## Ministry of Health of Ukraine Danylo Halytsky Lviv National Medical University Department of Surgical Dentistry and Maxillofacial Surgery

## **METHODICAL GIDE**

## from Medical Practice of Dental Surgery

Second level of higher education (Master's Degree)
Sphere of Knowledge 22 «Healthcare»
Specialty 221 «Dentistry»
Faculty, Year: Dentistry, IV

Recommended	by the l	by the profile	methodical	commission	for	dentistry
(Protocol No	_ of	201_)				

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#### INTRODUCTION

#### **Curriculum for Medical Practice of Dental Surgery**

(in accordance with the Standard of Higher Education for the second level of higher education (Master's Degree)

Sphere of Knowledge 22 "Healthcare"

Specialty 221 "Dentistry"

Master's Degree Program in Dentistry

**Description of the discipline (abstract).** The discipline involves the study of surgical dentistry in its main sections: "Propedeutics of surgical dentistry and MFD", "Inflammatory diseases of MFA", "Traumatology of MFA", with emphasis on the study of etiology, pathogenesis, clinics, diagnostics, emergency treatment and prophylaxis of the main and most widespread diseases of MFA.

The main focus of the program is on the formation and development of students' skills in collecting anamnesis, conducting the examination and differential diagnosis of diseases of the MFA with a variety of clinical course and their complications. In the course of this program, modern approaches to the diagnosis are taught in practice, the principles of treatment and prophylaxis are studied on the basis of evidence-based medicine. Furthermore, students are introduced to the range of urgent states in practical surgical dentistry. Students are also involved into the diagnostic and treatment process of in- and out- patients under the guidance of assistants and associate professors of the department. Students also look into a wide scope of therapeutic and prophylactic measures, which are most often applied in dental surgical practice.

The study of surgical dentistry in theory and practice, contributes to the formation of a holistic view of the structure and functioning of organs of MFA, deepening of theoretical and practical training, acquisition of professional practical skills for further independent medical activity.

	Number of credits, hours, including	- <b>T</b> 7	
Structure of the discipline	Total	Year of study/ semester	Test type
Name of the discipline: Medical Practice of Dental Surgery Number of content modules: 1	3 credits / 90 h	IV κypc (VII semester)	credit

The subject of the study of the discipline is the pathological processes of MFA, which relate to the sphere of competence of surgical dentistry and maxillofacial surgery, their clinical course, the main diagnostic and therapeutic manipulations used in the practice of a surgical dentist.

**Interdisciplinary connections:** therapeutic dentistry, paediatric dentistry, orthopedic stomatology, normal anatomy, histology, normal physiology, pathologic physiology, topographical anatomy and operative surgery, microbiology, biochemistry, pharmacology, internal diseases, endocrinology, skin and venereal, nervous diseases, otorhinolaryngology, ophthalmology, medicine of extreme conditions.

#### 1. Purpose and tasks of the discipline

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

conditions and qualified surgical dental and reconstructive-restoration assistance in MFD.

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

#### Information volume of the academic discipline.

**Explain and interpret** the principles of deontology and medical ethics in Dental Surgery and MFD, the method of examination of MFD patients, involvement of adjacent specialists in the examination.

**Analyze** the indications and contraindications, especially the application of the basic methods of general and local anesthesia, sedation in the practice of a surgical dentist.

**Make a plan and conduct** a patient's examination with MFA pathology, refer to an additional research (if needed) and be able to interpret their results, plan for comprehensive examination and treatment of AIDS patients.

**Collect** anamnesis and examination results of the patient with the specified MFA pathology, fill in the relevant medical documentation; carry out cardiopulmonary resuscitation.

**Collect** the material for additional research (microbiological, cytological, histological); preventive measures and emergency care.

**Assign** an individual scheme of premedication, depending on the psycho-somatic state of the patient, the nature and extent of surgical intervention, medical therapy in the postoperative period, to provide appropriate recommendations.

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

#### **Practical lessons schedule**

No॒	Topic	Hours
1.	The structure and organization of surgical dental aid to population of Ukraine. Introducing the work of dental-surgeon. Identifying risk factors for major dental diseases depending on anatomical and physiological characteristics of the maxillofacial area.	6
2.	Methods of patient examination. Algorithm of dental examination in patients with surgical dental pathology. Subjective and objective methods of diagnosis.	6
3.	Dental instruments recommended to perform surgical procedures in the oral cavity. Sanitary-epidemiological requirements of dental- surgeon.	6
4.	Methods of local anesthesia in an outpatient surgical procedures on the upper and lower jaws.	6
5.	Methods of typical and atypical tooth removal on the upper and lower jaws	6
6.	Indications and contraindications for surgery in an outpatient surgical dental practice. Methods of surgical interventions: periostotomy at subperiostal abscess, alveolotomy, resection of the root apex, hemysection, crown-radicular separation, extraction.	6
7.	Methods of examination of patients with traumatic injuries of maxillofacial area.	6
8.	Methods of surgical interventions in patients with traumatic injuries of maxillofacial area	6

9.	Complications of teeth extraction (bleeding, alveolitis, alveoloneuritis). Their	6
	treatment and prevention and traumatic injuries of the maxillo-facial area (scars,	
	traumatic ostemiyelitis, traumatic maxillary sinusitis, etc.). The algorithm of dental	
	surgeon actions at the outpatient reception.	
10.	Postoperative treatment of patients with traumatic injuries and inflamatory diseases	4
	of maxillofacial area.	
11.	Final control	2
	Total:	60

## 6. Self-study work schedule

№	Topic	Hours	Type of Control
1.	The structure and organization of surgical dental aid to population of Ukraine. Introducing the work of dental-surgeon. Identifying risk factors for major dental diseases depending on anatomical and physiological characteristics of the maxillofacial area.	3	Current control at practical classes
2.	Methods of patient examination. Algorithm of dental examination in patients with surgical dental pathology. Subjective and objective methods of diagnosis.	3	Current control at practical classes
3.	Dental instruments recommended to perform surgical procedures in the oral cavity. Sanitary-epidemiological requirements of dental-surgeon.		Current control at practical classes
4.	Methods of local anesthesia in an outpatient surgical procedures on the upper and lower jaws.	3	Current control at practical classes
5.	Methods of typical and atypical tooth removal on the upper and lower jaws	3	Current control at practical classes
6.	Indications and contraindications for surgery in an outpatient surgical dental practice. Methods of surgical interventions: periostotomy at subperiostal abscess, alveolotomy, resection of the root apex, hemysection, crown-radicular separation, extraction.		Current control at practical classes
7.	Methods of examination of patients with traumatic injuries of maxillofacial area.	3	Current control at practical classes
8.	Methods of surgical interventions in patients with traumatic injuries of maxillofacial area	3	Current control at practical classes
9.	Complications of teeth extraction (bleeding, alveolitis, alveoloneuritis). Their treatment and prevention and traumatic injuries of the maxillo-facial area (scars, traumatic ostemiyelitis, traumatic maxillary sinusitis, etc.). The algorithm of dental surgeon actions at the outpatient reception.	3	Current control at practical classes
10.	Postoperative treatment of patients with traumatic injuries and inflamatory diseases of maxillofacial area.	3	Current control at practical classes
Total hours: 30			

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

Head of the Department: professor Ya. E. Vares

Educational discipline	Manufacturing practice from surgical dentistry
Topic	<b>Topic №1.</b> The structure and organization of surgical dental aid to population of Ukraine. Introducing the work of dental surgeon. Identifying risk factors for major dental diseases depending on anatomical and physiological characteristics of the maxillofacial area.
Course	4th
Faculty	Dental

**Objective:** providing dental care - one of the most common types of medical services. Proper organization of surgical dental aid promotes quality treatment of patients, providing conditions for prevention measures.

**Purpose:** To acquaint students with organization and structure of surgical unit (cabinet), dental clinic and department of maxillofacial surgery in the hospital, their equipment, documentation.

### **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 practical skill evaluation.

**Interdisciplinary integration** 

Disciplines	Student should know	Student should be able to	
Previous:			
Normal anatomy	Know the anatomical and physiological features of the maxillofacial area: - structure of the upper and lower jaws;	To be able to explain the structure of systems and organs of maxillo-facial area (MFA)	
Normal physiology	- innervation and vascularization of these sites;		

	<ul> <li>structure of the lymphatic system of the head and neck;</li> <li>structure of the muscles of the head and neck;</li> <li>structure of the head and neck areas.</li> </ul>	
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)
Therapeutic dentistry  Pediatric dentistry	To know diseases of hard tissues of tooth and pulp. To know additional methods of examination, which are used in dental practice.	Be able to carry out an intra- oral examination of individual teeth.Be able to diagnose caries, pulpitis of temporary and permanent teeth.

#### Plan and organizational structure of practical lesson of the discipline

Duration of practical lesson is 6 academic hours – 4 hours. 30 minutes including 10 minutes for a break.

#### Methodology of organization of educational process in practical lesson.

# STRUCTURE OF PRACTICAL LESSON Preparation stage (30 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.

#### Materials of methodical support of the preparatory stage of the lesson:

- 1. Surgical dental services.
- 2. Types of surgical dental services: outpatient and inpatient (urgent and elective).
- 3. Peculiarities of assistance in emergency situations.

- 4. Arrangement of work and equipment of surgical department (office) in dental clinic, maxillofacial department of the hospital, operating and dressing rooms.
- 5. Special equipment, devices and instruments to examine patients and perform dental procedures. Examination of surgical dental patient.
- 6. Peculiarities of examination of patients with diseases of dento-facial system, injuries, inflammation, benign, malignant tumours and mass, congenital and acquired defects, deformities of maxillo-facial area.
- 7. The value of personal contact of doctor with patient.
- 8. Emotional factors associated with facial diseases, injuries and defects and applied treatment.
- 9. Deontology and medical ethics in dental and maxillo-facial surgery.

#### Algorithms for the formation of professional skills.

- 1. Demonstrate the ability to apply the principles of medical ethics in surgical dental practice.
- 2. Demonstrate possession of advanced techniques and principles of health education work.
- 3. Identify the basic units of dental surgical care to the population of Ukraine.
- 4. Draw up necessary medical documentation.
- 5. Work out preoperative technique of hands preparation with modern techniques.
- 6. To master the technique of antiseptic treatment of the surgical field.

#### Final stage (30 min.)

Summing up of the lesson Practical skills demonstration and evaluation

#### Literature:

- 1. Bauml, Philips R.W., Lund M.R. Texbook of Operative Dentistry = Підручник з хірургічної стоматології.- 3-rd ed.- Philadelphia: Saunders, 1995.- 661р.
- 2. Kharkov L. V. Pediatric oral and maxillofacial surgery: a textbook for students of higher medical educational institutions of the III-IV levels of accreditation / L. V. Kharkov, L. M. Yakovenko, N. V. Kiselyova; ed. by L. V. Kharkov. Kyiv: AUS Medicine Publishing, 2015. 103 c.
- 3. Oral and maxillofacial surgery= Хірургічна стоматологія та щелепно-лицева хірургія. Part 1: textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / V. O. Malanchuk [et al.]; ed. V. Malanchuk. Вінниця: Нова книга, 2011
- 4. Oral and maxillofacial surgery= Хірургічна стоматологія та щелепно-лицева хірургія. Part 2: textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / V. O. Malanchuk [et al.]; ed. V. Malanchuk. Вінниця: Нова книга, 2011.
- 5. Pohranychna, Ch. R. Infections of the maxillofacial area: guide of lectures on oral and maxillofacial surgery for the english-medium students of the 3rd year education at dentistry faculty (spring semester): methodological guide / Ch. R. Pohranychna, R. Z. Ogonovsky. Lviv, 2011.
- 6. Pohranychna, Ch. R. Maxillofacial oncology: guide of lectures on oral and maxillofacial surgery for the english-medium students of the 5th year education at dentistry faculty (autumn semester) [Tekct]: methodological guide / Ch. R. Pohranychna, R. Z. Ogonovsky. Lviv, 2011.
- 7. Vares Ya.E., Ogonovsky R.Z., Pohranychna Ch.R. Principles of Local Dental Anaesthesia and Teeth Removal: An Illustrated Methodological Guide. Lviv, 2007.
- 8. Timofieiev O.O. Anesthesia in Oral and Maxillofacial Surgery / O.O. Timofieiev, I.I. Fesenko. Kyiv: OMF Publishing, 2016, 128 p.

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

Head of the Department: professor Ya. E. Vares

Educational discipline	Manufacturing practice from surgical dentistry		
Topic	<b>Topic №2.</b> Methods of patient examination. Algorithm of dental examination in patients with surgical dental pathology. Subjective and objective methods of diagnosis.		
Course	4th		
Faculty	Dental		

#### Lviv - 2019

**Objective:** examination of patients occupies an important place in every day practice of a dental-surgeon, which is the basis for establishing the correct diagnosis and effective treatment appointment.

**Purpose:** teach students methods of patients examination, introduce additional methods of examination used in surgical dentistry.

#### 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 practical skill evaluation.

**Interdisciplinary integration** 

Disciplines	Student should know	Student should be able to
Previous:		
Normal anatomy	Know the anatomical and physiological features of the maxillofacial area: - structure of the upper and lower jaws;	To be able to explain the structure of systems and organs of maxillo-facial area (MFA)
Normal physiology	- innervation and vascularization of these sites;	

	,	
	<ul> <li>structure of the lymphatic system of the head and neck;</li> <li>structure of the muscles of the head and neck;</li> <li>structure of the head and neck areas.</li> </ul>	
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)
Therapeutic dentistry  Pediatric dentistry	To know diseases of hard tissues of tooth and pulp. To know additional methods of examination, which are used in dental practice.	Be able to carry out an intra- oral examination of individual teeth.Be able to diagnose caries, pulpitis of temporary and permanent teeth.

#### Plan and organizational structure of practical lesson of the discipline

Duration of practical lesson is 6 academic hours – 4 hours. 30 minutes including 10 minutes for a break.

#### Methodology of organization of educational process in practical lesson.

# STRUCTURE OF PRACTICAL LESSON Preparation stage (30 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.

#### Materials of methodical support of the preparatory stage of the lesson:

- 1. Collecting subjective data from the patient: Present complaints.
- 2. Medical history: the disease and its dynamics, previous treatment.
- 3. Past history: hereditary diseases, Anamnesis Morbi and comorbidity, bad habits drugs, alcohol, smoking; heredity, allergological anamnesis.

- 4. Physical examination: general condition, consciousness. Examination of organs and systems at the hospital.
- 5. Examination of the maxillo-facial area. Inspection of face. Palpation.
- 6. Examination of organs and soft tissues of the mouth, dental examination.
- 7. General clinical, laboratory and special techniques.
- 8. Examination of functions of motor and sensory nerves.
- 9. Examination of salivary glands and their ducts, temporomandibular joint, lymph system of face and neck.
- 10. Establishing the nature and size of defects and deformities of facial and mouth tissues, condition of adjacent tissues.
- 11. Assessment of the extent of anatomical, functional and aesthetic defects.
- 12. Objective examination methods with modern diagnostic equipment.
- 13. Rentgenologic: X-ray, tomography, panoramic radiography and pantomography.
- 14. Application of artificial contrast.
- 15. Computed tomography and magnetic resonance imaging, radioisotope and ultrasound diagnostics, distant and contact thermography.
- 16. Morphological methods: cytology of prints, scrapes, puncture material; histological examination of biopsy material.
- 17. Methods of functional diagnostics: rheo-, polaro- and electromyography, electroodontodiagnosis.
- 18. The use of computers in diagnosis: X-ray interpretation, operation planning, health outcomes.
- 19. Range of examination of patients with disorders of the maxillo-facial area during treatment in outpatient and inpatient departments, participation of allied professionals in examination.

#### Algorithms for the formation of professional skills.

- 1. Demonstrate the ability to collect the patient's history to fill outpatients dental card.
- 2. To conduct palpation of inflammatory diseases, traumatic injuries of the soft and bone tissues of the maxillofacial area, demonstrate the ability to collect the patient's history.
- 3. Be able to fill outpatients dental card.
- 4. To take a swab and print for cytology at a patient.
- 5. Work out extaoral method of inspection and palpation of the maxillofacial area.
- 6. Work out method inspection and palpation of vestibule of the mouth.
- 7. Work out method of inspection and palpation of oral cavity.
- 8. Work out method of inspection, percussion, revealing the degree of teeth mobility, measuring of gingival pockets.
- 9. Work out the method of determining the extent of limited mouth opening.
- 10. Study to write referrals to additional methods of examination.

#### Final stage (30 min.)

Summing up of the lesson

Practical skills demonstration and evaluation

#### Literature:

- 1. Bauml, Philips R.W., Lund M.R. Texbook of Operative Dentistry = Підручник з хірургічної стоматології.- 3-rd ed.- Philadelphia: Saunders, 1995.- 661р.
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- 3. Oral and maxillofacial surgery= Xipypriчна стоматологія та щелепно-лицева хipypriя. Part 1: textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / V. O. Malanchuk [et al.]; ed. V. Malanchuk. Вінниця: Нова книга, 2011

- 4. Oral and maxillofacial surgery= Хірургічна стоматологія та щелепно-лицева хірургія. Part 2: textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / V. O. Malanchuk [et al.]; ed. V. Malanchuk. Вінниця: Нова книга, 2011.
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"Approwed" on the meeting of the Department of Surgical Dentistry and Maxillofacial Surgery

Head of the Department: professor Ya. E. Vares

Educational discipline	Manufacturing practice from surgical dentistry	
Topic	<b>Topic №3.</b> Dental instruments recommended to perform surgical procedures in the oral cavity. Sanitary-epidemiological requirements of dental- surgeon.	
Course	4th	
Faculty	Dental	

**Objective:** choice of surgical instruments before and during the surgery in surgical dentistry clinic largely determines the quality and time of performed manipulations. A good choice of various instruments, forceps, elevators, needle holders, clamps and others can reduce traumatism of intervention and create conditions for the favorable course of postoperative period.

**Purpose:** teach students to choose the necessary instruments in accordance with anatomic and topographic features, volume of planned or ongoing intervention and clinical situation.

## **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 practical skill evaluation.

**Interdisciplinary integration** 

Disciplines	Student should know	Student should be able to
Previous:		
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Normal physiology	- 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
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Therapeutic dentistry  Pediatric dentistry	To know diseases of hard tissues of tooth and pulp. To know additional methods of examination, which are used in dental practice.	Be able to carry out an intra- oral examination of individual teeth.Be able to diagnose caries, pulpitis of temporary and permanent teeth.

#### Plan and organizational structure of practical lesson of the discipline

Duration of practical lesson is 6 academic hours – 4 hours. 30 minutes including 10 minutes for a break.

Methodology of organization of educational process in practical lesson.

# STRUCTURE OF PRACTICAL LESSON Preparation stage (30 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.

#### Materials of methodical support of the preparatory stage of the lesson:

- 1. Asepsis and antisepsis during surgery on the face and in the mouth.
- 2. Preparation for oral surgery.
- 3. Processing of surgical field.

- 4. Sterilization of instruments, dressing and suture materials (silk, catgut, synthetic thread).
- 5. Preparing of surgeon's hands.
- 6. Peculiarities of services for outpatients and inpatients with inflammatory diseases, injuries and after planned surgical interventions in the maxillo-facial area, their nutrition.
- 7. Medical documentation in the surgical department (office) of dental clinic and maxillo-facial department of a hospital.
- 8. Performance measure of dental surgeon.
- 9. Indications for hospitalization of patients with disorders of the maxillo-facial area, peculiarities of their examination and rehabilitation.
- 10. Hospital-acquired infection in dental clinic and maxillo-facial hospital, ways of transmission.
- 11. Protection of patients and medical staff from hospital infections, viral hepatitis, HIV, and others.

#### Algorithms for the formation of professional skills.

- 1. Disinfection of medical devices chemical method
- 2. Pre-sterilization cleaning
- 3. Sterilization Steam method
- 4. Sterilization air method
- 5. Sterilization chemical method
- 6. Quality control of the pre-sterilization cleaning azopiram test
- 7. Quality control of the pre-sterilization cleaning phenolphathalein indicator test
- 8. Processing of individual dental kits
- 9. Disinfection of dental handpieces

#### Final stage (30 min.)

Summing up of the lesson

Practical skills demonstration and evaluation

#### Literature:

- 1. Bauml, Philips R.W., Lund M.R. Texbook of Operative Dentistry = Підручник з хірургічної стоматології.- 3-rd ed.- Philadelphia: Saunders, 1995.- 661р.
- 2. Kharkov L. V. Pediatric oral and maxillofacial surgery: a textbook for students of higher medical educational institutions of the III-IV levels of accreditation / L. V. Kharkov, L. M. Yakovenko, N. V. Kiselyova; ed. by L. V. Kharkov. Kyiv: AUS Medicine Publishing, 2015. 103 c.
- 3. Oral and maxillofacial surgery= Хірургічна стоматологія та щелепно-лицева хірургія. Part 1: textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / V. O. Malanchuk [et al.]; ed. V. Malanchuk. Вінниця: Нова книга, 2011
- 4. Oral and maxillofacial surgery= Хірургічна стоматологія та щелепно-лицева хірургія. Part 2: textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / V. O. Malanchuk [et al.]; ed. V. Malanchuk. Вінниця: Нова книга, 2011.
- 5. Pohranychna, Ch. R. Infections of the maxillofacial area: guide of lectures on oral and maxillofacial surgery for the english-medium students of the 3rd year education at dentistry faculty (spring semester): methodological guide / Ch. R. Pohranychna, R. Z. Ogonovsky. Lviv, 2011.
- 6. Pohranychna, Ch. R. Maxillofacial oncology: guide of lectures on oral and maxillofacial surgery for the english-medium students of the 5th year education at dentistry faculty (autumn semester) [Tekct]: methodological guide / Ch. R. Pohranychna, R. Z. Ogonovsky. Lviv, 2011.
- 7. Vares Ya.E., Ogonovsky R.Z., Pohranychna Ch.R. Principles of Local Dental Anaesthesia and Teeth Removal: An Illustrated Methodological Guide. Lviv, 2007.
- 8. Timofieiev O.O. Anesthesia in Oral and Maxillofacial Surgery / O.O. Timofieiev, I.I. Fesenko. Kyiv: OMF Publishing, 2016, 128 p.

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

Head of the Department: professor Ya. E. Vares

Educational discipline	Manufacturing practice from surgical dentistry
Topic	<b>Topic №4.</b> Methods of local anesthesia on the upper and lower jaws in the outpatient surgery.
Course	4th
Faculty	Dental

**Objective:** local anesthesia is a primary method in practice dentist and maxillofacial surgeon, as in outpatient clinic, as well as in maxillofacial department in a hospital. All surgical manipulations require adequate anesthesia beforsurgical intervention. Proper execution regional or infiltration anesthesia is a key to the success of surgical intervention.

**Purpose:** to examine and work out techniques of application, regional and infiltration anesthesia.

#### **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 practical skill evaluation.

**Interdisciplinary integration** 

Disciplines	Student should know	Student should be able to
Previous:		
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	To know the appearance and flow of the pathological processes in the	To be able to explain the appearance and flow of the pathological processes in the
Pathologic physiology	tissues and organd of MFA	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)
Therapeutic dentistry	To know diseases of hard tissues of tooth and pulp. To know additional methods of examination, which are	Be able to carry out an intra- oral examination of individual teeth.Be able to diagnose
Pediatric dentistry	used in dental practice.	caries, pulpitis of temporary and permanent teeth.

## Plan and organizational structure of practical lesson of the discipline

Duration of practical lesson is 6 academic hours – 4 hours. 30 minutes including 10 minutes for a break.

Methodology of organization of educational process in practical lesson.

STRUCTURE OF PRACTICAL LESSON

#### Preparation stage (30 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.

#### Materials of methodical support of the preparatory stage of the lesson:

- 1. Classification of regional anesthesia on the lower jaw.
- 2. Mandibular anesthesia: place of injection, direction and depth of needle advance, the target point of anesthesia, the amount of injected anesthetic. Clinical effect of anesthesia. Area of anesthesia.
- 3. Torusal anesthesia place of injection, direction and depth of needle advance, the target point of anesthesia, the amount of injected anesthetic. Clinical effect of anesthesia. Area of anesthesia.
- 4. Mental anesthesia: place of injection, direction and depth of needle advance, the target point of anesthesia, the amount of injected anesthetic. Clinical effect of anesthesia. Area of anesthesia.
- 5. Lingual anesthesia: place of injection, direction and depth of needle advance, the target point of anesthesia, the amount of injected anesthetic. Clinical effect of anesthesia. Area of anesthesia.
- 6. Buccal anesthesia: place of injection, direction and depth of needle advance, the target point of anesthesia, the amount of injected anesthetic. Clinical effect of anesthesia. Area of anesthesia.
- 7. Local complications of anesthesia on the lower jaw, their causes. Clinical manifestations.
- 8. Classification of regional anesthesia on the upper jaw.
- 9. Infraorbitalna anesthesia: place of injection, direction and depth of needle advance, the target point of anesthesia, the amount of injected anesthetic. Clinical effect of anesthesia. Area of anesthesia.
- 10. Tuberosital anesthesia: place of injection, direction and depth of needle advance, the target point of anesthesia, the amount of injected anesthetic. Clinical effect of anesthesia. Area of anesthesia.
- 11. Incisival anesthesia: place of injection, direction and depth of needle advance, the target point of anesthesia, the amount of injected anesthetic. Clinical effect of anesthesia. Area of anesthesia.
- 12. Palatal anesthesia: place of injection, direction and depth of needle advance, the target point of anesthesia, the amount of injected anesthetic. Clinical effect of anesthesia. Area of anesthesia.
- 13. Extraoral methods of anesthesia on the upper jaw. Indications for implementation.
- 14. The upper dental plexus anesthesia (plexual anesthesia).
- 15. Local complications of anesthesia in the upper jaw, their causes. Clinical manifestations.
- 16. Provide assistance to the patient in case of complications.

## Algorithms for the formation of professional skills.

- 1. Perform local anaesthesia in the maxillofacial area (application, infiltration).
- 2. Perform local conductive anaesthesia on the upper jaw.
- 3. Perform local conductive anaesthesia on the lower jaw.
- 4. Be able to choose a local anesthetic and identify the dose.
- 5. Be able to determine the location of the target point of anesthesia.
- 6. Work out the technique of infraorbital anesthesia using extraoral and intraoral accesses.
- 7. Work out the technique of tuberosital anesthesia using extraoral and intraoral accesses.
- 8. Work out the technique of incisival anesthesia using extraoral and intraoral accesses.
- 9. Work out the technique of palatal anesthesia.
- 10. Be able to provide first aid in case of blood vessels damage during anesthesia.
- 11. Work out the technique of mandibular anesthesia using extraoral accesses.
- 12. Work out the technique of intraoral mandibular anesthesia (finger and without finger method).

- 13. Work out the technique of torusal anesthesia.
- 14. Work out the technique of mental anesthesia using extraoral accesses.
- 15. Work out the technique of mental anesthesia using intraoral accesses.
- 16. Work out the technique of lingual anesthesia.
- 17. Work out the technique of buccal anesthesia.

#### Final stage (30 min.)

Summing up of the lesson Practical skills demonstration and evaluation

#### Literature:

- 1. Bauml, Philips R.W., Lund M.R. Texbook of Operative Dentistry = Підручник з хірургічної стоматології.- 3-rd ed.- Philadelphia: Saunders, 1995.- 661р.
- 2. Kharkov L. V. Pediatric oral and maxillofacial surgery: a textbook for students of higher medical educational institutions of the III-IV levels of accreditation / L. V. Kharkov, L. M. Yakovenko, N. V. Kiselyova; ed. by L. V. Kharkov. Kyiv: AUS Medicine Publishing, 2015. 103 c.
- 3. Oral and maxillofacial surgery= Хірургічна стоматологія та щелепно-лицева хірургія. Part 1: textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / V. O. Malanchuk [et al.]; ed. V. Malanchuk. Вінниця: Нова книга, 2011
- 4. Oral and maxillofacial surgery= Хірургічна стоматологія та щелепно-лицева хірургія. Part 2: textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / V. O. Malanchuk [et al.]; ed. V. Malanchuk. Вінниця: Нова книга, 2011.
- 5. Pohranychna, Ch. R. Infections of the maxillofacial area: guide of lectures on oral and maxillofacial surgery for the english-medium students of the 3rd year education at dentistry faculty (spring semester): methodological guide / Ch. R. Pohranychna, R. Z. Ogonovsky. Lviv, 2011.
- 6. Pohranychna, Ch. R. Maxillofacial oncology: guide of lectures on oral and maxillofacial surgery for the english-medium students of the 5th year education at dentistry faculty (autumn semester) [Tekct]: methodological guide / Ch. R. Pohranychna, R. Z. Ogonovsky. Lviv, 2011.
- 7. Vares Ya.E., Ogonovsky R.Z., Pohranychna Ch.R. Principles of Local Dental Anaesthesia and Teeth Removal: An Illustrated Methodological Guide. Lviv, 2007.
- 8. Timofieiev O.O. Anesthesia in Oral and Maxillofacial Surgery / O.O. Timofieiev, I.I. Fesenko. Kyiv: OMF Publishing, 2016, 128 p.

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

Head of the Department: professor Ya. E. Vares

Educational discipline	Manufacturing practice from surgical dentistry
Topic	<b>Topic №5.</b> Methods of typical and atypical tooth extraction on the upper and lower jaws.
Course	4th
Faculty	Dental

**Objective:** tooth extraction is one of the most common operations in the out-patient dental clinic practice. Setting the indications and contraindications for the tooth extraction, selection of instruments and methods of intervention play an important role in the quality of the surgery and its effects.

**Purpose:** To teach students various methods teeth removing, depending on the group of teeth, jaw, where they are located.

### **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 practical skill evaluation.

**Interdisciplinary integration** 

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

	Τ	
	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	To know the appearance and flow of	To be able to explain the appearance and flow of the
Pathologic physiology	the pathological processes in the tissues and organd of MFA	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)
Therapeutic dentistry  Pediatric dentistry	To know diseases of hard tissues of tooth and pulp. To know additional methods of examination, which are used in dental practice.	Be able to carry out an intra- oral examination of individual teeth.Be able to diagnose caries, pulpitis of temporary and permanent teeth.
		una permanent teeni.

#### Plan and organizational structure of practical lesson of the discipline

Duration of practical lesson is 6 academic hours – 4 hours. 30 minutes including 10 minutes for a break.

Methodology of organization of educational process in practical lesson.

# STRUCTURE OF PRACTICAL LESSON Preparation stage (30 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.

#### Materials of methodical support of the preparatory stage of the lesson:

- 1. Tools for teeth extraction, their structure and operating principles.
- 2. Indications and contraindications for surgical tooth extraction.

- 3. Peculiarities of preparation of a patient and performance of operation in patients with alterations of the cardiovascular system, blood diseases and other systemic disorders, in pregnant women and children.
- 4. Typical tooth extraction: Preparation of the surgical field.
- 5. Techniques of tooth extraction taking into consideration anatomical conditions, structure and mechanism of instruments.
- 6. The location and position of a doctor and patient during tooth extraction.
- 7. Tools for tooth extraction.
- 8. Types of forceps, elevators, their structure, operating principles, purpose.
- 9. Extraction of a tooth with forceps.
- 10. Distinct stages of tooth extraction with forceps.
- 11. Peculiarities of extracting certain types of teeth and roots.
- 12. Techniques and operating principles of various types of elevators.
- 13. Wound healing after typical tooth extraction.
- 14. Technique of extracting mandibular third molar with its impaction or abnormal position.
- 15. Atypical tooth extraction: indications, techniques, anaesthesia, instruments.
- 16. Treatment of wound after tooth extraction and care.
- 17. Peculiarities of socket healing.

#### Algorithms for the formation of professional skills.

- 1. Conduct typical teeth extractions.
- 2. Conduct atypical teeth extractions.
- 3. Conduct extraction of the impacted teeth.
- 4. Conduct stop bleeding after tooth extraction.
- 5. Tamponing or suturing the perforation of the maxillary sinus.
- 6. Work out the phantom stages of operation of tooth extraction.
- 7. Work out the position of patient and doctor during operation of teeth extraction.
- 8. Work out ways of holding instruments for teeth extraction.
- 9. Work out the phantom method of removing different groups of teeth on the upper and lower jaws.

#### Final stage (30 min.)

Summing up of the lesson

Practical skills demonstration and evaluation

#### Literature:

- 1. Bauml, Philips R.W., Lund M.R. Texbook of Operative Dentistry = Підручник з хірургічної стоматології. 3-rd ed. Philadelphia: Saunders, 1995. 661р.
- 2. Kharkov L. V. Pediatric oral and maxillofacial surgery: a textbook for students of higher medical educational institutions of the III-IV levels of accreditation / L. V. Kharkov, L. M. Yakovenko, N. V. Kiselyova; ed. by L. V. Kharkov. Kyiv: AUS Medicine Publishing, 2015. 103 c.
- 3. Oral and maxillofacial surgery= Хірургічна стоматологія та щелепно-лицева хірургія. Part 1: textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / V. O. Malanchuk [et al.]; ed. V. Malanchuk. Вінниця: Нова книга, 2011
- 4. Oral and maxillofacial surgery= Хірургічна стоматологія та щелепно-лицева хірургія. Part 2: textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / V. O. Malanchuk [et al.]; ed. V. Malanchuk. Вінниця: Нова книга, 2011.
- 5. Pohranychna, Ch. R. Infections of the maxillofacial area: guide of lectures on oral and maxillofacial surgery for the english-medium students of the 3rd year education at dentistry faculty (spring semester): methodological guide / Ch. R. Pohranychna, R. Z. Ogonovsky. Lviv, 2011.

- 6. Pohranychna, Ch. R. Maxillofacial oncology: guide of lectures on oral and maxillofacial surgery for the english-medium students of the 5th year education at dentistry faculty (autumn semester) [Τεκcτ]: methodological guide / Ch. R. Pohranychna, R. Z. Ogonovsky. Lviv, 2011.
- 7. Vares Ya.E., Ogonovsky R.Z., Pohranychna Ch.R. Principles of Local Dental Anaesthesia and Teeth Removal: An Illustrated Methodological Guide. Lviv, 2007.
- 8. Timofieiev O.O. Anesthesia in Oral and Maxillofacial Surgery / O.O. Timofieiev, I.I. Fesenko. Kyiv: OMF Publishing, 2016, 128 p.

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

Head of the Department: professor Ya. E. Vares

Educational discipline	Manufacturing practice from surgical dentistry
Topic	<b>Topic №6.</b> Indications and contraindications for surgery in an outpatient surgical dental practice. Methods of surgical interventions: periostotomy at subperiostal abscess, alveolotomy, resection of the root apex, hemysection, crown-radicular separation, extraction.
Course	4th
Faculty	Dental

**Objective**: along with the removal of teeth teeth-saving methods of treatment of acute and chronic periodontal pathology make up the bulk of surgeries conducted in the clinic of surgical dentistry.

**Purpose:** teach students to exercise the most common surgeries: periosteotomy, compactosteotomy, tooth hemisection, tooth root amputation, apexectomy.

#### **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 practical skill evaluation.

**Interdisciplinary integration** 

Disciplines	Student should know	Student should be able to
Previous:		
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	To be able to explain the structure of systems and organs of maxillo-facial area (MFA)

of the head and neck;	
,	
- structure of the head and neck	
areas.	
To know the appearance and flow of	To be able to explain the
	appearance and flow of the
· · ·	pathological processes in the
e e e e e e e e e e e e e e e e e e e	tissues and organd of MFA
To know the topography of the	To be able to explain the
2 2 2	topography of the organs of
organs or with	MFA
To know histological structure of	To be able to explain the stages
	of manufacturing of
soft and hard tissues of WIFA	cytological, histological
	preparations
	To be able to explain the stages
To know the species identification of	of manufacturing of
microorganisms in the oral cavity	microbiological preparations
	and the essence of
	bacteriological examination
	To be able to explain the
To know the methods of radiological	principles on which these or
examination used in dental practice	other methods are based (X-
	ray, CT, MRI, ultrasound)
To know discusses of hard tissues of	Be able to carry out an intra-
	oral examination of individual
	teeth.Be able to diagnose
,	caries, pulpitis of temporary
used in dental practice.	and permanent teeth.
	- structure of the muscles of the head and neck; - structure of the head and neck areas.  To know the appearance and flow of the pathological processes in the tissues and organd of MFA  To know the topography of the organs of MFA  To know histological structure of soft and hard tissues of MFA  To know the species identification of microorganisms in the oral cavity

#### Plan and organizational structure of practical lesson of the discipline

Duration of practical lesson is 6 academic hours – 4 hours. 30 minutes including 10 minutes for a break.

Methodology of organization of educational process in practical lesson.

## STRUCTURE OF PRACTICAL LESSON Preparation stage (30 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.

#### Materials of methodical support of the preparatory stage of the lesson:

- 1. Classification of periodontitis, periostitis and osteomyelitis.
- 2. Acute serous and purulent periodontitis, exacerbation of chronic periodontitis.
- 3. Etiology, pathogenesis, pathological anatomy, ways of spreading the infectious process.
- 4. Clinic, diagnostics, differential diagnostics, surgical treatment.
- 5. Chronic periodontitis. Classification.

- 6. Clinical and X-ray diagnostics, differential diagnostics, surgical methods of treatment.
- 7. Transactions: resection of tooth root tops, hemiosection, tooth root amputation, replantation, tooth transplantation, and others.
- 8. Operation of replanting of teeth (types of operations, removal procedure and tooth treatment).
- 9. Features of splicing after replantation.
- 10. Indications for the operation and the technique of its implementation in different groups of teeth. Possible complications and prognosis.
- 11. Acute purulent periostitis of the jaws.
- 12. Pathogenetic relationship with periodontitis.
- 13. Spreading of inflammatory process depending on the location of the roots of different groups of teeth.
- 14. Pathological anatomy. Clinical picture. Differential diagnostics.
- 15. Treatment. Indications for tooth extraction in case of acute odontogenic jaw infiltration.
- 16. Chronic periostitis. Clinic, treatment.
- 17. Acute, subacute and chronic osteomyelitis of the jaw.
- 18. Clinical and radiological picture of its various forms (sequestering, ratifying, hyperplastic), differential diagnostics.
- 19. Features of the flow on the upper and lower jaws.
- 20. Primary-chronic osteomyelitis.
- 21. Comprehensive treatment at different stages of development.
- 22. The course of osteomyelitis of the upper and lower jaws of different origins.
- 23. Treatment depending on the peculiarities of the pathogenesis of the disease.
- 24. Terms and technique of sequestrant crectomy.
- 25. Possible complications: resorption fracture, defect and deformity of jaws, sepsis, pneumonia, and others.

#### Algorithms for the formation of professional skills.

- 1. Open subperiosteal abscesses
- 2. Open soft tissue abscesses and phlegmons.
- 3. Demonstrate dissection and excision of the mucosa at pericoronitis.
- 4. Master the technique of removing sequestration with limited osteomyelitis.
- 5. To be able to perform surgical treatment of chronic periodontitis (resection of the root apex, hemisection, amputation, crown-radicular separation, replantation).
- 6. Conduct fistula sensing, salivary gland ducts probing, removal of calculus from the ducts.
- 7. To capture the technique of periosteotomy.
- 8. To capture the technique of apexectomy.
- 9. To capture the technique of compactosteotomy.
- 10. To capture the technique of hemisection.
- 11. To capture the technique of tooth root amputation.

#### Final stage (30 min.)

Summing up of the lesson

Practical skills demonstration and evaluation

#### Literature:

- 1. Bauml, Philips R.W., Lund M.R. Texbook of Operative Dentistry = Підручник з хірургічної стоматології.- 3-rd ed.- Philadelphia: Saunders, 1995.- 661р.
- 2. Kharkov L. V. Pediatric oral and maxillofacial surgery: a textbook for students of higher medical educational institutions of the III-IV levels of accreditation / L. V. Kharkov, L. M. Yakovenko, N. V. Kiselyova; ed. by L. V. Kharkov. Kyiv: AUS Medicine Publishing, 2015. 103 c.

- 3. Oral and maxillofacial surgery= Хірургічна стоматологія та щелепно-лицева хірургія. Part 1: textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / V. O. Malanchuk [et al.]; ed. V. Malanchuk. Вінниця: Нова книга, 2011
- 4. Oral and maxillofacial surgery= Хірургічна стоматологія та щелепно-лицева хірургія. Part 2: textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / V. O. Malanchuk [et al.]; ed. V. Malanchuk. Вінниця: Нова книга, 2011.
- 5. Pohranychna, Ch. R. Infections of the maxillofacial area: guide of lectures on oral and maxillofacial surgery for the english-medium students of the 3rd year education at dentistry faculty (spring semester): methodological guide / Ch. R. Pohranychna, R. Z. Ogonovsky. Lviv, 2011.
- 6. Pohranychna, Ch. R. Maxillofacial oncology: guide of lectures on oral and maxillofacial surgery for the english-medium students of the 5th year education at dentistry faculty (autumn semester) [Τεκcτ]: methodological guide / Ch. R. Pohranychna, R. Z. Ogonovsky. Lviv, 2011.
- 7. Vares Ya.E., Ogonovsky R.Z., Pohranychna Ch.R. Principles of Local Dental Anaesthesia and Teeth Removal: An Illustrated Methodological Guide. Lviv, 2007.
- 8. Timofieiev O.O. Anesthesia in Oral and Maxillofacial Surgery / O.O. Timofieiev, I.I. Fesenko. Kyiv: OMF Publishing, 2016, 128 p.

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

Head of the Department: professor Ya. E. Vares

Educational discipline	Manufacturing practice from surgical dentistry
Topic	<b>Topic №7.</b> The structure and organization of surgical dental aid to population of Ukraine. Introducing the work of dental-surgeon. Identifying risk factors for major dental diseases depending on anatomical and physiological characteristics of the maxillofacial area.
Course	4th
Faculty	Dental

**Objective:** damage of the maxillofacial area soft tissues, injury of teeth and bones of the facial skeleton obtain about 5% of all human traumatic injuries. The competence of the dental surgeon belongs timely diagnosis disease, diagnosis of possible complications, the establishment of necessity of attraction other doctors and determine indications for outpatient or inpatient treatment in each clinical case.

**Purpose:** teach students to diagnose soft tissue injuries of the maxillofacial area, trauma of teeth and bones of the facial skeleton. To conduct examination of indicated patients, identify and interpret the results of investigation. Establish the need in hospital treatment of traumatic 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 practical skill evaluation.

**Interdisciplinary integration** 

1 1 0		
Disciplines	Student should know	Student should be able to
Previous:		
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)
Therapeutic dentistry  Pediatric dentistry	To know diseases of hard tissues of tooth and pulp. To know additional methods of examination, which are used in dental practice.	Be able to carry out an intra- oral examination of individual teeth.Be able to diagnose caries, pulpitis of temporary and permanent teeth.

#### Plan and organizational structure of practical lesson of the discipline

Duration of practical lesson is 6 academic hours – 4 hours. 30 minutes including 10 minutes for a break.

### Methodology of organization of educational process in practical lesson.

## STRUCTURE OF PRACTICAL LESSON Preparation stage (30 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.

#### Materials of methodical support of the preparatory stage of the lesson:

- 1. Patients subjective data collection: Compiaints at the moment of referrense to medical institution.
- 2. History of illness: disease development, it's dynamics, previous treatment.
- 3. History of life: hereditary, previous Ta concomitant diseases, bad habits drug use, alcohol drinks, smoking; heredity, alergological anamnesis.
- 4. Objective examination: general condition, consciousness. Inpatient examination of organs and systems.
- 5. Examination of maxillofacial area. Face inspection. Palpation. Inspection of organs and soft tissues of oral cavity, teeth examination.
- 6. General clinical, laboratory and special methods of investigation. Investigation of motor and sensetive nerves function.
- 7. Examination of salivary glands and their ducts, of temporomandibular joint, of limphatic apparate of the face and neck.
- 8. Determination of character and size of defects and deformations of the face and oral cavity tissues, condition of surrounding tissues.
- 9. Evaluation of a degree of anatomical, functional and aesthetic violations.
- 10. Objective methods of investigation with usage of modern diagnostical staff.
- 11. Rentgenologic: X-ray investigation, tomography, panoramic X-ray and pantomography.
- 12. Using of artificial contrasting.
- 13. Computed tomography and magnetic resonance imaging, radioisotop, ultrasound diagnostics, distance and contact thermography.
- 14. Morphological methods: cytological investigation of compresions, scrapings, punction matherial; hystological investigation of bioptates.
- 15. Methods of functional diagnostics: rheu-, polaro- and electromyography, electrodontiagnosis.
- 16. The use of computers in diagnostics: rendering of X-rays, surgery planing, planing of treatment results .
- 17. Volume of examination of patients with pathology of maxillofacial area due to out- and inpatient treatment, participation of related specialists in examination.

#### Algorithms for the formation of professional skills.

- 1. To demonstrate an ability to collect complians and anamnesis.
- 2. To demonstrate an ability to filling medical documentation in.
- 3. To conduct palpatory investigation πρи inflamatory diseases, injuries of soft tissues and bones of maxillofacial area.
- 4. Peculiarities of subjective examination of patients with traumatic injuries of the maxillofacial
- 5. Extraoral examination of patients with traumatic injuries of the maxillofacial area.
- 6. Intraoral examination of patients with traumatic injuries of the maxillofacial area.
- 7. Interpretation of x-ray examination of patients with traumatic injuries of the maxillofacial area.
- 8. Setting indications for hospitalization of patients with traumatic injuries of the maxillofacial
- 9. Diagnostics of adjacent organs and systems damage in patients with traumatic injuries of the maxillofacial area.

#### Final stage (30 min.)

Summing up of the lesson

Practical skills demonstration and evaluation

#### Literature:

1. Bauml, Philips R.W., Lund M.R. Texbook of Operative Dentistry = Підручник з хірургічної стоматології.- 3-rd ed.- Philadelphia: Saunders, 1995.- 661р.

- 2. Kharkov L. V. Pediatric oral and maxillofacial surgery: a textbook for students of higher medical educational institutions of the III-IV levels of accreditation / L. V. Kharkov, L. M. Yakovenko, N. V. Kiselyova; ed. by L. V. Kharkov. Kyiv: AUS Medicine Publishing, 2015. 103 c.
- 3. Oral and maxillofacial surgery= Хірургічна стоматологія та щелепно-лицева хірургія. Part 1: textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / V. O. Malanchuk [et al.]; ed. V. Malanchuk. Вінниця: Нова книга, 2011
- 4. Oral and maxillofacial surgery= Хірургічна стоматологія та щелепно-лицева хірургія. Part 2: textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / V. O. Malanchuk [et al.]; ed. V. Malanchuk. Вінниця: Нова книга, 2011.
- 5. Pohranychna, Ch. R. Infections of the maxillofacial area: guide of lectures on oral and maxillofacial surgery for the english-medium students of the 3rd year education at dentistry faculty (spring semester): methodological guide / Ch. R. Pohranychna, R. Z. Ogonovsky. Lviv, 2011.
- 6. Pohranychna, Ch. R. Maxillofacial oncology: guide of lectures on oral and maxillofacial surgery for the english-medium students of the 5th year education at dentistry faculty (autumn semester) [Τεκcτ]: methodological guide / Ch. R. Pohranychna, R. Z. Ogonovsky. Lviv, 2011.
- 7. Vares Ya.E., Ogonovsky R.Z., Pohranychna Ch.R. Principles of Local Dental Anaesthesia and Teeth Removal: An Illustrated Methodological Guide. Lviv, 2007.
- 8. Timofieiev O.O. Anesthesia in Oral and Maxillofacial Surgery / O.O. Timofieiev, I.I. Fesenko. Kyiv: OMF Publishing, 2016, 128 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	Manufacturing practice from surgical dentistry	
Topic	<b>Topic №8.</b> Methods of surgical interventions in patiens with traumatic injeries of maxillofacial area.	
Course	4th	
Faculty	Dental	

**Objective:** even minor damage of the facial soft tissues or dental injury can lead to significant functional and aesthetic effects. All these formulates demands for timeliness, volume and quality of primary surgical processing.

**Purpose:** work out methods and principles of primary surgical debridement of traumatic injuries of teeth and soft tissue of the maxillofacial area. Master methods of transport jaw immobilization and methods of early posttraumatic complications prevention.

# **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 practical skill evaluation.

**Interdisciplinary integration** 

Disciplines	Student should know	Student should be able to
Previous:		
Normal anatomy	Know the anatomical and physiological features of the maxillofacial area: - structure of the upper and lower jaws;	To be able to explain the structure of systems and organs of maxillo-facial area (MFA)
Normal physiology	- 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
Topographical anatomy	To know the topography of the To be able to expla	
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)
Therapeutic dentistry  Pediatric dentistry	To know diseases of hard tissues of tooth and pulp. To know additional methods of examination, which are used in dental practice.	Be able to carry out an intra- oral examination of individual teeth.Be able to diagnose caries, pulpitis of temporary and permanent teeth.

#### Plan and organizational structure of practical lesson of the discipline

Duration of practical lesson is 6 academic hours – 4 hours. 30 minutes including 10 minutes for a break.

Methodology of organization of educational process in practical lesson.

# STRUCTURE OF PRACTICAL LESSON <u>Preparation stage</u> (30 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.

#### Materials of methodical support of the preparatory stage of the lesson:

- 1. Trauma of soft tissues of MFA.
- 2. Surgical processing of wounds of the face.
- 3. Types of sutures.

- 4. Dental trauma.
- 5. Teeth immobilization. It's methods.
- 6. Jaw fracture.
- 7. Temporary and permanent immobilization. It's species.
- 8. Intermaxillary ligature splinting, standard transporte bandages.
- 9. Orthoredic methods of jaw fixation.
- 10. Types of splints.
- 11. Overdenture splints, their species.
- 12. Dento-alveolar splints.
- 13. Alveolar splints, indications for their use.
- 14. Surgical methods of jaw fragments fixation.
- 15. Osteosynthesis, it's types.
- 16. Indications and contraindications for osteosynthesis.
- 17. Combined syrgical and orthopedic methods of fragments fixation.
- 18. Their spesies, indications and contraindications.

#### Algorithms for the formation of professional skills.

- 1. Be able to perform surgical treatment for dental and soft tissues trauna in maxillofacial area.
- 2. Master the technique of stitching wounds of the oral mucosa
- 3. Master the technique of skin wounds stitching.
- 4. Master the technique of primary surgical debridement of penetrating wounds of the face.
- 5. Master the technique of teeth fixing with a smooth splint.
- 6. Master the technique of teeth fixing using modern adhesive techniques.

#### Final stage (30 min.)

Summing up of the lesson

Practical skills demonstration and evaluation

#### Literature:

- 1. Bauml, Philips R.W., Lund M.R. Texbook of Operative Dentistry = Підручник з хірургічної стоматології.- 3-rd ed.- Philadelphia: Saunders, 1995.- 661р.
- 2. Kharkov L. V. Pediatric oral and maxillofacial surgery: a textbook for students of higher medical educational institutions of the III-IV levels of accreditation / L. V. Kharkov, L. M. Yakovenko, N. V. Kiselyova; ed. by L. V. Kharkov. Kyiv: AUS Medicine Publishing, 2015. 103 c.
- 3. Oral and maxillofacial surgery= Хірургічна стоматологія та щелепно-лицева хірургія. Part 1: textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / V. O. Malanchuk [et al.]; ed. V. Malanchuk. Вінниця: Нова книга, 2011
- 4. Oral and maxillofacial surgery= Хірургічна стоматологія та щелепно-лицева хірургія. Part 2: textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / V. O. Malanchuk [et al.]; ed. V. Malanchuk. Вінниця: Нова книга, 2011.
- 5. Pohranychna, Ch. R. Infections of the maxillofacial area: guide of lectures on oral and maxillofacial surgery for the english-medium students of the 3rd year education at dentistry faculty (spring semester): methodological guide / Ch. R. Pohranychna, R. Z. Ogonovsky. Lviv, 2011.
- 6. Pohranychna, Ch. R. Maxillofacial oncology: guide of lectures on oral and maxillofacial surgery for the english-medium students of the 5th year education at dentistry faculty (autumn semester) [Tekct]: methodological guide / Ch. R. Pohranychna, R. Z. Ogonovsky. Lviv, 2011.
- 7. Vares Ya.E., Ogonovsky R.Z., Pohranychna Ch.R. Principles of Local Dental Anaesthesia and Teeth Removal: An Illustrated Methodological Guide. Lviv, 2007.
- 8. Timofieiev O.O. Anesthesia in Oral and Maxillofacial Surgery / O.O. Timofieiev, I.I. Fesenko. Kyiv: OMF Publishing, 2016, 128 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	Manufacturing practice from surgical dentistry	
Topic	<b>Topic №9.</b> Complications of teeth extraction (bleeding, alveolitis, alveoloneuritis). Their treatment and prevention and traumatic injuries of the maxillo-facial area (scars, traumatic ostemiyelitis, traumatic maxillary sinusitis, etc.). The algorithm of dental surgeon actions at the outpatient reception.	
Course	4th	
Faculty	Dental	

**Objective:** teeth extraction is one of the most common surgical procedures in the maxillofacial area. General and local complications may occur that require a dentist's knowledge and skills for their prevention, clinical assessment, diagnosis and treatment.

**Purpose:** To acquaint students with modern methods of diagnosis and treatment of complications arising during teeth extraction.

### **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 practical skill evaluation.

**Interdisciplinary integration** 

Disciplines	Student should know	Student should be able to
Previous:		
Normal anatomy	Know the anatomical and physiological features of the maxillofacial area: - structure of the upper and lower jaws;	To be able to explain the structure of systems and organs of maxillo-facial area (MFA)
Normal physiology	- innervation and vascularization of these sites;	

	<ul> <li>structure of the lymphatic system of the head and neck;</li> <li>structure of the muscles of the head and neck;</li> <li>structure of the head and neck areas.</li> </ul>	
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)
Therapeutic dentistry  Pediatric dentistry	To know diseases of hard tissues of tooth and pulp. To know additional methods of examination, which are used in dental practice.	Be able to carry out an intra- oral examination of individual teeth.Be able to diagnose caries, pulpitis of temporary and permanent teeth.

#### Plan and organizational structure of practical lesson of the discipline

Duration of practical lesson is 6 academic hours – 4 hours. 30 minutes including 10 minutes for a break.

#### Methodology of organization of educational process in practical lesson.

# STRUCTURE OF PRACTICAL LESSON Preparation stage (30 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.

#### Materials of methodical support of the preparatory stage of the lesson:

- 1. Complications of tooth and root extraction.
- 2. Penetration of a tooth into respiratory and gastrointestinal tract.
- 3. Fracture and dislocation of adjacent teeth.
- 4. Breaking of parts of alveolar process, fracture and dislocation of jaws.

- 5. Damage to the floor of the maxillary sinus and pushing of a tooth root into it.
- 6. Bleeding during tooth extraction and its prevention.
- 7. Ways of treatment of such complications and their prevention.
- 8. Complications after tooth extraction.
- 9. Bleeding. Etiology.
- 10. Measures to stop the hemorrhage from wounds of the soft tissues and bones.
- 11. Surgical, pharmacological and biological methods to control postoperative bleeding.
- 12. Postoperative pain in the socket.
- 13. Alveolitis, causes, prevention.
- 14. Treatment of other postoperative complications.
- 15. Surgical intervention on the alveolar process to prepare for orthopaedic treatment.

#### Algorithms for the formation of professional skills.

- 1. Conduct stop bleeding after tooth extraction.
- 2. Tamponing or suturing the perforation of the maxillary sinus.
- 3. Demonstrate methods of providing emergency artificial respiration, closed cardiac massage.
- 4. To capture methods of alveolitis treatment.
- 5. To capture methods of diagnosis of oro-antral communication.
- 6. Master the technique of eliminating oro-antral communication.
- 7. Master the technique postextraction stop of bleeding.

#### Final stage (30 min.)

Summing up of the lesson

Practical skills demonstration and evaluation

#### Literature:

- 1. Bauml, Philips R.W., Lund M.R. Texbook of Operative Dentistry = Підручник з хірургічної стоматології.- 3-rd ed.- Philadelphia: Saunders, 1995.- 661р.
- 2. Kharkov L. V. Pediatric oral and maxillofacial surgery: a textbook for students of higher medical educational institutions of the III-IV levels of accreditation / L. V. Kharkov, L. M. Yakovenko, N. V. Kiselyova; ed. by L. V. Kharkov. Kyiv: AUS Medicine Publishing, 2015. 103 c.
- 3. Oral and maxillofacial surgery= Хірургічна стоматологія та щелепно-лицева хірургія. Part 1: textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / V. O. Malanchuk [et al.]; ed. V. Malanchuk. Вінниця: Нова книга, 2011
- 4. Oral and maxillofacial surgery= Хірургічна стоматологія та щелепно-лицева хірургія. Part 2: textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / V. O. Malanchuk [et al.]; ed. V. Malanchuk. Вінниця: Нова книга, 2011
- 5. Pohranychna, Ch. R. Infections of the maxillofacial area: guide of lectures on oral and maxillofacial surgery for the english-medium students of the 3rd year education at dentistry faculty (spring semester): methodological guide / Ch. R. Pohranychna, R. Z. Ogonovsky. Lviv, 2011.
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- 7. Vares Ya.E., Ogonovsky R.Z., Pohranychna Ch.R. Principles of Local Dental Anaesthesia and Teeth Removal: An Illustrated Methodological Guide. Lviv, 2007.
- 8. Timofieiev O.O. Anesthesia in Oral and Maxillofacial Surgery / O.O. Timofieiev, I.I. Fesenko. Kyiv: OMF Publishing, 2016, 128 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	Manufacturing practice from surgical dentistry	
Topic	<b>Topic №10.</b> Postoperative treatment of patients with traumatic injuries and inflamatory deseases of maxillofacial area.	
Course	4th	
Faculty	Dental	

**Objective:** successful surgical treatment of inflammatory and traumatic diseases of the maxillofacial area largely depends on the patients care in the postoperative period. Proper and timely care of postoperative wounds, sutures, dentitions, splints facilitate rapid rehabilitation of patients.

**Purpose:** study principles and rules of care different types of postoperative wounds.

# **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 practical skill evaluation.

**Interdisciplinary integration** 

Disciplines	Student should know	Student should be able to
Previous:		
Normal anatomy	Know the anatomical and physiological features of the maxillofacial area: - structure of the upper and lower jaws;	To be able to explain the structure of systems and organs of maxillo-facial area (MFA)
Normal physiology	- innervation and vascularization of these sites;	

<b>-</b>	,	
	<ul> <li>structure of the lymphatic system of the head and neck;</li> <li>structure of the muscles of the head and neck;</li> <li>structure of the head and neck areas.</li> </ul>	
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)
Therapeutic dentistry  Pediatric dentistry	To know diseases of hard tissues of tooth and pulp. To know additional methods of examination, which are used in dental practice.	Be able to carry out an intra- oral examination of individual teeth.Be able to diagnose caries, pulpitis of temporary and permanent teeth.

#### Plan and organizational structure of practical lesson of the discipline

Duration of practical lesson is 6 academic hours – 4 hours. 30 minutes including 10 minutes for a break.

#### Methodology of organization of educational process in practical lesson.

# STRUCTURE OF PRACTICAL LESSON Preparation stage (30 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.*

#### Materials of methodical support of the preparatory stage of the lesson:

- 1. General principles of wound reparation.
- 2. Primary and secondary wound healing.
- 3. Peculiarities of operating with purulent wounds.
- 4. Types of bone healing.

- 5. Terms of immobilization for jaw fractures.
- 6. Types of healing of dislocated teeth.
- 7. Terms of immobilization.
- 8. Peculiarities of feeding of patients with trauma of MFA.

#### Algorithms for the formation of professional skills.

- 1. To demonstrate an ability to use principles of medical deontology in surgical dental practice.
- 2. To demonstrate knowledge of modern methods and principles of sanitation work.
- 3. Dressing at periosteotomy.
- 4. Dressing patients with odontogenic abscesses and phlegmons.
- 5. Washing of the maxillary sinus.
- 6. Changing of intermaxillary rubbers.

#### Final stage (30 min.)

Summing up of the lesson

Practical skills demonstration and evaluation

#### Literature:

- 1. Bauml, Philips R.W., Lund M.R. Texbook of Operative Dentistry = Підручник з хірургічної стоматології.- 3-rd ed.- Philadelphia: Saunders, 1995.- 661р.
- 2. Kharkov L. V. Pediatric oral and maxillofacial surgery: a textbook for students of higher medical educational institutions of the III-IV levels of accreditation / L. V. Kharkov, L. M. Yakovenko, N. V. Kiselyova; ed. by L. V. Kharkov. Kyiv: AUS Medicine Publishing, 2015. 103 c.
- 3. Oral and maxillofacial surgery= Хірургічна стоматологія та щелепно-лицева хірургія. Part 1: textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / V. O. Malanchuk [et al.]; ed. V. Malanchuk. Вінниця: Нова книга, 2011
- 4. Oral and maxillofacial surgery= Хірургічна стоматологія та щелепно-лицева хірургія. Part 2: textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / V. O. Malanchuk [et al.]; ed. V. Malanchuk. Вінниця: Нова книга, 2011.
- 5. Pohranychna, Ch. R. Infections of the maxillofacial area: guide of lectures on oral and maxillofacial surgery for the english-medium students of the 3rd year education at dentistry faculty (spring semester): methodological guide / Ch. R. Pohranychna, R. Z. Ogonovsky. Lviv, 2011.
- 6. Pohranychna, Ch. R. Maxillofacial oncology: guide of lectures on oral and maxillofacial surgery for the english-medium students of the 5th year education at dentistry faculty (autumn semester) [Τεκcτ]: methodological guide / Ch. R. Pohranychna, R. Z. Ogonovsky. Lviv, 2011.
- 7. Vares Ya.E., Ogonovsky R.Z., Pohranychna Ch.R. Principles of Local Dental Anaesthesia and Teeth Removal: An Illustrated Methodological Guide. Lviv, 2007.
- 8. Timofieiev O.O. Anesthesia in Oral and Maxillofacial Surgery / O.O. Timofieiev, I.I. Fesenko. Kyiv: OMF Publishing, 2016, 128 p.

#### Control methods.

Forms of control and evaluation system are carried out according to the requirements of the production program of medical practice for students of the 4th year dental faculties.

Score from practice is the sum of scores for performance of student practical skills and points for final control. Daily checks of practical skills performs a supervisor from the base and vises their implementation in practice diary of a student. Practice Leader from the University systematically monitors keeping diaries students.

Current control is carried out according to specific objectives. One of the activities of students and its control of the head from the base practice is keeping a diary manufacturing practice (see. Annex 1). Diary is the main document for the period of practical training, including its protection. Students are required during the period of practice every day to record everything that was done for the day in a diary. There are a total sequence shown socially useful work (sanitary issues papers, writing essays, interviews in organized groups, etc.).

The student must submit daily blog for review and signature to supervisor of base practices (dentists from the hospital).

After completion of the practice student has to fill in the final report on its work. After medical practice, preparation of digital and reports haracterization and review of the diary is given signed by the superior of manufacturing practices and general manager of base practices (see. Annex 1).

In characteristics and reviews the following indicators are necessary to display: the level of theoretical training, mastery of practical skills, knowledge of recipes, compliance and ethical foundations of ethics, the attitude of the student to master practical skills. Characteristics is to be stamped hospital where practice was conducted. Having filled in the appropriate form and signed by the supervisor of the basis of practice diary and the final report is required for admission to the student's final class.

In the program has been applied such evaluation system.

10. Current control. The head of the practice base daily analyzes and monitors students' work in the offices (the student must not have gaps), the quality of keeping a diary, quality mastering practical skills defined list, application principles of ethics and deontology in practice physician.

Before the demonstration of abilities or practical skills the student describes in details the methodology and justifies its to supervisor of base practices. After describing the manipulation and informing the patient, the student can be admitted to its implementation in the clinic under the control of supervisor. Current assessment of abilities and practical skills is managed as follows:

№	Abilities and Practical Skills	<b>Points</b> (3-5)
1.	Demonstrate the ability to apply the principles of medical ethics in surgical dental practice	
2.	Demonstrate possession of advanced techniques and principles of health education work.	
3.	Identify the basic units of dental surgical care to the population of Ukraine.	
4.	Demonstrate the ability to collect the patient's complaints and anamnesis	
5.	Demonstrate the ability to fill medical documentation	
6.	To conduct palpatory examination of inflammatory diseases, injuries of the soft and bone tissues of the maxillofacial area.	
7.	To take a swab and print for cytology at a patient	
8.	Perform local anaesthesia in the maxillofacial area (application, infiltration).	
9.	Perform local conductive anaesthesia on the upper jaw.	
10.	Perform local conductive anaesthesia on the lower jaw	

11.	Conduct typical teeth extractions	
12	Conduct atypical teeth extractions.	
13.	Conduct extraction of the semiimpacted and impacted teeth.	
14.	Disclosure of subperiosteal abscess.	
15.	Disclosure soft tissue abscess.	
16.	Demonstrate dissection and excision of the mucosa at pericoronitis	
17.	Master the technique of removing sequestration with limited osteomyelitis	
18.	Stop bleeding after tooth extraction.	
19.	Tamponing or suturing the perforation of the maxillary sinus.	
20.	To be able to conduct a puncture investigation for inflamatory diseases of the	
	maxillofacial area.	
21.	To be able to perform surgical treatment of chronic periodontitis (resection of the root	
	apex, hemisection, amputation, crown-radicular separation, replantation).	
22.	Conduct fistula sensing, salivary gland ducts probing, removal of calculus from the	
	ducts.	
23.	To be able to perform surgical treatment of dental trauma and trauma of soft tissues of	
	maxillofacial area.	
24.	Demonstrate methods of providing emergency - artificial respiration, closed cardiac	
	massage.	
	Total	72-120

"5" points - gets a student who outlined the proposed writing the number of manipulations and thoroughly described them at high theoretical level.

"4" points - gets a student who outlined the proposed writing the number of manipulations and gave them a theoretical description, but admitted with minor errors.

"3" points - gets student who outlined the proposed writing the number of manipulations and gave them a theoretical description, but admitted with significant errors.

A skill is not considered to be passed if the student orally or in writing outlined the proposed manipulation and / or did not provide her adequate theoretical description.

#### **Concluding session (control credit)**

Final control students make up at the last day of practice committee, comprised of leaders from the University and, were present on bases of practice.

Concluding session of medical practice students of the 4th course provides theoretical description and demonstration of skills and practical skills from the list. To make up practice on the final lesson may a student who 100% completed the program of practical training, provided reasonable answers to questions about the contents of the diary, and scored the minimum score on the ongoing practical training (72 points), presented a report on the practice and positive characteristics of general manager the base practices.

#### Regulations.

Final control consists of the following stages:

I - a) a written answer describing the proposed manipulations;

b) student demonstrates practical skills learned during the medical practice.

II – Checking works by a teacher, a break for students.

III - Announcement of the results.

IV – processing documentation.

#### Evaluation criteria.

Scores for final classes exposed under the existing provisions 50 to 80 points.

70-80 points - gets a student who outlined the proposed writing the number of manipulations and thoroughly described them at high theoretical level.

- 60-69 points gets a student who outlined the proposed writing the number of manipulations and gave them a theoretical description, but admitted with minor errors.
- 50-59 points gets student who outlined the proposed writing the number of manipulations and gave them a theoretical description, but admitted with significant errors.

Less than 50 points - gets student who haven't done in written forf all the proposed amount of manipulation and / or did not provide them adequate theoretical description. The student did not have learned practical skills during practice.

Score from practice is the sum of scores for performance of student practical skills that are tested supervisor of base practices (maximum 120 points - minimum 72 points) and points for the final control, offered during the differentiated credit (maximum 80 points - minimum 50 points).

Points of discipline are converted regardless both in scale ECTS, and a 4-point scale.

Scores of students enrolled in one specialty, ranked by ECTS scale as follows:

ECTS	Statistical index
A	Best 10 % of students
В	Next 25 % of students
С	Next 30 % of students
D	Next 25 % of students
Е	Last 10 % of students

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:

Points of discipline	4-point scale
From 170 to 200 points	5
From 140 to 169 points	4
From 139 points to the minimum number of points the student have to gain	3
Less than minimum number of points that a student have to gain	2

Score from practice is fixed by the head of the University to the diary, the student academic records and test-examination information. Within three days after the practice supervisor from the University delivers a statement to the appropriate dean, a report on the practice - practice Department of the University. Diary practices is kept at the department for 1 year.

# MINISTRY OF HEALTH OF UKRAINE Danylo Halytskyi Lviv National Medical University

# Department of Surgical Dentistry and Maxillo-facial Surgery Head of Department – Professor Yan Vares

# DIARY FROM MANUFACTURING MEDICAL PRACTICE OF SURGICAL DENTISTRY

Last name		
First name		
Year	Group	

Student				
(Full name)				
underwent surgical dentistry medical practice as an assistant of dental (oral) surgeon at				
(Name of the clinic, unit or another healthcare facility)				
in				
(Country, district or region, city)				
Practice: from till 20 year.				
University practice manager				
(position, full name, signature)				
Base practice manager				
(position, full name, signature)				
Base practice supervisor				
(position, full name, signature)				
Check in ""				
A person in charge				
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				

Place for seal

#### **EXPLANATORY NOTE**

Practical training is conducted in accordance with the curriculum for dentists and the program of practice on IV year of study after the winter session. The volume of medical practice in surgical dentistry is the three credits (two weeks).

During the practice students carry out the duties of assistant of surgeon at the dentist offices and dental surgery offices of regional, city and district health facilities. Students work 6 hours a day for 10 days. The department should schedule students. Immediate supervisor of students practice is the dental surgeon.

Student prior to the departure to the practice should undergo University practice manager training, receive the program and the diary of practice, reference for practice.

A student arriving at health care institution must submit to the Base practice manager the diary of practice, undergo safety training, and clarify the plan to practice.

During the practice the student must strictly observe internal regulations of health care institution.

The student's industrial practice is assessed by a 200 point system and is taken into account when awarding scholarships along with other disciplines of the curriculum.

A student who has not complied the requirements of practice and got a negative practice review or negative mark during defense of practice must be expelled from the University.

The purpose of medical practice dental surgery is to consolidate knowledge and practical skills obtained in the discipline, the formation and development of students' professional ability to make independent decisions in the field of dental surgery. To achieve the goal formulated final objectives practices, and on their basis - specific tasks in the form of certain abilities (actions).

# PRACTICE SCHEDULE

No॒	Topic	Hours	Date	Done	Signature
1.	The structure and organization of surgical dental aid to population of Ukraine. Introducing the work of dental-surgeon. Identifying risk factors for major dental diseases depending on anatomical and physiological characteristics of the maxillofacial area.	6			
2	Methods of patient examination. Algorithm of dental examination in patients with surgical dental pathology. Subjective and objective methods of diagnosis.	6			
3	Dental instruments recommended to perform surgical procedures in the oral cavity. Sanitary-epidemiological requirements of dental-surgeon.	6			
4	Methods of local anesthesia in an outpatient surgical procedures on the upper and lower jaws.	6			
5	Methods of typical and atypical tooth removal on the upper and lower jaws.	6			
6	Indications and contraindications for surgery in an outpatient surgical dental practice. Methods of surgical interventions: periostotomy at subperiostal abscess, alveolotomy, resection of the root apex, hemysection, crown-radicular separation, extraction.				
7	Methods of examination of the patients with traumatic injuries of maxillo-facial area.	6			
8	Methods of surgical interventions in patients with traumatic injuries of maxillo-facial area.	6			
9	Complications of teeth extraction (bleeding, alveolitis, alveoloneuritis). Their treatment and prevention and traumatic injuries of the maxillofacial area (scars, traumatic osteomyelitis, traumatic maxillary sinusitis, etc.). The algorithm of dental surgeon actions at the outpatient reception.	6			
10	Postoperative treatment of patients with traumatic injuries and inflammatory diseases of the maxillofacial area.	4			
11	Final lesson	2			

#### CONTENTS OF THE PRACTICE

### List of practical skills and abilities for the duration of the manufacturinh practice

# "Surgical Dentistry Medical Practice"

- 1. To demonstrate the ability to apply the principles of medical deontology in surgical dental practice.
- 2. To demonstrate the skills in modern methods and principles of sanitary-educational work.
- 3. To identify the main structural units of the organization of dental surgical care for the population of Ukraine.
- 4. To demonstrate the ability to collect complaints and anamnesis.
- 5. To demonstrate the ability to complete medical records.
- 6. To carry out palpation of inflammatory diseases, injuries of the soft tissues and bones of maxillofacial area.
- 7. To be able to take a smear, a print for cytological examination.
- 8. To be able to perform local anesthesia of the maxillofacial area (application, infiltration).
- 9. To be able to perform conductive anesthesia on the upper jaw.
- 10. To be able to perform conductive anesthesia on the lower jaw.
- 11. To be able to perform a typical tooth extraction.
- 12. To be able to perform atypical tooth extraction.
- 13. To be able to perform extraction teeth with partial and full retention.
- 14. To be able to open subperiosteal abscesses.
- 15. To be able to open the inflammatory processes of the soft tissues.
- 16. To demonstrate dissection or excision of the mucous membrane in case of the pericoronitis.
- 17. To be able to provide removal of sequesters in case of limited osteomyelitis.
- 18. To be able to stop bleeding after tooth extraction.
- 19. To be able to perform tamponade or suturing of the alveolar socket in case of perforation of the maxillary sinus.
- 20. To be able to make a puncture in the inflammatory processes of the maxillofacial area.
- 21. To be able to perform surgical treatment of chronic periodontitis (resection of the apex, hemisection, amputation, coronary-radicular separation, replantation).
- 22. To be able to perform probing of the salivary fistula, ducts of salivary glands, removal of salivary stones from the ducts.
- 23. To be able to perform surgical treatment in case of trauma of the teeth and soft tissues of the maxillofacial area.
- 24. To demonstrate the methods of providing of the first aid artificial respiration, closed heart massage

#### **Practical skills evaluation criteria:**

"5" points – receives a student who has written the proposed manipulation and thoroughly described it at a quite high level of theoretical and practical mastering of skills and fully demonstrated them.

"4" points – receives a student who has written the proposed manipulation and gives theoretical description, admitted with insignificant mistakes. Volume demonstration of the practical skills was sufficient.

"3" points – receives a student who has written the proposed manipulation and gives theoretical description, admitted with serious mistakes. The student has demonstrated only the simplest level of performance of the practical skills.

Practical skills are not counted to the student, who did not set out the essence of the practical skills in written form and / or hasn't provided its adequate theoretical description. The student didn't learn practical skills during the practice.

Manager signature	6	
Treatment (what is done, the stages of treatment, the specification of medications)	8	Example  Mandibular and infiltration anesthesia Sol. Ubistesini 4%- 1.8. Periostotomy 2 cm long within 35-37 teeth. The wound was washed with 3% H <sub>2</sub> O <sub>2</sub> and drained with rubber stripe.  Medication: Klyndamicin 0,3 g 2 times per day for 5 days per os; Linex 2 kaps. 3 times per day 7 days per os;  Nimesyl 1-2 packs per day 2 days per os; Rinsing of the oral cavity by hypertonic sodium solution 4-5 times per day. Second visit in 2-3 days
Diagnosis in native and English Languages	7	Example Acute purulent odontogenic periostitis of the mandible in the area of 36 tooth
Objective examination and dental formula	9	Example  The face is asymmetrical due to the swelling of the left cheek. Crown 36 is destroyed. The mucous membrane in the area of 36 tooth is hyperemic, transitiory fold is smooth and painful on palpation, fluctuation symptom is positive.
Complaints and medical history	S	Example Painful swelling in the area of 36 tooth, appeared 2 days ago, gradually increased. Pain when biting on 36 tooth.
I, II	4	I
Patient's name, last name age	3	Example  Karpenko  Sergiy, 34  years
Date	2	Exam
ž	1	I

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2	
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# List of Abilities and Practical Skills at the Time of Medical Practice of Surgical Dentistry

No	Abilities and Practical Skills	Points (from 3 to 5)	Base Manager Signiture
1.	To demonstrate the ability to apply the principles of medical deontology in surgical dental practice.		
2.	To demonstrate the skills in modern methods and principles of sanitary-educational work.		
3.	To identify the main structural units of the organization of dental surgical care for the population of Ukraine.		
4.	To demonstrate the ability to collect complaints and anamnesis.		
5.	To demonstrate the ability to complete medical records.		
6.	To carry out palpation of inflammatory diseases, injuries of the soft tissues and bones of maxillofacial area.		
7.	To be able to take a smear, a print for cytological examination.		
8.	To be able to perform local anesthesia of the maxillofacial area (application, infiltration).		
9.	To be able to perform conductive anesthesia on the upper jaw.		
10.	To be able to perform conductive anesthesia on the lower jaw.		
11.	To be able to perform a typical tooth extraction.		
12.	To be able to perform atypical tooth extraction.		
13.	To be able to perform extraction teeth with partial and full retention.		
14	To be able to open subperiosteal abscesses.		
15.	To be able to open the inflammatory processes of the soft tissues.		
16.	To demonstrate dissection or excision of the mucous membrane in case of the pericoronitis.		
17.	To be able to provide removal of sequesters in case of limited osteomyelitis.		
18.	To be able to stop bleeding after tooth extraction.		
19.	To be able to perform tamponade or suturing of the alveolar socket in case of perforation of the maxillary sinus.		
20.	To be able to make a puncture in the inflammatory processes of the maxillofacial area.		

21.	To be able to perform surgical treatment of chronic periodontitis (resection of the apex, hemisection, amputation, coronary-radicular separation, replantation).	
22.	To be able to perform probing of the salivary fistula, ducts of salivary glands, removal of salivary stones from the ducts.	
23.	To be able to perform surgical treatment in case of trauma of the teeth and soft tissues of the maxillofacial area.	
24.	To demonstrate the methods of providing of the first aid – artificial respiration, closed heart massage.	
Tota	al points for mastering practical skills (72-120):	

Note: The amount of points for mastering of practical skills is approved by a health care unit stamp

Base practice manager	
	(name, surname; signature)
Base practice supervisor	
Buse practice supervisor	(name, surname; signature)

#### Final Lesson (control credit)

The final control of students is made on the last day of the practice by the commission which consists of the heads of practice from the University and, if possible, from the bases of practice. A student who has 100% completed a manufacturing practice program, provided justified answers to diary questions, scored a minimum of 72 points for the current practice, submitted a practice report and got a positive characteristic of a general manager from the base of practice is allowed to defend the practice at the final lesson. .

#### The list of questions submitted to final control:

- 1. Full retention and dystopia of 38 tooth with a 90° incline in the medial side
- 2. Vestibular dystopia of 13 tooth outside of the dental arch
- 3. Acute serous periodontitis of 26 tooth
- 4. Acute purulent periodontitis of 37 tooth
- 5. Acute purulent periodontitis of 44 tooth
- 6. Acute purulent periodontitis of 22 tooth
- 7. Acute purulent periodontitis of 15 tooth
- 8. Chronic granulomatous periodontitis of 21 tooth
- 9. Chronic granulating periodontitis of 14 tooth
- 10. Chronic granulomatous periodontitis of 36 tooth (distal root)
- 11. Chronic granulomatous periodontitis of 27 tooth (distal buccal root)
- 12. Chronic fibrous periodontitis of 45 tooth
- 13. Acute serous pericoronitis in the area of 38 tooth
- 14. Acute purulent pericoronitis in the area of 48 tooth
- 15. Acute serous periostitis in the area of 35 tooth
- 16. Acute purulent periostitis in the area of 22 tooth
- 17. Acute purulent periostitis in the area of 26 tooth
- 18. Odontogenic abscess of the right suborbital area
- 19. Odontogenic abscess of the left sublingual grove
- 20. Acute epidemic parotitis
- 21. Acute serous lymphadenitis of the left submandibular area
- 22. Acute serous lymphadenitis of the left parotid-masseteric area
- 23. Furuncle of the left upper lip
- 24. Exacerbation of the left-sided chronic odontogenic maxillary sinusitis
- 25. Exacerbation of chronic salivary stone disease of the right submandibular salivary gland
- 26. The bited wound of the left cheek that penetrates into the oral cavity (an unknown dog)
- 27. The cut wound of the left suborbital area
- 28. The bited wound of the upper lip (unknown dog)
- 29. The ruptured wound of the upper lip
- 30. The ruptured wound of the right cheek that does not penetrate into the oral cavity
- 31. The abrasion of the mental area
- 32. Thermal burn of the 1st degree of the left buccal area
- 33. Thermal burn of the 2nd degree of the left buccal area
- 34. Thermal burn of the 3rd A degree of the left buccal area
- 35. Chemical burn of the 2nd degree of the right buccal area (concentrated sulfuric acid)

- 36. Traumatic incomplete dislocation of 21 tooth
- 37. Traumatic impacted dislocation of 11 tooth
- 38. Traumatic full dislocation of 21 tooth
- 39. Traumatic transverse fracture of the root of the tooth in the area in the apical third
- 40. Traumatic longitudinal fracture of the root of the tooth
- 41. Traumatic fracture of the alveolar process of the upper jaw within 14 21 teeth
- 42. Traumatic fracture of the alveolar appendix of the mandible in the range of 43 33 teeth
- 43. Traumatic central fracture of the lower jaw without displacement of the fragments
- 44. Traumatic fracture of the lower jaw in the area of the angle on the left with the displacement of the fragments
- 45. Traumatic bilateral fracture of the lower jaw in the area of the left corner and mental affair with the displacement of the fragments
- 46. Le Fort I traumatic fracture of the upper jaw
- 47. Le Fort II traumatic fracture of the upper jaw for
- 48. Bilateral anterior dislocation of the lower jaw
- 49. Traumatic fracture of the right zygomatic bone with displacement
- 50. Traumatic fracture of the left zygomatic arch with displacement

#### **Evaluation criteria of the practice final control:**

Concluding lesson of medical practice for students of the 4th year involves solving of two situational tasks, including description of theoretical and demonstration of practical skills:

Practical skill 1 -	collecting of complaints, medical history.
Practical skill 2 -	examination of the patient, instrumental examination, interpretation of additional methods of examination.
Practical skill 3 -	setting of preliminary diagnosis, plan of treatment and filling in the appropriate documentation.
Practical skill 4 -	performing of medical manipulations.
Practical skill 5 -	appointment of postoperative treatment, recommendations

Number of points for final lesson is charged according to the existing provision from 50 to 80 points and consists of the sum of scores for both situational tasks. The possible number of points for a situational task is from 25 to 40 and consists of an amount of points for each of the five practical skills.

8 points – receives a student who has written the proposed manipulation and thoroughly described it at a quite high level of theoretical and practical mastering of skills and fully demonstrated them.

7 points – receives a student who has written the proposed manipulation and gives theoretical description, admitted with insignificant mistakes. Volume demonstration of the practical skills was sufficient.

6 points – receives a student who has written the proposed manipulation and gives theoretical description, admitted with serious mistakes. The student has demonstrated only the simplest level of performance of the practical skills.

5 points – receives a student who has written the proposed manipulation and gives theoretical description with significant mistakes. The student was unable to demonstrate practical skills

Practical skills are not counted to the student, who did not set out the essence of the practical skills in written form and / or hasn't provided its adequate theoretical description. The student didn't learn practical skills during the practice.

Mark from practice is the sum of scores for fulfillment of a student's practical skills that are tested by a base practice supervisor (maximum 120 points - minimum 72 points) and points for the final control, offered during the differentiated credit (maximum 80 points - minimum 50 points).

#### **Final control**

Task	Points (from 5 to 8)	Data	University practice manager signature
Total points for the final control			

Mark from practice is the sum of scores for fulfillment of a student's practical skills that are tested by a base practice supervisor (maximum 120 points - minimum 72 points) and points for the final control, offered during the differentiated credit (maximum 80 points - minimum 50 points).

	Points	Mark	University practice manager signature
Mark for the practice			

#### STUDENT'S WRITTEN REPORT FORM

- 1. Brief description of the database (according to the student).
- 2. Equipping and providing the base with tools and necessary materials.
- 3. Daily workload.

	Wishes	and	suggestions	for	improving	the	manufacturing	practice	(student
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4. The relationship between the student and the staff of the Practice base.

Base practice manager	
	(name, surname; signature)
Base practice supervisor	
	(name, surname; signature)
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DIARY	Y REVIEW
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Base practice manager	
-	(name, surname; signature)
Base practice supervisor	
	(name, surname; signature)
indicators: the level of the	review of the diary the responsible person should reflect the following coretical knowledge of student, mastery of practical skills, knowledge of sand deontology, the student's attitude to mastering new practical skills rds and diary.
Mark for the practice	
(in words)	
«»_	20
(date of the defense of the p	practice)
University practice manage	er
(name, surname, signature)	