

**“MAXILLOFACIAL SURGERY
AND ORAL SURGERY”
FINAL CERTIFICATION PROGRAM
(3RD COURSE)**

MINSK, 2019

Requirements to the students after studying the subjects.

Student must **know**:

- organization and economic aspects of activity of the health care institutions for «Maxillofacial surgery and oral surgery»;
- indications and contraindications to the general and local anesthesia;
- prophylaxis of complications in the general and local anesthesia in maxillofacial patients;
- indications and contraindications for tooth extraction;
- methods of emergency medical care on an outpatient reception;
- modern classification, etiology, pathogenesis, clinical picture, diagnosis, differential diagnosis, principles of treatment non-specific and specific odontogenic pyoinflammatory processes and traumatic injuries of the maxillofacial area, tumors of maxillo-facial area;
- epidemiology of tumors of maxillo-facial area and frequency of morbidity;
- etiology, clinical picture, diagnostics and treatment methods of inborn and acquired defects and deformations of tissue in maxillofacial area;

be able to:

- to examine the patient with surgical pathology of the maxillofacial area;
- perform local anesthesia in the maxillofacial area;
- to perform certain types of outpatient surgical treatment in the oral cavity;
- to provide emergency medical care in emergency cases at reception of dental surgeon;
- to perform massage the major salivary glands;
- to make primary surgical treatment of wounds of soft tissues of the maxillofacial area;
- to provide emergency medical care to patients with fractures of the upper and lower jaws;
- to provide emergency medical care with shock, asphyxiation, bleeding;
- to provide emergency care to patients with diseases of the facial nerves.

THE CONTENTS:

1. ORGANIZATION OF SERVICE OF MAXILLOFACIAL SURGERY

1.1. Introduction to object «Maxillofacial surgery». The history of the development of maxillofacial surgery.

Goals and objectives of maxillofacial surgery. The organization of service of maxillofacial surgery in the Republic of Belarus.

1.2. Organization of departments (rooms) of maxillofacial surgery in the outpatient clinic and hospital.

The structure of departments, rooms of maxillofacial surgery in the outpatient clinic and hospital. List of staff of the departments. Regulations of work of departments. Accounting-reporting documentation.

1.3. Preparation of the hands of the surgeon and the surgical field.

Disinfection and sterilization of instruments and bandages in a polyclinic and a hospital. The sanitary and epidemiological rules in departments and rooms. Scrubbing. Methods of preparation of the tools, rooms, equipment and material for sterilization. Sterilization techniques and their rules.

1.4. Examination of patients with surgical pathology in the maxillofacial area.

Complaints, anamnesis of life and medical history. Examination of maxillofacial area, neck and mouth. Methods of clinical and paraclinical examinations of patients with pathology of the maxillofacial area and neck.

2. ANESTHESIA IN MAXILLOFACIAL SURGERY

2.1. Local anesthesia in the maxillofacial area.

The modern concept of solution of the problem of pain in the treatment of maxillofacial patients. Prophylaxis of local and common complications in anesthesia

in the maxillofacial area. Local anesthesia. Types of local anesthesia, tools, local anesthetics in the practice of a dentist. Indications contraindications for local anesthesia. Drugs used for anesthesia. Tools for anesthesia. Development of skills of work with the toolkit.

2.2. Continuation of studies. Infiltration anesthesia in the maxillofacial area.

The skills of conducting infiltration anaesthesia (on the skin, the mucous membrane of the mouth, subperiosteal, intraosseous, intraligamentary). Anatomic topographic signs in anesthesia in the lower jaw. Individual methods of anesthesia. The skills on the phantoms.

2.3. Conduction anesthesia on the lower jaw.

Anatomic and topographic signs during anesthesia in the lower jaw. Individual methods of anesthesia. The ability of the individual methods of anesthesia on the phantoms.

2.4. Block anesthesia for the upper jaw.

Anatomic topographic landmarks during anesthesia in the upper jaw. Individual methods of anesthesia. The ability of the individual methods of anesthesia on the phantoms.

2.5. General anesthesia in maxillofacial surgery: neuroleptanalgesia, ataralgesia, anesthesia, acupuncture analgesia, analgesia using transcutaneous electroneurostimulation.

Indications and contraindications for general anesthesia. Methods of intubation in maxillofacial patients. Medical preparations. Instrumental and equipment providing general anesthesia in maxillofacial surgery in the outpatient practice.

2.6. Local complications of injecting anesthesia in maxillofacial surgery.

Possible errors when injecting anesthesia and their prophylaxis. Treatment of complications.

3. ORAL SURGERY

3.1. General and common indications and contraindications for tooth extraction.

3.2. Anatomical peculiarities of the structure of the upper jaw.

The tools and techniques for operations of teeth removal in the upper jaw. Tools for removal of teeth in the upper jaw. The steps of teeth extraction on the upper jaw. The practical skills on the phantom.

3.3. Anatomical peculiarities of the structure of the lower jaw.

Tools and methodology for removal of teeth on the lower jaw. The steps of surgery tooth extraction in the lower jaw. The practical skills on the phantom.

3.4. Methods of operation for complex extraction on the upper and lower jaws.

Stapes of operations and tools.

3.5. Local complications that arise during the tooth extraction.

Causes leading to complications. Prevention of complications. Specialized surgical care providing.

3.6. Local complications that occur after removal of the tooth.

The causes leading to complications. Prevention of complications. Specialized surgical care providing.

3.7. Peculiarities of local anesthesia and teeth removal in patients with cardiovascular pathology, diseases of the connective tissue, systemic diseases of blood, with the pathology of the liver and kidney diseases of nervous system.

Prophylaxis of complications. Peculiarities of anesthesia and tooth extraction in pregnant women and nursing mothers.

3.8. Common complications due to tooth extraction.

State of emergency occurring stomatological care: hypertonic kriz, acute abnormality of cerebral blood flow, acute myocardium infarction, severe asthma, coma, diabetes, convulsive syndrome. Clinical signs. First medical care rendering.

3.9. The continuation of studies.

Drug anaphylactic shock. The risk factors. Clinical manifestations. Diagnosis, differential diagnosis. The tactics of the doctor-stomatologist in the development anaphylacticski shock the patient.

4. ODONTOGENIC INFLAMMATORY PROCESSES

4.1. Pyoinflammatory diseases of maxillofacial region.

Modern classification of pyoinflammatory processes in maxillofacial area. Problem of odontogenic infections in maxillofacial surgery and stomatology. Odontogenic inflammatory processes. Etiology, pathogenesis. The way of the spread of infection in the maxillofacial area.

Classification. Clinical manifestations apical periodontitis. Peculiarities of clinical development of apical periodontitis on the upper and lower jaw. Methods of diagnostics, differential diagnostics. Classification of surgeries of apical periodontitis. Indications, contraindications for surgical treatment of apical periodontitis. Complications and their prophylaxis.

4.3. Diseases of teething.

Classification. Clinic, diagnostics, treatment. Etiological factors leading to retention and dystopia teeth. Surgical tactics in treatment of diseases of teeth. Defecation of teeth eruption, retention, dystopia. Clinical and radiological diagnosis. Surgical treatment. Exercise therapy, physiotherapy and acupuncture in complex treatment. Temporary disability examination.

4.4. Odontogenic periostitis jaws.

Clinic, diagnostics. Classification of periostitis of jaws. Peculiarities of clinical development of periostitis in the upper and lower jaws. Treatment of patients with periostitis of jaws. Tactics of surgeon dentist about cause tooth. The steps of primary surgical treatment for periostitis of jaws of various localization. Medication and physiotherapeutic treatment. Exercise therapy, physiotherapy and acupuncture in complex treatment. Temporary disability examination.

4.5. Osteomyelitis of the jaws.

Modern classification of odontogenic osteomyelitis of the jaws. Theory of pathogenesis of osteomyelitis. Acute odontogenic osteomyelitis of the jaws. Etiology, pathogenesis. Clinical signs of acute odontogenic osteomyelitis on the lower and upper jaws. Diagnostics, treatment, prophylaxis of complications.

4.6. Chronic odontogenic osteomyelitis.

Clinical signs, diagnostics, treatment. Peculiarities of clinical development of chronic odontogenic osteomyelitis on the lower and upper jaw. Diagnosis of chronic osteomyelitis, including modern radiation methods of examination. Chronic ossifying osteomyelitis by Garra. Surgical and medical treatment of patients with chronic osteomyelitis of the jaws. Exercise therapy, physiotherapy and acupuncture as a part of complex treatment. Temporary disability examination and dispensary system of patients.

4.7. Odontogenic lymphadenitis of the maxillofacial area.

Clinical picture, diagnostics, differential diagnostics and treatment. Topography of lymphatic system of the maxillofacial area. Indications for surgical treatment and its methods. Exercise therapy, physiotherapy and acupuncture as a part of complex treatment. Temporary disability examination.

4.8. Differential diagnostics of pyoinflammatory processes in maxillofacial area and neck (periodontitis, periostitis, odontogenic osteomyelitis of the jaws, lymphadenitis).

A detailed analysis of patients with clinical, radiological and laboratory examinations, identification and description of main characteristics of manifestations of these diseases.

4.9. Boils and carbuncles of the maxillofacial area.

Clinical signs, diagnostics, treatment. Peculiarities of inflammatory process development in for boils and carbuncles of face. Complications of boils and their prophylaxis. Complex treatment of patients with boils and carbuncles of the maxillofacial area. Temporary disability examination.

4.10. Severe complications of pyoinflammatory processes in maxillofacial area and neck.

Severe complications of pyoinflammatory processes in maxillofacial area and neck (phlebitis of facial veins, cavernous sinus thrombosis). Clinical signs, diagnostics, treatment, prophylaxis.

4.11 Continuation of studies.

Severe complications of pyoinflammatory processes in maxillofacial area and neck (anaerobic infection, odontogenic mediastinum). Exercise therapy and acupuncture as a part of complex treatment. Temporary disability examination.

4.12 Continuation of studies.

Severe complications of pyoinflammatory processes in maxillofacial area and neck (odontogenic sepsis in patients with pyo-inflammatory processes in maxillofacial area and neck). Prognostication of chronic pyoinflammatory processes development in maxillofacial area.

4.13. Modern principles of treatment of purulent wounds in the maxillofacial area and neck.

Principles of primary surgical treatment in the maxillofacial region. Local treatment of pyoinflammatory processes depending on the development phase. Types of drainages of wounds. The terms of imposing of secondary early and late seams. Modern principles of drug therapy of pyoinflammatory processes in maxillofacial area. Antimicrobial, detoxification, desensitizing, immunocorrective, restorative, symptomatic therapy. Basic principles of physical therapy or acupuncture use as a part of complex treatment of the patients with pyoinflammatory processes in maxillofacial area and neck.

4.14. Examination of temporary disability and dispensary system of patients with pyoinflammatory processes in maxillofacial area and neck.

5. SPECIFIC INFLAMMATORY PROCESSES IN MAXILLOFACIAL AREA

5.1. Specific diseases of the maxillofacial area.

Differential diagnostics of specific inflammatory processes in maxillofacial area. Actinomycosis of maxillofacial area. Clinical signs, diagnostics, treatment. Methods of laboratory and immunological diagnostics of actinomycosis. Complex treatment and prophylaxis of disease. Temporary disability examination.

5.2. Syphilis, tuberculosis. HIV-infection in the maxillofacial area.

Clinical manifestations of diseases in maxillofacial region. Methods of laboratory and immunological diagnostics. Structure of skilled care for patients with syphilis, tuberculosis, HIV-infection.

6. DISEASES OF THE MAXILLARY SINUS

6.1. Odontogenic sinusitis, maxillary sinus.

Classification of sinusitis. Etiology, pathogenesis. Clinical picture, diagnostics, differential diagnostics. Treatment in polyclinic and hospital. Prophylaxis of the disease.

6.2. Perforation and fistulas of the maxillary sinus.

The reasons of development. Clinical signs, diagnostics, treatment. Surgical tactics in perforations of the maxillary sinus. Prophylaxis of perforation.

Head of Oral Surgery Department
Belarusian State Medical University
Doctor of Medicine, Professor

I.O. Pohodenko-Chudakova