Ministry of Health of Ukraine

Danylo Halytsky Lviv National Medical University

Department of Surgical Dentistry and Maxillofacial Surgery

METHODOLOGICAL GUIDE

(for teachers)

Fundamentals of dentistry

Second level of higher education (Master's Degree)
Sphere of Knowledge 22 «Healthcare»
Specialty 222 «Medicine»
General medicine
Pediatrics
Prophylactic medicine
Faculty, Year: Medical, III

Lviv – 2019

Methodological guide was approved at the meeting of the Methodical Commision of Dentistry of the Danylo Halytsky Lviv National Medical University (protocol № from).

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INTRODUCTION

Course description (abstract). The discipline involves the study of therapeutic, orthopedic, surgical and pediatric dentistry in its main sections, with emphasis placed on the study of etiology, pathogenesis, clinics, diagnostics, emergency treatment and prevention of major and most common diseases of maxillo-facial area (MFA).

Special attention is paid to the formation of the student's skills of collecting anamnesis, conducting examination and differential diagnosis of MFA diseases with various clinical course and their complications. It is envisaged to get acquainted with the treatment-and-prophylactic measures, which are most often used in dental practice.

Studying the discipline of "fundamentals of dentistry" contributes to the formation of a holistic view of the structure and functioning of the organs of the MFA; 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)			
Name of the discipline: Fundamentals of Dentistry	**0,5 credits / 15 hours.**	**-**	**10**	**5**	**III course (V/VI semesters)**	**Credit**

The subject of study of the discipline are the pathological processes of MFA, related to the competence of therapeutic, orthopedic, surgical and pediatric dentistry, features of their clinical course, the main diagnostic and therapeutic manipulations used in the practice of dentist.

Interdisciplinary connections: normal anatomy, histology, normal physiology, pathological physiology, topographic anatomy and operative surgery, microbiology, biochemistry, pharmacology, internal diseases, endocrinology, skin and venereal diseases, nerve diseases, otolaryngology, medicine of extreme conditions.

The purpose and objectives of the discipline

The purpose of teaching the discipline (Fundamentals of Dentistry) is to provide a comprehensive and highly-specialized training of a dentist, which involves mastering the theory and practice of all sections of dentistry and basics of maxillo-facial departments (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.

The main tasks of studying the discipline of " Fundamentals of Dentistry " are the ability to carry out examination of a dental patient, to diagnose the main symptoms and syndromes of MFA pathologies, to justify and formulate a preliminary diagnosis; analyze the results of the examination and carry out differential diagnosis, formulate a clinical diagnosis of major diseases, identify and identify manifestations of somatic diseases in the oral cavity, determine the principles of complex treatment in the clinic of surgical dentistry, identify different clinical options and complications of the most common diseases and diseases, to know measures of primary and secondary prevention of the most common dental diseases.

Approximate structure of the test credit

Topic	Lectures	Practical lessons	Independent work
Topic 1. Organization of dental care in Ukraine. Principles and methods of dental patients examination. Temporary and permanent teeth, terms and features of their physiological eruption. Non-carious lesions of the teeth. Caries, pulpitis, periodontitis, general principles of treatment and prevention.	-	*2*	1
Topic 2. Inflammatory diseases of the maxillo-facial area: periostitis, lymphadenitis, osteomyelitis, maxillary sinusitis, sialoadenitis, abscesses and phlegmons of the maxilla-facial area - etiology, pathogenesis, clinical manifestations, diagnosis, treatment	-	2	1
Topic 3. Diseases of the oral mucosa and periodontal tissues - etiology, pathogenesis, clinical manifestations, diagnosis, treatment. Manifestations of somatic diseases in the maxillofacial area. Tumors and precancerous lesions of the lips red border and oral mucosa.	-	2	1
Topic 4. Traumatic injuries of hard and soft tissues of the maxilla-facial area. Peculiarities of surgical treatment, general principles of treatment, prevention of early and late complications.	-	2	1
Topic 5. Congenital malformations of the face. Clinical manifestations, diagnosis, principles of treatment and care. **Summary lesson.**	-	2	1
Total credits: 0,5 ***Total hours: 15***	-	**10**	**5**

№	**PRACTICAL LESSONS SCHEDULE** **from the "Fundamentals od Dentistry"**	**Hours**
1.	**Topic 1**. Organization of dental care in Ukraine. Principles and methods of dental patients examination. Temporary and permanent teeth, terms and features of their physiological eruption. Non-carious lesions of the teeth. Caries, pulpitis, periodontitis, general principles of treatment and prevention.	*2*

2.	**Topic 2.** Inflammatory diseases of the maxilla-facial area: periostitis, lymphadenitis, osteomyelitis, maxillary sinusitis, sialoadenitis, abscesses and phlegmons of the maxilla-facial area - etiology, pathogenesis, clinical manifestations, diagnosis, treatment.	*2*
3.	**Topic 3.** Diseases of the oral mucosa and periodontal tissues - etiology, pathogenesis, clinical manifestations, diagnosis, treatment. Manifestations of somatic diseases in the maxillofacial area. Tumors and precancerous lesions of the lips red border and oral mucosa.	*2*
4.	**Topic 4.** Traumatic injuries of hard and soft tissues of the maxilla-facial area. Peculiarities of surgical treatment, general principles of treatment, prevention of early and late complications.	*2*
5.	**Topic 5.** Congenital malformations of the face. Clinical manifestations, diagnosis, principles of treatment and care. **Summary lesson.**	*2*
Total hours: *10*		

Student's independent work and it's control			
№	**Topic**	**Hours**	**Control**
1	Anaesthesia in dentistry. Local, general, potentiated. General complications of local anesthesia, clinical features and urgent care.	1	Current control on the practical classes
2	Manifestations of specific inflammatory diseases and HIV/AIDS in the oral cavity. Reliable and unreliable signs of AIDS.	1	Current control on the practical classes
3	Benign and malignant tumors of the maxilla-facial area.	1	Current control on the practical classes
4	Traumatic injuries of the maxillofacial area, traumatic disease. Classification, pathogenesis, clinical flow, prognosis, peculiarities of treatment, effects of the disease.	1	Current control on the practical classes
5	Factors that influence the occurrence of congenital malformations of the teeth and face.	1	Current control on the practical classes
Total hours: 5			

Evaluation of the discipline

Evaluation of current student's progress made on each practical lessons on the 4- point scale and recorded in the register of academic success. Knowledge of students are evaluated both theoretical and practical training by the following criteria:

"Perfect" – the student perfectly mastered theoretical material, shows the deep and comprehensive knowledge of the relevant subject or discipline, the basic provision of the basic textbook and recommended literature, have the logical thinking and make the answer, freely use the acquired theoretical knowledge in the analysis of practical material, expresses his attitude to various problems, demonstrates the high level of practical skills;

"Good" – the student learned theoretical material good, has the main aspects of the basic textbook and recommended literature, the knowledge set reasonable; has the practical skills, expressed own views of the problem, but assume certain inaccuracies in the logic of the theoretical contents presentation or by the analysis of the practical;

"Satisfactory" – the student basically mastered the theoretical knowledge of the subject or discipline, oriented in the basic textbook and recommended literature, but unconvincingly answer, confuses the notions, additional questions arouse the student uncertainty or absence of stable knowledge, answering the practical questions reveals inaccuracies in knowledge, cannot estimate the facts and events, link them to the future activities;

"Unsatisfactory " - the student has not mastered the subject (discipline) course material, does not know the scientific facts, definitions, hardly versed in the basic textbook and recommended literature, the scientific thinking is absent, practical skills are not formed.

Evaluation of student's independent study

Material for independent work of students, which provided simultaneously with the practical classes and estimated during the current control of the theme on the appropriate practical classes.

The final control - semester credit is performed to assess learning outcomes on a national scale and ECTS scale.

The students who attended all the stipulated discipline curriculum classes and scored for current progress score not less than the minimum are allowed to the final control. For students who missed classes, with the dean permission is permitted to fulfill academic debt to the fixed period within the term.

The semester credit is the form of final control, which is consist in the evaluation assess of the educational material mastering exclusively on the basis of the certain types of work realization at the practical classes. The semester test performed at the end before the examinations. Credits accept teachers who conducted practical classes in the group or hold lectures in the discipline. A student is considered to be admitted to semester control if all kinds of work provided the curriculum and the work program have been met.

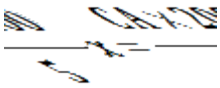
The results of student work evaluation during the semester should be documented (included in the academic journal, credit - examination sheet, student Gradebook). Performed by students during the semester control tests, individual tasks are kept at the department during the year.

In the educational University process, the following grading scale are used: multimark (200 - point) scale, the traditional 4- point scale and ECST rating scale. The results are converted from one scale to another according to the following rules. In evaluating the mastering of each theme for current educational student activity the score by the 4- point scale (traditional) are set. This takes into account all types of work, provided the curriculum. The student must obtain an assessment of each theme. The forms assessment of current educational activity should include control of theoretical and practical training. Exhibited the traditional assessment scale are converted into the points.

The maximum number of points that a student can collect for current educational activity at the subject's study is 200 points.

The minimum number of points that a student must collect for current educational activity for enrollment courses is 120 points.

Calculating the number of points is based on student evaluations received by traditional scale while learning subjects during the semester, by calculating the arithmetic mean rounded to two decimal places. The result value is converted into points by multi- scale as follows:



For convenience, a table converting 200 -point scale:

Table 1 Conversion of the average score for current activity in multimark scale for disciplines ending as credit (differentiated credit)

4-points scale	200-points scale
5	200
4.97	199
4.95	198
4.92	197
4.9	196
4.87	195
4.85	194
4.82	193
4.8	192
4.77	191
4.75	190
4.72	189
4.7	188
4.67	187
4.65	186
4.62	185
4.6	184
4.57	183
4.52	181
4.5	180
4.47	179

4-points scale	200-points scale
4.45	178
4.42	177
4.4	176
4.37	175
4.35	174
4.32	173
4.3	172
4.27	171
4.24	170
4.22	169
4.19	168
4.17	167
4.14	166
4.12	165
4.09	164
4.07	163
4.04	162
4.02	161
3.99	160
3.97	159
3.94	158

4-points scale	200-points scale
3.92	157
3.89	156
3.87	155
3.84	154
3.82	153
3.79	152
3.77	151
3.74	150
3.72	149
3.7	148
3.67	147
3.65	146
3.62	145
3.57	143
3.55	142
3.52	141
3.5	140
3.47	139
3.45	138
3.42	137
3.4	136

4-points	200-points
3.37	135
3.35	134
3.32	133
3.3	132
3.27	131
3.25	130
3.22	129
3.2	128
3.17	127
3.15	126
3.12	125
3.1	124
3.07	123
3.02	121
3	120
Less then 3	Not enougph

Evaluation of the disciplines (subjects) which the final control is the **test** is based solely on the results of current training and expressed by two points national scale: "Passed " or " Not passed ". To enroll the student must receive for current training activities at least 60 % of the maximum amount of points in the discipline (120 points). Scores are ranked on a scale of discipline ECTS (Table 3) for the above scheme.

Grade F (unsatisfactory with required repeated course) put at the test or differential credit to students who attended all subject (discipline) classes, but did not reach the minimum number of points for current educational activity. These students are not obtained credit and are not allowed to pass examinations.

Scores of discipline for students who successfully completed the program, converted into traditional 4- point scale by absolute criteria, which are listed in the table below:

Table 2

Discipline scores	**4 – point scale**
From 170 to 200 points	5
From 140 to 169 points	4
From 139 points to the minimal points number, which the student must score	3
Less than the minimal points number, which the student must score	2

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

Objectivity evaluation of educational activities of students tested statistically (correlation coefficient between ECTS assessment and evaluation on a national scale).

Scores of students enrolled in one specialty, given the number of points gained in the discipline ranked on a scale ECTS as follows:

Table 3

Evaluation of ECTS	Statistical index
A	The best 10 % students
B	The next 25 % students
C	The next 30 % students
D	The next 25 % students
E	The last10 % students

Ranking of assigning ratings of "A", "B", "C", "D", " E" held for the students of the course who are studying for one specialty and successfully completed the study subjects. Students who received estimates FX, F (« 2») are not made to the list of students who ranked. Students with an estimate after repassing FX are automatically mark "E".

Ministry of Health of Ukraine

Danylo Halytsky Lviv National Medical University

"Approwed"
on the meeting of the Department
of Surgical Dentistry
and Maxillofacial Surgery

Head of the Department:
professor Ya. E. Vares

METHODICAL GIUDE FOR PRACTICAL LESSONS

Educational discipline	FUNDAMENTALS OF DENTISTRY
Topic of the lesson	**Topic 1**. Organization of dental care in Ukraine. Principles and methods of dental patients examination. Temporary and permanent teeth, terms and features of their physiological eruption. Non-carious lesions of the teeth. Caries, pulpitis, periodontitis, general principles of treatment and prevention.
Course	3rd
Faculty	Medical

Lviv – 2019

Actuality of the topic. The process of eruption of the temporary (milk) and permanent teeth that is a prerequisite for the formation of bite, is an important stage in the formation of tooth-jawhuman system. Violation of these processes, as well as the influence of factors that are at first sightdo not matter (certain habits in children, the use of individual drugs in the periodpregnancy) can cause a number of morphological, physiological and aesthetic defects, which will require complex corrective measures.

Diseases of the teeth are perhaps the most common disease in humans. Statistical data indicate that about 95% of the total population is more or less suffering from caries and its complications. Carious lesions often become a source of odontogenic infection, which leads to chronic sensitization of the body or cause development of inflammatory diseases. Hygiene of the oral cavity and other types of prophylaxis of caries and its complications occupy a leading place in reducing the level of morbidity in dentistry.

The purpose of the lesson is: to get acquainted with the norm and pathology of temporary and permanent teeth, as well as factors influencing the development of solid tooth tissues, major defects in teeth development. To study the causes of the occurrence, the clinic, the diagnosis, treatment, emergency care and the prevention of major tissue diseases of the tooth: caries, pulpitis, periodontitis. Know the complications of these diseases.

Learning objectives:

- *Professional competence:*

1. Collection of medical information on the patient's condition.
2. Evaluation of the results of laboratory and instrumental research.
3. Establishment of a clinical diagnosis of dental disease.
4. Planning and conducting preventive measures for dental diseases.
5. Execution of medical and dental manipulations.
6. Organization and conducting of dental medical examination of persons subject to dispensary supervision.
7. Assessment of the environmental impact on the health of the population (individual, family, population).
8. Maintaining medical records.
9. Processing of state, social and medical information.

- *General competence:*

1. The ability to abstract thinking, analysis and synthesis; the ability to learn and be trained today.
2. Knowledge and understanding of the subject area and understanding of the profession.
3. Ability to apply knowledge in practical situations.
4. Ability to communicate in the state language both verbally and in writing; Ability to communicate in a second language.
5. Skills in the use of information and communication technologies.
6. Ability to search, process and analyze information from various sources.
7. Ability to adapt and act in a new situation; ability to work autonomously.
8. Ability to identify, put and solve problems.
9. Ability to choose a communication strategy.
10. Ability to work in a team.
11. Interpersonal skills.
12. Ability to act on the basis of ethical considerations (motives).
13. Ability to act in a socially responsible and civic conscious manner.

Methods of training:
Preparatory stage - Frontal oral interview.
The main stage - practical training, role-playing game.
The final stage is brainstorming.

Interdisciplinary integration

Disciplines	Student should know	Student should be able to
Попередні:		
Normal anatomy Normal physiology	Know the anatomical and physiological features of the maxillofacial area: - structure of the upper and lower jaws; - innervation and vascularization of these sites; - structure of the lymphatic system of the head and neck; - structure of the muscles of the head and neck; - structure of the head and neck areas.	To be able to explain the structure of systems and organs of maxillo-facial area (MFA)
Pathologic anatomy Pathologic physiology	To know the appearance and flow of the pathological processes in the tissues and organd of MFA	To be able to explain the appearance and flow of the pathological processes in the tissues and organd of MFA
Topographical anatomy	To know the topography of the organs of MFA	To be able to explain the topography of the organs of MFA
Hystology	To know histological structure of soft and hard tissues of MFA	To be able to explain the stages of manufacturing of cytological, histological preparations
Mycrobiology	To know the species identification of microorganisms in the oral cavity	To be able to explain the stages of manufacturing of microbiological preparations and the essence of bacteriological examination
Radiation diagnostics.	To know the methods of radiological examination used in dental practice	To be able to explain the principles on which these or other methods are based (X-ray, CT, MRI, ultrasound)

Plan and organizational structure of practical lesson of the discipline

Duration of the practical lesson is 2 academical hours – 1 hour 30 minutes

№	The main stages of the lesson, their functions and content	Time period	Methods of eductation and control	Materials of methodical support
1.	**Preparatory stage**	**20 min.**		
1.1	Organizational measures	1 min.		

1.2	Setting up of educational goals and motivation.	4 min.			
1.3	Control of the initial level of knowledge (standardized control methods).	15 min.	Individual theoretical evaluation. Solving typical tasks.Test control.Written interwiev.	Question for an individual oral and written evaluation. Typical situational tasks and tests.	Tables, phantoms, collapsible jaws, textbooks, manuals, reference books, atlas, methodical recommendations, video films.
2.	**Main Stage**	**50 min.**			
	Formation of professional skills and abilities: 1. To collect anamnesis and to conduct a review of the patient with the pathology of the maxillofacial area. 2. Set up a patient survey plan. 3. Make a plan for additional research methods. 4. Complete the relevant medical documentation. 5. To work out a method of examination and palpation of the maxillofacial area during the examination. 6. To work out the method of examination and palpation of vestibulum of the oral cavity. 7. To work out the method of examination and palpation of the oral cavity itself. 8. To work out a survey method, percussion, determination of degree of mobility of teeth, depth of tooth-ashen pockets. 9. To work out the method of determining the degree of limitation of opening the mouth. 10. Learn to fill the patient's dental formula. 11. Learn to issue referral for additional survey methods. 12. Learn to diagnose caries of teeth at different stages. 13. Learn to diagnose pulpitis and periodontitis.1 4. To learn to carry out differential diagnostics between caries and its complications.		Formation of professional skills: Work with patients with pathology of maxillofacial area. Work out the results of additional methods of examination of patients with diseases of the maxillofacial area. Solving typical situational tasks. Oral and written evaluation on standardized list of issues.Work with phantoms, view thematic videos.	Patients with pathology of maxillofacial area. The history of the disease.Selection of results of additional survey methods. Situational tasks.Algorithms.Phantoms, surgical instruments.Thematic videos.	
3.	**Final stage**	**20 min.**			

3.1	Control and correction of the level of professional skills and abilities		Individual skills control.Control of skills by solving non-typical situational problems with illustrative material.	Phantoms, surgical instruments.The history of the disease.Selection of results of additional methods of examination of thematic patients.Unusual situational tasks.
3.2	Control and correction of the level of professional skills and abilities.		Final evaluation of the students	
3.3	Homework. Informing students about the topic of the next lesson.			Recommended literature

Methodology of organization of educational process in practical lesson.
STRUCTURE OF PRACTICAL LESSON
Preparation stage (20 min.)

To substantiate the significance of the subject for further study of the discipline and professional activity of the doctor in order to formulate motivation and purposeful educational activity. Get acquainted with students with specific goals and lesson plans.Conduct standardized control of the initial level of student training, discussion and student answers.

• *Organizational part of the lesson: presence check, evaluation of the uniform.*

• *Informing about of the topic and the purpose of the lesson.*

Topic of the lesson: «Organization of dental care in Ukraine. Principles and methods of dental patients examination. Temporary and permanent teeth, terms and features of their physiological eruption. Non-carious lesions of the teeth. Caries, pulpitis, periodontitis, general principles of treatment and prevention.»

The purpose of the lesson is: to get acquainted with the norm and pathology of temporary and permanent teeth, as well as factors influencing the development of solid tooth tissues, major defects in teeth development. To study the causes of the occurrence, the clinic, the diagnosis, treatment, emergency care and the prevention of major tissue diseases of the tooth: caries, pulpitis, periodontitis. Know the complications of these diseases.

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• *Motivation for learning activities.*

Correct organization of surgical dental care promotes qualitative treatment of patients, provides conditions for preventive measures. In the practice of a surgeon-dentist, an important place is the examination of patients, which is the basis for establishing the correct diagnosis and the appointment of effective treatment.

Materials of the methodical provision of the preparatory stage of the class:

Questions to the front-line evaluation:

1. Dentistry as a medical specialty. Organization of dental care polyclinics and hospitals in Ukraine.

2. Development of the tooth-jaw system: temporary and permanent teeth, teeth eruption, formation of the root and periodontum, physiology of the tooth-jaw system. The connection of the status of the tooth-jaw system and general state of human health.
3. Examination of the dental, maxillo-facial patient.
4. Caries of teeth: etiology and pathogenesis, classification. Clinical manifestations. Principles of treatment.
5. Pulpitis of teeth: etiology and pathogenesis, classification. Clinical manifestations. Principles of treatment.
6. Non-carious lesions of teeth: etiology, pathogenesis, classification. Congenital malformations of the teeth tissues. Clinical manifestations. Principles of the treatment of: enamel hypoplasia, wedge-shaped defects, increased enamel sheath, chemical enamel necrosis and dentin, hyperesthesia of enamel.
7. Measures for the prevention of dental diseases (state, social, medical, and hygienical, educational).

The main stage: the formation of professional skills and abilities (50 min.)

Providing of professional training

Materials of the methodical provision of the main stage of the lesson:

Organization of work and equipment of the dental clinic, maxillofacial department of the hospital, operating, dressing.Special equipment, equipment and tools for examination of patients and performing dental interventions.Medical documentation in the surgical department (office) of the dental clinic and in the maxillofacial department of the hospital. Indicators of the work of the surgeon-dentist.Indications for hospitalization of patients with pathology of maxillofacial area, peculiarities of their examination and rehabilitation.

Peculiarities of examination of patients with diseases of the dento-jaw system, injuries, inflammatory processes, benign, malignant and tumor-like formations, congenital and acquired defects, deformities of the maxillofacial area. The value of personal communication between the doctor and the patient. Emotional factors associated with diseases, lesions and facial defects and treatment. Deontology and medical ethics in surgical dentistry and maxillofacial surgery.

Collection of subjective data of the patient:

- Complaints at the time of applying to a health facility.
- History of the disease: the development of the disease, its dynamics, pre-treatment.
- Anamnesis of life: hereditary, transferred and concomitant diseases, bad habits - the use of drugs, alcoholic beverages, smoking heredity, allergic history.

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

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

Objective methods of research with the use of modern diagnostic equipment. X-ray: X-ray, tomography, panoramic radiography and pantomography. The use of artificial contrasts. Computer and magnetic resonance imaging, radioisotope, ultrasound diagnostics, remote and contact

thermography. Morphological methods: cytological examination of prints, scissors, puncture material, histological examination of biopsy material. Methods of functional diagnostics: rheography, polarography and electromyography, electroodont diagnostics. Application of computers in diagnostics: decoding of X-rays, planning of operations, results of treatment.

The volume of examination of patients with pathology of the maxillofacial area during treatment in the conditions of the clinic and in-patient department, participation of adjacent specialists in the examination.

Types of bite. Terms of eruption of temporary and permanent teeth.

Stages of caries, classification of pulpitis and periodontitis. Clinical manifestations, methods of treatment.

- *Algorithms for the formation of professional skills and abilities.*

1. Be able to collect complaints, anamnesis of the disease and life.
2. To be able to conduct an objective examination of a dental patient: external examination, examination of maxillofacial area and oral cavity.
3. To be able to conduct an examination of the status of the maxillofacial area, hard tissues of the teeth, periodontum, oral mucosa (review, sensing, percussion, palpation).
4. To be able to appoint (if necessary) additional survey methods.
5. To be able to determine the need for counseling by the pediatrician or other specialists.
6. To be able to assess the condition of oral hygiene.
7. To be able to assess the condition of the hard tissues of teeth.
8. To be able to evaluate the bite (orthognathic or pathological).
9. To be able to make a plan for treatment of caries of teeth (including multiple).
10. To be able to give recommendations on choosing the means of individual hygiene of the cavitymouth depending on the dental status.

<u>Final stage</u> (20 min.)

Summing up of the lesson

Materials of methodological support of the final stage of the lesson:

- Brain storm.Students demonstrate an exhaustive description of the unusual clinical situation and offer to offer the most rational diagnostic methods.After recording all the proposed diagnostic methods during the discussion, students choose the most rational.
- Tasks for self-employment.To work on phantoms the technique of examination and palpation of maxillofacial area, oral cavity under conditions of phantom class.
- Evaluation.

Conduct standardized final control using individual test tasks and questions (15 min.), Work check (5 min.). Evaluate the student's current activities during the classroom, taking into account standardized final control, analyze the student's progress, announce the evaluation of each student's activity, and display it in the student attendance and student log book.An adult group at the same time makes assessments in the record of the record of success and attendance of classes by students, the teacher certifies them with his signature.

Brief informing the students about the topic of the next lesson and the methodical measures for preparing for it.

Basic knowledge level:

1. Subjective examination of patients.
2. Objective (general and local) survey.

3. Basic methods of examination (review, palpation, percussion, auscultation).

List of questions to be studied by the student:

1. Principles of the organization of dental care to the population of Ukraine.
2. Organization of the operation of the surgical department (cabinet) of the dental clinic.
3. Features of the organization and provision of special surgical dental care.
4. Sanitary-hygienic requirements to the surgical department (cabinet) of the dental clinic and hospital.
5. Equipment, medical documentation of the surgical office (department).
6. Subjective examination of a surgical dental patient (complaints, history of the disease, history of life).
7. Method of examination of the general condition of a surgical dental patient.
8. Method of local examination (extraoral and intraoral) of a surgical dental patient.
9. Additional methods of examination (electroiodontometry, radiography, morphological, microbiological, functional studies).
10. Indications for hospitalization of surgical dental patients.

List of practical skills to be learned by the student:

1. Be able to collect complaints, anamnesis of the disease and life.
2. To be able to conduct an objective examination of a dental patient: external examination, examination of maxillofacial area and oral cavity.
3. To be able to conduct an examination of the status of the maxillofacial area, hard tissues of the teeth, periodontium, oral mucosa (review, sensing, percussion, palpation).
4. To be able to appoint (if necessary) additional survey methods.
5. To be able to determine the need for counseling by the pediatrician or other specialists.
6. To be able to assess the condition of oral hygiene.
7. To be able to assess the condition of the hard tissues of teeth.
8. To be able to evaluate the bite (orthognatic or pathological).
9. To be able to make a plan for treatment of caries of teeth (including multiple).
10. To be able to give recommendations on choosing the means of individual hygiene of the cavity mouth depending on the dental status.

Situational test tasks:

1. In a 5-year-old child, enamel and dentin are covered with yellowish-brown stripes, naked dentin, multiple caries. It is known that during pregnancy mother took antibiotics. What drug could cause such a side effect?

A. Ampicillin.
B. Streptocide.
C. Tetracycline.
D. Nystatin.
E. Lincomycin.

2. Indications for remineralizing therapy:

A. Fleeting initial caries.
B. Imperfect amelogenesis.
C. Enamel necrosis.
D. Chronic initial caries.
E. Tetracycline teeth.

3. Non-carious teeth lesion associated with hereditary disorders of its development:

A. Fluorosis.
B. Erosion of the enamel.
C. Hypoplasia of enamel.
D. Kapdepon's dysplasia.
E. Marble disease.

4. Tooth reaction to cold stimulus with fleeting middle caries:

A. From cold pain calms down.
B. Under the influence of cold, no pain occurs.
C. The pain disappears immediately after removing the stimulus.
D. The pain does not disappear immediately after removing the stimulus.
E. Under the influence of a cold there is a long attack of pain.

5. Physiological eruption of temporary teeth in a child ends up:

A. 2-2.5 years.
B. 2,5-3 years.
C. 3 years.
D. 3-3,5 years.
E. 2 years.

Literature:

Basic:

1. Bases of Dentistry: Textbook, / ed. by V.O. Malanchuk. – Vinnytsia: Nova Knyha Publishers, 2012. – 616p.
2. Oral and Maxillofacial Surgery: Textbook, Part 1, 2 / V.O. Malanchuk. – Vinnytsia: Nova Knyha Publishers, 2011. – 453p.
3. Principles of Dental Local Anaesthesia and Teeth Removal / Ya. E. Vares, R. Z. Ogonovsky, Ch. R. Pohranychna – LNMU, 2007. – 63p.
4. Atlas of Human Anatomy / F. Netter – 2nd ed. – New Jersey: ICON Learning Systems. – 592 p.

Additional:

1. Contemporary Oral and Maxillofacial Surgery / L. J. Peterson, E. Ellis, J. R. Hupp, M.R. Tucker – 3rd ed. – St. Louis: Mosby – Year Book, Inc. – 1998. – 1477 p.

Ministry of Health of Ukraine

Danylo Halytsky Lviv National Medical University

"Approwed"
on the meeting of the Department
of Surgical Dentistry
and Maxillofacial Surgery

Head of the Department:
professor Ya. E. Vares

METHODICAL GIUDE FOR PRACTICAL LESSONS

Educational discipline	FUNDAMENTALS OF DENTISTRY
Topic of the lesson	**Topic 2**. Inflammatory diseases of the maxillo-facial area: periostitis, lymphadenitis, osteomyelitis, maxillary sinusitis, sialoadenitis, abscesses and phlegmons of the maxillo-facial area - etiology, pathogenesis, clinical manifestations, diagnosis, treatment.
Course	3rd
Faculty	Medical

Lviv – 2019

Actuality of the topic. Acute inflammatory diseases of odontogenic origin have a significant effect on the general condition of the body and require, as a rule, urgent surgical intervention. Doctors of any specialty should have an algorithm for examination and emergency treatment in acute inflammatory odontogenic diseases.

The purpose of the lesson is: to study the main causes of occurrence, symptoms, methods of diagnosis and emergency treatment in odontogenic inflammatory diseases. Get familiar with the commonly accepted principles of treatment of inflammatory processes of MFA.

Learning objectives:

- *Professional competence:*

1. Collection of medical information on the patient's condition.
2. Evaluation of the results of laboratory and instrumental research.
3. Establishment of a clinical diagnosis of dental disease.
4. Planning and conducting preventive measures for dental diseases.
5. Execution of medical and dental manipulations.
6. Organization and conducting of dental medical examination of persons subject to dispensary supervision.
7. Assessment of the environmental impact on the health of the population (individual, family, population).
8. Maintaining medical records.
9. Processing of state, social and medical information.

- *General competence:*

1. The ability to abstract thinking, analysis and synthesis; the ability to learn and be trained today.
2. Knowledge and understanding of the subject area and understanding of the profession.
3. Ability to apply knowledge in practical situations.
4. Ability to communicate in the state language both verbally and in writing; Ability to communicate in a second language.
5. Skills in the use of information and communication technologies.
6. Ability to search, process and analyze information from various sources.
7. Ability to adapt and act in a new situation; ability to work autonomously.
8. Ability to identify, put and solve problems.
9. Ability to choose a communication strategy.
10. Ability to work in a team.
11. Interpersonal skills.
12. Ability to act on the basis of ethical considerations (motives).
13. Ability to act in a socially responsible and civic conscious manner.

Methods of training:

Preparatory stage - Frontal oral interview.
The main stage - practical training, role-playing game.
The final stage is brainstorming.

Interdisciplinary integration

Disciplines	Student should know	Student should be able to
Попередні:		
Normal anatomy	Know the anatomical and physiological features of the maxillofacial area: - structure of the upper and lower	To be able to explain the structure of systems and organs of maxillo-facial area (MFA)

Normal physiology	jaws; - innervation and vascularization of these sites; - structure of the lymphatic system of the head and neck; - structure of the muscles of the head and neck; - structure of the head and neck areas.	
Pathologic anatomy Pathologic physiology	To know the appearance and flow of the pathological processes in the tissues and organd of MFA	To be able to explain the appearance and flow of the pathological processes in the tissues and organd of MFA
Topographical anatomy	To know the topography of the organs of MFA	To be able to explain the topography of the organs of MFA
Hystology	To know histological structure of soft and hard tissues of MFA	To be able to explain the stages of manufacturing of cytological, histological preparations
Mycrobiology	To know the species identification of microorganisms in the oral cavity	To be able to explain the stages of manufacturing of microbiological preparations and the essence of bacteriological examination
Radiation diagnostics.	To know the methods of radiological examination used in dental practice	To be able to explain the principles on which these or other methods are based (X-ray, CT, MRI, ultrasound)
General surgery	To know the basic principles of surgical treatment of inflammatory diseases of human body	To be able to create a plan of surgical opening of an inflammatory process
Pharmacology	To know the groups of medicaments which can be used in medicament treatment of inflammatory processes, their main representatives and their properties	To be able to create a plan of medicament treatment of inflammatory process

Plan and organizational structure of practical lesson of the discipline

Duration of the practical lesson is 2 academical hours – 1 hour 30 minutes

№	The main stages of the lesson, their functions and content	Time period	Methods of eductation and control	Materials of methodical support	
1.	**Preparatory stage**	**20 min.**			
1.1	Organizational measures	1 min.			
1.2	Setting up of educational goals and motivation.	4 min.			
1.3	Control of the initial level of knowledge (standardized control methods).	15 min.	Individual theoretical evaluation. Solving	Question for an individual oral and	Tables, phantoms, collapsible jaws, textbooks,

			typical tasks.Test control.Writt en interwiev.	written evaluation. Typical situational tasks and tests.	manuals, reference books, atlas, methodical recommendation s, video films.
2.	**Main Stage**	**50 min.**			
	Formation of professional skills and abilities: 1. To collect anamnesis and to conduct a review of the patient with the inflammatory pathology of the maxillofacial area. 2. Set up a patient survey plan. 3. Make a plan for additional research methods. 4. Complete the relevant medical documentation. 5. To work out a method of examination and palpation of the maxillofacial area during the examination. 6. To work out the method of examination of patient with inflammatory disease of MFA. 7. To work out with prescription of additional methods of radiological diagnostics. 8. Learn about etiology and pathogenesis of different inflammatory diseases of MFA. 9. Learn to diagnose periostitis. 10. Learn to diagnose osteomyelitis of bones of MFA. 11. Learn to diagnose abscesses and phlegmons. 12. Learn to diagnose lymphadenitis. 13.Learn to diagnose maxillary sinusitis. 14. Learn to diagnose sialoadenitis. 15. To work out clinical flow and possible complications of inflammatoy diseases of MFA. 16. Learn to carry out differential diagnostics between inflammatory diseases of MFA. 17. Learn the stages and variants of surgical opening of the inflammatory processes of MFA. 18. Learn the medicaments and their combinations which can be used in medicament treatment of inflammatory diseases of MFA.		Formation of professional skills: Work with patients with inflammatory pathology of the MFA. Work out the results of additional methods of examination of patients with inflammatory diseases of the MFA. Solving of typical situational tasks. Oral and written evaluation on standardized list of issues.Work with phantoms, view thematic videos.	Patients with inflammatory diseases of maxillofacial area. The history of the disease.Selection of results of additional survey methods. Situational tasks.Algorithms.Phantoms, surgical instruments.Thematic videos.	

3.	**Final stage**	**20 min.**		
3.1	Control and correction of the level of professional skills and abilities		Individual skills control.Control of skills by solving non-typical situational problems with illustrative material.	Phantoms, surgical instruments.The history of the disease.Selection of results of additional methods of examination of thematic patients.Unusual situational tasks.
3.2	Control and correction of the level of professional skills and abilities.		Final evaluation of the students	
3.3	Homework. Informing students about the topic of the next lesson.			Recommended literature

Methodology of organization of educational process in practical lesson.
STRUCTURE OF PRACTICAL LESSON
Preparation stage (20 min.)

To substantiate the significance of the subject for further study of the discipline and professional activity of the doctor in order to formulate motivation and purposeful educational activity. Get acquainted with students with specific goals and lesson plans.Conduct standardized control of the initial level of student training, discussion and student answers.

• *Organizational part of the lesson: presence check, evaluation of the uniform.*

• *Informing about of the topic and the purpose of the lesson.*

Topic of the lesson: «Inflammatory diseases of the maxillo-facial area: periostitis, lymphadenitis, osteomyelitis, maxillary sinusitis, sialoadenitis, abscesses and phlegmons of the maxillo-facial area - etiology, pathogenesis, clinical manifestations, diagnosis, treatment.»

The purpose of the lesson is: to study the main causes of occurrence, symptoms, methods of diagnosis and emergency treatment in odontogenic inflammatory diseases. Get familiar with the commonly accepted principles of treatment of inflammatory processes of MFA. Know the complications of these diseases.

• *Motivation for learning activities.*

A group of inflammatory diseases of the maxillofacial area includes a large number of nosological forms. These are widespread diseases. Therefore, one of the main places in the routine practice of a dental surgeon is diagnosis and differential diagnosis of inflammatory processes. The doctor should also know about the clinical flow and possible complications of these diseases for planning a patient's treatment either in the surgical office of the dental polyclinic or in the department of maxillofacial surgery of the hospital.

Materials of the methodical provision of the preparatory stage of the class:
Questions to the front-line evaluation:

1. Topographic and anatomical features of the maxillofacial area (cellular spaces,blood and lymphatic systems, etc.).

2. Pathogenesis and stages of inflammatory process.
3. Modern medicament supply of antibacterial, anti-inflammatory, desensitizing,detoxification, restoration, immunostimulating treatment, their pharmacodynamics.
4. Basic principles of treatment of inflammatory diseases.
5. Possible complications of inflammatory disesases.
6. General principles of anestesia and intensive care in patients with inflammatory disesases of MFA.

The main stage: the formation of professional skills and abilities (50 min.)

Providing of professional training

Materials of the methodical provision of the main stage of the lesson:

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

Periostitis of jaws. Classification. Acute purulent periostitis of the jaw. Pathogenetic connection with periodontitis. Distribution of inflammation process depending on the location of the roots of different groups of teeth. Pathological anatomy. Clinical picture. Differential diagnostics. Treatment. Indications for tooth extraction in case of acute odontogenic jaw infiltration. Chronic periostitis. Clinic, treatment.

Osteomyelitis of 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 conceptions of etiology and pathogenesis of odontogenic osteomyelitis of the jaws.Clinic and differential diagnostics of acute odontogenic osteomyelitis. Complex pathogenetic treatment: surgical, medical therapy, application of physiotherapeutic methods. Consequences and possible complications.

Odontogenic sinusitis: classification, clinic, diagnosis, differential diagnosis, methods of surgical and conservative treatment. Methods of surgical interventions.

Surgical anatomy of interfascial and intermuscular cellular spaces of the head and neck. Definition of the concepts of abscess and phlegmon. Etiology and pathogenesis of the abscess and phlegmon of the maxillofacial area and neck. Ways and mechanisms of spreading the infectious process.

Classification of surface and deep processes. General and local clinical characteristics of the abscess and phlegmons of the pharyngeal and adjacent areas. Etiological and pathogenetic principles of general and local treatment of inflammatory processes. Surgical treatment, its goals. The value of the choice and techniques of the performing of surgical approach. Anesthesia during surgical interventions in case of abscess or phlegmon of different MFA localizations.

The use of medicaments, immunotherapy and physiotherapy procedures. Osteophlegmon and adenophlegmon, superficial and deep abscess and phlegmon: comparative characteristic of etiology, pathogenesis, clinical course, treatment of complications, rehabilitation of patients.

- *Algorithms for the formation of professional skills and abilities.*

1. Conduct a survey and survey of patients with inflammatory diseases.
2. To work out the skills to provide medical care to inflammatory patientsdiseases of MFA.
3. To work out the skills of interpretation of data of X-rays, CT data, MRI of the skull in case of inflammatory diseases of MFA.
4. To work out the ability to interpret the biochemical analysis of blood in case of inflammatory diseases of MFA.

5. To work out the skills of interpreting the indicators of external breathing in case of inflammatory diseases of MFA.
6. To work out the skills in the analysis of indicators of laboratory research (general blood test, total protein and protein fractions, coagulogram) in case of tinflammatory diseases of MFA.
7. To work out the skills to provide medical care for asphyxia as a result of inflammatory diseases of MFA.

Final stage (20 min.)

Summing up of the lesson

Materials of methodological support of the final stage of the lesson:

- Brain storm.Students demonstrate an exhaustive description of the unusual clinical situation and offer to offer the most rational diagnostic methods.After recording all the proposed diagnostic methods during the discussion, students choose the most rational.
- Tasks for self-employment.To work on phantoms the technique of examination and palpation of maxillofacial area, oral cavity under conditions of phantom class.
- Evaluation.

Conduct standardized final control using individual test tasks and questions (15 min.), Work check (5 min.). Evaluate the student's current activities during the classroom, taking into account standardized final control, analyze the student's progress, announce the evaluation of each student's activity, and display it in the student attendance and student log book.An adult group at the same time makes assessments in the record of the record of success and attendance of classes by students, the teacher certifies them with his signature.

Brief informing the students about the topic of the next lesson and the methodical measures for preparing for it.

Basic knowledge level:

1. Subjective examination of patients.
2. Objective (general and local) survey.
3. Basic methods of examination (review, palpation, percussion, auscultation).

List of questions to be studied by the student:

1. What is osteomyelitis and the basic theories of its occurrence?
2. Causes and factors that cause acute odontogenic osteomyelitis.
3. Ways of spreading odontogenic infection in jaw bones.
4. Classification of phlegmon of MFA.
5. Periostitis of jaws – clinical flow, diagnostics and treatment.
6. General characteristics of the clinical flow of phlegmons and abscesses of MFA.
7. General principles of treatment of phlegmons and abscesses of MFA.
8. Inflammatory processes of lymph nodes of MFA: clinical flow, diagnosis and treatment.
9. Inflammatory diseases of the salivary glands - etiology, clinical flow, diagnostics and treatment.
10. Odontogenic sinusitis: clinical flow, diagnosis and treatment.
11. Complications of acute inflammatory processes of MFA

List of practical skills to be learned by the student:

1. Conduct a survey and survey of patients with inflammatory diseases.
2. To work out the skills to provide medical care to inflammatory patientsdiseases of MFA.
3. To work out the skills of interpretation of data of X-rays, CT data, MRI of the skull in case of inflammatory diseases of MFA.

4. To work out the ability to interpret the biochemical analysis of blood in case of inflammatory diseases of MFA.
5. To work out the skills of interpreting the indicators of external breathing in case of inflammatory diseases of MFA.
6. To work out the skills in the analysis of indicators of laboratory research (general blood test, total protein and protein fractions, coagulogram) in case of tinflammatory diseases of MFA.
7. To work out the skills to provide medical care for asphyxia as a result of inflammatory diseases of MFA.

Situational test tasks:

1. The driver, 55 years old, entered the clinic of maxillofacial surgery with a diagnosis: phlegmon of the bottom of the oral cavity with the spread of purulent process in the pterygo-mandibular and parapharyngeal spaces on the left. The patient underwent surgical opening of the phlegmon, purulent areas are drained, causal teeth were removed. Antibacterial therapy is prescribed, but during the nextseveral hours the patient's condition deteriorated. The temperature has become intermittent.There was a severe headache, dizziness, signs of respiratory failure,arterial pressure dropped to 80/50 mm. hg., tachycardia 150 dpi. Development of which complications can be suspected in a patient?

A. Pneumonia.
B. Sepsis.
C. Coma.
D. Mediastenitis.
E. Abscess of the brain.

2. Acute purulent periostitis of the upper jaw on the left caused by 23 tooth is diagnosed. Crown of 23 is destroyed by a carious process. 22, 24 teeth are intact. On the X-ray there is an extension of the periodontal gap of 23. What treatment should be conducted in for this case?

A. Treatment of a causal tooth.
B. Peristotomy, medical treatment with subsequent treatment of causal tooth.
C. Sequestrectomy, medication with subsequent treatment of causal tooth.
D. Removal of causal tooth, periostostomy, physiotherapeutic treatment.
E. Removal of causal tooth.

3. A young man, 14 years old, appealed with complaints about the presence of a slightly painful swelling in bothwhites, chewing areas, dry mouth, high body temperature (39°C). The illness started 3 days ago. At palpation, there are three pain points: in frontearshot, near the tip of the mastoid and atop the lower jaw.The mucous membrane at the papillae of the excretory ducts of the salivary glands is hyperemic, from them stand out a clear saliva in small quantities. What is the most likely diagnosis?

A. Phlegmon of preauricular areas.
B. Herzenberg’s false parotitis.
C. Acute non-epidemic parotitis.
D. Exacerbation of chronic parotitis.
E. Epidemic parotitis.

4. On the skin of the chin of 48 years old man appeared a pustule, which is fast developed to a dense, sharply painful infiltrate in the size of 3x5 cm. The skin on it has blue-red color. In the center of the infiltrate there are three areas of necrosis around the hair follicles. Lymph nodes are enlarged, painful. What is the diagnosis of a patient?

A. Primary syphilis.
B. Abscess of the chin.
C. Carbuncle of the chin.
D. Manganotti's heilitis.
E. Furuncle of the chin.
5. Give a clinical evaluation of the condition of the patient and establish the diagnosis. Patient P. 44 years old after the acute respiratory infection complains of headache in the frontal, occipital and buccal areas on the left. Objectively: face is asymmetric, difficult breathing through the left nasal passage, mild pain at pressure on the suborbital area on the left and on the transitory fold in the projection of 24, 25 teeth. Percussion of 24, 25 teeth is painful, 24 has the tooth seal, no tooth movement, mucous membrane is unchanged. On the radiograph - reduction of pneumatisation of the left maxillary sinus.
A. Acute periodontitis caused by 24 tooth.
B. Chronic pulpitis caused by 24 tooth.
C. Chronic sinusitis, exacerbation.
D. Acute periostitis.
E. Acute osteomyelitis in the area of 24, 25 teeth.

Literature:

Basic:
1. Bases of Dentistry: Textbook, / ed. by V.O. Malanchuk. – Vinnytsia: Nova Knyha Publishers, 2012. – 616p.
2. Oral and Maxillofacial Surgery: Textbook, Part 1, 2 / V.O. Malanchuk. – Vinnytsia: Nova Knyha Publishers, 2011. – 453p.
3. Principles of Dental Local Anaesthesia and Teeth Removal / Ya. E. Vares, R. Z. Ogonovsky, Ch. R. Pohranychna – LNMU, 2007. – 63p.
4. Atlas of Human Anatomy / F. Netter – 2nd ed. – New Jersey: ICON Learning Systems. – 592 p.

Additional:
1. Contemporary Oral and Maxillofacial Surgery / L. J. Peterson, E. Ellis, J. R. Hupp, M.R. Tucker – 3rd ed. – St. Louis: Mosby – Year Book, Inc. – 1998. – 1477 p.

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Head of the Department:
professor Ya. E. Vares

METHODICAL GIUDE FOR PRACTICAL LESSONS

Educational discipline	FUNDAMENTALS OF DENTISTRY
Topic of the lesson	**Topic 3**. Diseases of the oral mucosa and periodontal tissues - etiology, pathogenesis, clinical manifestations, diagnosis, treatment. Manifestations of somatic diseases in the maxillofacial area. Tumors and precancerous lesions of the lips red border and oral mucosa
Course	3rd
Faculty	Medical

Lviv – 2019

Actuality of the topic. One of the most common lesions of the tooth-skeletal system are periodontal diseases. In dental practice, they rank second aftercaries Particularly increases the frequency of lesions of periodontal tissues in somatic diseases. Therefore, the problem of periodontal pathology goes beyond the scope of dental practice and is considered to be general medicine. An extremely topical issue is the pathology of the oral mucosa. Important is the combination and close relationship between the defeat of the oral mucosa and the general-somatic pathology. Particular attention is needed in the cavity of socially dangerous infections such as tuberculosis, syphilis and AIDS.

According to the literature, about 25% of all oncological diseases of the human body falls on the maxillofacial area. The anatomical and physiological features of this site make a certain specificity in the course of diseases. Oncology should be at the doctor of any specialty, and the availability of relevant knowledge will promote early detection of tumors and timely integrated treatment that improves the outlook for this pathology.

The purpose of the lesson is: to study the etiology and pathogenesis, features of the clinical picture, principles of treatment and prophylaxis of periodontal and oral mucosal diseases; to understand the connection of pathology in the cavity of the mouth with the general-somatic. to study the classification of tumors of the maxillofacial area. Know the clinical symptoms, methods of diagnosis and treatment of oncological diseases of the face and oral cavity.

Learning objectives:

- *Professional competence:*

1. Collection of medical information on the patient's condition.
2. Evaluation of the results of laboratory and instrumental research.
3. Establishment of a clinical diagnosis of dental disease.
4. Planning and conducting preventive measures for dental diseases.
5. Execution of medical and dental manipulations.
6. Organization and conducting of dental medical examination of persons subject to dispensary supervision.
7. Assessment of the environmental impact on the health of the population (individual, family, population).
8. Maintaining medical records.
9. Processing of state, social and medical information.

- *General competence:*

1. The ability to abstract thinking, analysis and synthesis; the ability to learn and be trained today.
2. Knowledge and understanding of the subject area and understanding of the profession.
3. Ability to apply knowledge in practical situations.
4. Ability to communicate in the state language both verbally and in writing; Ability to communicate in a second language.
5. Skills in the use of information and communication technologies.
6. Ability to search, process and analyze information from various sources.
7. Ability to adapt and act in a new situation; ability to work autonomously.
8. Ability to identify, put and solve problems.
9. Ability to choose a communication strategy.
10. Ability to work in a team.
11. Interpersonal skills.
12. Ability to act on the basis of ethical considerations (motives).
13. Ability to act in a socially responsible and civic conscious manner.

Methods of training:
Preparatory stage - Frontal oral interview.
The main stage - practical training, role-playing game.
The final stage is brainstorming.

Interdisciplinary integration

Disciplines	Student should know	Student should be able to
Попередні:		
Normal anatomy Normal physiology	Know the anatomical and physiological features of the maxillofacial area: - structure of the upper and lower jaws; - innervation and vascularization of these sites; - structure of the lymphatic system of the head and neck; - structure of the muscles of the head and neck; - structure of the head and neck areas.	To be able to explain the structure of systems and organs of maxillo-facial area (MFA)
Pathologic anatomy Pathologic physiology	To know the appearance and flow of the pathological processes in the tissues and organd of MFA	To be able to explain the appearance and flow of the pathological processes in the tissues and organd of MFA
Topographical anatomy	To know the topography of the organs of MFA	To be able to explain the topography of the organs of MFA
Hystology	To know histological structure of soft and hard tissues of MFA	To be able to explain the stages of manufacturing of cytological, histological preparations
Mycrobiology	To know the species identification of microorganisms in the oral cavity	To be able to explain the stages of manufacturing of microbiological preparations and the essence of bacteriological examination
Radiation diagnostics.	To know the methods of radiological examination used in MFA	To be able to explain the principles on which these or other methods are based (X-ray, CT, MRI, ultrasound)
Oncology	To know the basic principles of benign and malignant tumors of human body	To be able to create a plan of treatment of benign and malignant tumors
Pharmacology	To know the groups of medicaments which can be used in medicament treatment of maxillo-facial patients, their main representatives and their properties	To be able to create a plan of medicament treatment of diseases of periodontum, oral mucosa and tumors of MFA

Plan and organizational structure of practical lesson of the discipline

Duration of the practical lesson is 2 academical hours – 1 hour 30 minutes

№	The main stages of the lesson, their functions and content	Time period	Methods of eductation and control	Materials of methodical support	
1.	**Preparatory stage**	**20 min.**			
1.1	Organizational measures	1 min.			
1.2	Setting up of educational goals and motivation.	4 min.			
1.3	Control of the initial level of knowledge (standardized control methods).	15 min.	Individual theoretical evaluation. Solving typical tasks.Test control.Written interwiev.	Question for an individual oral and written evaluation. Typical situational tasks and tests.	Tables, phantoms, collapsible jaws, textbooks, manuals, reference books, atlas, methodical recommendations, video films.
2.	**Main Stage**	**50 min.**			
	Formation of professional skills and abilities: 1. To collect anamnesis and to conduct a review of the patient with the diseases of periodontum, oral mucosa and tumors of MFA. 2. Set up a patient survey plan. 3. Make a plan for additional research methods. 4. Complete the relevant medical documentation. 5. To work out a method of examination and palpation of the maxillofacial area during the examination. 6. To work out the method of examination of patient with diseases of periodontum, oral mucosa and tumors of MFA. 7. To work out with prescription of additional methods of radiological diagnostics. 8. Learn about etiology and pathogenesis of the diseases of periodontum, oral mucosa and tumors of MFA. 9. Learn to diagnose parodontal diseases. 10. Learn to diagnose diseases of oral mucosa. 11. Learn to diagnose benign and		Formation of professional skills: Work with patients with inflammatory pathology of the MFA. Work out the results of additional methods of examination of patients with inflammatory diseases of the MFA. Solving of typical situational tasks. Oral and written evaluation on standardized list of issues.Work with phantoms, view thematic	Patients with inflammatory diseases of maxillofacial area. The history of the disease.Selection of results of additional survey methods. Situational tasks.Algorithms.Phantoms, surgical instruments.Thematic videos.	

	malignant tumors of MFA. 12. To work out clinical flow and possible complications of periodontal diseases of MFA. 13. To work out clinical flow and possible complications of diseases of oral mucosa of MFA. 14. To work out clinical flow and possible complications of benign and malignant tumors of MFA. 15. Learn to carry out differential diagnostics between diseases periodontum, oral mucosa and tumors of MFA. 16. Learn the stages and variants of surgical treatment of the diseases periodontum, oral mucosa and tumors of MFA. 17. Learn the methods of special treatment of the diseases periodontum, oral mucosa and tumors of MFA. 18. Learn the medicaments and their combinations which can be used in medicament treatment of the diseases periodontum, oral mucosa and tumors of MFA.		videos.	
3.	**Final stage**	**20 min.**		
3.1	Control and correction of the level of professional skills and abilities		Individual skills control.Control of skills by solving non-typical situational problems with illustrative material.	Phantoms, surgical instruments.The history of the disease.Selection of results of additional methods of examination of thematic patients.Unusual situational tasks.
3.2	Control and correction of the level of professional skills and abilities.		Final evaluation of the students	
3.3	Homework. Informing students about the topic of the next lesson.			Recommended literature

Methodology of organization of educational process in practical lesson.

STRUCTURE OF PRACTICAL LESSON

Preparation stage (20 min.)

To substantiate the significance of the subject for further study of the discipline and professional activity of the doctor in order to formulate motivation and purposeful educational

activity. Get acquainted with students with specific goals and lesson plans. Conduct standardized control of the initial level of student training, discussion and student answers.

• *Organizational part of the lesson: presence check, evaluation of the uniform.*

• *Informing about of the topic and the purpose of the lesson.*

Topic of the lesson: «Diseases of the oral mucosa and periodontal tissues - etiology, pathogenesis, clinical manifestations, diagnosis, treatment. Manifestations of somatic diseases in the maxillofacial area. Tumors and precancerous lesions of the lips red border and oral mucosa.»

The purpose of the lesson is: to study the etiology and pathogenesis, features of the clinical picture, principles of treatment and prophylaxis of periodontal and oral mucosal diseases; to understand the connection of pathology in the cavity of the mouth with the general-somatic. to study the classification of tumors of the maxillofacial area. Know the clinical symptoms, methods of diagnosis and treatment of oncological diseases of the face and oral cavity.

• *Motivation for learning activities.*

The periodontal disease group has become widespread over the past few decades. The severity of the clinical course and the difficulty in achieving remission give the issue of diagnosis and treatment of these diseases an unmatched urgency. Mucous membrane diseases of the oral cavity are also important, as they can be a manifestation of somatic pathology, significantly impairing the quality of life of the patient, and some of them may be malignant. Tumors themselves are dangerous and require careful attention of the dentists, especially dental surgeons during diagnosing and differential diagnosis of diseases that may have symptoms of the tumor process.

Materials of the methodical provision of the preparatory stage of the class:
Questions to the front-line evaluation:

1. Parodontum, its components, anatomy and physiology.
2. Mucous membrane of the oral cavity, its structure, features and functions.
3. Primary and secondary elements of injury of the mucous membrane.
4. Precancerous diseases of the skin of the face, red rim of the lips, mucous membrane of oral cavity Background Diseases. Clinical manifestations, diagnostic methods, treatment.
5. Classification of tumors of the maxillofacial area. Theories of carcinogenesis.
6. The examination of patients for the purpose of diagnosis of tumors, the role of modern methods of examination (X-ray, radioisotope diagnosis, cytological and histological verificationtumors) Stages of process by the TNM system.
7. Benign tumors of hard and soft tissues of MFA.
8. Malignant tumors of hard and soft tissues of MFA.
9. Modern medicaments used for cancer treatment.

The main stage: the formation of professional skills and abilities (50 min.)

Providing of professional training

Structure and function of parodontum. Classification, etiology and pathogenesis of parodontitis and periodontitis. Clinical flow, variants of treatment and possible complications of these diseases.

Recurrent aphthous stomatitis. Clinical manifestations, etiological factors, principles of treatment of patients with somatic pathology.Acute herpetic stomatitis. The main symptoms in children and adults, methods of differential diagnosis. Principles of medical

treatment.Manifestations of diseases of the gastrointestinal tract, blood system, cardiovascular and endocrine system in the oral cavity.

Classification of tumors of the maxillofacial area. Statistics on the distribution of tumors of the MFA. The role and tasks of the dentists and doctors of general practice in the system of providing specialized assistance to patients with tumors of the maxillofacial area. The examination of patients for the purpose of diagnosis of tumors, the role of modern methods of examination (X-ray, radioisotope diagnosis, cytological and histological verification of tumors). Stages of defeat by the TNM system. Clinical groups of cancer patients.

Tumor-like diseases. Cyst as a consequence of developmental defects: odontogenic (primary cyst - keratocyst, cyst eruption, follicular); neodontogenic (cysts of the nasopharyngeal (incisor) canal, globulomaxilar, aneurysmal and solitary). Odontogenic cysts of inflammatory nature are radicular. Clinical manifestations, diagnosis, mechanism of growth, pathological anatomy, methods of surgical treatment: cystotomy, cystectomy, two-stage method, plastic cystectomy, oronazal cystectomy.

Odontogenic tumors. Classification: benign - ameloblastoma (adamantinoma), ameloblastic fibroma (soft odontoma), complex odontoma, fibroma (odontogenic), myxoma and cementum - benign cementoplastoma (true cementoma), cementing fibroma.Predecinal diseases of the skin of the face, red rim of the lips, oral mucous membrane. Classification. Optional, obligatory forms. Background Diseases. Clinical manifestations, diagnostic methods, treatment.

Tumors of the skin of the face. Epithelial tumors, tumor-like processes and cysts, the growth source of which is the epidermis of the skin. Tumor-like processes: keratocentrum, keratolytic papilloma (skin horn), and others. Cysts of the epidermis - atheroma. Tumor-like process in the sebaceous glands - rinofima. Melanogenic system tumors: benign - nevus, malignant - melanoma. Clinic, features of diagnostics, treatment. Epithelial tumors and tumor-like lesions of the organs of the oral cavity and jaws. Benign - squamous papilloma. Malignant - intraepithelial and squamous cell carcinoma, lymphoepithelioma, basal and squamous cell carcinoma.

Clinic, diagnosis, treatment depending on the stage of injury (surgical, radiation, cryogenic, laser, combined effect). Cancer of the lips Cancer of the cavity of the mouth (tongue, cheek, bottom of the oral cavity, hard and soft palate). Cancer of the upper and lower jaws. Clinic, diagnostics, principles of treatment (radiation, surgical, cryogenic, laser, chemotherapy, medication, immunotherapy, combined effect).

Indications and contraindications to surgical intervention at the primary hearth and on the paths of regional metastasis. Features of anesthesia and postoperative management of patients. Indications for intensive care. Forecast and recovery criteria. Sarcoma of soft tissues and bones of maxillofacial area. Clinic, diagnostics, treatment.

Tumors, cysts and tumor-like lesions of the salivary glands. Retinal cyst of small salivary glands. Cyst of large salivary glands. Ranula: clinic, differential diagnosis, histological structure. Methods of treatment. Epithelial tumors: adenoma - polymorphic (mixed tumor), monomorphic (adenolymphoma, etc.); moukoopidermoidnaya; cylinder, adenocellular tumor.

Differential diagnosis of benign and malignant tumors of the salivary glands. Carcinoma: adenocystous (cylindroma), adenocarcinoma, epidermoid carcinoma, carcinoma in polymorphic adenomas. Treatment of nosological forms of tumors, taking into account localization in large and small salivary glands. Surgical methods of treatment and indications for them.

Tumors of soft tissues. Tumor-like lesions of fibrous tissue: gum fibromatosis, radiation keloid, keloid, peripheral giant cellular granuloma (giant cellular epulisis), fibromatous and angiomatous epulisis. Tumors and tumor-like lesions of adipose tissue: benign - lipoma, diffuse

lipomatosis; malignant - liposarcoma. Tumors of fibrous tissue: benign - fibroma; malignant - fibrosarcoma. Tumors of muscle tissue: benign - myoma, leiomyoma, rhabdomyoma; malignant - leiomyosarcoma, rhabdomyosarcoma. Tumors and tumor-like lesions of the blood vessels: benign - hemangioma (capillary, cervical, crustal, benign hemangiode coli); Malignant - hemangiotomy (angiosarcoma). Tumors and tumor-like lesions of the lymphatic vessels: benign: lymphangioma - capillary, cervical, (cystic hygroma); malignant: lymphangioendothelioma (lymphosarcoma); tumorous - systemic lymphangiomatosis. Tumors and tumor-like lesions of the peripheral nerves of the face: benign - neuriloma (svanogliooma), neurofibroma; malignant neurogenic sarcoma; tumor-like: neurofibromatosis (Recklinghausen's disease), traumatic neurology. Tumors and tumor-like lesions of the embryonic origin: teratoma (dermoid cyst). Congenital cysts and fistulas from embryonic remains. Side (brighiogenic), median (thyroid gland) cyst and fist face and neck. Branchogenic cancer. Clinical picture, diagnosis, treatment.

- *Algorithms for the formation of professional skills and abilities.*

1. To be able to evaluate the condition of paroodontal tissues.
2. To be able to assess the condition of the mucous membrane of the mouth.
3. To be able to make a plan of treatment and prophylaxis of periodontal tissue diseases (gingivitis,parodontitis, parodontosis).
4. To be able to conduct an examination of the patients with tumors of MFA.
5. To be able to differentiate tumor-like lesions, benign and malignant tumors of the maxillofacial area.
6. To be able to conduct a cytological study.
7. To be able to conduct a biopsy.

Final stage (20 min.)

Summing up of the lesson

Materials of methodological support of the final stage of the lesson:

- Brain storm.Students demonstrate an exhaustive description of the unusual clinical situation and offer to offer the most rational diagnostic methods.After recording all the proposed diagnostic methods during the discussion, students choose the most rational.
- Tasks for self-employment.To work on phantoms the technique of examination and palpation of maxillofacial area, oral cavity under conditions of phantom class.
- Evaluation.

Conduct standardized final control using individual test tasks and questions (15 min.), Work check (5 min.). Evaluate the student's current activities during the classroom, taking into account standardized final control, analyze the student's progress, announce the evaluation of each student's activity, and display it in the student attendance and student log book.An adult group at the same time makes assessments in the record of the record of success and attendance of classes by students, the teacher certifies them with his signature.

Brief informing the students about the topic of the next lesson and the methodical measures for preparing for it.

Basic knowledge level:

1. Subjective examination of patients.
2. Objective (general and local) survey.
3. Basic methods of examination (review, palpation, percussion, auscultation).

List of questions to be studied by the student:

1. Etiology, pathogenesis and classification of parodontal diseases. Principles of examination of patients.

2. The most common parodontal diseases: gingivitis, parodontitis, parodontosis. Their etiology and pathogenesis, clinical manifestations, principles of treatment.
3. Etiology, pathogenesis and classification of diseases oral mucosa.
4. Acute herpetic and ulcerative-necrotic stomatitis. Etiology and pathogenesisclinical manifestations, principles of treatment.
5. Chronic recurrent aphthous stomatitis. Etiology and pathogenesis, clinical manifestations,principles of treatment.
6. Changes in oral mucosa by infectious diseases, diseases of the digestive, cardiovascular, endocrine and hematopoietic systems. The main symptoms.
7. Tuberculosis, syphilis and HIV infection. Their manifestations in the oral cavity, diagnosis, pathwaysand prevention of infection.
8. Prevention of diseases of oral mucosa and periodontal tissues.
9. Classification of tumors of the maxillofacial area. Theories of carcinogenesis.
10. Survey of patients with the purpose of diagnosis of tumors, the role of modern methods of examination (X-ray, radioisotope diagnosis, cytological and histological verification of tumors) Stages of process by the TNM system.
11. Tumor-like lesions of MFA (jaw cysts). Etiology, pathogenesis. Clinic, diagnostic, treatment.
12.Organospecific benign tumors (odontoma, ameloblastoma, cementoma, epulis):clinic, diagnostics, treatment.
13. Organone-specific benign tumors of MFA (angioma, osteoma, osteoblastoclostoma, fibroma, papilloma): clinic, treatment.
14. Predecinal diseases of the skin of the face, red border of the lips, mucous membraneoral cavity Background Diseases. Clinical manifestations, diagnostic methods, treatment.
15. Malignant tumors of soft tissues of maxillofacial area. Cancer of the lips and tongue - the clinic,diagnosis and treatment. Malignant tumors of the salivary glands. Malignant tumors of the lower and upper jaw.
16. Metastases of malignant tumors on the neck. Basic methods of treating malignant tumorsjaw-facial area.

List of practical skills to be learned by the student:

1. To be able to evaluate the condition of paroodontal tissues.
2. To be able to assess the condition of the mucous membrane of the mouth.
3. To be able to make a plan of treatment and prophylaxis of periodontal tissue diseases (gingivitis,parodontitis, parodontosis).
4. To be able to conduct an examination of the patients with tumors of MFA.
5. To be able to differentiate tumor-like lesions, benign and malignant tumors of the maxillofacial area.
6. To be able to conduct a cytological study.
7. To be able to conduct a biopsy.

Situational test tasks:

1. In a patient, 18 years old, hemorrhages were revealed on the buccal mucosa, along the line of closure of teeth, tongue and palatine, bleeding gums. General anxiety, muscle aches, joints and bones, throats, enlargement of the submandibular and cervical lymph nodes, subfebrilebody temperature Probable diagnosis?

A. Acute leukemia.

B. Addison-Birmer's disease.
C. Hypovitaminosis C.
D. Disease of Verlhof.
E. Diabetes mellitus.

2. The patient, 19 years old, appealed with complaints about the growth of gums in the area of 22, 23 teeth, which appeared more than 3 months ago. Objectively: on contact surfaces 22, 23 teeth – deep caries cavities, interdental contact disturbed. Papilla is enlarged, hyperemic, 1/3 height of the crown covers teeth. Make a diagnosis.
A. Hypertrophic gingivitis.
B. Catarrhal gingivitis.
C. Vensan's angina.
D. Periodontitis.
E. Primary syphilis.

3. The patient, 70 years old, appealed with complaints of itching of the gums, increased sensitivity tochemical, thermal and mechanical stimuli. He considers himself ill for about 20 years. Concomitant disease: atherosclerosis. Objectively: gums are anemic, atrophied, naking of teeth roorts for 2-3 mm. Teeth are stable. There are no periodontal pockets. What is additional method of disgnostic need to be done for diagnosis?
A. Roentgenography.
B. Sialography.
C. Electrodiodometry.
D. Echoesteometry.
E. Reaparodontography.

4. Which of the listed tumors of the salivary glands is especially malignant, grows fast, causes early paralysis of mimic muscles?
A. Monomorphic adenoma.
B. Polymorphic adenoma.
C. Adenocystous carcinoma.
D. Adenocarcinoma.
E. Mucopirdermoid tumor.

5. Patient M., 63 y.o.., appealed to the dentist with complaints about the presence of pain ulcer on the lower lip, which has the wrong crater form, the twisted edges are surroundedwooden infiltrate. The red lining of the cancer is diagnosed. Which of diseases is obligatory for cancer of this localization?
A. Plate leukoplakia.
B. Manganotti's heilitis.
C.Verrucous Leukoplakia.
D. Keratoacanthoma
E. Post-Ray heilitis.

6. The patient was found to have a painless, round-bottomed translucent lips on the lizardboiling diameters of 1 cm of elastic consistency, which disappeared twice, and then was formed again. What disease can you think of?
A. Lypoma.
B. Hemangioma.
C. Lymphangioma.
D. Retential cyst.

E. Fibroma.

Literature:

Basic:

5. Bases of Dentistry: Textbook, / ed. by V.O. Malanchuk. – Vinnytsia: Nova Knyha Publishers, 2012. – 616p.
6. Oral and Maxillofacial Surgery: Textbook, Part 1, 2 / V.O. Malanchuk. – Vinnytsia: Nova Knyha Publishers, 2011. – 453p.
7. Principles of Dental Local Anaesthesia and Teeth Removal / Ya. E. Vares, R. Z. Ogonovsky, Ch. R. Pohranychna – LNMU, 2007. – 63p.
8. Atlas of Human Anatomy / F. Netter – 2nd ed. – New Jersey: ICON Learning Systems. – 592 p.

Additional:

2. Contemporary Oral and Maxillofacial Surgery / L. J. Peterson, E. Ellis, J. R. Hupp, M.R. Tucker – 3rd ed. – St. Louis: Mosby – Year Book, Inc. – 1998. – 1477 p.

Ministry of Health of Ukraine

Danylo Halytsky Lviv National Medical University

"Approwed"
on the meeting of the Department
of Surgical Dentistry
and Maxillofacial Surgery

Head of the Department:
professor Ya. E. Vares

METHODICAL GIUDE FOR PRACTICAL LESSONS

Educational discipline	FUNDAMENTALS OF DENTISTRY
Topic of the lesson	**Topic 4**. Traumatic injuries of hard and soft tissues of the maxillo-facial area. Peculiarities of surgical treatment, general principles of treatment, prevention of early and late complications.
Course	3rd
Faculty	Medical

Lviv – 2019

Actuality of the topic. According to statistical data, the frequency of traumatic injuries of the maxillofacial area reaches up to 8% of all traumatic injuries of the human body in peacetime. Like any injury, damage to the maxillofacial area requires emergency medical care. Anatomic-functional features, particularly, the immediate proximity of vital organs, makes significant specifics in providing of this care and requires the necessary knowledge and skills of doctors of all specialties..

The purpose of the lesson is: to study the features of traumatic damage to the maxillofacial area. Know the clinical flow and methods of treatment of traumatic injuries of soft tissues, teeth and bones of the maxillofacial area. Learn to provide emergency and first medical aid for injured patients.

Learning objectives:

- *Professional competence:*

1. Collection of medical information on the patient's condition.
2. Evaluation of the results of laboratory and instrumental research.
3. Establishment of a clinical diagnosis of dental disease.
4. Planning and conducting preventive measures for dental diseases.
5. Execution of medical and dental manipulations.
6. Organization and conducting of dental medical examination of persons subject to dispensary supervision.
7. Assessment of the environmental impact on the health of the population (individual, family, population).
8. Maintaining medical records.
9. Processing of state, social and medical information.

- *General competence:*

1. The ability to abstract thinking, analysis and synthesis; the ability to learn and be trained today.
2. Knowledge and understanding of the subject area and understanding of the profession.
3. Ability to apply knowledge in practical situations.
4. Ability to communicate in the state language both verbally and in writing; Ability to communicate in a second language.
5. Skills in the use of information and communication technologies.
6. Ability to search, process and analyze information from various sources.
7. Ability to adapt and act in a new situation; ability to work autonomously.
8. Ability to identify, put and solve problems.
9. Ability to choose a communication strategy.
10. Ability to work in a team.
11. Interpersonal skills.
12. Ability to act on the basis of ethical considerations (motives).
13. Ability to act in a socially responsible and civic conscious manner.

Methods of training:

Preparatory stage - Frontal oral interview.
The main stage - practical training, role-playing game.
The final stage is brainstorming.

Interdisciplinary integration

Disciplines	Student should know	Student should be able to
Попередні:		
Normal anatomy	Know the anatomical and physiological features of the	To be able to explain the structure of systems and organs

Normal physiology	maxillofacial area: - structure of the upper and lower jaws; - innervation and vascularization of these sites; - structure of the lymphatic system of the head and neck; - structure of the muscles of the head and neck; - structure of the head and neck areas.	of maxillo-facial area (MFA)
Pathologic anatomy Pathologic physiology	To know the appearance and flow of the pathological processes in the tissues and organd of MFA	To be able to explain the appearance and flow of the pathological processes in the tissues and organd of MFA
Topographical anatomy	To know the topography of the organs of MFA	To be able to explain the topography of the organs of MFA
Hystology	To know histological structure of soft and hard tissues of MFA	To be able to explain the stages of manufacturing of cytological, histological preparations
Mycrobiology	To know the species identification of microorganisms in the oral cavity	To be able to explain the stages of manufacturing of microbiological preparations and the essence of bacteriological examination
Radiation diagnostics.	To know the methods of radiological examination used in MFA	To be able to explain the principles on which these or other methods are based (X-ray, CT, MRI, ultrasound)
General traumatology and ortopedics	To know the basic principles of treatment of the fractures of human's body bones or soft tissue wounds	To be able to create a plan of treatment of the patient with bone fracture or with a wound of soft tissues
Pharmacology	To know the groups of medicaments which can be used in medicament treatment of patients with maxillo-facial traumatic injuries, their main representatives and their properties	To be able to create a plan of medicament treatment of patients with maxillo-facial traumatic injuries

Plan and organizational structure of practical lesson of the discipline

Duration of the practical lesson is 2 academical hours – 1 hour 30 minutes

№	The main stages of the lesson, their functions and content	Time period	Methods of eductation and control	Materials of methodical support
1.	**Preparatory stage**	**20 min.**		
1.1	Organizational measures	1 min.		

1.2	Setting up of educational goals and motivation.	4 min.			
1.3	Control of the initial level of knowledge (standardized control methods).	15 min.	Individual theoretical evaluation. Solving typical tasks.Test control.Writt en interwiev.	Question for an individual oral and written evaluation. Typical situational tasks and tests.	Tables, phantoms, collapsible jaws, textbooks, manuals, reference books, atlas, methodical recommendation s, video films.
2.	**Main Stage**	**50 min.**			
	Formation of professional skills and abilities: 1. To collect anamnesis and to conduct a review of the patients with the traumatic injuries of soft and hard tissues of MFA. 2. Set up a patient survey plan. 3. Make a plan for additional research methods. 4. Complete the relevant medical documentation. 5. To work out a method of examination and palpation of the maxillofacial area during the examination. 6. To work out the method of examination of the patients with the traumatic injuries of soft and hard tissues of MFA. 7. To work out with prescription of additional methods of radiological diagnostics. 8. Learn about etiology and pathogenesis of the traumatic injuries of soft and hard tissues of MFA. 9. Learn to diagnose injuries of soft tossues of MFA. 10. Learn to diagnose injuries of the teeth. 11. Learn to diagnose traumatic injuries of bones of MFA. 12. To work out clinical flow and possible complications of the traumatic injuries of soft and hard tissues of MFA. 13. Learn to carry out differential diagnostics between different types of the traumatic injuries of soft and hard tissues of MFA. 14. Learn the stages and variants of		Formation of professional skills: Work with patients with inflammatory pathology of the MFA. Work out the results of additional methods of examination of patients with inflammatory diseases of the MFA. Solving of typical situational tasks. Oral and written evaluation on standardized list of issues.Work with phantoms, view thematic videos.	Patients with inflammatory diseases of maxillofacial area. The history of the disease.Selection of results of additional survey methods. Situational tasks.Algorithms.Phantoms, surgical instruments.Thematic videos.	

	surgical treatment of the traumatic injuries of soft tissues of MFA. 15. Learn the stages and variants of surgical treatment of the traumatic injuries of bones of MFA. 16. Learn the stages and variants of treatmen of the patients with facial burns and frosting of the face 16. Learn the medicaments and their combinations which can be used in medicament treatment of the patients with the traumatic injuries of soft and hard tissues of MFA.			
3.	**Final stage**	**20 min.**		
3.1	Control and correction of the level of professional skills and abilities		Individual skills control.Control of skills by solving non-typical situational problems with illustrative material.	Phantoms, surgical instruments.The history of the disease.Selection of results of additional methods of examination of thematic patients.Unusual situational tasks.
3.2	Control and correction of the level of professional skills and abilities.		Final evaluation of the students	
3.3	Homework. Informing students about the topic of the next lesson.			Recommended literature

Methodology of organization of educational process in practical lesson.
STRUCTURE OF PRACTICAL LESSON
Preparation stage (20 min.)

To substantiate the significance of the subject for further study of the discipline and professional activity of the doctor in order to formulate motivation and purposeful educational activity. Get acquainted with students with specific goals and lesson plans. Conduct standardized control of the initial level of student training, discussion and student answers.

• *Organizational part of the lesson: presence check, evaluation of the uniform.*

• *Informing about of the topic and the purpose of the lesson.*

Topic of the lesson: «Traumatic injuries of hard and soft tissues of the maxillo-facial area. Peculiarities of surgical treatment, general principles of treatment, prevention of early and late complications.»

The purpose of the lesson is: to study the features of traumatic damage to the maxillofacial area. Know the clinical flow and methods of treatment of traumatic injuries of soft tissues, teeth and bones of the maxillofacial area. Learn to provide emergency and first medical aid for injured patients.

• *Motivation for learning activities.*

Traumatic injuries of the hard and soft tissues of the maxillofacial area may sometimes be accompanied by dangerous conditions for the patient's health and life (bleeding, dislocation asphyxia, brain damage, etc.). Correct organization of surgical dental care promotes qualitative treatment of patients, provides conditions for preventive measures. In the practice of a surgeon-dentist, an important place is the examination of patients, which is the basis for establishing the correct diagnosis and the appointment of effective treatment.

Materials of the methodical provision of the preparatory stage of the class:
Questions to the front-line evaluation:

1.Classification of traumatic injuries of MFA.

2. Clinical features of wounds of soft tissues of MFA. Primary surgical treatment of wounds MFA. Stages of conducting.

3. Local complications in wounds of soft tissues of MFA.

4. First aid for injury of the facial bones. First premedical, first medical, qualified and specialized treatment.

5. Dislocation of the lower jaw.

6. Classification, clinic and treatment of jaw fractures.

7. Burns of the face – classification, clinic, diagnosis and treatment.

8. Frosting of the face - features of clinical manifestations, diagnostics and treatment.

9. Traumatic disease: pathogenesis, clinic, principles of treatment, complications. Complication of injuries of MFA.

The main stage: the formation of professional skills and abilities (50 min.)

Providing of professional training

Causes of injury, its prevention, statistics of damages of maxillofacial area of peaceful and military time, their classification. General characteristics and features of facial injuries. Traumatic disease: pathogenesis, clinic, treatment principles, complications. Basic organizational principles of tacing care of injured person with damage to soft tissues and bones of the face. First premedical, first medical, qualified and specialized treatment.

Causes and mechanism of non-fatal injury of the person, its features. Methods of investigation of injured persons. General immediate complications, damage to the jawbone area. (shock, asphyxia, bleeding, etc.). Classification, clinic, treatment.

Fractures of the bones of the facial skull: lower and upper jaw, zygomatic bones, nasal bones, adjoining bones. Frequency, causes, localization and character of bone fractures depending on the causes and mechanism of injury. Types and typical locations of fractures. Biomechanics of fractures, mechanism and the nature of the displacement of fragments. Clinical examination, manifestations of fractures of the facial bones: anatomic and functional disorders, bite changes etc. The fate of the teeth that are in the fracture lines. Indications for removing these teeth. Intraarticular fractures, fractures with dislocation of the condyle’s head.

Principles of treatment of fractures of the bones of the facial skull - repositioning and fixation of fragments, jaw immobilization, medication and physiotherapy, orthopedic and functional treatment, complications, their prevention.

Treatment of fractures of the lower jaw. Provision of first medical aid. Ways of repositioning of the fragments. Biomechanical bases of fixation of the fragments. Temporary (transport) immobilization of the jaw, indications, means. Treatment immobilization. Application of individual and standard arch bars and splints. Osteosynthesis of mandible: indications and contraindications, osteosynthesis with bone sutures; application of metal vires, plates and frames, miniplates with screws. Compression osteosynthesis of the mandible.

Treatment of fractures of the upper jaw, middle face area. Temporary and transport immobilization of the upper jaw. Ways of repositioning and fixing fragments of the. Osteosynthesis and compression osteosynthesis. Terms of healing, consequences.

Fractures of zygomatic bone and arc, zygomatic complex. Classification, diagnosis, clinical picture. Features of treatment. Conservative, surgical methods of repositioning and fixing of the fragments. Traumatic sinusitis. Restoration of the bottom of the orbit. Fractures of the bones and damage to the cartilage of the nose. Diagnostics, clinic, treatment. Front and back tamponade of the nasal passages.

Combined injuries of the maxillofacial area. Cranio-maxillo-facial trauma. Fractures of the bones of the skull base. Diagnosis, treatment. Features of providing medical care in combination of facial damage with concussion and brain sneezing, liquor, damage to other organs. The role of neurosurgeons, specialists of intensive care and ophthalmologists.

Thermal damage to the face. Classification. Features, causes, severity and depth of damage, possible complications. Treatment of face burns. Burns caused by Napalm. Electric trauma. Cold trauma, frostbite. Clinic, treatment. Chemical damage: acids, alkalis, fighting poisonous substances. Damage of facial tissues as a result of penetrating radiation and radioactive contamination. Clinical flow, diagnostics, treatment of these injuries.

Combined radiation damage to the face. Peculiarities of the course of the wound process depending on the stage of the radiation sickness. Syndrome of mutual encumbrance. The term and features of surgical treatment of wounds and features of treatment of fractures and defects of jaws in combined injuries. Combined chemical, bacteriological and mechanical lesions of the maxillofacial area: clinical course, treatment at the stages of medical evacuation, features of wound treatment, hemostasis, wound healing.

- *Algorithms for the formation of professional skills and abilities.*

1. To be able to conduct a survey and examination of patients with traumatic injuries MFA.
2. To be able to conduct medical care to patients with traumatic injuries of MFA.

3. To be able to conduct interpretation of data of X-rays, CT data, MRI skulls attraumatic lesions of MFA.

4. To be able to conduct temporary ligature viring of mandibular or maxillary fragments.

5. To be able to create a plan of debridement of the wound of soft tissues.

6. To be able to conduct stopping of the bleeding from tissues of MFA.

7. To be able to create a plan of treatment of the patient with fracture of the facial bones.

8. To be able to create a plan of treatment of the patient with facial burn.

9. To be able to create a plan of treatment of the patient with combined injury of MFA.

Final stage (20 min.)

Summing up of the lesson

Materials of methodological support of the final stage of the lesson:

- Brain storm.Students demonstrate an exhaustive description of the unusual clinical situation and offer to offer the most rational diagnostic methods.After recording all the proposed diagnostic methods during the discussion, students choose the most rational.
- Tasks for self-employment.To work on phantoms the technique of examination and palpation of maxillofacial area, oral cavity under conditions of phantom class.
- Evaluation.

Conduct standardized final control using individual test tasks and questions (15 min.), Work check (5 min.). Evaluate the student's current activities during the classroom, taking into account standardized final control, analyze the student's progress, announce the evaluation of each student's activity, and display it in the student attendance and student log book.An adult group at the same time makes assessments in the record of the record of success and attendance of classes by students, the teacher certifies them with his signature.

Brief informing the students about the topic of the next lesson and the methodical measures for preparing for it.

Basic knowledge level:

1. Anatomical and topographic features of maxillofacial area, structure of the facialskeleton.
2. Additional methods of examination in dentistry.
3. Stages of providing of medical care for injured patients.

List of questions to be studied by the student:

1. Characteristic features of traumatic injuries of MFA.
2. Classification of traumatic injuries of MFA.
3. Clinical features of wounds of soft tissues of MFA. Primary surgical treatment of wounds MFA. Stages of conduction.
4. Local complications of wounds of soft tissues of MFA.
5. First aid for injured. First premedical, first medical, qualified and specialized treatment.
6. Classification, clinic, treatment of fractures of the jaws, zygomatic bone and arc. Clinical examination, manifestations, types, typical fracture sites.Biomechanics of fractures, mechanism of the displacement of fragments.
7. Dislocations of the lower jaw.
8. Facial burns – classification, clinic, diagnosis, treatment.
9. Frostbite of the face – features of clinical manifestations, diagnostics, treatment.

10. Traumatic disease: pathogenesis, clinic, principles of treatment, complications.Complications of damage to the maxillofacial area (shock, asphyxia, bleeding, etc.).
11. Nutrition and care for patients with MFA trauma.

List of practical skills to be learned by the student:

1. To be able to conduct a survey and examination of patients with traumatic injuries MFA.
2. To be able to conduct medical care to patients with traumatic injuries of MFA.
3. To be able to conduct interpretation of data of X-rays, CT data, MRI skulls attraumatic lesions of MFA.
4. To be able to conduct temporary ligature viring of mandibular or maxillary fragments.
5. To be able to create a plan of debridement of the wound of soft tissues.
6. To be able to conduct stopping of the bleeding from tissues of MFA.
7. To be able to create a plan of treatment of the patient with fracture of the facial bones.
8. To be able to create a plan of treatment of the patient with facial burn.
9. To be able to create a plan of treatment of the patient with combined injury of MFA.

Situational test tasks:

1. Patient P., 22 years old, with a bilateral mental fracture of the mandiblethere has a typical dislocation of fragments. Which causes the displacement of the central fragment down?

A. Tension of the muscles of the supragioid group.
B. Tension of the pterygoid muscles.
C. Tension of masseter and temporal muscles.
D. Tension of mimic muscles.
E. The proper weight of the mandible.

2. The dentist of the village medical clinic has diagnosed the traumatic open fracture of the angle of the lower jaw on the left with the displacement of the fragments. Which of the following methods should be used for temporary (transport) immobilization of fragments.

A. Standard splint.
B. Individual arch bars.
C. Standard arch bars.
D. Weber’s splint.
E. Ligature viring.

3. The cause of traumatic disease:

A. Firearm or household injury.
B. Effect of ionizing radiation.
C. Effect of high temperature.
D. Interaction of a mechanical agent with body tissues.
E. Low temperature action.

4. In the patient from a work injury a wound of the right parotid region with uneven edges and a significant area of damage arose. What kind of wound has arisen?

A. Contused.
B. Cut.
C. Stab.
D. Chopped.
E. Smashed.

5. Contusion is:
A. Closed mechanical damage of soft tissues without a visible injury of their anatomical integrity
B. Mechanical damage of the surface layers of the skin (epidermis) or the mucous membrane.
C. Injury of the integrity of the skin or mucous membrane over their entire thickness, caused by mechanical influence.
D. Hemorrhage in the thickness of the skin or mucous membrane.
E. No correct ansver.

6. A 20 year old patient got a trauma in the area of his upper jaw. He applied to a dentist and complained about mobility of his frontal upper teeth, pain during cutting and joining of teeth. Objectively: the 11 and 21 teeth have II-III degree mobility. Tooth crowns are intact but have oral position. Complete joining of teeth is impossible because the teeth are situated beyond the dental arch. X-ray picture shows a slight broadening of periodontal fissure of the 11 tooth up to 0,5-2 mm. The roots are intact. Make a correct diagnosis:
A. Traumatic subluxation of the 11, 21 teeth
B. Traumatic periodontitis of the 11, 21 teeth
C. Traumatic complete dislocation of the 11, 21 teeth
D. Fracture of alveolar process in the area of the 11, 21 teeth
E. Traumatic extraction of the 11, 21 teeth

7. During the transport of a patient aged 32 years with a traumatic unilateral fracture of the body of the mandible to the department of maxillofacial surgery, the dental surgeon applied imaxillo-mandibular fixation by Ivy. For what time it is indicaated to hold Ivy's fixation:
A. For the entire duration of treatment.
B. Up to 5-6 days.
C. No value.
D. Up to 8 days.
E. Up to 2-3 days.

8. A patient aged 27 was admitted to a clinic complaining of the presence of blisters on the face. From the medical history we know that 25 hours ago he participated in firefighting and injured his face. Among his childhood diseases he indicates childhood infections, colds. On examination: presence of thin-walled blisters containing yellowish substance on the nose and lips. What is a provisional diagnosis?
A. Thermal bum of face of the 3-A degree
B. Thermal bum of face of the 2-3 degree
C. Thermal burn of face of the 1 degree
D. Thermal burn of face of the 3-4 degree
E. Thermal burn of face of the 1 -2 degree

Literature:

Basic:

9. Bases of Dentistry: Textbook, / ed. by V.O. Malanchuk. – Vinnytsia: Nova Knyha Publishers, 2012. – 616p.
10. Oral and Maxillofacial Surgery: Textbook, Part 1, 2 / V.O. Malanchuk. – Vinnytsia: Nova Knyha Publishers, 2011. – 453p.
11. Principles of Dental Local Anaesthesia and Teeth Removal / Ya. E. Vares, R. Z. Ogonovsky, Ch. R. Pohranychna – LNMU, 2007. – 63p.
12. Atlas of Human Anatomy / F. Netter – 2nd ed. – New Jersey: ICON Learning Systems. – 592 p.

Additional:

3. Contemporary Oral and Maxillofacial Surgery / L. J. Peterson, E. Ellis, J. R. Hupp, M.R. Tucker – 3rd ed. – St. Louis: Mosby – Year Book, Inc. – 1998. – 1477 p.

Ministry of Health of Ukraine

Danylo Halytsky Lviv National Medical University

"Approwed"
on the meeting of the Department
of Surgical Dentistry
and Maxillofacial Surgery

Head of the Department:
professor Ya. E. Vares

METHODICAL GIUDE FOR PRACTICAL LESSONS

Educational discipline	FUNDAMENTALS OF DENTISTRY
Topic of the lesson	**Topic 5**. Congenital malformations of the face. Clinical manifestations, diagnosis, principles of treatment and care.
Course	3rd
Faculty	Medical

Lviv – 2019

Actuality of the topic. Congenital malformations of the maxillofacial area occupy 3rd place among other birth defects. 70% of them are congenital malformations of the upper lip and the palate, and 30% - various forms of craniosynostoses and cranio-facial dystostosis. At congenital and acquired defects of the maxillofacial area, severe anatomical and functional disturbances are occured. Such changes in the body predetermine the need for giving qualified medical care, application of the most advanced surgical methods of treatment, early medical and social rehabilitation, which makes it possible to return to a person a joy of full life.

The purpose of the lesson is: to get acquainted with the most common congenital defects and acquired deformations of the face; their classification, clinical picture and basic stages and principles of treatment. Features of patient care with the specified pathology.

Learning objectives:

- *Professional competence:*

1. Collection of medical information on the patient's condition.
2. Evaluation of the results of laboratory and instrumental research.
3. Establishment of a clinical diagnosis of dental disease.
4. Planning and conducting preventive measures for dental diseases.
5. Execution of medical and dental manipulations.
6. Organization and conducting of dental medical examination of persons subject to dispensary supervision.
7. Assessment of the environmental impact on the health of the population (individual, family, population).
8. Maintaining medical records.
9. Processing of state, social and medical information.

- *General competence:*

1. The ability to abstract thinking, analysis and synthesis; the ability to learn and be trained today.
2. Knowledge and understanding of the subject area and understanding of the profession.
3. Ability to apply knowledge in practical situations.
4. Ability to communicate in the state language both verbally and in writing; Ability to communicate in a second language.
5. Skills in the use of information and communication technologies.
6. Ability to search, process and analyze information from various sources.
7. Ability to adapt and act in a new situation; ability to work autonomously.
8. Ability to identify, put and solve problems.
9. Ability to choose a communication strategy.
10. Ability to work in a team.
11. Interpersonal skills.
12. Ability to act on the basis of ethical considerations (motives).
13. Ability to act in a socially responsible and civic conscious manner.

Methods of training:

Preparatory stage - Frontal oral interview.
The main stage - practical training, role-playing game.
The final stage is brainstorming.

Interdisciplinary integration

Disciplines	Student should know	Student should be able to
Попередні:		
Normal anatomy	Know the anatomical and	To be able to explain the

Normal physiology	physiological features of the maxillofacial area: - structure of the upper and lower jaws; - innervation and vascularization of these sites; - structure of the lymphatic system of the head and neck; - structure of the muscles of the head and neck; - structure of the head and neck areas.	structure of systems and organs of maxillo-facial area (MFA)
Pathologic anatomy Pathologic physiology	To know the appearance and flow of the pathological processes in the tissues and organd of MFA	To be able to explain the appearance and flow of the pathological processes in the tissues and organd of MFA
Topographical anatomy	To know the topography of the organs of MFA	To be able to explain the topography of the organs of MFA
Hystology Embryology	To know histological structure of soft and hard tissues of MFA. To know processes of conception, growth and development of tissues of the maxillofacial area	To be able to explain the stages and possible causes of occcurence of the congenital disorders of the face
Anestesilolgy and intensive care	To know the specifity of provivding of anestesia or intensive care for children and adults with congenital defects of the face	To be able to create a plan of anestesia and (or) intensive care measures for the patient with congenital defect of the face
Radiation diagnostics.	To know the methods of radiological examination used in MFA	To be able to explain the principles on which these or other methods are based (X-ray, CT, MRI, ultrasound)
Medical genetics	To know the basic principles of providing of genetical analysis to find out possible congenital disorders	To be able to create a plan of genetical analysis
Pharmacology	To know the groups of medicaments which can be used in medicament treatment of maxillo-facial patients, their main representatives and their properties	To be able to create a plan of medicament treatment of diseases of periodontum, oral mucosa and tumors of MFA

Plan and organizational structure of practical lesson of the discipline

Duration of the practical lesson is 2 academical hours – 1 hour 30 minutes

№	The main stages of the lesson, their functions and content	Time period	Methods of eductation and control	Materials of methodical support	
1.	**Preparatory stage**	**20 min.**			
1.1	Organizational measures	1 min.			
1.2	Setting up of educational goals and motivation.	4 min.			
1.3	Control of the initial level of knowledge (standardized control methods).	15 min.	Individual theoretical evaluation. Solving typical tasks.Test control.Written interwiev.	Question for an individual oral and written evaluation. Typical situational tasks and tests.	Tables, phantoms, collapsible jaws, textbooks, manuals, reference books, atlas, methodical recommendations, video films.
2.	**Main Stage**	**50 min.**			
	Formation of professional skills and abilities: 1. To collect anamnesis and to conduct a review of the patient with the congenital disorders of the face. 2. Set up a patient survey plan. 3. Make a plan for additional research methods. 4. Complete the relevant medical documentation. 5. To work out a method of examination and palpation of the maxillofacial area during the examination. 6. To work out the method of examination of patient with the congenital disorders of the face. 7. To work out with prescription of additional methods of radiological diagnostics. 8. Learn about etiology and pathogenesis of the congenital disorders of the face. 9. Learn to diagnose the cleft of the upper lip. 10. Learn to diagnose the cleft of the hard palate. 11. Learn to diagnose anomalies of the jaws and the bite.		Formation of professional skills: Work with patients with inflammatory pathology of the MFA. Work out the results of additional methods of examination of patients with inflammatory diseases of the MFA. Solving of typical situational tasks. Oral and written evaluation on standardized list of issues.Work with phantoms,	Patients with inflammatory diseases of maxillofacial area. The history of the disease.Selection of results of additional survey methods. Situational tasks.Algorithms.Phantoms, surgical instruments.Thematic videos.	

	12. To work out clinical flow and possible complications of the congenital disorders of the face. 13. Learn to carry out differential diagnostics between the congenital disorders of the face. 14. Learn the stages and variants of surgical treatment of the congenital disorders of the face. 15. Learn the methods of special treatment of the congenital disorders of the face. 16. Learn the medicaments and their combinations which can be used in medicament treatment of the congenital disorders of the face.		view thematic videos.	
3.	**Final stage**	**20 min.**		
3.1	Control and correction of the level of professional skills and abilities		Individual skills control.Control of skills by solving non-typical situational problems with illustrative material.	Phantoms, surgical instruments.The history of the disease.Selection of results of additional methods of examination of thematic patients.Unusual situational tasks.
3.2	Control and correction of the level of professional skills and abilities.		Final evaluation of the students	
3.3	Homework. Informing students about the topic of the next lesson.			Recommended literature

Methodology of organization of educational process in practical lesson.
STRUCTURE OF PRACTICAL LESSON
Preparation stage (20 min.)

To substantiate the significance of the subject for further study of the discipline and professional activity of the doctor in order to formulate motivation and purposeful educational activity. Get acquainted with students with specific goals and lesson plans. Conduct standardized control of the initial level of student training, discussion and student answers.

• *Organizational part of the lesson: presence check, evaluation of the uniform.*

• *Informing about of the topic and the purpose of the lesson.*

Topic of the lesson: «Congenital malformations of the face. Clinical manifestations, diagnosis, principles of treatment and care.»

The purpose of the lesson is: to get acquainted with the most common congenital defects and acquired deformations of the face; their classification, clinical picture and basic stages and principles of treatment. Features of patient care with the specified pathology.

• *Motivation for learning activities.*

Congenital deformations of the face – are severe diseases which need complex and special treatment. Correct organization of surgical dental care promotes qualitative treatment of patients, provides conditions for preventive measures. In the practice of a surgeon-dentist, an important place is the examination of patients, which is the basis for establishing the correct diagnosis and the appointment of effective treatment.

Materials of the methodical provision of the preparatory stage of the class:
Questions to the front-line evaluation:

1. Classification of congenital defects of the face.
2. Clinical symptoms of congenital defects of the upper lip.
3. Classification of congenital defects of the hard palate.
4. What are the symptoms of latent defects of the upper lip?
5. Factors of the development of congenital defects of the face.
6. Terms of conducting of heyloplasty and uranostophiloplasty.
7. What kind of anesthesia is used in the plastic operations of congenital defects of the face?
8. The role of adjacent specialists in postoperative rehabilitation of patients.
9. What complications can arise in the postoperative period after plasty of the defects of the upper lip and hard palate?
10. What are the features of care and nutrition of the newborns with congenital defects of the face?

The main stage: the formation of professional skills and abilities (50 min.)

Providing of professional training

Congenital and acquired defects and deformations of the face. The role of a person in a person's life. Classification of defects and deformations of the face. Congenital defects and abnormalities in the development of various areas of the face. Analysis and evaluation of the volume of the defect of the face, anatomical, functional and aesthetic changes. Influence of deformations and defects of the maxillofacial area on the general and psychoemotional status of the patient.

Anomalies of development and deformation of jaw bones. WHO classification of deformations and anomalies of the jaws: underdevelopment (microgravity) or excessive development (macrognatija) of the upper and lower jaws or their individual sites (prothratomy and retrograde), open bite. Clinical manifestations, functional and aesthetic disorders. Diagnosis using telerentgenography of the skull. Indications for surgical treatment. Basic methods of surgery for correction of size and shape of the mandible. Intervention within the body, angle and branches of the mandible. Plans of jaw osteotomy. Removing the open bite. Operative correction of the shape, size and position of the upper jaw. Features of operational equipment, immobilization and postoperative management.

Distractic-compression method in the treatment of anomalies of development and jaw deformities. History of development, the role of domestic scientists. Biological justification of distractive hestiogenesis. Distraction regenerate, zone of "growth" of bone tissue. Indications and

equipment for distraction-compression of bone tissue, muscles, vessels, nerves, and skin. Types of apparatus, the use of external and intrauterine devices, the rate of distraction-compression of the upper and lower jaws.

The task of restorative surgery of the maxillofacial area, its connection with other parts of medicine. The importance of planning plastic operations and auxiliary therapeutic measures in multistage interventions. Principles and techniques of local plastic surgery, examination of the patient, requirements for local and general status. Typical methods of plastic with local tisuues. Elimination of defects of the lips and vestibulum area. Replacing the defects of the lips with cheek blades, nasolabial scars from the other lips. Removal of microstomery, plastic of the corners of the mouth. Operative intervention in connection with double lip, reduction of the frenulum of the lip or the tongue.

- *Algorithms for the formation of professional skills and abilities.*

1. To be able to conduct an objective examination of the dental patient: the general condition ,examination of maxillofacial area and oral cavity.
2. To be able to appoint (if necessary) additional survey methods.
3. To bee able to determine the need for counseling help by the pediatrician or other narrow sspecialists.
4. To be able to evaluate bite (orthognathic or pathological).

Final stage (20 min.)

Summing up of the lesson

Materials of methodological support of the final stage of the lesson:

- Brain storm.Students demonstrate an exhaustive description of the unusual clinical situation and offer to offer the most rational diagnostic methods.After recording all the proposed diagnostic methods during the discussion, students choose the most rational.
- Tasks for self-employment.To work on phantoms the technique of examination and palpation of maxillofacial area, oral cavity under conditions of phantom class.
- Evaluation.

Conduct standardized final control using individual test tasks and questions (15 min.), Work check (5 min.). Evaluate the student's current activities during the classroom, taking into account standardized final control, analyze the student's progress, announce the evaluation of each student's activity, and display it in the student attendance and student log book.An adult group at the same time makes assessments in the record of the record of success and attendance of classes by students, the teacher certifies them with his signature.

Brief informing the students about the topic of the next lesson and the methodical measures for preparing for it.

Basic knowledge level:

1. Subjective examination of patients.
2. Objective (general and local) survey.
3. Basic methods of examination (review, palpation, percussion, auscultation).
4. Topographic anatomy of the maxillofacial area.
5. Embryogenesis of the tissues of the maxillofacial area.

List of questions to be studied by the student:

1. Congenital malformations of the upper lip. Etiology, pathogenesis, classification, clinic,t erms and basic principles of treatment. Features of child care and nutrition with this pathology in the pre- and postoperative period.
2. Congenital malformations of hard and soft palate. Etiology, pathogenesis,classification, clinic, terms and basic principles of treatment. Features of child care and nutrition with this pathology in the pre- and postoperative period.
3. Macro- and micrognatia. Etiology, pathogenesis, classification, clinic, basic principles of treatment.
4. Macro- and microgenia. Etiology, pathogenesis, classification, clinic, basic principles of treatment.
5. Anomalies of bite in children. Classification. Orthodontic equipment, classification of devices, terms of treatment. Prevention of occurence.

List of practical skills to be learned by the student:

1. To be able to conduct an objective examination of the dental patient: the general condition ,examination of maxillofacial area and oral cavity.
2. To be able to appoint (if necessary) additional survey methods.
3. To bee able to determine the need for counseling help by the pediatrician or other narrow sspecialists.
4. To be able to evaluate bite (orthognathic or pathological).

Situational test tasks:

1. Treatment of patients with congenital malformations of the upper lip and palate should be:

A. Surgical.
B. Orthodontic.
C. Surgical and Orthodontic.
D. Surgical, Orthodontic, Logopedic.

2. What is the name of the plastic surgery to eliminate the defect of the soft palate?

A. Uranoplasty.
B. Staphylocplasty.
C. Staphylorraphy.
D. Uranosafiloplasty.

3. Isolated clefts of the upper lip:

A. Accompanied by the presence of bone defect in the tissues of the upper jaw.
B. Not connected to the nasal cavity.
C. Connected with the nasal cavity.
D. Not accompanied by the presence of bone defect in the tissues of the upper jaw.
E. There are only one-sided.

4. What is the name of operation to eliminate the defect of hard palate?

A. Uranoplasty.
B. Staphyloplasty.
C. Staphylorraphy.
D. Uranosafiloplasty.

5. Surgical closure of congenital cleft of the palate is carried out at the age of:

A. Up to 2 months.

B. 5-6 years.
C. After 7 years.
D. Up to 2 years.
E. 6-12 months

Literature:

Basic:

13. Bases of Dentistry: Textbook, / ed. by V.O. Malanchuk. – Vinnytsia: Nova Knyha Publishers, 2012. – 616p.
14. Oral and Maxillofacial Surgery: Textbook, Part 1, 2 / V.O. Malanchuk. – Vinnytsia: Nova Knyha Publishers, 2011. – 453p.
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