient before the operation of tooth extraction.
10. Stages of tooth extraction.
11. Preparation for the operation of tooth extraction of patients with various comorbidities (diseases of the cardiovascular, respiratory, endocrine systems, gastrointestinal tract, neuropsychiatric sphere; hematological and infectious diseases).
12. The position of the patient and doctor at the removal of the teeth on the upper jaw.
13. Position of the patient and the doctor at the removal of the teeth on the lower jaw.
14. Stages of the tooth extraction operation.
15. Features of removal of single-root teeth on the upper and lower jaws.
16. Features of removing multi-root teeth on the upper and lower jaws.
17. Features of removal of the upper third molars. Instruments.
18. Features of removing the lower third molars. Instruments.
19. Features of removal of roots of teeth. Instruments.
20. Healing the wound after tooth extraction.
21. Early local complications that occur during tooth extraction:
  - a. fracture of the tooth or its root;
  - b. fracture, dislocation of the neighboring tooth;
  - c. fracture of the part of the alveolar process;
  - d. fracture of the tuber of the upper jaw;
  - e. damage to soft tissues;
  - f. pushing the tooth or its root into soft tissues;
  - g. perforation of the bottom of the maxillary sinus;
  - h. hit the tooth or its root in the respiratory tract.
22. Late local complications that occur after tooth extraction:
  - a. bleeding from the alveolar socket;
  - b. alveolitis;
  - c. alveolar pains.
23. Common complications that occur during tooth extraction (fainting, collapse, cardiac arrest).
24. Organization of surgical dental care. Familiarity with the structure of the surgical department of the dental clinic and the department of maxillofacial surgery of the clinical hospital. Provision, documentation of the outpatient dental office and department. Methods of examination of the maxillofacial area and neck.
25. Asepsis and antiseptics in MFS. Specific and nonspecific resistance of the oral cavity. Prevention of socially significant infections.
26. Pain, its components, the leading pathways of pain. Classification of anesthesia, types, methods, indications and contraindications. General numbness. Premedication. Neuroleptanalgesia.
27. Local anesthetics, their properties, side effects. Classification. Indications and contraindications to local anesthesia. Application, infiltration anesthesia.
28. Peripheral conduction anesthesia on the lower jaw: torus, mandibular anesthesia. Indications, methods. Local complications, their treatment.

29. Peripheral conduction anesthesia on the lower jaw: mental, buccal and lingual anesthesia. Indications, methods. Local complications, their treatment.
30. Peripheral conduction anesthesia on the upper jaw: tubercular, infraorbital anesthesia. Indications, methods. Local complications, their treatment.
31. Peripheral conduction anesthesia on the upper jaw: incisor, palatal anesthesia. Indications, methods. Local complications, their treatment.
32. Central conductive methods of numbness of the jaws and adjacent tissues. Local complications, their treatment.
33. General complications of local anesthesia, their prevention and treatment. Cardiopulmonary resuscitation.
34. Indications and contraindications to tooth extraction surgery. Tooth extraction tools. Preparation of patients with concomitant pathology for tooth extraction.
35. Techniques for removing teeth on the upper jaw. Stages of the operation.
36. Techniques for removing teeth on the lower jaw. Stages of the operation.
37. Complications during tooth extraction: clinical picture, diagnosis, treatment and prevention.

**Topic №4. Inflammatory processes of MFA: classification, etiology, pathogenesis. Diseases of teething. Pericoronaritis. Acute and chronic periodontitis: classification, etiology, pathogenesis. clinic, diagnosis, surgical methods of treatment, complications, their prevention. Odontogenic periostitis and osteomyelitis of the jaws (acute, chronic): etiology, pathogenesis, clinical course, diagnosis, treatment, complications, their prevention. Features of the course and treatment of osteomyelitis in patients with drug abuse.**

Etiology and pathogenesis of purulent-inflammatory diseases of maxillofacial localization. Classification. The importance of dental caries and dental damage in the development and spread of the inflammatory process. Definition of the term "odontogenic infection" and modern ideas about its importance in the development of local general somatic pathology.

Dystopia of teeth. Retention and inclusion of teeth. Difficult eruption, causes. Clinical manifestations. Indications for surgical treatment. Complications, their classification. Methods of surgery for dystopia and retention of teeth. Pericoronitis: classification, clinic, diagnosis, treatment.

Acute serous and purulent periodontitis, exacerbation of chronic periodontitis. Etiology, pathogenesis, pathological anatomy, ways of spreading the infectious process. Clinic, diagnosis, differential diagnosis, surgical treatment. Chronic periodontitis. Classification. Clinical and radiological diagnostics, differential diagnostics, surgical methods of treatment.

Operations: resection of the apex of the tooth root, hemisection, amputation of the tooth root, replantation, tooth transplantation and others.

Tooth replantation operation (types of operations, methods of tooth extraction and treatment). Features of fusion after replantation. Indications for surgery and technique of its implementation on different groups of teeth. Possible complications and prognosis. Acute purulent periostitis of the jaws. Pathogenetic connection with periodontitis. The spread of the inflammatory process depends on the location of the roots of different groups of teeth. Pathological anatomy. Clinical picture. Differential diagnosis. Treatment. Indications for tooth extraction in the case of acute odontogenic periostitis of the jaws. Chronic periostitis. Clinic, treatment.

Acute osteomyelitis of the jaws, classification: odontogenic, contact, hematogenous. The role of microflora, nonspecific resistance, immunological status of the patient, anatomical structure of the jaws in the development of the disease. Modern ideas about the etiology and pathogenesis of odontogenic osteomyelitis of the jaws.

Clinic and differential diagnosis of acute odontogenic osteomyelitis. Complex pathogenetic treatment: surgical, drug therapy, application of physiotherapeutic methods. Consequences and possible complications.

Subacute and chronic stage of osteomyelitis of the jaws. Clinical and radiological picture of its various forms (sequestering, rarifying, hyperplastic), differential diagnosis.

Features of the course on the upper and lower jaws. Primary chronic osteomyelitis. Comprehensive treatment at different stages of development. The course of osteomyelitis of the upper and lower jaws of various origins. Treatment depending on the pathogenesis of the disease. Terms and technique of performing of sequestrectomy. Possible complications: resorption fracture, defect and deformity of the jaws, sepsis, pneumonia, etc. Other forms of osteomyelitis: Garre, Brody, radiation osteonecrosis.

***The list of questions to be studied by the student at the lesson:***

1. Microflora, which causes purulent-inflammatory processes in the maxillofacial area.
2. Ways of infection spreading in the maxillofacial area.
3. Modern classification of inflammatory diseases of the maxillofacial area:
  - a. localization of the primary source of infection;
  - b. in the presence of infection;
  - c. by the type of defeat by the inflammatory process of tissues;
  - d. on the basis of the organ or anatomical structure of the maxillofacial area;

- e. on a topographic anatomical sign;
  - f. by the type of inflammatory reaction (the severity of the clinical flow);
  - g. during the phases of the disease;
  - h. by the kind of inflammatory exsudate.
4. Types of reactions and features of the clinical flow of inflammatory diseases of the maxillofacial area.
  5. The influence of the local source of infection on the general state of the organism through the blood, lymphatic vessels, as well as the immune, endocrine, and blood coagulation systems.
  6. The inverse influence of the organism on the center of the inflammatory process in the maxillofacial area (syndrome of mutual encumbrance).
  7. Odontogenic chronic sepsis.
  8. The concept of "retention" and "dystopia" of the tooth, etiology, pathogenesis, classification.
  9. Features of the clinical flow of retention and dystopia of teeth.
  10. Treatment tactics for retention and dystopia of teeth, indications for surgical treatment.
  11. Planning of surgical interventions at different stages of retention and dystopia of the teeth on the upper and lower jaw. Method of atypical tooth extraction.
  12. The concept of "difficult to erupt tooth" etiopathogenesis, classification.
  13. Pericoronitis. Clinical picture of inflammatory complications with difficult tooth eruption.
  14. Ways of spreading infection in diseases of cutting teeth of wisdom.
  15. Treatment of inflammatory complications that arise on the background of difficult to erupt teeth.
  16. Definition of periodontitis.
  17. Etiology and pathogenesis, classification of periodontitis.
  18. Diagnostics and differential diagnostics of periodontitis.
  19. Clinic of acute periodontitis.
  20. Clinical and radiological picture of chronic periodontitis.
  21. Features of clinical flow of exacerbation of periodontitis.
  22. Principles of treatment of acute and chronic periodontitis, prognosis and complications.
  23. Surgical treatment of chronic periodontitis: resection of the apex of the root, coronary-radicular separation, hemisection and root amputation, tooth replantation. Indications and contraindications, method of conducting.
  24. Clinic, diagnosis and treatment of odontogenic granuloma of the face.
  25. General information, etiology and pathogenesis, classification of acute periostitis of the jaws.
  26. Clinic of acute periostitis of the jaws.
  27. Diagnosis and differential diagnosis of acute periostitis of the jaws.
  28. Principles of treatment of acute periostitis of the jaws, prognosis and complications.
  29. Chronic periostitis of the jaws, classification, clinic, treatment.
  30. Determination of osteomyelitis.
  31. Theories of its origin.
  32. Causes and contributing factors to the occurrence of acute osteomyelitis of the jaws.
  33. Ways of spreading odontogenic infection in the jaw bones.
  34. Pathogenesis of the osteomyelitic process.
  35. Pathomorphological changes in bone tissue in this disease.
  36. Classifications of odontogenic osteomyelitis of the jaws
  37. Clinical symptoms of acute odontogenic osteomyelitis of the jaws.
  38. Features of the course of acute odontogenic osteomyelitis of the upper jaw.
  39. Features of the course of acute odontogenic osteomyelitis of the mandible.
  40. Blood and urine parameters, data of radiography, thermography, radioisotope diagnostics and echoosteometry in odontogenic osteomyelitis of the jaws.
  41. Differential diagnosis of acute osteomyelitis with acute periodontitis and periostitis.
  42. Surgical treatments used in acute odontogenic osteomyelitis of the jaws.
  43. Indications for surgery to remove the causative tooth in this disease.
  44. Stages of operation periostotomy and intraosseous lavage.
  45. Features of incisions of soft tissues on the alveolar process and hard palate in the presence of subperiosteal abscesses in these areas.
  46. Drugs prescribed for acute osteomyelitis of the jaws, mechanism of action (etiotropic, pathogenetic, symptomatic).
  47. Physiotherapeutic techniques prescribed to a patient with acute osteomyelitis of the jaws.
  48. Pathomorphological and clinical signs of chronic inflammation.
  49. Causes and mechanism of transition from acute to odontogenic osteomyelitis to chronic.
  50. Clinical symptoms of chronic odontogenic osteomyelitis of the jaws.
  51. Features of the clinical flow of chronic osteomyelitis on the upper and lower jaw.
  52. Diagnosis of chronic odontogenic osteomyelitis of the jaws.

53. Principles of casting of patients with chronic odontogenic osteomyelitis of the jaws.
54. Features of osteomyelitis in patients with drug addiction.
55. Features of treatment of osteomyelitis in patients with drug addiction.

**Topic №5. Acute and chronic odontogenic maxillary sinusitis. Lymphadenitis, adenophlegmon of MFA. Boils and carbuncles of the face. Etiology, pathogenesis, classification, clinical course, diagnosis, treatment, complications and prevention. Specific inflammatory processes of MFA: actinomycosis, tuberculosis, syphilis. Etiology, pathogenesis, clinical course, diagnosis, treatment, prevention. HIV infection / AIDS. Manifestations in the maxillofacial area. Arthritis and osteoarthritis of the temporomandibular joint. Acute and chronic sialoadenitis. Salivary stone disease. Classification, etiology, clinical course, diagnosis, treatment, complications, their prevention.**

Odontogenic sinusitis: anatomical preconditions. Etiology, pathogenesis. Classification. Acute odontogenic sinusitis. Methods of diagnosis and treatment. Oroantral connections. Clinic, diagnosis, indications for their closure. Methods of surgical interventions. Prevention of oroantral connections.

Anatomy and functions of the lymphatic system of the face and neck, classification. Acute and chronic lymphadenitis. Abscessive lymphadenitis. Adenophlegmon. Diagnosis and diff. diagnosis, clinic, treatment. Endolymphatic therapy.

Furuncle, carbuncle. Clinical flow, treatment, prevention of complications.

Erysipelas inflammation. Noma, etiology, pathological anatomy, prevention, treatment. Complications and consequences.

Necrotic processes of the tissues of the maxillofacial area of another origin.

Complications of inflammatory processes in the maxillofacial area.

Diphtheria. Spread. Clinic, diagnosis, prevention.

Actinomycosis of the maxillofacial area. Etiology and pathogenesis. Ways of infection. Classification of actinomycosis according to T.G. Robustova. Clinic, diagnosis, differential diagnosis, general principles of treatment.

Tuberculous lesions of the oral cavity and jaws. Clinic, diagnosis, differential diagnosis, treatment.

Syphilis. Manifestations in the maxillofacial area. Diagnosis, medical tactics. Prevention.

HIV infection / AIDS. Manifestations in the mouth, maxillofacial area. Classification of TMJ diseases.

Examination of patients with TMJ diseases. Arthritis of the temporomandibular joint. Classification, clinical picture, diagnosis, treatment. Osteoarthritis of the temporomandibular joint. Classification, clinical picture, diagnosis, treatment. Possibilities of arthroscopy and arthroscopic surgery of TMJ diseases.

Syndrome of painful dysfunction of the TMJ. Etiology, pathogenesis, diagnosis, treatment. Kosten's syndrome.

Classification of diseases of the salivary glands. Methods of examination of patients: clinical, laboratory, radiological (sialography), radiological: pantomo- and radiosialography, sialoscintigraphy. Inflammation of the salivary glands. Classification, etiology, pathogenesis. Parotitis. Banal bacterial sialadenitis. Acute lymphogenic and contact sialadenitis. Postoperative and postoperative parotitis. Acute inflammation of the mandibular and sublingual salivary glands. Clinic, differential diagnosis. Treatment of acute sialadenitis (conservative and surgical). False parotitis, differential diagnosis.

Chronic inflammation of the salivary glands. Parenchymal, interstitial and ductal (sialodochitis) sialadenitis: etiology, pathogenesis, clinic, differential diagnosis. Methods of treatment. Concremental (calculous) sialadenitis is a salivary stone disease. Formation and composition of salivary stones. Clinic, diagnosis, complications, treatment. Surgical accesses and anesthesia during the removal of salivary stones. Stenosis and atresia of the salivary ducts. Diagnosis, treatment. Damage to the salivary glands. Classification, clinical picture, treatment. Fistulas of salivary glands. Causes of salivary gland fistula. Complete and incomplete fistulas. Examination methods: fistulography, probing. Differential diagnosis and treatment. Suppression of gland function (drug, radiation). Plastic outlet ducts.

Reactive-dystrophic diseases of the salivary glands. Mikulich's disease (lymphoma of glands). Sjogren's syndrome and disease. Xerostomia as a symptom of salivary gland dysfunction.

***The list of questions to be studied by the student at the lesson:***

1. Surgical anatomy of the maxillary sinus.
2. Etiology and pathogenesis of odontogenic sinusitis.
3. Classification of sinusitis.
4. Acute odontogenic sinusitis, clinic, diagnosis, treatment.
5. Plastic closure of the oroantral junction.
6. Complications of odontogenic sinusitis.
7. Chronic odontogenic sinusitis, clinic, diagnosis, treatment.
8. Plastic closure of the oroantral junction.
9. Surgical methods of treatment of chronic odontogenic maxillary sinusitis.
10. Complications of odontogenic sinusitis.

11. Etiology and pathogenesis of lymphadenitis and inflammatory infiltrates of the MFA.
12. Ways of spreadinf of thr infection in MFA.
13. Clinical picture and results of additional methods of examination in lymphadenitis and inflammatory infiltration of the MFA.
14. Principles of diagnosis and differential diagnosis of lymphadenitis and inflammatory infiltrates of the MFA.
15. Surgical and conservative treatment of lymphadenitis and inflammatory infiltrates of the MFA.
16. Possible complications and principles of their prevention.
17. Classification of boils and carbuncles.
18. Contributing factors to the development of boils and carbuncles.
19. Features of localization of boils and carbuncles in different parts of the face.
20. Clinical flow of the disease.
21. Features of surgery.
22. Drug treatment: antibacterial, anti-inflammatory, detoxification, tonic, immunostimulatory therapy.
23. Local and general complications. Their prevention and treatment.
24. The mechanism of development of erysipelas, the role of sensitization of the body in the development of this pathology.
25. Classification of erysipelas.
26. Differential diagnosis of erysipelas.
27. Principles of treatment of erysipelas.
28. Clinical signs and stages of the noma in the oral cavity
29. Complications that occur during and after the transferred noma, their prevention and treatment.
30. Principles of complex treatment of noma of MFA.
31. Possible ways of infection in the skin.
32. Causes and concomitant factors that contribute to the development of Wegener's disease.
33. The main clinical manifestations of Wegener's disease in the oral cavity.
34. Characteristic indicators of laboratory tests of blood in Wegener's disease.
35. Differential diagnosis of Wegener's disease.
36. Principles of treatment and prevention of Wegener's disease.
37. Etiology of diphtheria.
38. Characteristic clinical signs and diagnosis of diphtheria.
39. Differential diagnosis of diphtheria with infectious mononucleosis, scarlet fever, leukemia, sore throat.
40. Principles of local and general treatment of diphtheria
41. Etiopathogenesis and classification of actinomycosis of MFA.
42. Ways of penetration of actinomycetes into MFA.
43. Features of the clinical picture in various forms of actinomycosis.
44. Surgical treatment of actinomycosis.
45. Specific immunotherapy of actinomycosis according to Sutteev G.O. and Asnin V.I.
46. Antibiotic therapy of concomitant actinomycosis of the microflora.
47. X-ray therapy of actinomycosis.
48. Consequences and possible complications of actinomycosis.
49. Etiopathogenesis of syphilis.
50. Features of the clinical flow of primary, secondary and tertiary syphilis.
51. Differential diagnosis and principles of syphilis treatment.
52. Etiopathogenesis of MFA tuberculosis.
53. Clinical picture in different forms of tuberculosis: tuberculous lymphadenitis, primary tuberculosis of the skin, tuberculous lupus, scrofuloderma, warty tuberculosis, miliary ulcerative tuberculosis, disseminated miliary tuberculosis of the face, facial tuberculosis and tuberculosis.
54. Differential diagnosis and principles of tuberculosis treatment.
55. Complications and consequences of the disease.
56. Stages of HIV infection in humans.
57. Manifestations of AIDS in the maxillofacial area.
58. Modern methods of treatment of HIV infection.
59. Prevention of tuberculosis, actinomycosis, syphilis and AIDS in the maxillofacial area.
60. Causes of arthritis.
61. Ways of infection in the TMJ.
62. Classification of arthritis.
63. Types of osteoarthritis of the TMJ.
64. Features of clinical symptoms of osteoarthritis, their diagnosis.
65. Radiological features of osteoarthritis and differential diagnosis.
66. Characteristics of painful thyroid dysfunction.

67. Treatment of arthritis, osteoarthritis and painful thyroid dysfunction.
68. Complications and prevention of these diseases.
69. Classification of acute sialoadenitis.
70. Epidemic parotitis: etiology and pathogenesis of the disease.
71. Epidemic parotitis: clinical flow, diagnosis, differential diagnosis, treatment and prevention.
72. Acute viral sialoadenitis (caused by parotitis virus, influenza, cytomegalovirus, herpes, etc.). Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment and prevention.
73. Acute bacterial sialoadenitis. Etiology and pathogenesis of the disease, factors contributing to its occurrence.
74. Purulent-necrotic parotitis. Causes, clinical course, diagnosis, differential diagnosis and treatment.
75. Lymphogenic parotitis (Herzenberg's false parotitis). Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment.
76. Acute contact sialoadenitis. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis and treatment.
77. Sialoadenitis caused by a foreign body entering the excretory duct of the gland. Clinical picture, diagnosis and treatment.
78. Classification of chronic sialoadenitis.
79. Parenchymal parotitis: etiology and pathogenesis of the disease, contributing factors.
80. Parenchymal parotitis: clinical picture depending on the stage of the disease.
81. Sialography: characteristic changes in parenchymal parotitis.
82. Treatment of chronic parenchymal parotitis.
83. Sclerosing submaxillitis: etiology and pathogenesis of the clinic, diagnosis, treatment.
84. Definition of "sialosis".
85. Classification and causes of sialoses.
86. Stages of clinical flow of sialosis.
87. Sjogren's syndrome: the main clinical symptoms, treatment.
88. Mikulich's disease: probable etiology and pathogenesis of the disease, clinical symptoms, treatment methods.
89. Hereford's syndrome: clinical symptoms that distinguish it from other sialosis, methods of treatment.

***Topic №6. Abscesses and phlegmons of the cellular spaces adjacent to the upper and lower jaw. Topographic anatomy, etiology, pathogenesis, clinical course, diagnosis, treatment, complications, their prevention. Final thematic control № 2. "Inflammatory processes of MFA".***

Abscess and phlegmon of superficial and deep areas of the middle zone of the face: buccal, maxillary, infraorbital, temporal, subtemporal, pterygopalatine fossa.

Topographic anatomy, etiology, pathogenesis, ways of infection spread from the specified topographic and anatomical areas, clinical flow, main clinical symptoms, diagnosis, results of additional methods of examination, treatment, complications and prevention. Modern surgical and conservative methods of treatment. Surgical access and stages of operation of opening of abscess and phlegmon of the specified localization. Features of surgical treatment of orbital phlegmon.

The essence of medical and physiotherapeutic treatment of patients with purulent-inflammatory diseases.

Terms of hospitalization and temporary disability depending on the severity of the disease.

Complications, causes, main clinical manifestations, diagnosis and treatment.

Purulent thrombophlebitis, cavernous sinus thrombosis, meningitis, mediastinitis, encephalitis, sepsis, infectious-toxic shock. Their etiology, pathogenesis, clinical picture, treatment. Principles of therapy.

Principles of prevention of abscesses and phlegmons of the specified localizations. Abscesses and phlegmons of the cellular spaces adjacent to the lower jaw: chin, submandibular areas, pharyngeal and pterygopalatine maxillary spaces, maxillary sublingual groove. Phlegmon of the bottom of the oral cavity and neck. Purulent-necrotic phlegmon of the face and neck.

Topographic anatomy, etiology, pathogenesis, ways of infection spread from the specified topographic and anatomical areas, clinical flow, main clinical symptoms, diagnosis, results of additional methods of examination, treatment, complications and prevention. Modern surgical and conservative methods of treatment. Surgical access and stages of operation of opening of abscess and phlegmon of the specified localization. Features of surgical treatment of orbital phlegmon.

The essence of medical and physiotherapeutic treatment of patients with purulent-inflammatory diseases.

Terms of hospitalization and temporary disability depending on the severity of the disease.

Complications, causes, main clinical manifestations, diagnosis and treatment.

Purulent thrombophlebitis, cavernous sinus thrombosis, meningitis, mediastinitis, encephalitis, sepsis, infectious-toxic shock. Their etiology, pathogenesis, clinical picture, treatment. Principles of therapy.

Principles of prevention of abscesses and phlegmons of the specified localizations.

Etiology and pathogenesis of inflammatory processes of the hard tissues of the MFA (periodontitis, periostitis, osteomyelitis), inflammatory processes of the soft tissues of the thyroid gland (abscesses, phlegmons, lymphadenitis, furuncles, carbuncles, erysipelas), odontogenic sinusitis, inflammatory diseases, specific syphilis, diphtheria, HIV), inflammatory and destructive processes of the TMJ, inflammatory and reactive-dystrophic diseases of the salivary glands, salivary stone disease, complications of inflammatory processes of the MFA (sepsis, mediastinitis, brain abscess, thrombosis of the cavernous sinus). Application of modern methods of diagnosis and treatment of inflammatory processes of hard and soft tissues of MFA, specific inflammatory diseases of MFA, inflammatory and destructive processes of TMJ, inflammatory and reactive-dystrophic diseases of salivary glands, salivary stone disease, complications of inflammatory processes of MFA, management of oroantral connections. Creating a comprehensive plan for examination and treatment of patients with inflammatory diseases of the thyroid gland, the ability to interpret their results.

Execution on a phantom of a diagnostic puncture of the inflammatory center of MFA, operations of opening of a subperiosteal abscess, operations of closing of an oroantral connection, operations of a radical sinusotomy, operations of a sequestrectomy, stages of operation - opening of abscesses and phlegmons of various anatomical and topographic sites of MFA.

Diagnosis of complications of inflammatory processes of the MFA; preparation of relevant medical documentation.

Appointment of individual schemes of drug treatment depending on the psycho-somatic condition of the patient, the nature and volume of surgery, drug therapy in the postoperative period, the relevant recommendations.

***The list of questions to be studied by the student at the lesson:***

1. Etiology of abscesses and phlegmons of the maxillofacial area.
2. Pathogenesis of abscesses and phlegmons of the maxillofacial area.
3. Superficial and deep cellular spaces of the face.
4. Variants of the clinical flow of the phlegmon.
5. Ways of spreading of infection in MFA.
6. Classification of abscesses and phlegmons of the maxillofacial area.
7. Clinical flow of abscesses and phlegmons (general manifestations, local signs).
8. Subjective and objective methods of examination (examination, palpation, percussion).
9. Additional and laboratory methods of examination.
10. Basic principles of treatment of abscesses and phlegmons of the maxillofacial area.
11. The choice of type of anesthesia for surgery.
12. Stages of the operation - opening of abscesses and phlegmons.
13. Local treatment of postoperative wounds.
14. Basic principles of drug therapy (antibacterial therapy, detoxification, immunotherapy, hyposensitizing therapy).
15. Additional methods of local and general treatment.
16. Differences in the clinical flow of superficial and deep phlegmon.
17. Etiology and sources of infection in abscesses and phlegmons of the suborbital and zygomatic areas, abscesses and phlegmons of the temporal area, subtemporal and pterygopalatine fossae, phlegmon of the orbit.
18. Topographic anatomical boundaries of the suborbital and zygomatic areas, temporal area, subtemporal and pterygopalatine fossa, orbit.
19. Typical clinical signs of abscesses and phlegmon of the suborbital and zygomatic areas, abscesses and phlegmon of the temporal area, subtemporal and pterygopalatine fossa, phlegmon of the orbit.
20. Differential diagnosis of inflammatory processes of the suborbital and zygomatic areas, temporal area, subtemporal and pterygopalatine fossa, orbit.
21. Surgical accesses for drainage in inflammatory processes of the suborbital and zygomatic areas, temporal area, subtemporal and pterygopalatine fossa, orbit.
22. Drug therapy in patients with inflammatory processes of the suborbital and zygomatic areas, the temporal area, the subtemporal and pterygopalatine fossa, the orbit.
23. Etiology and pathogenesis of phlegmon of the buccal, parotid-masticatory, maxillary areas.
24. Clinical course of phlegmon of the buccal, parotid-masticatory, maxillary areas.
25. Methods of clinical and laboratory diagnosis.
26. Conservative and surgical methods of treatment.
27. Differential diagnosis of phlegmon of the buccal, parotid-masticatory and posterior maxillary areas with periostitis, boils, carbuncles, abscesses, erysipelas, sialoadenitis and other inflammatory processes of the soft tissues of the maxillofacial area.
28. Complications of phlegmon of the buccal, parotid and maxillary areas and assistance in them.
29. Postoperative care and management of patients with this pathology.
30. Classification of phlegmons of the maxillofacial area.

31. Etiology and pathogenesis of phlegmons of the chin, submandibular areas, pharyngeal and pterygomandibular spaces.
32. Clinical course of phlegmons of the chin, submandibular areas, pharyngeal and pterygomandibular spaces.
33. Methods of clinical and laboratory diagnosis.
34. Surgical and medical methods of treatment.
35. Differential diagnosis of phlegmons of the chin, submandibular areas, pharyngeal and maxillofacial spaces with periostitis, boils, carbuncles, abscesses, erythema, sialoadenitis and other inflammatory processes of the soft tissues of the maxillofacial area.
36. Complications of the phlegmons of the chin, submandibular areas, pharyngeal and pterygomandibular spaces and treatment of them.
37. Etiology and pathogenesis of abscess of the sublingual roller and maxillofacial groove, abscesses and phlegmon of the tongue, its root, phlegmon of the bottom of the oral cavity, Jeansul–Ludwig’s purulent-necrotic phlegmon.
38. Clinical course of abscess of the sublingual roller and maxillofacial groove, abscesses and phlegmon of the tongue, its root, phlegmon of the bottom of the oral cavity, Jeansul–Ludwig’s purulent-necrotic phlegmon.
39. Methods of clinical and laboratory diagnosis.
40. Surgical and medical methods of treatment.
41. Differential diagnosis of abscess of the sublingual roller and maxillofacial groove, abscesses and phlegmon of the tongue, its root, phlegmon of the bottom of the oral cavity, Jeansul–Ludwig’s purulent-necrotic phlegmon.
42. Complications of abscess of the sublingual roller and maxillofacial groove, abscesses and phlegmon of the tongue, its root, phlegmon of the bottom of the oral cavity, Jeansul–Ludwig’s purulent-necrotic phlegmon and treatment of them.
43. Etiology, pathogenesis and classification of inflammatory processes in the maxillofacial area.
44. Chronic odontogenic inflammatory foci in patients with somatic local and systemic pathology. Dentist tactics.
45. Chronic odontogenic inflammatory foci in patients before and after operations on the abdominal cavity, chest. Dentist tactics.
46. Diseases of teeth eruption. Dystopia and retention. Clinic, diagnosis. Indications and methods of tooth extraction.
47. Pericoronaritis. Causes, classification, clinic, diagnosis, methods of conservative and surgical treatment.
48. Acute periodontitis. Classification, clinic, diagnosis and treatment.
49. Chronic periodontitis. Classification. Clinic, diagnosis.
50. Chronic granulomatous periodontitis, clinic and diagnosis. Types of granulomas, theories of the origin of the epithelium in granulomas.
51. Surgical methods of treatment of chronic periodontitis. Resection of the apex of the root. Indications, methods of implementation, possible complications, their prevention.
52. Surgical methods of treatment of chronic periodontitis. Hemisection, amputation, replantation. Indication. Method of execution. Possible complications and their prevention.
53. Tooth replantation: one-time and delayed, indications and contraindications, methods of operation, complications. Types of connection of the tooth root with the alveolar pocket.
54. Causes of exacerbations of chronic periodontitis, pathogenesis. Treatment, prevention of complications.
55. Periostitis of the jaws: classification, etiology, pathogenesis, clinic, differential diagnosis.
56. Treatment of acute purulent odontogenic periostitis of the jaws.
57. Osteomyelitis of the jaws. Etiology, theories of pathogenesis, classification.
58. Odontogenic osteomyelitis of the jaws. Acute stage. Clinic, diagnosis, treatment.
59. Odontogenic osteomyelitis of the jaws. Chronic stage. Clinic, diagnosis. Conservative treatment. Sequestrectomy operation. Indications, deadlines and its methodology. Prevention of complications.
60. Features of the clinical course of odontogenic osteomyelitis of the lower and upper jaws. Dependence on anatomical and topographic features. Complications of osteomyelitis.
61. Differential diagnosis of acute periodontitis, periostitis and osteomyelitis of the jaws.
62. Features of the clinical course, diagnosis and treatment of neodontogenic acute osteomyelitis of the jaws.
63. Hematogenous acute osteomyelitis of the upper jaw: etiology, clinic, complications and treatment.
64. Odontogenic sinusitis. Etiology, classification, clinic, diagnosis.
65. Odontogenic sinusitis. Conservative and surgical treatment. Complications and their prevention.
66. Actinomycosis of the maxillofacial area: clinic, differential diagnosis, treatment.
67. Syphilis of the maxillofacial area: clinic, differential diagnosis, treatment.
68. Tuberculosis of the maxillofacial area: clinic, differential diagnosis, treatment.
69. HIV infection / AIDS. Manifestations in the maxillofacial area.
70. Furuncles and carbuncles of the maxillofacial area: classification, clinic, complications and treatment.

71. Noma. Etiology, pathogenesis, clinical picture, treatment. Differential diagnosis, complications.
72. Erysipelas of the face. Etiology, pathogenesis, clinical picture, treatment. Differential diagnosis, complications.
73. Diphtheria. Etiology, pathogenesis, clinical picture, treatment. Differential diagnosis, complications.
74. Odontogenic mediastinitis: etiology, pathogenesis, clinical picture, diagnosis.
75. Differential diagnosis of odontogenic mediasthenitis, surgical and medical treatment.
76. Sepsis, infectious-toxic shock. Etiology, clinic, differential diagnosis, treatment.
77. Thrombophlebitis of facial veins, thrombosis of the cavernous sinus. Etiology, clinic, differential diagnosis, treatment.
78. Odontogenic brain abscess, meningitis. Etiology, clinical picture, treatment.
79. Clinic, diagnosis and treatment of arthritis and osteoarthritis of the temporomandibular joint. Write the necessary recipes.
80. Acute inflammation of the salivary glands: classification, clinical course, treatment.
81. Salivary stone disease: etiology, clinic, complications and treatment.
82. Genzenberg's pseudoparotitis and mumps.
83. Chronic inflammation of the salivary glands: classification, clinical course, treatment.
84. Systemic diseases of the salivary glands: Mikulich's disease, Sjogren's syndrome.

***Topic №7. MFA soft tissues civil and military trauma: classification, clinical signs, treatment. Methods of surgical debridement. Type of sutures. Postsurgical management.***

Causes of injuries, its prevention, statistics of injuries of the maxillofacial area in peacetime and wartime, their classification. General characteristics and features of facial injuries.

Organization and provision of all types of dental care to the personnel of the Armed Forces of Ukraine in peacetime and wartime. Basic organizational principles of providing surgical dental care to victims of soft tissue and facial bone injuries. Principles of medical sorting and evacuation of the wounded. The amount of medical care during the stages of medical evacuation of the wounded. Pre-medical, first aid, qualified and specialized care.

Types of soft tissue damage. Bruising of the soft tissues of the face.

Abrasions and wounds of the soft tissues of the face: bruising, torn, cut, chipped, chopped, bitten, crushed, scalped.

Features of the clinical course.

Methods of surgical treatment of wounds and types of sutures.

Providing emergency and first aid to injured patients.

Methods of patient care in the postoperative period.

Impressive factors of modern firearms: bullet, fragment, explosive wave, thermal effects. Zones of tissue damage in the wound canal.

Modern gunshot wound: morphological and clinical features, the course of the wound, the principles of treatment. Immediate complications after injury.

Clinical manifestations of gunshot wounds of the face depending on the duration of the injury. Features of the course of penetrating, tangential, blind wounds (bullet and shrapnel, penetrating and impenetrable).

Methods of manual and instrumental examination of the wound. Features of radiological research methods: radiography in various projections, including with contrast. Computed tomography and magnetic resonance imaging, ultrasound diagnostics. Methods of functional diagnostics: rheo-, polaro- and electromyography.

Application of computer software at the stages of diagnosis and planning of surgical interventions for gunshot wounds of soft tissues MFA.

The volume of examination of patients with gunshot wound MFA during treatment in the hospital, the participation of related specialists in the examination.

Surgical treatment of gunshot wounds MFA. Terms of intervention. Choice of analgesia. Sequence of treatment of wounds of the mucous membrane of the mouth, bones, soft tissues of the face, functional and cosmetic requirements. Indications for applying different types of sutures to facial wounds. Primary, primary-delayed suture, early and late secondary sutures. Plate seams. Possibilities of primary plastic surgery. Secondary surgical treatment of wounds. Complication prevention measures.

***The list of questions to be studied by the student at the lesson:***

1. Principles of organization of dental care for victims of MFA injuries.
2. Statistics of traumatic injuries MFA.
3. First aid for the wounded in the MFA.
4. First aid.
5. Qualified medical care
6. Specialized medical care
7. Subjective examination of a surgical dental patient (complaints, medical history, life history).
7. Methods of examination of the general condition of the traumatological patient.

8. Methods of local examination (extraoral and intraoral) of a traumatological patient.
9. Additional methods of examination (radiography, computed tomography, magnetic resonance imaging).
10. Indications for hospitalization of trauma patients.
11. Anatomical and functional features of the soft tissues of the maxillofacial area (anatomy of facial and masticatory muscles, innervation, vascularization)
12. Classification of facial soft tissue injuries
13. Slaughter of soft tissues of the face
14. Abrasions and wounds of soft tissues of the face - stabbing, torn, cut, stabbed, chopped, crushed and scalped wounds
15. Features of the clinical picture of facial soft tissue wounds depending on the location.
16. Methods of diagnosing soft tissue wounds of the face.
17. Classification of facial soft tissue injuries in peacetime.
18. Slaughter and abrasion of soft tissues of the face - clinic, diagnosis, first aid.
19. Wounds of soft tissues of the face (slaughter, torn, cut, chipped, chopped, bitten, crushed, scalped) - clinic, diagnosis, first aid.
11. Classification of gunshot wounds of the soft tissues of the face.
12. Features of the clinical picture of gunshot wounds of soft tissues depending on their location.
13. Features of the clinical picture of soft tissue wounds depending on their location.
14. Basic principles of PSD of wounds.
15. Features of PSD of wounds on the face.
16. Characteristic features of the soft tissues of the maxillofacial area that affect the healing processes of wounds.
17. Medical methods of wound treatment in the postoperative period.
18. Physiotherapeutic methods of wound treatment.
19. Classification, clinic and treatment of complications of facial wounds, their prevention.
20. Medical care for the wounded at the site of injury and during the stages of medical evacuation.
21. Types of seams and suture material. Plastic seams: purpose and modification.
22. The impact of violations of facial aesthetics on the psyche of the wounded.

***Topic №8. Teeth and bones civil and military trauma: classification, clinical signs, treatment. Methods of primary and permanent immobilization. Osteosynthesis of the facial bones. Indications. Materials and tools for osteosynthesis. Types of fixation devices. Stages of the operation. Combined trauma: classification, clinical signs, treatment. Traumatic disease.***

**Summary control № 3. «MFA Trauma».**

Classification of dislocations and fractures of teeth.

Clinical signs of dislocations and fractures.

Features of examination of patients with dislocations and fractures of teeth.

Objective methods of research of dislocations and fractures of teeth. X-ray research methods: radiography in different projections. Computed tomography and magnetic resonance imaging. Clinical assessment of the condition of injured teeth. Indications for the removal of these teeth. Methods of functional diagnostics: electroodontodiagnostics. Features of conservative and surgical methods of treatment of dislocations and fractures of teeth. Modern methods of immobilization.

Classification of mandibular dislocations.

Etiology and pathogenesis of mandibular dislocations.

Clinical manifestations of different types of jaw dislocations.

Features of examination of patients with mandibular dislocations. Objective methods of research of mandibular dislocations. X-ray research methods: radiography in different projections. Computed tomography and magnetic resonance imaging, ultrasound diagnostics.

Methods of correcting mandibular dislocations.

Frequency, location and nature of injuries of the upper and lower jaw depending on the causes and mechanism of injury.

Types and typical localizations of fractures of the upper and lower jaw.

Biomechanics of fractures of the upper and lower jaw, the mechanism and nature of the displacement of fragments.

Clinical examination of patients with fractures of the upper and lower jaw.

Clinical symptoms of fractures of the upper and lower jaw: anatomical and functional disorders, changes in occlusion, etc.

The condition of the teeth in the fracture gap of the jaws. Indications for the removal of these teeth. Intra-articular fractures, fractures with dislocation of the jaw head.

Objective methods of research of fractures of the upper and lower jaw with the use of modern diagnostic equipment. X-ray research methods: radiography in different projections. Computed tomography and magnetic

resonance imaging, ultrasound diagnostics. Methods of functional diagnostics: rheo-, polaro- and electromyography, electroodontodiagnostics. The use of computer software at the stages of diagnosis and planning of surgical interventions for fractures of the upper and lower jaw.

Fractures of the chin bone and arch, chin complex.

Classification, diagnosis, clinical picture.

Features of treatment. Conservative, surgical methods of repositioning and fixation of fragments; indications, essence.

Traumatic maxillary sinusitis. Restoration of the bottom of the orbit.

Bone fractures and damage to the cartilage of the nose.

Diagnosis, clinic, treatment. Anterior and posterior tamponade of the nasal passages.

Study of the function of motor and sensory nerves.

Establishing the nature and magnitude of defects and deformations of facial tissues, the condition of surrounding tissues.

Assessment of the degree of anatomical, functional and aesthetic disorders.

The volume of examination of patients with trauma of the maxillofacial area during treatment in the clinic and hospital, the participation of related specialists in the examination.

Temporary (transport) immobilization, indications, means.

Methods of repositioning fragments. Biomechanical bases of fragment fixation.

The scope and procedure for providing medical care to patients with traumatic injuries of the facial bones at the stages of medical evacuation.

Therapeutic immobilization. Methods of repositioning and fixing fragments.

Toothed splints, dental splints and spur splints; tires with external oral fastening. Use of individual and standard tires. Features of application of a smooth tire bracket. Tires with hooking loops and intermaxillary traction for repositioning and fixing fragments. S. Tigerstedt splinting systems and others. Methods and techniques of splinting (Tigerstedt tires and others). Indications for the use of individual (orthopedic) tires and laboratory devices.

Extraoral fixation of fragments in fractures and defects of the mandible. Rudko's, Zbarzh's apparatus and others. Their structure, biomechanical properties of application.

General characteristics, clinical course, diagnosis of gunshot wounds of facial bones in extreme conditions: classification, features of the clinical course, diagnosis of injuries at the stages of medical evacuation. Treatment at the stages of medical evacuation. Complications and their prevention.

Gunshot injuries of the mandible: statistics, classification, clinical picture, treatment, complications and their prevention. Treatment at the stages of medical evacuation.

Gunshot injuries of the bones of the middle zone of the face: statistics, classification, clinical picture, treatment at the stages of medical evacuation. Complications and their prevention.

Gunshot osteomyelitis, features of the clinical course. Diagnosis and treatment.

The impact of facial aesthetics on the psyche of the wounded. Bone-plastic surgery in the treatment of gunshot wounds to the face. Osteosynthesis of the bones of the facial skeleton: indications and contraindications, osteosynthesis of bone sutures; use of metal spokes, bone plates and frames, miniplates with screws. Compression osteosynthesis. Indications for its holding. Stages and features of osteosynthesis operations in the maxillofacial area.

Hardware methods of fixing fragments of facial skull bones.

Cranio-maxillofacial trauma. Fractures of the bones of the skull base. Diagnosis, treatment. Features of medical care in combination with facial injuries with concussion and contusion of the brain, cerebrospinal fluid, damage to other organs. The role of neurosurgeons, resuscitators, ophthalmologists.

Traumatic disease: pathogenesis, clinic, principles of treatment, complications. Periods of traumatic illness; providing medical care at the pre-hospital stage. Basic principles of complex therapy of traumatic illness.

Thermal damage to the face. Classification. Features, causes, severity and depth of damage, possible complications. Treatment of facial burns.

Napalm burns. Electrotrauma. Cold injury, frostbite. Clinic, treatment.

Chemical damage: acids, alkalis, poisonous substances.

Clinic, diagnosis, treatment of these injuries.

Protocols for providing medical care for these injuries. Comprehensive treatment of patients.

Causes of combined MFA damage. Diagnosis of combined damage by war poisons (WP) and radioactive substances (RS).

Principles of sorting the wounded and the order of assistance in case of combined injuries. Consequences of the action of damaging factors of nuclear weapons on the human body.

Combined radiation injuries of the face. Pathogenesis, variants of the clinical course depending on the nature of the damage.

Radiation sickness. Clinical manifestations. Features of the wound process depending on the stage of radiation sickness. Features of treatment.

Mutual burden syndrome.

The term and features of surgical treatment of wounds and features of treatment of fractures and defects of the jaws in combined injuries.

Combined chemical, bacteriological and mechanical lesions of MFA: clinical course, treatment at the stages of medical evacuation, features of wound treatment, hemostasis, wound healing.

Providing emergency medical care to victims of various traumatic injuries, accompanied by disruption of vital functions of the body, life-threatening and require emergency treatment.

***The list of questions to be studied by the student at the lesson:***

1. Classification of mandibular dislocation.
2. Anatomical structure of the temporomandibular joint.
3. Clinic of anterior mandibular dislocation.
4. Clinic of posterior mandibular dislocation.
5. Diagnosis of mandibular dislocations.
6. Conservative methods of treatment of mandibular dislocation.
7. Surgical methods of treatment of mandibular dislocation.
8. Classification of mandibular fractures.
9. The mechanism of displacement of the fragments of the mandible
10. Clinical symptoms of mandibular fractures.
11. Radiological symptoms of mandibular fractures
12. Methods of diagnosis of fractures of the mandible.
13. Diagnostic techniques for palpation of the mandible.
14. Classification of non-gunshot fractures of the upper jaw.
15. Clinic of non-gunshot fractures of the upper jaw.
16. Diagnosis of non-gunshot fractures of the upper jaw.
17. Typical clinical symptoms: Malevich's symptom, spectacle symptom, etc.
18. Classification of injuries of the cheekbones and arches, nasal bones.
19. Etiology and pathogenesis of damage to the cheekbones and arches, nasal bones.
20. Clinic of injuries of the cheekbones and arches, nasal bones.
21. Subjective examination of a surgical dental patient (complaints, medical history, life history).
22. Methods of examination of the general condition of a surgical dental patient.
23. Methods of local extraoral examination of a patient with damage to the cheekbones and arches, nasal bones.
24. Methods of local intraoral examination of a patient with damage to the cheekbones and arches, nasal bones.  
Tools for examination of the oral cavity.
25. Laboratory additional methods of inspection.
26. Instrumental additional methods of examination.
27. Indications for hospitalization of surgical dental patients.
28. Conservative and surgical methods of treatment of injuries of the cheekbones and arches, nasal bones.
29. The scheme of drug treatment of patients with injuries of the cheekbones and arches, nasal bones.
30. Complications that can occur with damage to the cheekbones and arches, nasal bones.
31. Types of methods of immobilization of bone fragments of the facial skull.
32. Basic principles of evacuation and transport immobilization.
33. Methods of temporary immobilization.
34. Types of temporary immobilization in fractures of the mandible (circular, sling-like, individual chin-parietal bandage, elastic bandage Pomerantseva-Urbanskaya, etc.)
35. Types of temporary transport immobilization in fractures of the upper jaw (Faltina, Limberg, rigid chin sling by Entin, etc.)
36. Indications and contraindications to ligature splinting of teeth and jaws.
37. Conservative methods of treatment of fractures of the jaw bones. Advantages and disadvantages.
38. Indications and contraindications to conservative methods of treatment of fractures of the jaws.
39. Types of tires (by method of fixation, by method of manufacture, etc.).
40. Methods of permanent immobilization used in fractures of the upper and lower jaws.
41. Surgical and orthopedic methods of immobilization for injuries of the jaw bones (fixation of splints to other anatomical structures with a wire ligature, "S" -like, "L" -like hooks, the use of cortical screws, etc.).
42. Factors that complicate the consolidation of bone fragments (soft tissue wounds, teeth in the fracture line, free-lying bone fragments, etc.).
43. Care of the oral cavity after conservative repositioning and fixation of fragments. Terms of permanent immobilization. Drug treatment.
44. Statistical characteristics and sources of gunshot wounds of the maxillofacial area in conditions of hostilities and emergencies.
45. Classification of gunshot wounds to the face.

46. Characteristics of gunshot wounds to the face depending on the type of weapon.
47. Features of the course of gunshot wounds depending on the anatomical and physiological features of the maxillofacial area.
48. Diagnosis of gunshot wounds to the face and determine the severity of the injury.
49. The scope of first aid for victims of gunshot wounds to the face.
50. The sequence of medical and evacuation measures for the mass admission of patients with gunshot wounds to the face. Principles of medical sorting of patients.
51. Conservative and surgical methods of treatment of gunshot wounds of the maxillofacial area and post-traumatic defects. Osteoplastic surgery.
52. Complications of gunshot wounds to the bones of the face. Gunshot osteomyelitis: features of the clinical course, diagnosis and treatment.
53. Features of rehabilitation of patients with injuries of the maxillofacial area. Medical ethics and deontology.
54. Indications for osteosynthesis of the bones of the facial skull.
55. Preparing the patient for osteosynthesis surgery.
56. The choice of methods for fixing fragments.
57. Features of osteosynthesis in fractures of the lower and upper jaw, chin bone and arch.
58. Hardware operative methods of osteosynthesis.
59. Features of the postoperative period in traumatic patients. Possible complications.
60. Mesenchymal osteogenesis.
61. Factors influencing osteogenesis.
62. Types of bone regeneration.
63. Stages of reparative bone regeneration.
64. X-ray symptoms of bone healing after fracture.
65. Causes of repair of reparative regeneration.
66. The main mechanisms of influence on the processes of bone regeneration.
67. Methods for optimizing the course of reparative osteogenesis.
68. The concept of "combined injuries".
69. Classification of combined MFA injuries. Closed (uninfected) and open (infected) traumatic brain injury.
70. Concussion, contusion, compression of the brain, clinic, diagnosis.
71. Fracture of the skull base, clinic, diagnosis.
72. Principles of providing emergency care to victims with combined MFA injuries.
73. Traumatic disease, classification, its periods, diagnosis.
74. Clinical manifestations of traumatic illness, features of MFA injuries.
75. Complex therapy of traumatic illness, prevention of complications.
76. Traumatic shock, its stages, clinic, diagnosis.
77. Algorithm for providing emergency medical care in traumatic shock, treatment at the stages of medical evacuation.
78. Prehospital and inpatient care for patients with traumatic shock.
79. Prevention of traumatic shock.
80. Complex effects of injury on the body.
81. Prevention of complications in combined MFA injuries and traumatic illness.
82. Burns, classification, signs.
83. First aid depending on the degree of burns.
84. Frostbite, classification, signs.
85. First aid for frostbite.
86. Chemical burns, classification, signs.
87. First aid for chemical burns, depending on the active substance.
88. Electric shock, local and general changes.
89. First aid for chemical burns, depending on the mild or severe lesion.
90. Classification and pathogenesis of combined lesions.
91. Variants of the clinical course of combined MFA lesions.
92. Sorting the wounded.
93. Prevention of complications in patients with combined MFA injuries.
94. The concept of radiation sickness.
95. Features of the clinical course of radiation sickness depending on the severity.
96. Mechanisms of action of combat poisons.
97. Symptom of mutual burden in mechanochemical injuries of the maxillofacial area.
98. Features of medical care for maxillofacial wounded with combined injuries.

***Topic №9. MFA benign tumors and tumor-like lesions: classification, patients examination, clinical signs, differential diagnosis, management principles. Precancer diseases.***

The concept of tumors. Classification of MFA tumors. MFA tumor spread statistics. The role and tasks of the dentist in the system of providing specialized care to patients with MFA tumors. The value of early diagnosis. "Cancer vigilance" - systematic concepts, knowledge and principles of anti-tumor service. Oncology vigilance in the examination of surgical and dental patients.

Endo- and exofactors that contribute to tumors. Patterns of growth and development of benign tumors, the principles of their differential diagnosis.

Examination of patients for the diagnosis of tumors, the role of modern methods of examination (radiological, radioisotope diagnosis, cytological and histological verification of tumors). Algorithm for diagnosing MFA tumor processes and principles of their treatment.

Stages of defeat according to the TNM system. Clinical groups of cancer patients. Medical examination of cancer patients.

Cyst, as a consequence of malformations: odontogenic (primary cyst - keratocyst, eruption cyst, follicular); neodontogenic (cyst of the nasopharyngeal (incisal) canal, globulomaxillary, aneurysmal and solitary).

Odontogenic cyst of inflammatory nature - radicular.

Clinical manifestations, diagnosis, growth mechanism, pathological anatomy, methods of surgical treatment: cystotomy, cystectomy, two-stage method, plastic cystectomy, oro-nasal cystectomy. Technique of surgical intervention, postoperative management of patients.

The plan of complex treatment of patients with the specified pathology.

Benign odontogenic tumors of the jaws: ameloblastoma (adamantinoma), odontoma, cementoma, epulid. Classification, histological structure, clinic, differential diagnosis, principles and methods of treatment.

Benign neodontogenic tumors of the jaws (osteoblastoma, osteoclastoma, osteoma, osteoid-osteoma, chondroma, hemangioma, fibroma, etc.): classification, histological structure, clinic, differential diagnosis, principles and methods of treatment

Osteogenic tumor-like formations of the jaws (fibrous osteodysplasia, parathyroid osteodystrophy, Paget's disease, eosinophilic granuloma): etiology, pathogenesis, classification, histological structure, clinic, differential diagnosis, features of treatment.

Benign soft tissue tumors MFA (skin, adipose, connective, muscle, nerve tissue, blood and lymphatic vessels): etiology, pathogenesis, classification, histological structure, clinic, differential diagnosis, treatment.

MFA soft tissue tumors: etiology, pathogenesis, classification, histological structure, clinic, differential diagnosis, treatment.

Precancerous diseases of the skin, mucous membranes of the mouth and tongue. Histological structure, clinical forms, differential diagnosis, treatment, prevention.

Benign tumors and cysts of the salivary glands: classification, etiology, histological structure, clinic, differential diagnosis, principles and methods of treatment. Malignant tumors of the salivary glands: histological structure, clinical forms, differential diagnosis, treatment.

***The list of questions to be studied by the student at the lesson:***

1. Etiological factors that cause tumors of the maxillofacial area. Varieties of carcinogens.
2. Theories of tumors. Phases of carcinogenesis.
3. Classification of tumors of the maxillofacial area.
4. Classification and features of benign tumors of the maxillofacial area.
5. Comparative characteristics of benign and malignant tumors.
6. The main methods of diagnosis of tumors of the maxillofacial area.
7. Types of odontogenic tumors MFA.
8. Etiopathogenesis of odontogenic neoplasms of the jaws.
9. Pathanatomy of different types of odontogenic tumors.
10. Clinical manifestations of ameloblastoma, diagnosis, differential diagnosis, treatment.
11. Features of clinical manifestations, diagnosis, differential diagnosis and treatment with odont.
12. Clinic, diagnosis, differential diagnosis and treatment with cement.
13. Epulid. Clinic, diagnosis, differential diagnosis, treatment.
14. Classification of benign tumors of the jaw bones.
15. Etiopathogenesis of benign tumors of the jaws.
16. Features of the clinical course of benign tumors of the jaws.
17. Methods of diagnosis of benign tumors of the jaws.
18. Methods of treatment and rehabilitation of patients with benign tumors of the jaws.
19. Principles of prevention of complications in patients with this pathology.
20. Etiology and pathogenesis of osteogenic tumor-like neoplasms of the jaws.
21. Basic methods of diagnosis, differential diagnosis.
22. Clinical manifestations at all stages of osteogenic tumors of the jaws.
23. Methods of surgical treatment of osteogenic tumor-like neoplasms of the jaws.
24. Complications, causes of their occurrence. Preventive measures to prevent this pathology.
25. Classification of soft tissue neoplasms MFA.

26. Etiopathogenesis of benign soft tissue tumors MFA.
27. Clinical manifestations, diagnosis, treatment of benign skin tumors.
28. Clinical manifestations, diagnosis, treatment of benign connective tissue tumors.
29. Clinical manifestations, diagnosis, treatment of benign tumors of muscle tissue.
30. Clinical manifestations, diagnosis, treatment of benign tumors of adipose tissue.
31. Clinical manifestations, diagnosis, treatment of benign neurogenic tumors and tumor-like formations.
32. Clinical manifestations, diagnosis, treatment of hemangiomas.
33. Clinical manifestations, diagnosis, treatment of lymphangiomas.
34. Principles of prevention of complications in patients with benign soft tissue tumors MFA.
35. Pathomorphology of congenital tumor-like neoplasms.
36. Clinical manifestations, diagnosis, treatment of dermoid and epidermoid cysts.
37. Clinical manifestations, diagnosis, treatment of median cysts and fistulas of the neck.
38. Clinical manifestations, diagnosis, treatment of lateral cysts and fistulas of the neck.
39. Differential diagnosis of congenital soft tissue tumors MFA.
40. Principles of treatment of congenital soft tissue tumors MFA.
41. Prevention of complications of MFA soft tissue tumors
42. Etiology, pathogenesis of precancerous conditions.
43. Classifications of precancerous conditions.
44. Morphological and clinical diagnosis of precancerous conditions.
45. Methods of examination of patients with precancerous conditions.
46. Clinic, diagnosis, treatment of precancerous diseases of the skin, mucous membranes of the mouth and tongue.
47. Differential diagnosis of obligate and facultative forms of precancerous diseases.
48. Features of the pathomorphology of precancerous diseases of the skin, mucous membranes of the mouth and tongue.
49. Prevention of precancerous conditions.
50. Dispensary observation of patients with precancerous conditions.
51. Clinical and morphological classification of benign tumors and cysts of the salivary glands.
52. Cysts of the salivary glands: retention cysts of small salivary glands; retention cysts of the sublingual salivary glands (wounds); cysts of the submandibular salivary gland; parotid salivary gland cysts; oncocytosis; Kuttner's syndrome.
53. Clinic, diagnosis and treatment of pleomorphic adenoma (polymorphic adenoma, mixed tumor).
54. Clinic, diagnosis and treatment of monomorphic adenomas: adenolymphoma (Wortin's tumor); oxyphilic adenoma (oncocytoma).
55. Clinic, diagnosis and treatment of non-epithelial tumors of the salivary glands.
56. Surgical treatment of benign tumors of the salivary glands.
57. Clinical and morphological classification of malignant tumors of the salivary glands.
58. Mucoepidermoid cancer of the salivary glands, clinical manifestations, diagnosis, treatment.
59. Adenocarcinoma and cylinder, clinical manifestations, diagnosis, treatment.
60. Clinic, diagnosis, treatment of sarcoma sarcoma.

***Topic №10. MFA malignant tumors and tumor-like lesions: classification, patients examination, clinical signs, differential diagnosis, management principles.***

***Summary control № 4. «MFA Oncology».***

***Algorithms of the practical skills implementation. Summary classes.***

MFA and neck soft tissue malignancies: classification, histological structure, clinical forms, stages of the disease, differential diagnosis, treatment (surgery, radiation, chemotherapy, immunocorrection, etc.).

Cancer and sarcoma of the jaws: origin and histological structure, classification, clinic, differential diagnosis, treatment.

***The list of questions to be studied by the student at the lesson:***

1. Epidemiology, etiopathogenesis of malignant neoplasms of the skin of the face, mucous membranes and organs of the oral cavity.
2. Principles of diagnosis of malignant tumors of the MFA and neck.
3. Clinic, diagnosis and treatment of melanoma.
4. Clinic, diagnosis and treatment of basal cell carcinoma.
5. Classification of malignant neoplasms of the oral cavity.
6. Clinical picture of malignant neoplasms of the oral cavity.
7. Principles of treatment of malignant neoplasms of the oral cavity.
8. Pathomorphology of cancer and sarcoma of the jaws.

9. Clinical manifestations of cancer (carcinoma) of the upper jaw, diagnosis, treatment.
10. Clinical manifestations of mandibular cancer, diagnosis, treatment.
11. Clinic, diagnosis, treatment of sarcoma of the upper jaw.
12. Clinic, diagnosis, treatment of mandibular sarcoma.
13. Surgical treatment of malignant tumors of the jaws.

***Algorithms of the practical skills implementation.***

**General questions:**

1. Be able to collect medical history and conduct a clinical examination of the patient.
2. Be able to evaluate the data of additional research methods.
3. Be able to make a clinical diagnosis and develop a treatment plan.
4. Be able to issue a "Medical card of a dental patient".

**Anaesthesia in oral surgery interventions:**

1. Explain and perform infraorbital anesthesia by intraoral method.
2. Explain and perform infraorbital anesthesia by extraoral method.
3. Explain and perform tuberal anesthesia by intraoral method.
4. Explain and perform tuberal anesthesia by extraoral method.
5. Explain and perform incisional anesthesia by intraoral method.
6. Explain and perform incisional anesthesia by extraoral method.
7. Explain and perform palatal anesthesia.
8. Explain and perform mandibular anesthesia by palpation.
9. Explain and perform mandibular anesthesia by apodactyl method.
10. Explain and perform mandibular anesthesia by extraoral method.
11. Explain and perform torus anesthesia.
12. Explain and perform Bershe-Dubov anesthesia.
13. Explain and perform mental anesthesia by intraoral method.
14. Explain and perform mental anesthesia by extraoral method.

**Typical tooth and roots removal:**

1. Explain and perform the operation of removing certain groups of teeth and roots on the upper and lower jaw.

**Treatment of patients with traumatic injuries of the maxillofacial area:**

1. Explain and perform TMJ dislocation correction.
2. Explain and apply a sling bandage for fractures of the facial skeleton.
3. To explain and carry out intermaxillary ligature ligation of teeth at fractures of bones of a facial skeleton.
4. Explain and fix the dental splint.
5. Explain and perform the primary surgical treatment of the wound.

**Providing emergency care for complications in surgical dental patients:**

1. Explain and help with dizziness and loss of consciousness.
2. Explain and help with collapse.
3. Explain and provide assistance in hypertensive crisis.
4. Explain and help with anaphylactic shock.
5. Explain and help with bronchial asthma.
6. Explain and help with angina.
7. Explain and help with asphyxia.
8. Explain and help with Quincke's edema.
9. Explain and perform resuscitation measures for heart and respiratory failure.
10. Explain and perform a conicotomy.

**Carrying out small operations in the oral cavity:**

1. Explain and perform the disclosure of subperiosteal abscess.
2. Explain treatment measures and manage alveolitis.
3. Explain and follow the method of stopping postextraction bleeding.
4. Explain and perform material collection during cytological examination.
5. Explain and perform frenuloplasty.
6. Explain and perform the frenuloplasty of the tongue.
7. Explain and perform alveolotomy surgery.
8. Explain and perform the curettage of the alveolar socket.

9. Explain and perform the operation of opening a periodontal abscess.
10. Explain and perform the operation of excision of the hood in pericoronaritis.

***The list of questions that the student must learn for the content module №2***

1. Organization of surgical dental care. Familiarity with the structure of the surgical department of the dental clinic and the department of maxillofacial surgery of the clinical hospital. Provision, documentation of the outpatient dental office and department. Methods of examination of the maxillofacial area and neck.
2. Asepsis and antiseptics in MFS. Specific and nonspecific resistance of the oral cavity. Prevention of socially significant infections.
3. Pain, its components, the leading pathways of pain. Classification of anesthesia, types, methods, indications and contraindications. General numbness. Premedication. Neuroleptanalgesia.
4. Local anesthetics, their properties, side effects. Classification. Indications and contraindications to local anesthesia. Application, infiltration anesthesia.
5. Peripheral conduction anesthesia on the lower jaw: torus, mandibular anesthesia. Indications, methods. Local complications, their treatment.
6. Peripheral conduction anesthesia on the lower jaw: mental, buccal and lingual anesthesia. Indications, methods. Local complications, their treatment.
7. Peripheral conduction anesthesia on the upper jaw: tuberal, infraorbital anesthesia. Indications, methods. Local complications, their treatment.
8. Peripheral conduction anesthesia on the upper jaw: incisival, palatal anesthesia. Indications, methods. Local complications, their treatment.
9. Central conductive methods of anaesthesia of the jaws and adjacent tissues. Local complications, their treatment.
10. General complications of local anesthesia, their prevention and treatment. Cardiopulmonary resuscitation.
11. Indications and contraindications to tooth extraction surgery. Tooth extraction tools. Preparation of patients with concomitant pathology for tooth extraction.
12. Techniques for removing teeth on the upper jaw. Stages of the operation.
13. Techniques for removing teeth on the lower jaw. Stages of the operation.
14. Complications during tooth extraction: clinical picture, diagnosis, treatment and prevention.
15. Etiology, pathogenesis and classification of inflammatory processes in the maxillofacial area.
16. Chronic odontogenic inflammatory foci in patients with somatic local and systemic pathology. Dentist tactics.
17. Chronic odontogenic inflammatory foci in patients before and after operations on the abdominal cavity, chest. Dentist tactics.
18. Diseases of teething. Dystopia and retention. Clinic, diagnosis. Indications and methods of tooth extraction.
19. Pericoronaritis. Causes, classification, clinic, diagnosis, methods of conservative and surgical treatment.
20. Acute periodontitis. Classification, clinic, diagnosis and treatment.
21. Chronic periodontitis. Classification. Clinic, diagnosis.
22. Chronic granulomatous periodontitis, clinic and diagnosis. Types of granulomas, theories of the origin of the epithelium in granulomas.
23. Surgical methods of treatment of chronic periodontitis. Resection of the apex of the root. Indications, methods of implementation, possible complications, their prevention.
24. Surgical methods of treatment of chronic periodontitis. Hemisection, amputation, replantation. Indication. Method of execution. Possible complications and their prevention.
25. Tooth replantation: one-time and delayed, indications and contraindications, methods of operation, complications. Types of connection of the tooth root with the fossa.
26. Causes of exacerbations of chronic periodontitis, pathogenesis. Treatment, prevention of complications.
27. Periostitis of the jaws: classification, etiology, pathogenesis, clinic, differential diagnosis.
28. Treatment of acute purulent odontogenic periostitis of the jaws.
29. Osteomyelitis of the jaws. Etiology, theories of pathogenesis, classification.
30. Odontogenic osteomyelitis of the jaws. Acute stage. Clinic, diagnosis, treatment.
31. Odontogenic osteomyelitis of the jaws. Chronic stage. Clinic, diagnosis. Conservative treatment. Sequestrectomy operation. Indications, deadlines and its methodology. Prevention of complications.
32. Features of the clinical course of odontogenic osteomyelitis of the lower and upper jaws. Dependence on anatomical and topographic features. Complications of osteomyelitis.
33. Differential diagnosis of acute periodontitis, periostitis and osteomyelitis of the jaws.
34. Features of the clinical course, diagnosis and treatment of neodontogenic acute osteomyelitis of the jaws.
35. Hematogenous acute osteomyelitis of the upper jaw: etiology, clinic, complications and treatment.

36. Odontogenic sinusitis. Etiology, classification, clinic, diagnosis.
37. Odontogenic sinusitis. Conservative and surgical treatment. Complications and their prevention.
38. Surgical anatomy of the cellular spaces of the maxillofacial area. Ways of spreading odontogenic infection.
39. Abscess and phlegmon of the maxillofacial area. Inflammatory clinical signs, diagnostic techniques.
40. Abscess and phlegmon of the maxillofacial area. Principles of complex treatment.
41. Lymphadenitis of the maxillofacial area: classification, clinic, differential diagnosis, treatment.
42. Phlegmon of the subtemporal and pterygopalatine fossae. Etiology, pathogenesis, clinic; diagnosis, treatment.
43. Phlegmon of the temporal area. Causes, clinic, diagnosis, treatment.
44. Abscesses and phlegmons of the occipital and chin areas. Causes, clinic, diagnosis, treatment.
45. Abscess and phlegmon of the mandibular tissue space. His surgical anatomy. Causes, clinic, diagnosis, treatment.
46. Abscess and phlegmon of the pterygoid jaw tissue space. Surgical anatomy, causes, clinic, diagnosis, treatment.
47. Abscess and phlegmon of the submaterial material space. Surgical anatomy. Causes, clinic, diagnosis, treatment.
48. Abscess and phlegmon of the parotid-masticatory area. Causes, surgical anatomy, clinic, diagnosis, treatment.
49. Abscess and phlegmon of the buccal area. Surgical anatomy, causes. Clinic, diagnosis, treatment.
50. Abscess and phlegmon of the extramaxillary area. Surgical anatomy, causes, clinic, diagnosis, treatment.
51. Abscess and phlegmon of the tongue. Causes, clinic, diagnosis, treatment.
52. Phlegmon of the bottom of the mouth. Surgical anatomy, causes, clinic, diagnosis, treatment.
53. Abscess of the maxillofacial groove. Surgical anatomy, causes, clinic, diagnosis, treatment.
54. Septic-necrotic phlegmon of Jansul-Ludwig. Surgical anatomy, causes, clinic, diagnosis, treatment.
55. Abscess and phlegmon of the pharyngeal tissue space. Surgical anatomy, causes, clinic, diagnosis, treatment.
56. Odontogenic and neodontogenic phlegmon MFA: differential diagnosis, features of the clinical course, treatment of complications
57. Clinic, topographic anatomy and treatment of phlegmon of the neck.
58. General treatment of phlegmon MFA. Write the necessary recipes.
59. Actinomycosis of the maxillofacial area: clinic, differential diagnosis, treatment.
60. Syphilis of the maxillofacial area: clinic, differential diagnosis, treatment.
61. Tuberculosis of the maxillofacial area: clinic, differential diagnosis, treatment.
62. HIV infection / AIDS. Manifestations in the maxillofacial area.
63. Boils and carbuncles of the maxillofacial area: classification, clinic, complications and treatment.
64. Noma. Etiology, pathogenesis, clinical picture, treatment. Differential diagnosis, complications.
65. The face was emaciated. Etiology, pathogenesis, clinical picture, treatment. Differential diagnosis, complications.
66. Diphtheria. Etiology, pathogenesis, clinical picture, treatment. Differential diagnosis, complications.
67. Odontogenic mediastinitis: etiology, pathogenesis, clinical picture, diagnosis.
68. Differential diagnosis of odontogenic mediastinitis, surgical and medical treatment.
69. Sepsis, infectious-toxic shock. Etiology, clinic, differential diagnosis, treatment.
70. Thrombophlebitis of facial veins, thrombosis of the cavernous sinus. Etiology, clinic, differential diagnosis, treatment.
71. Odontogenic brain abscess, meningitis. Etiology, clinical picture, treatment.
72. Clinic, diagnosis and treatment of arthritis and osteoarthritis of the temporomandibular joint. Write the necessary recipes.
73. Acute inflammation of the salivary glands: classification, clinical course, treatment.
74. Salivary calculus disease: etiology, clinic, complications and treatment.
75. Genzenberg's pseudoparotitis and mumps.
76. Chronic inflammation of the salivary glands: classification, clinical course, treatment.
77. Systemic diseases of the salivary glands: Mikulich's disease, Sjogren's syndrome.
78. Principles of organization of dental care for victims of MFA injuries.
79. Statistics of traumatic injuries MFA.
80. First aid for the wounded in the MFA.
81. First aid.
82. Qualified medical care
83. Specialized medical care
84. Subjective examination of a surgical dental patient (complaints, medical history, life history).
85. Methods of examination of the general condition of the traumatological patient.

86. Methods of local examination (extraoral and intraoral) of a traumatological patient.
87. Additional methods of examination (radiography, computed tomography, magnetic resonance imaging).
88. Indications for hospitalization of trauma patients.
89. Anatomical and functional features of the soft tissues of the maxillofacial area (anatomy of facial and masticatory muscles, innervation, vascularization)
90. Classification of facial soft tissue injuries
91. Slaughter of soft tissues of the face
92. Abrasions and wounds of soft tissues of the face - stabbing, torn, cut, stabbed, chopped, crushed and scalped wounds
93. Features of the clinical picture of soft tissues of the face depending on the location.
94. Methods of diagnosing wounds of soft tissues of the face.
95. Classification of facial soft tissue injuries in peacetime.
96. Slaughter and abrasion of soft tissues of the face - clinic, diagnosis, first aid.
97. Wounds of soft tissues of the face (slaughter, torn, cut, stabbed, chopped, bitten, crushed, scalped) - clinic, diagnosis, first aid.
98. Classification of gunshot wounds of the soft tissues of the face.
99. Features of the clinical picture of gunshot wounds of soft tissues depending on their location.
100. Features of the clinical picture of soft tissue wounds depending on their location.
101. Basic principles of PST of wounds.
102. Features of PST of wounds on the face.
103. Characteristic features of the soft tissues of the maxillofacial area that affect the healing process of wounds.
104. Medical methods of wound treatment in the postoperative period.
105. Physiotherapeutic methods of wound healing.
106. Classification, clinic and treatment of complications of facial wounds, their prevention.
107. Medical care for the wounded at the site of injury and during the stages of medical evacuation.
108. Types of seams and suture material. Plastic seams: purpose and modification.
109. The impact of violations of facial aesthetics on the psyche of the wounded.
110. Classification of mandibular dislocation.
111. Anatomical structure of the temporomandibular joint.
112. Clinic of anterior dislocation of the mandible.
113. Clinic of posterior mandibular dislocation.
114. Diagnosis of mandibular dislocations.
115. Conservative methods of treatment of mandibular dislocation.
116. Surgical methods of treatment of mandibular dislocation.
117. Classification of mandibular fractures.
118. The mechanism of displacement of the fragments of the mandible
119. Clinical symptoms of mandibular fractures.
120. Radiological symptoms of mandibular fractures
121. Methods of diagnosis of fractures of the mandible.
122. Diagnostic techniques for palpation of the mandible.
123. Classification of non-gunshot fractures of the upper jaw.
124. Clinic of non-gunshot fractures of the upper jaw.
125. Diagnosis of non-gunshot fractures of the upper jaw.
126. Typical clinical symptoms: Malevich's symptom, spectacle symptom, etc.
127. Classification of injuries of the cheekbones and arches, nasal bones.
128. Etiology and pathogenesis of damage to the cheekbones and arches, nasal bones.
129. Clinic of injuries of the cheekbones and arches, nasal bones.
130. Subjective examination of a surgical dental patient (complaints, medical history, life history).
131. Methods of examination of the general condition of a surgical dental patient.
132. Methods of local extraoral examination of a patient with damage to the cheekbones and arches, nasal bones.
133. Methods of local intraoral examination of a patient with damage to the cheekbones and arches, nasal bones. Tools for examination of the oral cavity.
134. Laboratory additional methods of inspection.
135. Instrumental additional methods of inspection.
136. Indications for hospitalization of surgical dental patients.
137. Conservative and surgical methods of treatment of injuries of the cheekbones and arches, nasal bones.
138. The scheme of drug treatment of patients with injuries of the cheekbones and arches, nasal bones.
139. Complications that can occur with damage to the cheekbones and arches, nasal bones.
140. Types of methods of immobilization of bone fragments of the facial skull.

141. Basic principles of evacuation and transport immobilization.
142. Methods of temporary immobilization.
143. Types of temporary immobilization in fractures of the mandible (circular, sling-like, individual chin-parietal bandage, elastic bandage Pomerantseva-Urbanskaya, etc.)
144. Types of temporary transport immobilization in fractures of the upper jaw (Faltin, Limberg, rigid chin sling by Entin, etc.)
146. Indications and contraindications to ligature bonding of teeth and jaws.
147. Conservative methods of treatment of fractures of the jaw bones. Advantages and disadvantages.
148. Indications and contraindications to conservative methods of treatment of fractures of the jaws.
149. Types of tires (by method of fixation, by method of manufacture, etc.).
150. Methods of permanent immobilization used in fractures of the upper and lower jaws.
151. Surgical and orthopedic methods of immobilization for jaw bone injuries (fixation of splints to other anatomical structures with a wire ligature, "S" -shaped, "L" -shaped hooks, the use of cortical screws, etc.).
152. Factors that complicate the consolidation of bone fragments (soft tissue wounds, teeth in the fracture line, free-lying bone fragments, etc.).
153. Care of the oral cavity after conservative repositioning and fixation of fragments. Terms of permanent immobilization. Drug treatment.
154. Statistical characteristics and sources of gunshot wounds of the maxillofacial area in conditions of hostilities and emergencies.
155. Classification of gunshot wounds to the face.
156. Characteristics of gunshot wounds to the face depending on the type of weapon.
157. Features of the course of gunshot wounds depending on the anatomical and physiological features of the maxillofacial area.
158. Diagnosis of gunshot wounds to the face and determine the severity of the injury.
159. The scope of first aid for victims of gunshot wounds to the face.
160. The sequence of medical and evacuation measures for the mass admission of patients with gunshot wounds to the face. Principles of medical sorting of patients.
161. Conservative and surgical methods of treatment of gunshot wounds of the maxillofacial area and post-traumatic defects. Osteoplastic surgery.
162. Complications of gunshot wounds to the bones of the face. Gunshot osteomyelitis: features of the clinical course, diagnosis and treatment.
163. Features of rehabilitation of patients with injuries of the maxillofacial area. Medical ethics and deontology.
164. Indications for osteosynthesis of facial skull bones.
165. Preparation of the patient for osteosynthesis operation.
166. The choice of methods for fixing fragments.
167. Features of osteosynthesis in fractures of the lower and upper jaw, chin bone and arch.
168. Hardware operative methods of osteosynthesis.
169. Features of the postoperative period in traumatic patients. Possible complications.
170. Mesenchymal osteogenesis.
171. Factors influencing osteogenesis.
172. Types of bone regeneration.
173. Stages of reparative bone regeneration.
174. Radiological symptoms of bone healing after fracture.
175. Causes of impaired reparative regeneration.
176. The main mechanisms of influence on the processes of bone regeneration.
177. Methods for optimizing the course of reparative osteogenesis.
178. The concept of "combined injuries".
179. Classification of combined MFA injuries. Closed (uninfected) and open (infected) traumatic brain injury.
180. Concussion, concussion, compression of the brain, clinic, diagnosis.
181. Fracture of the skull base, clinic, diagnosis.
182. Principles of providing emergency care to victims with combined MFA injuries.
183. Traumatic disease, classification, its periods, diagnosis.
184. Clinical manifestations of traumatic illness, features of MFA injuries.
185. Complex therapy of traumatic illness, prevention of complications.
186. Traumatic shock, its stages, clinic, diagnosis.
187. Algorithm for providing emergency medical care in traumatic shock, treatment at the stages of medical evacuation.
188. Prehospital and inpatient care for patients with traumatic shock.
189. Prevention of traumatic shock.

190. Complex influence of an injury on an organism.
191. Prevention of complications in combined MFA injuries and traumatic illness.
192. Burns, classification, signs.
193. First aid depending on the degree of burns.
194. Frostbite, classification, signs.
195. First aid for frostbite.
196. Chemical burns, classification, signs.
197. First aid for chemical burns, depending on the active substance.
198. Electric shock, local and general changes.
199. First aid for chemical burns, depending on the mild or severe lesion.
200. Classification and pathogenesis of combined lesions.
201. Variants of the clinical course of combined MFA lesions.
202. Sorting the wounded.
203. Prevention of complications in patients with combined MFA injuries.
204. The concept of radiation sickness.
205. Features of the clinical course of radiation sickness depending on the severity.
206. Mechanisms of action of combat poisons.
207. Symptom of mutual burden in mechanochemical injuries of the maxillofacial area.
208. Features of medical care for maxillofacial wounded with combined injuries.
209. Etiological factors that cause tumors of the maxillofacial area. Varieties of carcinogens.
210. Theories of tumors. Phases of carcinogenesis.
211. Classification of tumors of the maxillofacial area.
212. Classification and features of benign tumors of the maxillofacial area.
213. Comparative characteristics of benign and malignant tumors.
214. The main methods of diagnosis of tumors of the maxillofacial area.
215. Types of odontogenic tumors MFA.
216. Etiopathogenesis of odontogenic neoplasms of the jaws.
217. Pathanatomy of different types of odontogenic tumors.
218. Clinical manifestations of ameloblastoma, diagnosis, differential diagnosis, treatment.
219. Features of clinical manifestations, diagnosis, differential diagnosis and treatment with odont.
220. Clinic, diagnosis, differential diagnosis and treatment with cement.
221. Epulid. Clinic, diagnosis, differential diagnosis, treatment.
222. Classification of benign tumors of the jaw bones.
223. Etiopathogenesis of benign tumors of the jaws.
224. Features of the clinical course of benign tumors of the jaws.
225. Methods of diagnosis of benign tumors of the jaws.
226. Methods of treatment and rehabilitation of patients with benign tumors of the jaws.
227. Principles of prevention of development of complications at patients with the specified pathology.
228. Etiology and pathogenesis of osteogenic tumor-like neoplasms of the jaws.
229. Basic diagnostic methods, differential diagnosis.
230. Clinical manifestations at all stages of osteogenic tumors of the jaws.
231. Methods of surgical treatment of osteogenic tumor-like tumors of the jaws.
232. Complications, causes of their occurrence. Preventive measures to prevent this pathology.
233. Classification of soft tissue neoplasms MFA.
234. Etiopathogenesis of benign soft tissue tumors MFA.
235. Clinical manifestations, diagnosis, treatment of benign skin tumors.
236. Clinical manifestations, diagnosis, treatment of benign connective tissue tumors.
237. Clinical manifestations, diagnosis, treatment of benign tumors of muscle tissue.
238. Clinical manifestations, diagnosis, treatment of benign tumors of adipose tissue.
239. Clinical manifestations, diagnosis, treatment of benign neurogenic tumors and tumor-like formations.
240. Clinical manifestations, diagnosis, treatment of hemangiomas.
241. Clinical manifestations, diagnosis, treatment of lymphangiomas.
242. Principles of prevention of complications in patients with benign soft tissue tumors MFA.
243. Pathomorphology of congenital tumor-like neoplasms.
244. Clinical manifestations, diagnosis, treatment of dermoid and epidermoid cysts.
245. Clinical manifestations, diagnosis, treatment of median cysts and fistulas of the neck.
246. Clinical manifestations, diagnosis, treatment of lateral cysts and fistulas of the neck.
247. Differential diagnosis of congenital soft tissue tumors MFA.
248. Principles of treatment of congenital soft tissue tumors MFA.
249. Prevention of complications of MFA soft tissue tumors
250. Etiology, pathogenesis of precancerous conditions.

251. Classifications of precancerous conditions.
252. Morphological and clinical diagnosis of precancerous conditions.
253. Methods of examination of patients with precancerous conditions.
254. Clinic, diagnosis, treatment of precancerous diseases of the skin, mucous membranes of the mouth and tongue.
255. Differential diagnosis of obligate and facultative forms of precancerous diseases.
256. Features of the pathomorphology of precancerous diseases of the skin, mucous membranes of the mouth and tongue.
257. Prevention of precancerous conditions.
258. Dispensary observation of patients with precancerous conditions.
259. Clinical and morphological classification of benign tumors and cysts of the salivary glands.
260. Cysts of salivary glands:
261. retention cysts of small salivary glands;
262. retention cysts of sublingual salivary glands (wounds);
263. cysts of the submandibular salivary gland;
264. cysts of the parotid salivary gland;
265. oncocytosis;
266. Kuttner's syndrome.
267. Clinic, diagnosis and treatment of pleomorphic adenoma (polymorphic adenoma, mixed tumor).
268. Clinic, diagnosis and treatment of monomorphic adenomas:
269. adenolymphoma (Wortin's tumor);
270. oxyphilic adenoma (oncocytoma).
271. Clinic, diagnosis and treatment of non-epithelial tumors of the salivary glands.
272. Surgical treatment of benign tumors of the salivary glands.
273. Clinical and morphological classification of malignant tumors of the salivary glands.
274. Mucoepidermoid cancer of the salivary glands, clinical manifestations, diagnosis, treatment.
275. Adenocarcinoma and cylinder, clinical manifestations, diagnosis, treatment.
276. Clinic, diagnosis, treatment of sarcoma sarcoma.
277. Epidemiology, etiopathogenesis of malignant neoplasms of the skin, mucous membranes and organs of the oral cavity.
278. Principles of diagnosis of malignant tumors of the MFA and neck.
279. Clinic, diagnosis and treatment of melanoma.
280. Clinic, diagnosis and treatment of basal cell carcinoma.
281. Classification of malignant neoplasms of the oral cavity.
282. Clinical picture of malignant neoplasms of the oral cavity.
283. Principles of treatment of malignant neoplasms of the oral cavity.
284. Pathomorphology of cancer and sarcoma of the jaws.
285. Clinical manifestations of cancer (carcinoma) of the upper jaw, diagnosis, treatment.
286. Clinical manifestations of mandibular cancer, diagnosis, treatment.
287. Clinic, diagnosis, treatment of sarcoma of the upper jaw.
288. Clinic, diagnosis, treatment of mandibular sarcoma.
289. Surgical treatment of malignant tumors of the jaws.
290. Goals and objectives of reconstructive surgery of the maxillofacial area.
291. Examination of patients in need of reconstructive surgery in the MFA.
292. Classification of defects and deformations of the maxillofacial area according to the etiology, pathogenesis, localization and nature of dysfunction.
293. Indications for reconstructive and reconstructive operations on the face.
294. Plastics with local fabrics according to Szymanowski.
295. Plastic counter triangular flaps according to Limberg.
296. Classification of rags on the leg.
297. Plastic replacement of defects and deformations of the nose.
298. Plastic replacement of lip defects.
299. Replacement of defects of tissues of the middle zone of the face.
300. Replacement of MFA defects with flaps on the leg.
301. Replacement of MFA defects by arterialized flaps.
302. Causes, classification of salivary fistulas.
303. Surgical methods of closing salivary fistulas.
304. Conservative treatment of salivary fistulas.
305. Indications for the use of skin and mucous membrane transplants.
306. Classification of methods and techniques for free transplantation of skin and mucous membranes.
307. The main indications and contraindications to the closure of facial defects with Filatov's stem.

308. Requirements for the skin, where they plan to form a stem and in the area of the defect of facial tissues.
309. Methods of stem preparation, the main stages of the operation of stem formation.
310. Basic techniques of preparation (training) of the stem for migration.
311. Rules of stratification of a stalk on a wound-recipient.
312. Features of care for patients after plastic surgery.
313. Medical examination of patients after reconstructive surgery in MFA.
314. Deontological aspects in working with patients in need of reconstructive surgery in the MFA.
315. Etiology of congenital malformations and nonunion of the face.
316. Classification of congenital nonunion of the lips and palate.
317. Clinical picture of congenital nonunion of the upper lip and palate.
318. Functional and anatomical disorders in children with congenital malformations of the upper lip and palate.
319. Principles of complex treatment of children with congenital malunions of the upper lip and palate.
320. Terms of surgical treatment of children with congenital malformations of the upper lip and palate.
321. Methods of cheiloplasty in unilateral and bilateral nonunion of the upper lip.
322. Methods of surgical interventions for congenital nonunion of the palate.
323. Care and feeding of children with congenital malformations of the upper lip and palate.
324. Preparation of children for cheiloplasty and uranostaphyloplasty.
325. Plastic surgery of postoperative defects and deformities of the upper lip, nose and palate.
326. Tasks and measures of surgical preparation of the oral cavity for prosthetics.
327. Types of surgery on the soft tissues of the oral cavity.
328. Indications and contraindications to surgical preparation of the oral cavity for prosthetics.
329. Indications for plastic surgery on the soft tissues of the oral cavity.
330. Methods of lengthening the bridles of the lips, cheeks, tongue, indications for these interventions.
331. Indications for plastic soft tissues of the oral cavity.
332. Operative methods of deepening the shallow dorsum of the oral cavity.
333. Indications for free plastic skin, methods of intervention.
334. Indications for free plasticity of the mucous membrane, the method of intervention.
335. Methods of applying cosmetic sutures.
336. Features of healing of soft tissues of the oral cavity.
337. Methods of removing the mucous membrane, its characteristics.
338. Possible complications of local plastic surgery.
339. Features of care for postoperative wounds.
340. Prevention of postoperative complications.
341. Methods of local prevention of atrophy of the alveolar process of the jaws after tooth extraction.
342. Indications for open alveolectomy and closed transmucosal alveolocompression.
343. Methods of open alveolectomy and closed transmucosal alveolocompression.
344. Indications for osteoplasty and methods of its implementation.
345. Goals and objectives of replacement of bone defects of the jaws.
346. The main methods of replacement of bone defects of the jaws and their characteristics.
347. Classification of bone-plastic materials.
348. The most common modern bone and plastic materials, their characteristics.
349. Indications for alveoloplasty and methods of its implementation.
350. Movement of the chin (mental) vascular-nervous bundle.
351. Methods of increasing the height of the alveolar processes of the jaws.
352. Methods of increasing the thickness of the alveolar processes of the jaws.
353. Goals and objectives of sinus lifting surgery. Open and closed sinus lifting.
354. Method of performing sinus lifting operation, its characteristics, indications and contraindications.
355. Complications of sinus lifting operation, ways of their prevention are possible.
356. Indications for raising the bottom of the nasal cavity, methods of raising the bottom of the nasal cavity.
357. Indications for the movement of the mandibular nerve.
358. Ways to move the mandibular nerve.
359. Methods of removing exostoses, their characteristics.
360. Local and general treatment measures for surgery on the alveolar processes of the jaws.
361. Definition of "bone defect". Types of bone defects of the jaws.
362. Features of examination of patients before dental implantation.
363. Indications and contraindications to dental implantation.
364. Types of implants. The structure of implants: a) by type of material; b) by type of construction; c) components of implants.
365. Support areas for implants.
366. Types of bone tissue by density (SE Misch).

367. Functional loads on implants after their installation.
368. Basic requirements for the design and materials of implants.
369. Types of dental implantation.
370. Clinical stages of implantation.
371. Planning the application of the method of prosthetic teeth based on implants.
372. Methods of endoosal implantation and features of its implementation on the upper and lower jaws.
373. The main criteria for the construction of implants.
374. The main criteria for assessing the condition of the endoosal implant in the bone.
375. Fundamentals of medical tactics when using dental implants.
376. Complications during and after implantation and their treatment.
377. Expediency and inexpediency of use of dental implants.
378. Features of a clinical picture of complications of endodontic treatment.
379. Indications and contraindications for appropriate surgical treatment.
380. Principles of granulomectomy in the apex of the tooth root, interradicular septum.
381. Techniques and stages of the operation of resection of the apex of the tooth root.
382. Resection (amputation) of the tooth root.
383. Coronary-radicular separation.
384. Hemisection of the tooth.
385. Tooth replantation.
386. Guided tissue regeneration.
387. The main tasks of periodontal reconstructive and reconstructive (plastic) surgery.
388. Indications and contraindications to surgical treatment of periodontal disease.
389. Surgical intervention planning.
390. Techniques of periodontal reconstructive and reconstructive (plastic) surgery:
  - operations within the periodontal, gingival pocket;
  - patchwork operations;
  - formation of the dorsum of the oral cavity.
391. Bone-replacing materials.

### 3. Structure of the educational discipline

Topic	Lectures	Practical lessons	Independent work	Individual tasks
<b>Content module I. "MFA Reconstructive Surgery"</b>				
<b>Topic №1.</b> Secondary facial soft tissues defects and deformities. The principles of plastic surgery planning. Local plastic surgery. Pedicle flap use. Free dermal transplantation. Soft tissue substitution by means of round Filatov's stem. Salivary gland fistulas surgical treatment. . Lip and palate clefts: classification, clinical features, functional disorders. The surgical treatment principles. Jaw deformities: etiology, pathogenesis, classification, clinical signs, diagnostics. Orthognathic surgery: principles and techniques of mono- and bimaxillary surgery. Distraction osteogenesis methods. Total and subtotal maxillary and mandibular defects, clinical and radiological features. Principles of MFA reconstructive surgery by means of craniofacial titanium implants and bone autografts. The principles of rhynoplasty and otoplasty. Basics of ectoprostheses. TMJ reconstruction		6	2 2 2 2 1 1 2 2	

<b>Topic №2.</b> Preprosthetic surgery. Soft tissues procedures: dissection of the labial and lingual frenulums, scars, mucous hyperplasia and fibrous inflammatory hyperplastic lesions. Vestibuloplasty: the surgeries principles and techniques. Dental implantation. The history and the main development stages. The types of dental implants. The principles of one and two stage implantation. The concept of immediate and delayed loading. Complications of dental implantation. Endodontic treatment complications and their surgical treatment. Periodontal surgery: the main principles, bone grafting materials. Guided tissue regeneration.		6	2 2 2	
<b>Topic №3.</b> TMJ ankylosis: etiology, pathophysiology, classification, clinical signs, diagnostics, treatment, prevention. Arthroscopy: indications and contraindications, arthroscopic techniques. Mandible contracture: etiology, classification, clinical signs, differential diagnostics, treatment, prevention. The trigeminal and facial nerves diseases: clinical signs, diagnostics, treatment. Pain syndrome surgical treatment. TMJ pain dysfunction syndrome. The practical skills algorithms performing: local plastic surgery methods, suturing techniques, alveolotomy conducting. Periodontal abscess incision <b>Summery lesson "MFA Reconstructive Surgery".</b>		6	2 2 1 2	
<b>Total for content module 1</b>	-	<b>18</b>	<b>27</b>	
<b>Content module 2</b>				
<b>Topic №1.</b> Patient's clinical examination. Presurgical management of patient. Principles of asepsis in surgical dentistry. The local anesthesia methods: classification, techniques, indications and contraindications. General anesthesia. Sedation.		6	9 3 3 3 3	
<b>Topic №2.</b> Local anesthetics. Local anesthesia application and infiltration methods. Conduction anesthesia methods technique. Local anesthesia complications. Cardiopulmonary resuscitation.		6	3 3	
<b>Topic №3.</b> Tooth extraction. Indications and contraindications. Instruments. The stages of tooth extraction. Tooth extraction techniques on upper and lower jaws. Surgical tooth extraction. Complications of tooth extraction. Initial management of patients with somatic diseases for tooth extraction. Summary control № 1. <b>"Oral surgery propedeutic".</b>		6		
<b>Topic №4.</b> Inflammatory processes of MFA: classification, etiology, pathogenesis. The diseases of teeth eruption. Pericoronitis and periodontitis: etiology, pathogenesis, clinical features, diagnosis, treatment, complications. Odontogenic periostitis and osteomyelitis (acute, chronic): etiology, pathogenesis, clinical signs, diagnosis, treatment, complications. The clinical features peculiarities of osteomyelitis in drug addicts patients.		6	3	-
<b>Topic №5.</b> Acute and chronic odontogenic maxillary sinusitis. MFA lymphadenitis, adenophlegmon. Face furuncle and carbuncle. Etiology, pathogenesis, clinical signs, diagnosis, treatment, complications. Specific MFA diseases: actinomycosis, tuberculosis, syphilis: clinical signs, diagnosis, treatment, complications. HIV/AIDS infection on oral cavity. TMJ arthritis and arthrosis. Acute and chronic sialoadenitis. Salivolithiasis. Classification, etiology, pathogenesis, clinical features, treatment, complication.		6	3	
<b>Topic №6.</b> Odontogenic phlegmons and abscesses of the maxilla and mandible spaces: etiology, pathogenesis, classification, clinical features, diagnosis, complex treatment, complications. Summary control № 2. <b>"Inflammatory diseases of MFA".</b>		6	3	

<b>Topic №7.</b> MFA soft tissues civil and military trauma: classification, clinical signs, treatment. Methods of surgical debridement. Type of sutures. Postsurgical management.		6		
<b>Topic №8.</b> Teeth and bones civil and military trauma: classification, clinical signs, treatment. Methods of primary and permanent immobilization. Osteosynthesis of the facial bones. Indications. Materials and tools for osteosynthesis. Types of fixation devices. Stages of the operation. Combined trauma: classification, clinical signs, treatment. Traumatic disease. Summary control № 3. «MFA Trauma».		6	3	
<b>Topic №9.</b> MFA benign tumors and tumor-like lesions: classification, patients examination, clinical signs, differential diagnosis, management principles. Precancer diseases.		6	3	
<b>Topic №10.</b> MFA malignant tumors and tumor-like lesions: classification, patients examination, clinical signs, differential diagnosis, management principles. Summary control № 4. «Oncology of the MFA». Algorithms of the practical skills implementation. Summery lesson.		6	3	
<b>Total for content module 2</b>	-	<b>60</b>	<b>45</b>	
<b>Total hours 150/5 ECTS credits</b>	-	<b>78</b>	<b>72</b>	
<b>Final control</b>				Credit

4. Thematic plan of lectures – are not provided in curriculum

5. Seminar classes schedule - are not provided in curriculum

#### 6. Thematic plan of practical (seminar) classes for IX (autumn) / X (spring) semester

№	Topic	Hours
1.	<b>Topic №1.</b> Secondary facial soft tissues defects and deformities. The principles of plastic surgery planning. Local plastic surgery. Pedicle flap use. Free dermal transplantation. Soft tissue substitution by means of round Filatov's stem. Salivary gland fistulas surgical treatment. Lip and palate clefts: classification, clinical features, functional disorders. The surgical treatment principles. Jaw deformities: etiology, pathogenesis, classification, clinical signs, diagnostics. Orthognathic surgery: principles and techniques of mono- and bimaxillary surgery. Distraction osteogenesis methods. Total and subtotal maxillary and mandibular defects, clinical and radiological features. Principles of MFA reconstructive surgery by means of craniofacial titanium implants and bone autografts. The principles of rhynoplasty and otoplasty. Basics of ectoprosthesis. TMJ reconstruction.	6
2.	<b>Topic №2.</b> Preprosthetic surgery. Soft tissues procedures: dissection of the labial and lingual frenulums, scars, mucous hyperplasia and fibrous inflammatory hyperplastic lesions. Vestibuloplasty: the surgeries principles and techniques. Dental implantation. The history and the main development stages. The types of dental implants. The principles of one and two stage implantation. The concept of immediate and delayed loading. Complications of dental implantation. Endodontic treatment complications and their surgical treatment. Periodontal surgery: the main principles, bone grafting materials. Guided tissue regeneration.	6
3	<b>Topic №3.</b> TMJ ankylosis: etiology, pathophysiology, classification, clinical signs, diagnostics,	6

<p>treatment, prevention. Arthroscopy: indications and contraindications, arthroscopic techniques. Mandible contracture: etiology, classification, clinical signs, differential diagnostics, treatment, prevention. The trigeminal and facial nerves diseases: clinical signs, diagnostics, treatment. Pain syndrome surgical treatment. TMJ pain dysfunction syndrome.</p> <p>The practical skills algorithms performing: local plastic surgery methods, suturing techniques, alveolotomy conducting. Periodontal abscess incision.</p> <p><b>Summary lesson "MFA Reconstructive Surgery".</b></p>	
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<b>Content module 2.</b>		
4.	<b>Topic №1.</b> Patient's clinical examination. Presurgical management of patient. Principles of asepsis in surgical dentistry. The local anesthesia methods: classification, techniques, indications and contraindications. General anesthesia. Sedation.	6
5.	<b>Topic №2</b> Local anesthetics. Local anesthesia application and infiltration methods. Conduction anesthesia methods technique. Local anesthesia complications. Cardiopulmonary resuscitation.	6
6.	<b>Topic №3.</b> Tooth extraction. Indications and contraindications. Instruments. The stages of tooth extraction. Tooth extraction techniques on upper and lower jaws. Surgical tooth extraction. Complications of tooth extraction. Initial management of patients with somatic diseases for tooth extraction. Summary control № 1. " <b>Oral surgery propedeutic</b> ".	6
7.	<b>Topic №4.</b> Inflammatory processes of MFA: classification, etiology, pathogenesis. The diseases of teeth eruption. Pericoronitis and periodontitis: etiology, pathogenesis, clinical features, diagnosis, treatment, complications. Odontogenic periostitis and osteomyelitis (acute, chronic): etiology, pathogenesis, clinical signs, diagnosis, treatment, complications. The clinical features peculiarities of osteomyelitis in drug addicts patients.	6
8.	<b>Topic №5.</b> Acute and chronic odontogenic maxillary sinusitis. MFA lymphadenitis, adenophlegmon. Face furuncle and carbuncle. Etiology, pathogenesis, clinical signs, diagnosis, treatment, complications. Specific MFA diseases: actinomycosis, tuberculosis, syphilis: clinical signs, diagnosis, treatment, complications. HIV/AIDS infection in oral cavity. TMJ arthritis and arthrosis. Acute and chronic sialoadenitis. Salivolithiasis. Classification, etiology, pathogenesis, clinical features, treatment, complication.	6
9.	<b>Topic №6.</b> Odontogenic phlegmons and abscesses of the maxilla and mandible spaces: etiology, pathogenesis, classification, clinical features, diagnosis, complex treatment, complications. Summary control № 2. " <b>Inflammatory diseases of MFA</b> ".	6
10.	<b>Topic №7.</b> MFA soft tissues civil and military trauma: classification, clinical signs, treatment. Methods of surgical debridement. Type of sutures. Postsurgical management.	6
11.	<b>Topic №8.</b> Teeth and bones civil and military trauma: classification, clinical signs, treatment. Methods of primary and permanent immobilization. Osteosynthesis of the facial bones. Indications. Materials and tools for osteosynthesis. Types of fixation devices. Stages of the operation. Combined trauma: classification, clinical signs, treatment. Traumatic disease. Summary control № 3. « <b>MFA Trauma</b> ».	6
12.	<b>Topic №9.</b> MFA benign tumors and tumor-like lesions: classification, patients examination, clinical signs, differential diagnosis, management principles. Precancer diseases.	6
13.	<b>Topic №10.</b> MFA malignant tumors and tumor-like lesions: classification, patients examination, clinical signs, differential diagnosis, management principles. Summary control № 4. « <b>MFA Oncology</b> ». Algorithms of the practical skills implementation. <b>Summary lesson.</b>	6
<b>Total hours: 78</b>		

**7. Laboratorial classes schedule – are not included in curriculum**

**8. Independent work schedule for IX (autumn) / X (spring) semester**

№	Topic	Hours	Type of Control
1.	<b>Topic №1.</b> Surgical treatment of TMJ disorders, TMJ reconstruction	2	Current control on the practical classes
2.	<b>Topic №2.</b> TMJ pain dysfunction syndrome.	2	
3.	<b>Topic №3.</b> Mandible contracture surgical treatment.	2	

4.	<b>Topic №4.</b> Soft tissue defects substitution by local (connective tissue, mucosal) grafts. Technique of pedicle flap.	2
5.	<b>Topic №5.</b> The employment of round Filatov's stem.	2
6.	<b>Topic №6.</b> Free dermal transplantation.	2
7.	<b>Topic №7.</b> Salivary glands fistulas surgical closure.	1
8.	<b>Topic №8.</b> Tissues regeneration. Biological basics of the osteogenesis.	1
9.	<b>Topic №9.</b> Bone grafting. Osseointegration. Autologous transplantation. Osteogenic materials.	2
10.	<b>Topic №10.</b> Distraction and compression methods of osteogenesis.	2
11.	<b>Topic №11.</b> Alveolar bone augmentation before the dental implantation. Methods and materials.	2
12.	<b>Topic №12.</b> Biological basics of dental implantation. Surgical stages.	2
13.	<b>Topic №13.</b> Periodontal Surgery. Guided tissues regeneration. Membrane techniques.	2
14.	<b>Topic №14.</b> MFA neuritis and neuralgia Physical therapy methods of treatment.	2
15.	<b>Topic №15.</b> MFA microsurgery.	2
16.	<b>Topic №16.</b> History of patient disease (Patients management).	9
17.	<b>Topic №17.</b> The X-Ray diagnosis methods in dentistry.	3
18.	<b>Topic №18.</b> Additional diagnosis methods justification in dentistry.	3
19.	<b>Topic №19.</b> The principles of sedation in pre surgery management in patients with MFA diseases.	3
20.	<b>Topic №20.</b> The peculiarities of different pharmacological groups medications in complex treatment of MFA diseases.	3
21.	<b>Topic №21.</b> The physical therapy methods in complex treatment of MFA diseases.	3
22.	<b>Topic №22.</b> Initial management of patients with somatic diseases for MFA surgery.	3
23.	<b>Topic №23.</b> Emergency states in oral surgery. Cardiopulmonary resuscitation.	3
24.	<b>Topic №24.</b> The principles of incisions in MFA surgery. Postsurgical management. Type of sutures.	3
25.	<b>Topic №25.</b> Perforate maxillary sinusitis. Oroantrum plasty.	3
26.	<b>Topic №26.</b> The medical care in maxillofacial injured and persons at the stages of medical evacuation.	3
27.	<b>Topic №27.</b> The diagnostic and treatment methods of MFA precancer diseases.	3
28.	<b>Topic №28.</b> The principles and methods of local plasty methods. Vestibular plasty.	3

	<i>Total</i>	72

**9. Individual tasks** - are not included into the curriculum.

### **10. Tasks for independent work**

#### **Independent work of students includes:**

- abstracts of theoretical material, solution of situational tasks, control questions on relevant subjects of independent work, etc.;
- creation of multimedia presentations on selected topics of independent work;
- creation of poster presentations on selected topics of independent work;
- writing a medical history according to selected nosologies;
- preparation for classroom classes (practical);
- performance of tasks in the academic discipline during the semester;
- work on individual topics of academic disciplines, which, according to the working curriculum of the discipline, are assigned to students for independent study;
- preparation for all types of control works;
- work in student scientific circles and centers, etc.;
- participation in the work of "round tables", etc.;
- participation in scientific and scientific-practical conferences, Olympiads, etc.;

In order to organize independent work at the department of surgical stomatology and maxillofacial surgery, the teachers conduct the following activities:

- group and individual consultations;
- interviews with students;
- systematic control over students' performance of tasks recommended for independent study;
- providing students with means for self-control (tests, packages of control questions and situational problems);
- analysis and evaluation of the student's work.

### **11. Teaching methods.**

The educational process at the Department of Surgical Dentistry and Maxillofacial Surgery is organized according to the following normative documents:

- Law of Ukraine "On Higher Education" of 01.07.2014 №1556-VII;
- Decree of the Cabinet of Ministers of Ukraine dated 29.04.2015 №266 "On approval of the list of branches of knowledge and specialties under which the training for higher education is carried out";
- the Order of the Ministry of Education and Science of Ukraine No. 1151 dated 06.01. 2015 "On the peculiarities of introduction of a list of branches of knowledge and specialties, under which the training for higher education is carried out; approved by the Resolution of the Cabinet of Ministers of Ukraine dated 29.04. 2015 №266";
- Order of the rector of the LNMU named after Danylo Halytsky dated 02.06.2016 № 1604 "On approval of curricula";
- the provision on the organization of the educational process at the Lviv National Medical University named after Danylo Halytsky, approved by the Academic Council of the Danylo Halytsky LNMU on 23.06. 2021, Minutes No. 3-VR;
- the provision on criteria, regulations and evaluation of results of the educational process at the Lviv National Medical University named after Danylo Halytsky, approved by the Academic Council of the Danylo Halytsky LNMU on 21.02. 2018, Minutes No. 1-VR;
- Education-professional curriculum "Dentistry", second (masters) level of higher education, 221 dentistry, MES Ukraine Certificate №1497026 valid until 01.07.2025;
- the provision on the curriculum of the discipline and methodological recommendations for it, CMC Danylo Halytsky LNMU 23.04.2015, Minutes №2;
- the curriculum of the discipline "surgical dentistry" for students of the III, IV and V years of the dental faculty.

Practical clinical sessions in the course of surgical dentistry and MFS are conducted in the groups of 13-15 people. The evaluation of initial level of knowledge of a student who is enrolled for studies at the Department of Surgical Dentistry involves assessment of the level of knowledge in anatomy, general and special physiology, pathological anatomy and physiology on the basis of fundamental training in the departments of the medical-

biological and general clinical profiles.

At lectures and practical classes, the teachers cover the achievements of scientific and technological progress, medicine, in particular, surgical dentistry and MFS and their implementation into practice.

The lecture courses cover the main and most complex sections of surgical dentistry and MFS, including the problems of the interrelation of all sections of dentistry with the general pathology, ecology, etiology and pathogenesis of various dental and somatic diseases, nosological diagnostics, surgical and conservative treatment, prevention, social rehabilitation and expertise.

In order to master the manual skills of providing surgical dental care, along with the study of theoretical issues, students work out manipulations on phantoms and headforms; under supervision of the teacher they independently carry out examination of patients with different pathological processes of MFA that fall within the competence of surgical dentistry and MFS, independently study symptoms of surgical dental diseases, acquire skills in the diagnosis of maxillofacial disorders and diseases, their treatment, expertise and working rehabilitation.

### **Methodology of educational process in practical lesson on surgical dentistry:**

Duration of practical lesson - 6 academical hours – 4 h. 30 min, including 3 10-minute breaks.

#### **1. Preparatory stage - 30 min.**

The teacher provides the rationale for the meaning of the lesson for further study of the discipline and professional activities of the physician with the aim of motivating students for further educational activities. Students get acquainted with specific goals and plan of the lesson.

The procedure of standardized control of the initial level of student, discussion and answers to students' questions.

**Educational technologies, materials of methodical maintenance:** questions for individual oral and written control, typical situational tasks and tests; tables, models, models of jaws, textbooks, manuals, reference books, atlas, methodical recommendations according to the subject of the lesson, videos.

#### **2. The main stage – 180 min.**

Students collect history and conduct an examination of the thematic patient. Students prepare a patient check-up plan, additional research methods, fill in the relevant medical documentation, work out techniques for conducting diagnostic manipulations and therapeutic measures, and train the practical skills relevant to the subject of the lesson.

**Educational technologies, materials of methodical maintenance:** patients of the dental clinic, medical history, selection of results of additional methods of examination of thematic patients, situational tasks, algorithms for practical skills implementation, models, tools, thematic videos.

#### **3. Final stage – 30 min.**

The procedure of standardized final control test using individual test tasks and questions (10-15 min.), checking the work (5-10 min.). Assessment by the teacher of student's activity during the class, taking into account standardized final control test, analysis of student's progress, announcing the evaluation of each student's activity, and displaying it in the register of student attendance and progress.

The group monitor, at the same time, fills in the assessment and attendance register for students, the teacher verifies it with their signature.

The students are provided with brief overview of the topic of the next lesson and the methodical preparation for it.

The students have the opportunity to get acquainted with the list of practical skills they are to master on the third year. The descriptions of practical skills are placed on educational-methodical stands and on the department's website. The department has developed a form of control over the acquisition of practical skills, which is distributed among students at the beginning of the semester. During the practical classes, as well as at the end of the semester, the teacher marks the progress of the students' acquisition of listed practical skills.

Independent work of students is reflected in the educational-thematic plans, as well as in the methodical development of practical classes for students.

#### **Independent work of students includes:**

- abstracts of theoretical material, solution of situational tasks, control questions on relevant topics of independent work, etc.;
- creation of multimedia presentations on selected topics of independent work;
- creation of poster presentations on selected topics of independent work;
- writing a medical history according to selected nosologies;
- preparation for auditorial classes (lectures, practical, etc.);
- performance of tasks in the discipline during the semester;
- work on certain topics of academic disciplines, which in accordance with the working curriculum of the discipline are submitted for independent study of students;

- preparation for all types of tests;
- performance of tasks provided by the practice program;
- work in student research circles and centers, etc.;
- participation in the work of "round tables", etc.;
- participation in scientific and scientific-methodical work of departments, faculties;
- participation in scientific and scientific-practical conferences, Olympiads, etc.;
- preparation for the final state certification and licensing exam "KROK 2. Dentistry".

In order to organize independent work at the Department of Surgical Dentistry and Maxillofacial Surgery, teachers carry out the following activities:

- group and individual consultations;
- interviews with students;
- systematic control over the performance by students of tasks recommended for self-study;
- providing students with tools for self-control (tests, packages of control questions and situational tasks);
- analysis and evaluation of student work.

The make-up sessions for practical (seminar) classes are carried out by the appointed teachers (on shift basis) as well as on an individual schedule. Schedules for the make-up sessions are available on the appropriate stands and the information website of the department. Students who have missed more than two practical classes are admitted to study with the permission of the Dean's Office of the Faculty of Dentistry, and also must make up for missed classes within the following two weeks. Control of the make-up classes is carried out in the special register with the sequential numbering and fixing the date of make-up session and the date of the missed class which corresponds to the schedule. All missed lectures are recorded in the registers, controlled at practical classes in the form of oral and written interviews, as well as taken into account at the time of credits and exam assessment.

All classes and lectures are provided with appropriate methodical and illustrated material. Classes are conducted in accordance with the traditional methodology, with the use of test tasks, control assignments, oral answers etc. Phantoms and headform are also used extensively during the classes.

Teachers of the department have done a lot of work to create methodological materials to support the learning process, materials for preparation for practical classes and lectures in electronic form, which is posted on the information platform of Danylo Halytsky LNMU MISA and the website of the Department of Surgical Dentistry and MFS.

#### **Innovative methods and technologies used in the educational process**

Discipline	Educational technologies and innovative teaching methods
Surgical dentistry	<ul style="list-style-type: none"> <li>- involvement of students into work with well-known medical databases (ScienceDirect, PubMed, Panteleimon, etc.);</li> <li>-interdisciplinary approach to the study of surgical dentistry - a constant emphasis on the interconnections between basic medical disciplines and related dental specialties;</li> <li>- Involvement of students in assisting with surgical interventions, online video broadcasting of surgical procedures with the simultaneous discussions and comments of the manipulations;</li> <li>- regular hospital rounds with students, examination of thematic patients and discussion of clinical cases, motivation of students to compile algorithms of diagnostic and treatment measures for different dental surgical pathology.</li> </ul>

#### **12. Control methods.**

Control measures are a necessary element of feedback in the study process. They determine the compliance of the students acquired knowledge and skills requirements of normative documents on higher education.

Monitoring forms and evaluation system implemented in accordance with the discipline program and regulations on the organization of educational process in Lviv Danylo Halytsky National Medical University, 2/21/2018 protocol №1-BP.

Control measures in the study of the discipline "Surgical Dentistry" include current control, final control - semester test credit.

At the start of a new course an initial test is conducted in order to check students' knowledge in disciplines making up the course. The initial test is conducted during first class using the tasks corresponding to the syllabus of previous discipline. Test results are analyzed during department (inter-department) meetings and

sessions of methodological committees with participation of academic staff who teach the discipline. Initial test results are used for development of student individual assistance means and academic process correction.

Current control is carried out at each practical lesson in accordance with the specific objectives of each topic. Current control is carried out on the basis of a comprehensive assessment of student activities, including control of the input level of knowledge, the quality of practical work, the level of theoretical training, independent work according to the thematic plan and the results of initial control of knowledge.

Final control - semester test credit - is a form of final control, which consists in assessing the student's mastery of educational material solely on the basis of the results of his performance of certain types of work on practical lessons. It is conducted in accordance with the curriculum within the timeframe set by the schedule of the educational process and in the amount of educational material determined by the curriculum of the discipline.

**Current evaluation** is conducted on the basis of comprehensive evaluation of student's activities, including assessment of initial level of knowledge, quality of practical work done, level of theoretical training and final level of knowledge. Forms of routine assessment – tests tasks, situational problems, recitation, structured written task and practical skills assessment under conditions approximating real. Forms of assessment of current learning activities are standardized and meet the standards of answers.

*Evaluation of current educational activities.* During the evaluation of the mastering of each topic for the current educational activity of the student, marks are set on a 4-point scale (national). This takes into account all types of work provided by the curriculum of discipline. The student must receive a mark from each topic for further conversion of marks into points on a multi-point (200-point) scale.

Evaluation of current student performance is carried out at each practical lesson and is recorded in the journal of academic performance.

Students' knowledge is evaluated from both theoretical and practical training according to next criteria:

- **"excellent"** – a student has perfectly mastered the theoretical material, demonstrates profound and comprehensive knowledge of a relevant topic or discipline as well as the main ideas of scientific sources and recommended literature; thinks logically and gives a logically built answer; freely uses theoretical knowledge gained during analysis of practical material; expresses attitude towards various problems; demonstrates a high level of practical skills;

- **"good"** – a student has mastered theoretical material well, is aware of the main theoretical principles discussed in scientific sources and recommended literature and is capable of substantiating them; has practical skills and expresses opinion on this or that issue yet may be inaccurate and erroneous when presenting theoretical material or analyzing the practical material;

- **"satisfactory"** – a student has generally mastered theoretical material on the topic or discipline, is aware of the scientific sources and recommended literature, yet is uncertain when answering and additional questions cause him/her to give an unclear answer or no answer at all; when answering practical questions a student demonstrate inaccuracies, is not capable of evaluating facts and phenomena and linking them to future activities;

- **"unsatisfactory"** – a student has not mastered the material of the topic (discipline); has no knowledge of scientific facts and definition; is hardly aware of the scientific sources and recommended literature; he/she lacks academic thinking, practical skills have not been formed.

### **The evaluation criteria by type of control:**

#### **Criteria for evaluating the test task**

**"Excellent"** - the student solved 95-100% of the proposed set of test tasks;

**"Good"** - the student solved 80-94% of the proposed set of test tasks;

**"Satisfactory"** - the student solved 60.5-79% of the proposed set of test tasks;

**"Unsatisfactory"** - the student solved less than 60.5% of the proposed set of test tasks.

#### **Criteria for evaluating the package of open questions**

The task includes 5 open questions on the topic of practical lesson. The cost of each question is 1 point, or 20%. The results of the answers are summarized and rated on a five-point scale: 5 "excellent" - 4.5-5 points; 4 "good" - 3.5-4 points; 3 "satisfactory" - 3 points; 2 "unsatisfactory" - 2 or less points.

Each of the questions is evaluated according to the following criteria:

1 point - the student perfectly mastered the theoretical material of the topic of the lesson; independently, competently and consistently with exhaustive completeness answered questions; demonstrates deep and comprehensive knowledge, logically builds the answer, expresses his attitude to certain problems; is able to establish causal relationships, logically and reasonably draw conclusions; unmistakably answers questions using materials submitted for independent work.

0.75 points - the student has mastered the theoretical material of the topic of the lesson, teaches it; reveals the main content of educational material, gives incomplete definitions, allows minor violations in the sequence of presentation of material and inaccuracies in the use of scientific terms, vaguely formulates conclusions, expresses its views on certain issues, but assumes certain errors in the logic of theoretical content.

0.5 points - the student has mainly mastered the theoretical material of the lesson, fragmentarily reveals the content of educational material, shows the initial idea of the subject of study, when reproducing the basic educational material makes significant mistakes, gives simple examples, unconvincing answers, confuses concepts.

0 points - the student has not mastered the educational material of the topic, does not know the basic definitions, concepts; gives the wrong answer to the questions.

#### **Criteria for assessing the situational tasks**

**"Excellent"** - the student has deeply mastered the theoretical material of the lesson, is able to connect theory with practice, which allows him to solve situational tasks of increased complexity.

**"Good"** - the student has firmly mastered the theoretical material of the topic of the lesson, correctly applies theoretical knowledge in solving situational problems of medium difficulty.

**"Satisfactory"** - the student has mastered only the basic material without details, solves only the easiest tasks, assumes inaccuracies, chooses insufficiently clear wording, violates the sequence in the presentation of the answer.

**"Unsatisfactory"** - the student does not know much of the theoretical material of the topic of the lesson, makes significant mistakes, does not solve the situational task.

#### **Criteria for evaluation of the practical skills**

**"Excellent"** - the student has full practical skills, is able to connect theory with practice.

**"Good"** - the student partially has a practical skill, correctly applies the theoretical provisions in solving practical problems.

**"Satisfactory"** - the student has only a mandatory minimum of practical tasks, familiar with the technique of performing.

**"Unsatisfactory"** - the student does not have practical skills.

When using different methods of verifying learning outcomes, their scores are summed to the arithmetic mean.

**13. Final control - semester test credit** - is a form of final control, which consists in assessing the student's mastery of educational material solely on the basis of the results of his performance of certain types of work on practical lessons. It is conducted in accordance with the curriculum within the timeframe set by the schedule of the educational process and in the amount of educational material determined by the curriculum of the discipline.

Semester test credit of the discipline is conducted after the end of its study, before the examination session.

To the final control are admitted the students who have attended all practical lessons foreseen by the curriculum in the discipline and scored at least the minimum number of points for the current evaluation. For students who have missed 3 or more practical lessons, these lessons can be repassed with the permission of the dean's office to eliminate academic debt by a certain deadline within the semester.

Final controls are held by lecturers who had practical classes in the academic group. Students are admitted to the semester final control if they perform all types of assignments foreseen by syllabus and curriculum.

Evaluation of the student's work during semester must be recorded (in academic journal, grade report sheet, student credit book). Tests and individual assignments performed by students during the term are kept at the department for a year.

#### **14. Scheme of calculation and distribution of points received by students:**

In studying process in The University are used next scales of evaluation: multi-point (200-point) scale, traditional 4-point scale and ECTS rating scale. Marks from the 4-point scale are converted into points on a multi-point (200-point) scale in accordance with following rules.

**Enrollment criteria:** To be enrolled, a student must receive at least 60% of the maximum amount of points of the discipline (120 points) for the current educational activity.

**Maximum number of points** is 200 points.

**Minimum number of points** is 120 points.

**Calculation of the number of points** is conducted on the basis of grades under traditional grade scale received by the student during the term by determining arithmetic average (AA) rounded off to the nearest

hundred. The resulting value is then converted into points according to the multipoint grade scale using the following procedure:

$$x = \frac{CA \times 200}{5}$$

For convenience, a table of recalculation on a 200-point scale is given below:

**Recalculation of the average grade for current activities in a multi-point scale for disciplines that end with a test**

4-point scale	200-point scale						
5	200	4.45	178	3.92	157	3.37	135
4.97	199	4.42	177	3.89	156	3.35	134
4.95	198	4.4	176	3.87	155	3.32	133
4.92	197	4.37	175	3.84	154	3.3	132
4.9	196	4.35	174	3.82	153	3.27	131
4.87	195	4.32	173	3.79	152	3.25	130
4.85	194	4.3	172	3.77	151	3.22	129
4.82	193	4.27	171	3.74	150	3.2	128
4.8	192	4.24	170	3.72	149	3.17	127
4.77	191	4.22	169	3.7	148	3.15	126
4.75	190	4.19	168	3.67	147	3.12	125
4.72	189	4.17	167	3.65	146	3.1	124
4.7	188	4.14	166	3.62	145	3.07	123
4.67	187	4.12	165	3.57	143	3.02	121
4.65	186	4.09	164	3.55	142	3	120
4.62	185	4.07	163	3.52	141	Less than 3	Not enough
4.6	184	4.04	162	3.5	140		
4.57	183	4.02	161	3.47	139		
4.52	181	3.99	160	3.45	138		
4.5	180	3.97	159	3.42	137		
4.47	179	3.94	158	3.4	136		

**Evaluation of the students' independent work**

The material for independent work of students, which is foreseen in the topic of practical lessons at the same time as classroom work, is evaluated during the current control of the topic of the relevant lesson. Evaluation of topics that are submitted for independent work and are not included in the topics of practical lessons, are controlled during the final control.

In the process of control measures the teacher evaluates:

- the level of assimilation by the student of the educational material submitted for independent processing;
- ability to use theoretical knowledge in performing practical tasks;
- validity and logic of presentation of independently studied material;
- completeness of disclosure of the research topic;
- registration of materials according to the requirements.

Marks on the performance or non-performance of various types of independent work of students are placed in the teacher's Journal of attendance and performance the of students.

*Possible forms of independent work of students, forms of control and reporting*

<b>Types and forms of independent work of students</b>	<b>Forms of conduction, control and reporting</b>
<i>1. Preparation for current practical lessons</i>	
1.1. Study of required and additional literature, texts of the lectures etc.	1.1. Active participation in various types of practical lessons and lectures
1.2. Performing of hometasks	1.2. Checking the correctness of the tasks
1.3. Preparation for practical lessons	1.3. Active participation in practical lessons
1.4. Preparation for control works and to another	1.4. Writing of control worl etc.

forms of current control	
<i>2. Research-analytic work</i>	
2.1. Search (selection) and review of literature sources on a given issue	2.1. Consideration of prepared materials during practical lessons
2.2. Writing of the referate on a given issue	2.2. Discussion (defense) of the materials of the referate during practical lessons or checking of the work by the teacher
2.3. Analytical review of a scientific publication	2.3. Discussion of the results of the work done during practical lessons
2.4. Analysis of a specific clinical situation	2.4. Examination of patients, acquaintance with results of examination, filling in of the documentation
2.5. Workshop on the educational discipline using software	2.5. Checking the correctness of performing of the tasks
<i>3. Scientific work</i>	
3.1. Participation in scientific student conferences and seminars	3.1. Approbation of research results at scientific student conferences and seminars
3.2. Preparation of scientific publications	3.2. Discussion with the teacher of the prepared materials, submission to the press the results of scientific researches
3.3. Execution of tasks within the research projects of the department (faculty)	3.3. Use of research results in the SRW report, preparation of work for the competition of student research papers

Assessment of the discipline is based solely on the results of current educational activities and is expressed on a two-point national scale: "credited" or "not credited". To be enrolled, a student must receive at least 60% of the maximum amount of points of the discipline (120 points) for the current educational activity. Points of the discipline are ranked on the ECTS scale.

Grade F (unsatisfactory with obligatory repeated course) assigned to the students who attended the lecture sessions on all subjects, but did not reach the minimum number of points for current educational activity and not allowed to take the exam. In the case of F evaluation, the student is obliged re-pass the subject.

Discipline scores for students who have successfully completed the program are converted into a traditional 4-point scale according to the absolute criteria listed in the table below:

<b>Points on discipline</b>	<b>Traditional 4-point scale</b>
from 170 to 200 points	5
from 140 to 169 points	4
from 139 to minimal allowed number of points	3
Less than minimal allowed number of points	2

Assessment ECTS in traditional scale is not converted because the scale of ECTS and four-point scale are independent.

The objectivity evaluation of the student's educational activities is tested by the statistical methods (correlation coefficient between the assessment and evaluation of ECTS national scale).

The scores of the students are enrolled in one specialty, taking into account the number of points gained in the discipline ranked on a scale ECTS as follows:

<b>ECTS estimate</b>	<b>Statistical index</b>
A	The best 10 % students
B	Next 25 % students
C	Next 30 % students
D	Next 25 % students
E	The last 10 % students

Ranking of assigning ratings of "A", "B", "C", "D", "E" is held for the students of this course, studying at one specialty and successfully completed the study subjects. Students who have received assessment FX, F («2») is not made to the list of students who ranked. Students from assessment after retaking FX are automatically mark "E".

**15. Methodological support:** abstracts, expanded plans and multimedia presentations of lectures, practical classes, independent work, lists of questions, tasks and cases for current, final and self-control of students' knowledge and skills, lists and algorithms for practical skills..

With the help of sponsorship was created and established the use of a local computer network and modern video equipment, which provides online broadcasting of surgical interventions in classrooms/ This allows students to "virtually" be present in the operating room, discuss with teachers and surgeons interventions or other surgical manipulations, etc. Based on the video footage of surgical interventions, a video library was created for demonstration during the relevant thematic classes. The video library of the department also contains advertising films with the products of Septodont (France), Kolapan (Russia), Conmet (Russia), Geistlich (Switzerland), Synthes (Switzerland), Ihde Dental (Switzerland). ), "BTI" (Spain), etc., the demonstration of which expands students' imagination about modern technologies in surgical dental practice. Due to the cooperation with the Center for Medical 3D Diagnostics (Lviv), the use of the program for decoding radiographs and computer tomograms "Point Nix" (Korea) was introduced into the educational process, which will allow students to better navigate the issues of radiological diagnostics of various surgical dental pathologies. Employees of the department created and implemented in the educational process author's computer programs for diagnostics and planning of cystectomy operations and atypical removal of lower third molars "RTG ruler" and "Xray analyzer" for which received patents of Ukraine for inventions and acts of implementation in practical medicine.

A phantom class of the Department of Surgical Dentistry and MFS has been created, which is equipped with modern computer and video stuff for demonstration of live-surgery and thematic films. To demonstrate and practically master the skills of local anesthesia in the maxillofacial area and tooth extraction, the phantom class is equipped with phantoms of the head with replaceable jaw modules (4 pcs.), Models of skulls and jaws (6 pcs.), Sets of tools for tooth extraction, performing surgical interventions in the maxillofacial area.

To demonstrate and implement practical skills of treatment of traumatic injuries of MFA, the phantom class is equipped with tools and models for performing the technique of mono- and intermaxillary splinting, osteosynthesis of facial bones (3 models of the skull with imitation fractures of the upper jaw and NOE complex models with imitation of mandibular angle fractures, 45 models with imitation of mandibular symphysis fractures, 40 models with imitation of mandibular fractures of the mandible, 3 holders for fixing models to the work surface, Synbone, Switzerland).

In 2018, the department received a full-fledged resuscitation simulator with a control device (ONICO) for visualization and practice of emergency care skills.

Practical classes on "Surgical Dentistry" are provided with methodical and illustrative material, respectively. Visualization of practical skills algorithms is provided with video presentations.

### **List of practical skills for the content module №1**

#### **Chapter "Reconstructive and reconstructive surgery of MFA"**

1. To master the method of examination of a patient with TMJ pathology, mandibular contracture.
2. Be able to prescribe exercise therapy, mechanotherapy for diseases of the TMJ.
3. Be able to conduct Z-plastic according to AA Limberg.
4. Be able to carry out conservative treatment of salivary fistula.
5. To master the method of examination of a patient who needs reconstructive surgery in the thyroid gland.
6. Work on the phantom technique of plastic flap "on the leg".
7. To demonstrate on the phantom the technique of preparation, formation, training, migration and plastics of the defect with the help of Filatov stalk.
8. Practice the technique of free skin graft surgery on a phantom.
9. Make a plan of comprehensive treatment and care for patients after local plastic surgery.
10. To master the method of examination of a patient with congenital malformations of the upper lip and palate.
11. To master the method of clinical examination of a patient with deformities of the facial skeleton.
12. Make a treatment plan for patients with facial skeletal deformities.
13. To master the method of clinical examination of a patient with defects and deformities of the facial skeleton.
14. Make a treatment plan for patients with defects and deformities of the facial skeleton.
15. To work on the phantom technique of bone graft collection and its fixation to the donor site.
16. To master the method of clinical examination of a patient with defects of the upper, lower jaw and nose.

17. Make a treatment plan for patients with defects of the upper, lower jaw and nose.
18. Make a plan of pre-prosthetic preparation of the patient.
19. Work on the phantom technique of frenuloplastics.
20. Work on the phantom technique of vestibuloplastics.
21. To master the method of analysis of orthopantomogram, CT to determine the width and height of the alveolar sprouts of the jaws, the location of the mandibular canal and the bottom of the maxillary sinus to select the optimal length and diameter of the implant.
22. To work out the technique of surgical stages of implantation on phantoms.
23. Collect complaints and anamnesis, examine the patient, interpret the data of X-ray examination and make a treatment plan for a patient with complications of endodontic treatment.
24. To master the technique of resection of the apex of the root
25. To master the technique of coronary-radicular separation, hemisection of the tooth, resection (amputation) of the tooth root, tooth replantation.
26. To master the technique of using surgical periodontal instruments.
27. To master the techniques of periodontal reconstructive surgery.
28. To master the technique of radical patchwork operation according to Cieszynski-Widmann-Neumann.
29. To master the technique of directed tissue regeneration using membranes.
30. To master the method of examination of patients with facial pain syndroms, trigeminal neuritis.
31. To make the plan of complex treatment of patients with a neuralgia and a neuritis of a trigeminal nerve.
32. Explain and be able to perform alveolotomy.
33. Explain and be able to perform an autopsy of a periodontal abscess.
34. Explain and be able to perform different techniques of suturing.
35. Explain and be able to perform various plastic techniques with local fabrics.

## **List of practical skills for the content module №2**

### **Chapter "Propaedeutics of surgical dentistry":**

1. To practice the method of examination and palpation of the maxillofacial area during extraoral examination.
2. To practice the method of examination and palpation of the oropharynx.
3. To practice the method of examination and palpation of the oral cavity.
4. To practice the method of examination, percussion, determining the degree of mobility of the teeth, the depth of the gingival pockets.
5. To work out a technique of definition of degree of opening of a mouth.
6. Learn to fill the necessary medical documentation.
7. Learn to write referrals for additional methods of examination.
8. To practice the technique of preoperative preparation of the surgeon's hands according to modern methods.
9. To master the technique of antiseptic treatment of the operating field on the phantom.
10. Assess the general condition of patients. Identify risk groups for general and local anesthesia.
11. Determine the psycho-emotional status of patients.
12. Assign an individual scheme of premedication depending on the psycho-somatic condition, nature and volume of surgery. Select doses of drugs.
13. Evaluate the effectiveness of preoperative drug preparation of patients.
14. To master the standards of post-anesthesia monitoring of the patient.
15. To work out on a phantom the technique of carrying out non-injection anesthesia by a chemical method.
16. To work out on a phantom the technique of carrying out non-injection anesthesia by a physical method.
17. To perform the phantom technique:
  - infiltration anesthesia of the skin;
  - infiltration anesthesia of subcutaneous fat;
  - infiltration anesthesia of the mucous membrane;
  - hypoxic infiltration anesthesia;
  - intraalveolar anesthesia;
  - intrapulp anesthesia;
  - intraosseous anesthesia.
18. To practice on a phantom the technique of carrying out mandibular anesthesia by an extraoral method.
19. To practice on the phantom technique of mandibular anesthesia by intraoral method (finger and apodactyl).
20. Work out the technique of torus anesthesia on a phantom.
21. To work out on a phantom technique of carrying out mental anesthesia by extraoral method.
22. To work on the phantom technique of mental anesthesia by intraoral method.
23. To practice the technique of lingual anesthesia on the phantom.

24. To practice the technique of buccal anesthesia on a phantom.
25. Be able to choose a local anesthetic and determine the dose.
26. Be able to determine, with the help of anatomical landmarks, the location of the target point of anesthesia.
27. To practice on the phantom technique of infraorbital anesthesia by intraoral and extraoral methods.
28. To practice on the phantom technique of tubercular anesthesia by intraoral and extraoral methods.
29. To practice phantom technique of incisional anesthesia by intraoral and intranasal methods.
30. To practice the technique of palatal anesthesia on a phantom.
31. Be able to provide first aid for vascular damage during anesthesia.
32. To practice on a phantom the technique of carrying out the central conducting anesthesia to a round opening by a submandibular-pterygoid way.
33. To practice on a phantom the technique of carrying out the central conducting anesthesia to a round opening by a tubercular way.
34. To practice on a phantom the technique of carrying out the central conducting anesthesia to a round opening by a palatal way.
35. To practice on the phantom the technique of conducting central conduction anesthesia to the oval hole by the submandibular-pterygoid path.
36. To practice on a phantom the technique of carrying out the central conducting anesthesia to an oval opening by a mandibular way.
37. To practice on the phantom technique of conducting central conduction anesthesia to the oval hole by excessive means.
38. To make cardiopulmonary resuscitation on a phantom (indirect heart massage and artificial respiration).
39. To make the most probable diagnosis of complications of local anesthesia, choose the appropriate treatment tactics.
40. To be able to make differential diagnosis of complications of local anesthesia. Provide emergency medical care.
41. Perform the necessary medical manipulations (measure blood pressure and pulse, auscultation of the heart and lungs, perform a venipuncture and connect a drip with appropriate drugs, inject drugs domestically or sublingually, perform artificial respiration and indirect heart massage, record i).
42. Choose tools to remove individual groups of teeth on the upper jaw.
43. Choose tools to remove certain groups of teeth on the lower jaw.
44. To practice ways of holding tools for tooth extraction.
45. To practice on the phantom stages of the operation to remove individual groups of teeth on the upper jaw.
46. To perform on a phantom stages of operation of removal of separate groups of teeth on a lower jaw.
47. To practice on a phantom the technique of performing the operation of atypical tooth extraction on the lower jaw.
48. To practice on the phantom technique of atypical tooth extraction on the upper jaw.
49. To make algorithm of preparation for extraction of teeth of patients with various accompanying pathology (diseases of cardiovascular, respiratory, endocrine systems, gastrointestinal tract, neuropsychiatric sphere, hematological, infectious diseases).
50. Assistance during atypical tooth extraction surgery.
51. To make the most probable diagnosis of local complication of tooth extraction, to choose treatment tactics.
52. Learn to read X-rays with complicated removals.
53. Learn to practice phantom dislocation of the mandible.

### **Chapter "Inflammatory processes MFA":**

1. To repair a set of tools for the operation of dissecting the hood in pericoronaritis and perform it on a phantom.
2. To prepare a set of tools for the operation of excision of the hood in pericoronaritis and work it out on the phantom.
3. To prepare a set of tools and work on the phantom to remove the dystopian 8th tooth on the lower jaw.
4. To prepare a set of tools and work on the phantom to remove retained 13.23 teeth.
5. To prepare a set of tools for the operation of resection of the apex of the tooth root and perform it on a phantom.
6. To prepare a set of tools for hemisection of the tooth and practice it on the phantom.
7. To prepare a set of tools for tooth root amputation and practice it on a phantom.
8. To prepare a set of tools for corona-radicular separation of the tooth and practice it on the phantom.
9. To prepare a set of tools for tooth replantation and practice it on a phantom.
10. To prepare a set of tools and practice phantom tissue dissection for periostitis.
11. To prepare a set of tools and practice phantom sequestrectomy.
12. To prepare a set of tools needed for dissection and drainage of phlegmon of the submandibular space and perform it on a phantom.

13. To prepare a set of tools needed for dissection and drainage of phlegmon of the parotid-masticatory area, pterygo-maxillary space, temporal area and perform them on the phantom.
14. To prepare a set of tools needed for dissection and drainage of the abscess of the maxillofacial groove and work it on the phantom.
15. To prepare a set of tools needed for dissection and drainage of phlegmon of the subtemporal area, pterygopalatine fossa (from different accesses) and work them out on a phantom.
16. To prepare a set of tools and practice phantom operation of dissection and drainage of canine abscesses.
17. To prepare a set of tools needed to dissect and drain the phlegmon of the orbit and practice it on the phantom.
18. To prepare a set of tools and practice phantom operation of dissection and drainage of abscesses of the maxillofacial area in boils.
19. To prepare a set of tools and practice phantom operation of dissection and drainage of abscesses of the maxillofacial area with carbuncles.
20. Be able to read and establish a preliminary diagnosis on radiographs for periodontitis.
21. Be able to read and establish a preliminary diagnosis on radiographs for osteomyelitis of the facial bones.
22. Be able to read and establish a preliminary diagnosis on radiographs for sinusitis.
23. Be able to read and establish a preliminary diagnosis on radiographs in diseases of the salivary glands.

### **Chapter "Traumatology of MFA"**

1. To make the plan of inspection of the patient with MFA damage.
2. To perform the PHO technique on the phantom.
3. To practice the method of temporary cessation of bleeding.
4. To master the method of examination of a patient with a fracture of the mandible.
5. To learn the technique of palpation of the mandible in a patient with suspected traumatic fracture of the mandible.
6. To learn to interpret radiographs.
7. To learn to make a plan of medical treatment.
8. To master the method of clinical examination of a patient with fractures of the upper jaw.
9. To learn to detect characteristic clinical symptoms in patients with fractures of the upper jaw.
10. Assign additional research methods.
11. Correctly interpret the results of instrumental research methods.
12. Learn to make a plan of complex treatment depending on the complexity of the case.
13. To master the basic methods of examination of a patient with a fracture of the chin, arch and nasal bones in peacetime.
14. To perform or prescribe additional methods of examination of a patient with a fracture of the chin, arch and nasal bones in peacetime.
15. Make a treatment plan for a patient with a fracture of the chin, arch and nasal bones in peacetime.
16. To master the skills of making and applying temporary transport bandages.
17. To master the skills of ligature bonding of teeth.
18. To master the skills of applying standard and individual tires.
19. To master the technique of bone suture.
20. To master the technique of applying miniplates to bone fragments.
21. Describe the control radiograph on the correctness of repositioning and fixation of fragments.
22. Learn to identify characteristic clinical symptoms that indicate a violation of regeneration.
23. Learn to recognize on radiographs signs of impaired reparative regeneration.
24. Prescribe comprehensive drug treatment aimed at improving reparative osteogenesis.
25. To master the method of examination of a patient with gunshot wound of the facial bones.
26. To make the plan of inspection of the patient with a traumatic illness.
27. To make a plan for medical treatment of traumatic shock.
28. Examine a patient with complications of traumatic injuries of the maxillofacial area.
29. Stop the bleeding by stitching the vessel.
30. To make a treatment plan for a patient with delayed consolidation of fragments.
31. Examine a patient with burns of the maxillofacial area.
32. Calculate the area of tissue damage.
33. To make the scheme of treatment of the patient with burns of a maxillofacial site.
34. To make a plan for examination of a patient with a combined lesion.
35. To make the scheme of priority of rendering of medical care to patients with the combined defeats.
36. To demonstrate schemes for the introduction of food probes.
37. To make a plan of measures for the care of seriously injured bedridden patients.
38. To make the plan-scheme of the organization of rendering of medical care to maxillofacial wounded at stages of medical evacuation.

39. Make a plan for comprehensive treatment of patients with gunshot wounds.

### **Chapter "Oncology MFA":**

1. Be able to collect anamnesis and examine patients with benign and malignant tumors of the maxillofacial area, tumor-like formations.
2. Be able to make a plan of examination of patients with benign and malignant tumors of the maxillofacial area, tumor-like formations.
3. Be able to make a diagnostic plan and interpret additional examination methods in patients with tumor-like neoplasms of the soft tissues of the thyroid gland.
4. Be able to perform a diagnostic puncture.
5. Be able to perform an incisional biopsy.
6. Be able to perform excisional biopsy.
7. Be able to determine the indications and contraindications to surgical treatment of benign and malignant tumors, tumor-like and precancerous diseases of the thyroid gland.
8. Be able to make a plan and scope of drug therapy for patients with benign and malignant tumors of the maxillofacial area, tumor-like formations.
9. Be able to make a plan and scope of postoperative drug therapy.
10. Be able to perform diathermocoagulation and cryodestruction.
11. Be able to diagnose complications that may occur after surgical treatment of benign and malignant tumors, tumor-like formations of the thyroid gland.
12. To be able to make the plan of complex treatment of patients with malignant diseases of MFA.

### **Chapter "Reconstructive and reconstructive surgery of MFA"**

1. To master the method of examination of a patient with TMJ pathology, mandibular contracture.
2. Be able to prescribe exercise therapy, mechanotherapy for diseases of the TMJ.
3. Be able to conduct Z-plastic according to AA Limberg.
4. Be able to carry out conservative treatment of salivary fistula.
5. To master the method of examination of a patient who needs reconstructive surgery in the thyroid gland.
6. To practice on the phantom technique of pedicular flap.
7. To practice on the phantom the technique of preparation, formation, training, migration and plastics of the defect with the help of Filatov stem.
8. Practice the technique of free skin graft surgery on a phantom.
9. Make a plan of comprehensive treatment and care for patients after local plastic surgery.
10. To master the method of examination of a patient with congenital malformations of the upper lip and palate.
11. To master the method of clinical examination of a patient with deformities of the facial skeleton.
12. Make a treatment plan for patients with facial skeletal deformities.
13. To master the method of clinical examination of a patient with defects and deformities of the facial skeleton.
14. To make a treatment plan for patients with defects and deformities of the facial skeleton.
15. To practice on the phantom the technique of bone graft collection operation and its fixation to the donor site.
16. To master the method of clinical examination of a patient with defects of the upper, lower jaw and nose.
17. To make a treatment plan for patients with defects of the upper, lower jaw and nose.
18. Make a plan of pre-prosthetic preparation of the patient.
19. To perform on the phantom technique of frenuloplastics.
20. To perform the phantom technique of vestibuloplastics.
21. To perform on the phantom technique of open and closed sinus lifting.
22. To perform on a phantom the technique of operation of splitting of an alveolar crest.
23. To master the method of clinical examination of a patient with partial and complete defects of the dentition, to make a plan of complex treatment with the use of dental implantation.
24. To master the method of analysis of orthopantomogram, CT to determine the width and height of the alveolar shoots of the jaws, the location of the mandibular canal and the bottom of the maxillary sinus to select the optimal length and diameter of the implant.
25. To perform the technique of surgical stages of implantation on phantoms.
26. To master the method of manufacturing platelet concentrates.
27. To make the plan of inspection of patients and their complex treatment with use of thrombocyte concentrates.
28. To master the method of examination of patients with age-related changes in the soft tissues of the face and neck.
29. To master the techniques of incisions to eliminate wrinkles in different parts of the face.
30. Collect complaints and anamnesis, examine the patient, interpret the data of X-ray examination and make a treatment plan for a patient with complications of endodontic treatment.
31. To master the technique of resection of the apex of the root.

32. To master the technique of coronary-radicular separation, hemisection of the tooth, resection (amputation) of the tooth root, tooth replantation.
33. To master the technique of using surgical periodontal instruments.
34. To master the techniques of periodontal reconstructive surgery.
35. To master the technique of radical patchwork operation according to Cieszynski-Widmann-Neymann.
36. To master the technique of targeted tissue regeneration using membranes.
37. To master the method of examination of patients with facial pain syndromes, trigeminal neuritis.
38. To make the plan of complex treatment patients with a neuralgia and a neuritis of a trigeminal nerve.
39. Explain and be able to perform alveolotomy.
40. Explain and be able to perform an autopsy of a periodontal abscess.
41. Explain and be able to perform different techniques of suturing.
42. Explain and be able to perform various plastic techniques with local fabrics.

**The list of questions for the final control to the content module №1 "Reconstructive and reconstructive surgery of MFA"**

1. Ankylosis of the temporomandibular joint. Classification, etiology, clinic, diagnosis.
2. Ankylosis of the temporomandibular joint. Surgical methods of treatment.
3. Contracture of the lower jaw. Classification, clinic, differential diagnosis.
4. Methods of treatment of mandibular contractures.
5. The role of domestic scientists in the development of reconstructive facial surgery. Indications for plastic surgery.
6. Basic principles, techniques and types of plastic surgery on the face and jaws.  
Skin plastic with local tissues. Operations planning (according to YK Shimanovsky, OO Limberg).
8. Elimination of defects of the nose, lips, cheeks, chin with local tissues, flaps on the leg.
9. Free tissue transplantation during operations in the maxillofacial area. Types of grafts, their advantages and disadvantages.
10. Filatov stalk and its application in reconstructive facial surgery. Rhinoplasty for F.M. Cuning.
11. Etiology, classification, methods of diagnosis of salivary fistulas.
12. Surgical methods of closing salivary fistulas. Conservative methods of treatment.
13. Etiology, classification, clinical picture of congenital malformations and nonunions of the upper lip and palate. Functional and anatomical disorders.
14. Methods of surgical interventions for congenital nonunion of the upper lip and palate.
15. Etiology, classification of craniomaxillary defects and deformities. Modern additional survey methods.
16. Possibilities of navigation computer technologies in complex treatment of defects and deformations of the face.
17. Etiology, pathogenesis, classification, clinical picture, diagnosis of jaw deformities.
18. Surgical methods of treatment of jaw deformities. Possibilities of application of the distraction method.
19. Bone plastics of the jaws: biological basis.
20. Osteogenic and osteoinductive therapy in facial bone pathology. Characteristic features of the jaws that affect the processes of bone regeneration.
21. Modern methods of research of bone regeneration.
22. The main methods of replacement of bone defects of the jaws and their characteristics.
23. The most common modern bone and plastic materials, their characteristics.
24. Etiology, pathogenesis, classification, clinical picture, diagnosis of mandibular defects, treatment.
25. Etiology, pathogenesis, classification, clinical picture, diagnosis of upper jaw defects, treatment.
26. Etiology, pathogenesis, classification, clinical picture, diagnosis of secondary deformities of the upper lip and nose, treatment.
27. Etiology, pathogenesis, classification, clinical picture, diagnosis of secondary deformities of the upper jaw and middle face, treatment.
28. Microvascular surgery and rags with an axial vascular pattern in the treatment of facial tissue defects.
29. Tasks and measures of surgical preparation of the oral cavity for prosthetics.
30. Basics of prosthetic surgery, types of operations on soft and hard tissues of the oral cavity: indications and contraindications.
31. Comprehensive treatment of patients with craniofacial defects and deformities, involvement of related specialists.
32. Local and general treatment measures for surgery on the alveolar processes of the jaws.
33. Fundamentals of implantology.
34. Treatment of paresis and paralysis of facial muscles.
35. Internal disorders of the temporomandibular joint. Classification, clinic, treatment.
36. Surgical treatment of facial pain syndromes.

37. Lesions of the trigeminal nerve. Neuritis, neuralgia. Clinic, diagnosis, treatment.
38. Principles of aesthetic facial surgery.
39. The current state of craniofacial surgery in the world and in Ukraine.
40. The future of the specialty.

**List of questions for the final control to the content module №2 "Subordination"**

1. Organization of surgical dental care for the population of Ukraine in outpatient and inpatient settings.
2. Stages of development of surgical dentistry in Ukraine. The contribution of domestic scientists.
3. Aseptic and antiseptic during operations on the maxillofacial area in the clinic and hospital.
4. Aseptic and antiseptic aspects of AIDS and viral hepatitis prevention in outpatient and inpatient practice of a dental surgeon.
5. Methods of preparing the hands of a dental surgeon for surgery in an outpatient setting and inpatient.
6. Immunobiological features of the tissues of the maxillofacial area. The role of local immunity in the course of odontogenic infection.
7. Examination of the patient in the surgical department of the dental clinic and hospital. Medical documentation.
8. Pain, its components, leading ways. Role for the body. The body's response to pain, surgical trauma.
9. Medicinal substances for local anesthesia, their chemical composition, mechanism of action. Prescriptions.
10. Methods of manufacturing, storage and quality assessment of solutions for local anesthesia. Tests for novocaine by IS Lukomsky and with chloramine by AE Gutsan.
11. Prolongation of local anesthetics. Vasoconstrictors. Dosage. Prescriptions. Adrenaline intoxication.
12. Types of local anesthesia in the maxillofacial area. Methods of execution.
13. Potentiated local anesthesia: principles of premedication, main ingredients of medicinal substances that are part of premedication schemes, disadvantages and advantages.
14. Medical preparation (premedication) of the patient for surgery on the maxillofacial area in the clinic and hospital. Possible complications of potentiated anesthesia.
15. General complications of local anesthesia. Anaphylactic shock. Resuscitation measures.
16. Local complications of local anesthesia in the maxillofacial area. Prevention, diagnosis, treatment.
17. Types and features of general anesthesia during operations on the maxillofacial area in the clinic and hospital. Indications and contraindications.
18. Pharmacological drugs for anesthesia, the mechanism of their action. Neuroleptanalgesia. Indications and contraindications in surgical dentistry.
19. General and local complications of anesthesia. Prevention. Resuscitation measures.
20. Indications and contraindications to the use of various types of local and general anesthesia in operations on the maxillofacial area in the clinic and hospital.
21. Central anesthesia with the exception of the II branch of the trigeminal nerve. Zones of innervation, indications, technique of execution. Prevention of complications.
22. Central anesthesia with the exception of the III branch of the trigeminal nerve. Zones of innervation of indications, technique of execution. Prevention of complications.
23. Anesthesia according to Bershe-Dubov-Uvarov. Indications and methods.
24. Vishnevsky anesthesia in the temporal fossa. Trigger-sympathetic blockade. Indication. Methods of conducting.
25. Weisbrem torus anesthesia. Areas of action. Indication. Method of execution. Prevention of complications.
26. Extraoral method of mandibular anesthesia. Areas of action. Indication. Method of execution. Prevention of complications.
27. Apodactyl method of intraoral mandibular anesthesia. Areas of action. Indication. Method of execution. Prevention of complications.
28. Finger method of intraoral mandibular anesthesia. Areas of action. Indication. Method of execution. Prevention of complications.
29. Anesthesia of the buccal nerve. See. Areas of action. Method of execution. Indication.
30. Mental anesthesia. Areas of action, indications, methods.
31. Infraorbital anesthesia. Areas of action. Indication. Method of execution. Possible complications, its prevention and treatment.
32. Tuberal anesthesia. Areas of action. Indication. Method of execution. Possible complications, its prevention and treatment.
33. Anesthesia around the incisor. Areas of action. Indication. Method of execution. Possible complications, prevention and treatment.
34. Plexual anesthesia. Areas of action. Indication. Method of execution. Prevention of complications.
35. Techniques of anesthesia when removing the lower molars.
36. Anesthesia during sequestrectomy in the mental part of the mandible.

37. Anesthesia when removing the upper incisors. Write a prescription - 2% solution of novocaine.
38. Anesthesia when removing the upper premolars.
39. Anesthesia at autopsy of superficial phlegmon MFA.
40. Anesthesia at autopsy of deep phlegmon of the thyroid gland and neck.
41. General complications during and after anesthesia. Prevention, help.
42. Preparation of a dental patient for urgent surgery in a clinic and hospital.
43. Preparation of a dental patient for planned surgery in a clinic and hospital.
44. Local complications during and after anesthetic injection. Prevention, treatment.
45. Tactics of the doctor at wrong introduction instead of anesthetic of an injectable solution.
46. Fainting, collapse, shock. Clinical course, care for a dental patient in an outpatient setting.
47. Local complications during anesthesia in MFA: etiology, pathogenesis, clinical picture, care, prevention.
48. Features of anesthesia during tooth extraction in patients with myocardial infarction, diabetes, cardiovascular disease.
49. Anesthesia when removing salivary stones.
50. Anesthesia for sinusitis.
51. The choice of method of anesthesia in patients with allergic status.
52. Features of anesthesia in the elderly.
53. Modern analgesics (anesthetics), equipment: action, disadvantages and advantages.
54. Modern methods of anesthesia in dental operations, the principles of further development of methods of anesthesia.
55. Preparation of the patient and oral cavity for tooth extraction surgery.
56. Tooth extraction operation. Stages. Features of removal of separate groups of teeth and roots on the upper and lower jaws.
57. Complications when removing teeth on the lower and upper jaws. Diagnosis, treatment.
58. Tools for typical and atypical tooth extraction, its purpose, action.
59. Tools for removing teeth and roots on the upper jaw. Structure and rules of use.
60. Tools for removing teeth and roots on the lower jaw. Structure and rules of use.
61. Atypical tooth extraction. Method. Postoperative wound care.
62. Types and timing of post-extraction wound healing.
63. Atypical removal of retained and dystopian teeth. Indication. Method of performing the operation. Alveolectomy. Complications and their treatment.
64. Bleeding after tooth extraction: its causes, methods of stopping, prevention.
65. Alveolitis: etiology, treatment. Wound care in the postoperative period.
66. Pit pain: etiology, clinic, treatment.
67. Tactics of the doctor at perforation of a bottom of a maxillary sinus during tooth extraction.
68. Tactics of the doctor when pushing a tooth into the maxillary sinus.
69. Specifics of preparation of a patient with blood disease for tooth extraction.
70. Tactics of the doctor at pushing of a tooth in fabrics of a bottom of an oral cavity.
71. Fracture of the tooth: method of removal, the necessary tools.
72. Tooth extraction in a patient with hypertension, stroke, myocardial infarction.
73. Tooth extraction in a patient with leukemia.
74. Causes of fracture of the jaws during tooth extraction. Doctor's tactics.
75. Prevention of tooth aspiration, fracture and dislocation of the mandible during tooth extraction.
76. Etiology, pathogenesis and classification of inflammatory processes in the maxillofacial area.
77. Chronic odontogenic inflammatory foci in patients with somatic local and systemic pathology. Dentist tactics.
78. Chronic odontogenic inflammatory foci in patients before and after operations on the abdominal cavity, chest. Dentist tactics.
79. Diseases of teething. Dystopia and retention. Clinic, diagnosis. Indications and methods of tooth extraction.
80. Pericoronaritis. Causes, classification, clinic, diagnosis, methods of conservative and surgical treatment.
81. Acute periodontitis. Classification, clinic, diagnosis and treatment.
82. Chronic periodontitis. Classification. Clinic, diagnosis.
83. Chronic granulomatous periodontitis, clinic and diagnosis. Types of granulomas, theories of the origin of the epithelium in granulomas.
84. Surgical methods of treatment of chronic periodontitis. Resection of the apex of the root. Indications, methods of implementation, possible complications, their prevention.
85. Surgical methods of treatment of chronic periodontitis. Hemisection, amputation, replantation. Indication. Method of execution. Possible complications and their prevention.
86. Tooth replantation: one-time and delayed, indications and contraindications, methods of operation, complications. Types of connection of the tooth root with the fossa.
87. Causes of exacerbations of chronic periodontitis, pathogenesis. Treatment, prevention of complications.

88. Periostitis of the jaws: classification, etiology, pathogenesis, clinic, differential diagnosis.
89. Treatment of acute purulent odontogenic periostitis of the jaws.
90. Osteomyelitis of the jaws. Etiology, theories of pathogenesis, classification.
91. Odontogenic osteomyelitis of the jaws. Acute stage. Clinic, diagnosis, treatment.
92. Odontogenic osteomyelitis of the jaws. Chronic stage. Clinic, diagnosis. Conservative treatment. Sequestrectomy operation. Indications, deadlines and its methodology. Prevention of complications.
93. Features of the clinical course of odontogenic osteomyelitis of the lower and upper jaws. Dependence on anatomical and topographic features. Complications of osteomyelitis.
94. Differential diagnosis of acute periodontitis, periostitis and osteomyelitis of the jaws.
95. Features of the clinical course, diagnosis and treatment of neodontogenic acute osteomyelitis of the jaws.
96. Hematogenous acute osteomyelitis of the upper jaw: etiology, clinic, complications and treatment.
97. Odontogenic sinusitis. Etiology, classification, clinic, diagnosis.
98. Odontogenic sinusitis. Conservative and surgical treatment. Complications and their prevention.
99. Surgical anatomy of the cellular spaces of the maxillofacial area. Ways of spreading odontogenic infection.
100. Abscess and phlegmon of the maxillofacial area. Inflammatory clinical signs, diagnostic techniques.
101. Abscess and phlegmon of the maxillofacial area. Principles of complex treatment.
102. Lymphadenitis of the maxillofacial area: classification, clinic, differential diagnosis, treatment.
103. Phlegmon of the subtemporal and pterygopalatine fossae. Etiology, pathogenesis, clinic; diagnosis, treatment.
104. Phlegmon of the temporal area. Causes, clinic, diagnosis, treatment.
105. Abscesses and phlegmons of the occipital and maxillary areas. Causes, clinic, diagnosis, treatment.
106. Abscess and phlegmon of the mandibular tissue space. His surgical anatomy. Causes, clinic, diagnosis, treatment.
107. Abscess and phlegmon of the pterygoid jaw tissue space. Surgical anatomy, causes, clinic, diagnosis, treatment.
108. Abscess and phlegmon of the submaterial tissue space. Surgical anatomy. Causes, clinic, diagnosis, treatment.
109. Abscess and phlegmon of the parotid-masticatory area. Causes, surgical anatomy, clinic, diagnosis, treatment.
110. Abscess and phlegmon of the buccal area. Surgical anatomy, causes. Clinic, diagnosis, treatment.
111. Abscess and phlegmon of the maxillary area. Surgical anatomy, causes, clinic, diagnosis, treatment.
112. Abscess and phlegmon of the tongue. Causes, clinic, diagnosis, treatment.
113. Phlegmon of the bottom of the mouth. Surgical anatomy, causes, clinic, diagnosis, treatment.
114. Abscess of the maxillofacial groove. Surgical anatomy, causes, clinic, diagnosis, treatment.
115. Septic-necrotic phlegmon of Jansul-Ludwig. Surgical anatomy, causes, clinic, diagnosis, treatment.
116. Abscess and phlegmon of the peripharyngeal tissue space. Surgical anatomy, causes, clinic, diagnosis, treatment.
117. Odontogenic and neodontogenic phlegmon of MFA: differential diagnosis, features of a clinical course, treatment of complications
118. Clinic, topographic anatomy and treatment of phlegmon of the neck.
119. General treatment of phlegmon MFA. Write the necessary recipes.
120. Actinomycosis of the maxillofacial area: clinic, differential diagnosis, treatment.
121. Syphilis of the maxillofacial area: clinic, differential diagnosis, treatment.
122. Tuberculosis of the maxillofacial area: clinic, differential diagnosis, treatment.
123. HIV infection / AIDS. Manifestations in the maxillofacial area.
124. Boils and carbuncles of the maxillofacial area: classification, clinic, complications and treatment.
125. Noma. Etiology, pathogenesis, clinical picture, treatment. Differential diagnosis, complications.
126. The face was emaciated. Etiology, pathogenesis, clinical picture, treatment. Differential diagnosis, complications.
127. Diphtheria. Etiology, pathogenesis, clinical picture, treatment. Differential diagnosis, complications.
128. Odontogenic mediastinitis: etiology, pathogenesis, clinical picture, diagnosis.
129. Differential diagnosis of odontogenic mediastinitis, surgical and medical treatment.
130. Sepsis, infectious-toxic shock. Etiology, clinic, differential diagnosis, treatment.
131. Thrombophlebitis of facial veins, thrombosis of the cavernous sinus. Etiology, clinic, differential diagnosis, treatment.
132. Odontogenic brain abscess, meningitis. Etiology, clinical picture, treatment.
133. Clinic, diagnosis and treatment of arthritis and osteoarthritis of the temporomandibular joint. Write the necessary recipes.
134. Acute inflammation of the salivary glands: classification, clinical course, treatment.
135. Salivary stone disease: etiology, clinic, complications and treatment.

136. Genzenberg's pseudoparotitis and mumps.
137. Chronic inflammation of the salivary glands: classification, clinical course, treatment.
138. Systemic diseases of the salivary glands: Mikulich's disease, Sjogren's syndrome.
139. Subject and tasks of military dentistry, maxillofacial surgery.
140. Organization of assistance to wounded soldiers of the Armed Forces of Ukraine in peacetime and wartime.
141. Traumatic disease: pathogenesis, classification, prognosis, course, features, treatment, consequences of the disease.
142. Classification of tissue damage MFA (DA Entin-BD Kabakov).
143. General characteristics, course, diagnosis of injuries of the face and jaws in peacetime and wartime.
144. Immediate complications of maxillofacial injuries, their diagnosis. Assistance on the battlefield and during the stages of medical evacuation,
145. The amount and content of medical care for the wounded in the maxillofacial area in peacetime and wartime.
146. Gunshot and non-gunshot injuries of soft tissues of the face: classification, course, features of surgical treatment.
147. Types of seams and suture materials. Plastic seams: purpose and modifications.
148. Gunshot and non-gunshot injuries of the mandible: classification, diagnosis, course, assistance at the stages of medical evacuation.
149. X-ray laying for diagnosis of injuries of bones of a facial skull.
150. Non-gunshot injuries of the upper jaw according to Le Fort, features of clinical manifestations, diagnosis, course, assistance at the stages of medical evacuation.
151. Gunshot wounds of the upper jaw, features of clinical manifestations, diagnosis, course, assistance at the stages of medical evacuation.
152. Temporary (transport) immobilization at injuries of bones MFA, types, principles, requirements.
153. Specialized care for injuries of the lower jaw.
154. Specialized care for injuries of the upper jaw.
155. Tiregstedt dentures and their modifications.
156. Laboratory splints and their use in case of jaw injuries.
157. Osteosynthesis of the mandible: indications, types, methods, equipment, biological and biomechanical principles.
158. Osteosynthesis of the upper jaw: indications, types, methods, equipment, biological and biomechanical principles.
159. Orthopedic-hardware method of treatment of jaw injuries and their defects: types, indications.
160. Combined injuries of the jaws: features of clinical manifestations and care.
161. Injuries of the cheekbones: classification, features of the clinical course.
162. Damage to the nasal bones: classification, clinic.
163. Anterior and posterior tamponade of the nose: indications, technique.
164. Combined radiation injuries of the maxillofacial area: classification, features of the course, care.
165. Combined chemical injuries of the maxillofacial area: classification, features of the course, care.
166. Combined injuries of the facial and cerebral skull: classification, features of the course, diagnosis of cerebrospinal fluid, principles of care.
167. Burns of the face: classification, features of a current, rendering of the help at stages of medical evacuation.
168. Treatment of the consequences of facial burns.
169. Modern gunshot wound MFA: features, treatment.
170. Asphyxia at damages of fabrics MFA: classification, features of a clinical course. Providing care to patients.
171. Bleeding at damages of fabrics MFA: classification, rendering of the help to patients.
172. Inflammatory complications of MFA injuries: traumatic (gunshot and non-gunshot) osteomyelitis, sinusitis. The course, features of treatment.
173. Damage to the tongue, bottom of the mouth: features of the clinical course and care.
174. Damage to the parotid-masticatory area, parotid salivary gland: features of the clinical course and care.
175. Neck injuries: features of the clinical course and care.
176. Foreign bodies of the maxillofacial area: etiology, course, methods of removal.
177. Nutrition of the wounded in the maxillofacial area. Types of diets. Feeding methods. Care for the wounded.
178. Exercise therapy and physiotherapy in the treatment of wounded in the maxillofacial area.
179. Military medical examination of the wounded in MFA.
180. Benign tumors of the soft tissues of the maxillofacial area.
181. Atheromas: clinic, differential diagnosis, treatment.
182. Lipoma of the maxillofacial area: clinic, differential diagnosis, treatment.
183. Hemangioma of the maxillofacial area: classification, clinic, treatment (Kondrashin's classification).
184. Cavernous hemangioma of the maxillofacial area: differential diagnosis, treatment.
185. Retention cyst of the maxillofacial area: clinic, diagnosis, treatment.

186. Dermoid cyst: clinical course, differential diagnosis, treatment.
187. Clinic and treatment of radicular cyst of the mandible.
188. Follicular cyst of the jaws: clinic, differential diagnosis, treatment.
189. Residual cyst of the jaws: etiology, pathogenesis, differential diagnosis, treatment.
190. Periodical cyst of the jaws: etiology, pathogenesis, differential diagnosis, treatment.
191. Clinic, differential diagnosis and treatment of adamantinomas of the jaws.
192. Odontoma of the jaws: classification, differential diagnosis, treatment.
193. Odontogenic tumor-like formations: osteodysplasia, parathyroid osteodystrophy Paget's disease, eosinophilic granuloma.
194. Peripheral form of osteoblastoclastoma: features of the clinical course, diagnosis, treatment.
195. Central form of osteoblastoclastoma: clinic, radiological picture.
196. Tumors of the salivary glands: classification, clinic, diagnosis, treatment.
197. Biological features of a tumor cell and the effect on it of radiation, cryotherapy, hyperthermia.
198. Biological features of the tumor cell and the effect of chemotherapy, oxygenation, ultrasound, hypoxia.
199. Immunological aspects of clinical oncology. Immunotherapy of patients with malignant tumors.
200. Comprehensive treatment of patients with malignant tumors.
201. Precancerous diseases and facial cancer: etiology, clinic, differential diagnosis, treatment.
202. Facial skin cancer: features of the clinical course, treatment.
203. Lip cancer: clinic, differential diagnosis, treatment.
204. Cancer of the oral mucosa: clinic, differential diagnosis, treatment.
205. Cancer of the tongue: etiology, pathogenesis, differential diagnosis, treatment.
206. Salivary gland cancer: clinical course, differential diagnosis, treatment.
207. Cancers of the mandible: etiology, clinic, treatment.
208. Cancer of the upper jaw, which develops from the upper wall of the maxillary sinus: clinic, differential diagnosis, treatment.
209. Cancer of the upper jaw, which develops from the lower wall of the maxillary sinus: clinic, differential diagnosis, treatment.
210. Cancer of the upper jaw, which develops from the lateral wall of the maxillary sinus: clinic, differential diagnosis, treatment.
211. Cancer of the upper jaw, which develops from the medial wall of the maxillary sinus: clinic, differential diagnosis, treatment.
212. Sarcoma of the jaws and soft tissues of the maxillofacial area.
213. Operation Crail: essence, testimony.
214. Operation Vanakh: indications, essence.
215. The role of domestic scientists in the development of reconstructive facial surgery. Indications for plastic surgery.
216. Basic principles, techniques and types of plastic surgery on the face and jaws.
217. Skin plastics with local tissues. Operations planning (according to YK Shimanovsky, OO Limberg).
218. Elimination of defects of the nose, lips, cheeks, chin with local tissues, flaps on the leg.
219. Filatov's stalk and its application in reconstructive facial surgery. Rhinoplasty for F.M. Cuning.
220. Free skin graft during operations in the maxillofacial area. Types of skin grafts, their advantages and disadvantages.
221. Types and surgical methods of treatment of mandibular deformities.
222. Types and surgical methods of treatment of deformities of the upper jaw.
223. Defects of the mandible: classification, clinic, treatment.
224. Defects of the upper jaw: classification, clinic, treatment.
225. Bone grafting: biological basis.
226. Compression-distraction method of treatment of deformities and defects of facial bones. Achievements of domestic scientists.
227. Secondary deformities of the upper lip and nose after rhinoheiloplasty. Clinic, treatment.
228. Secondary deformities of the upper jaw and middle face after uranostaphyloplasty: clinic, treatment.
229. Microvascular surgery and rags with an axial vascular pattern in the treatment of defects and deformations of facial tissues.
230. Osteogenic and osteoinductive therapy in pathology of facial bones.
231. Fundamentals of prosthetic surgery, implantology.
232. Treatment of paresis and paralysis of facial muscles.
233. Internal disorders of the temporomandibular joint. Classification, clinic, treatment.
234. Ankylosis of the temporomandibular joint. Classification, clinic, treatment.
235. Contracture of the lower jaw. Clinic, diagnosis, treatment.
236. Surgical treatment of facial pain syndromes.

237. Lesions of the trigeminal nerve. Neuritis, neuralgia. Clinic, diagnosis, treatment.
238. Principles of aesthetic facial surgery.
239. The current state of craniofacial surgery in the world and in Ukraine.
240. The future of the specialty.

## 16. Recommended literature

### Basic:

1. Oral and maxillofacial surgery= Хірургічна стоматологія та щелепно-лицева хірургія. Part 1 : textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / V. O. Malanchuk [et al.] ; ed. V. Malanchuk. – Вінниця: Нова книга, 2011
2. Oral and maxillofacial surgery= Хірургічна стоматологія та щелепно-лицева хірургія. Part 2 : textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / V. O. Malanchuk [et al.] ; ed. V. Malanchuk. – Вінниця: Нова книга, 2011.
3. Kharkov L. V. Pediatric oral and maxillofacial surgery : a textbook for students of higher medical educational institutions of the III-IV levels of accreditation / L. V. Kharkov, L. M. Yakovenko, N. V. Kiselyova ; ed. by L. V. Kharkov. - Kyiv : AUS Medicine Publishing, 2015. - 103 с.
4. Timofieiev O.O. Anesthesia in Oral and Maxillofacial Surgery / O.O. Timofieiev, I.I. Fesenko. - Kyiv: OMF Publishing, 2016, 128 p.

### Additional

1. Atlas of Human Anatomy / F. Netter – 2<sup>nd</sup> ed. – New Jersey: ICON Learning Systems. – 592 p.
2. Bauml, Philips R.W., Lund M.R. Textbook of Operative Dentistry = Підручник з хірургічної стоматології.- 3-rd ed.- Philadelphia: Saunders, 1995.- 661p.
3. PETERSON'S PRINCIPLES OF ORAL AND MAXILLOFACIAL SURGERY Third Edition, Vol. 1, 2012. - 2000 p.
4. PETERSON'S PRINCIPLES OF ORAL AND MAXILLOFACIAL SURGERY Third Edition, Vol. 2, 2012. - 1772 p. Pohranychna, Ch. R. Infections of the maxillofacial area : guide of lectures on oral and maxillofacial surgery for the english-medium students of the 3rd year education at dentistry faculty (spring semester) [Текст] : methodological guide / Ch. R. Pohranychna, R. Z. Ogonovsky. - Lviv, 2011.
5. Pohranychna, Ch. R. Maxillofacial oncology : guide of lectures on oral and maxillofacial surgery for the english-medium students of the 5th year education at dentistry faculty (autumn semester) [Текст] : methodological guide / Ch. R. Pohranychna, R. Z. Ogonovsky. - Lviv, 2011
6. Vares Ya.E., Ogonovsky R.Z., Pohranychna Ch.R. Principles of Local Dental Anaesthesia and Teeth Removal: An Illustrated Methodological Guide. – Lviv, 2007.

## 17. Informative sources:

1. TMJ anatomy [https://www.youtube.com/watch?v=\\_TJd7IKC064](https://www.youtube.com/watch?v=_TJd7IKC064)
2. Clinical case: ankylosis management [https://www.youtube.com/watch?v=kBh\\_Mx6sKSE](https://www.youtube.com/watch?v=kBh_Mx6sKSE)
3. Mandibular ankylosis <https://www.youtube.com/watch?v=5X24TjSgMIQ>
4. Lower lip reconstruction <https://www.youtube.com/watch?v=dAc2uU3gKw0>
5. Bone remodeling <https://www.youtube.com/watch?v=0dV1Bwe2v6c>
6. Guided bone regeneration <https://www.youtube.com/watch?v=x1r4qIab-Sg>
7. Bone augmentation technics [https://www.youtube.com/watch?v=qYBMiKd\\_tA](https://www.youtube.com/watch?v=qYBMiKd_tA)
8. Bone augmentation technics 2 <https://www.youtube.com/watch?v=SX8fLE3EeKY>
9. Vertical alveolar ridge augmentation <https://www.youtube.com/watch?v=y4fUCeq91G4>
10. Horizontal alveolar ridge augmentation <https://www.youtube.com/watch?v=OKCaYeH6BOE>
11. Curey technic <https://www.youtube.com/watch?v=GPPc2jvKyqY>
12. Sinus-lifting [https://www.youtube.com/watch?v=GqJ\\_XTZbZ6c](https://www.youtube.com/watch?v=GqJ_XTZbZ6c)
13. Vestibuloplasty <https://www.youtube.com/watch?v=hj2MNQHnkg>
14. Lower lip tumor excision <https://www.youtube.com/watch?v=9vzmharZgFQ>
15. Nose reconstruction <https://www.youtube.com/watch?v=JyeMPDHDH-U>
16. Midface soft tissues reconstruction <https://www.youtube.com/watch?v=q0Sb27DADBY>
17. Examination methods <https://youtu.be/-AjoqLAE9Gk>
18. Aseptics & antiseptics <https://youtu.be/YeB2eKmvWM0>
19. Anesthesia The Wand [https://www.youtube.com/watch?v=Yq2\\_ynfLPeA](https://www.youtube.com/watch?v=Yq2_ynfLPeA)

20. Upper jaw anesthesia <https://www.youtube.com/watch?v=zFndz48ojTE>
21. Lower jaw anesthesia [https://www.youtube.com/watch?v=3\\_7BqHJCXsU](https://www.youtube.com/watch?v=3_7BqHJCXsU)
22. Local anesthesia complications <https://www.youtube.com/watch?v=2mLY1pZ5Aa4>
23. Remanent for tooth extraction <https://www.youtube.com/watch?v=Crfag75ztP4>
24. Tooth extraction <https://www.youtube.com/watch?v=6czvwyizvcY>
25. Tooth extraction 2 <https://www.youtube.com/watch?v=Ku4iWM4K-80>
26. Typical tooth extraction <https://www.youtube.com/watch?v=mdE7H8maXcY>
27. Surgical tooth extraction <https://www.youtube.com/watch?v=KXkqIr7YFU4>
28. Acute pericoronitis <https://www.youtube.com/watch?v=AlSGwsc8E8Y>
29. Chronic pericoronitis [https://www.youtube.com/watch?v=3\\_xENPZNTV4](https://www.youtube.com/watch?v=3_xENPZNTV4)
30. Periodontitis <https://www.youtube.com/watch?v=cSSSUwUh0Qo>
31. Actinomycosis <https://www.youtube.com/watch?v=fCD1NfK8jRE>
32. Periostotomy <https://www.youtube.com/watch?v=SwwWMP9Zj1I>
33. Palatal abscess draining <https://www.youtube.com/watch?v=9CN5CMOaZeU>
34. Submandibular phlegmone <https://www.youtube.com/watch?v=IeK8cParDY0>
35. TMJ disorders <https://www.slideshare.net/memoalawad/lecture-of-tmj-67508951>
36. Dento-alveolar injuries management <https://www.youtube.com/watch?v=-9XtrnxhsWc>
37. IMF with standard splints <https://www.youtube.com/watch?v=RGp46yHoVag&list=PLODWbBfct7nYjK0xg6r1oS1YEXzNVPNFH&index=5>
38. Zygomatic fractures management <https://www.youtube.com/watch?v=inVW0DDJnKs>
39. Midface trauma <https://www.youtube.com/watch?v=-mHcEobz1w8>
40. Biopsy technics in dentistry <https://www.youtube.com/watch?v=zB08AVntCUc>
41. Odontogenic cysts [https://www.youtube.com/watch?v=UPjbNPz\\_WXs](https://www.youtube.com/watch?v=UPjbNPz_WXs)
42. Precancerous lesions <https://www.youtube.com/watch?v=TYzW59l-nXo>
43. Benign tumors of connective tissue <https://www.youtube.com/watch?v=rw7gzh25h9o>
44. Postresectional jaw reconstruction <https://www.youtube.com/watch?v=ppykKDo8kYs>