31.05.03 Prosthetics of dentition defects (180 HOURS/5 CREDITS)

(Course Title and Number)

I. Grokhotov

Contact: ilident@yandex.ru

Office: 200 , 126 Papanitsev str.

Office hours: Friday 14.25-17.00

and by appointment

COURSE OBJECTIVE:

preparation of a dentist who is able to diagnose and plan the orthopedic stage of complex treatment of patients with diseases of the dentoalveolar system, taking into account the individual characteristics of the course of the disease and the age of the patient.

Potential themes to be addressed:

- Orthopedic treatment of partial absence of teeth by clasp (resting) prostheses

- Methods of orthopedic treatment of patients with periodontal disease

-Orthopedic treatment of patients with increased erasure of hard tooth tissues.

COURSE OUTCOMES:

To know:

- Theoretical bases of biomechanics of the dentoalveolar system in norm and in pathology;  
- methods of examination, diagnosis and orthopedic treatment of patients with periodontal diseases, deformities of dentition, increased erasure of teeth;  
- the principles of diagnosis and orthopedic treatment of major dental diseases, taking into account the aesthetic, individual characteristics of the course of the disease, against the background of somatic pathology, including the use of methods of dental implantation;  
- mastering the knowledge of modern methods of computer modeling and manufacturing of dentures;  
- methods of conducting dispensary follow-up of patients who received orthopedic dental treatment.

To be able to:

- examine the patient;  
- analyze the results of basic and additional survey methods;  
- make a diagnosis;  
- to plan the orthopedic stage of complex treatment of patients:  
to identify, eliminate and take measures to prevent possible complications when using non-removable and removable orthopedic medical devices;  
- Conduct a discussion and dialogue with the patient, colleagues at work.

To master:

-methods of clinical dental examination of patients:  
 - interpretation of the results of basic and additional methods of dental examination of patients with major dental diseases requiring orthopedic treatment;  
- methods of planning the orthopedic stage of complex treatment and rehabilitation of patients with major dental diseases, taking into account individual characteristics of the body, using dental implants and modern materials and designs of prostheses and medical devices;  
- methods of conducting dental orthopedic rehabilitation activities;  
- registration of the necessary documentation, taking into account the concomitant diseases and pathological processes in the dental patient.

METHODOLOGY:

-Lectures and the presentation of visual materials (slides, videos)

-Readings and in-class discussions.

-Practical lessons.

COURSE REQUIREMENTS: The final exam includes test control and interview on tickets. The results of practical work of students in lessons will also be taken into account.

GRADING: Grading is based on individual progress. That progress will be based on the following:

20% - class participation

20% - test control

20% - practical skills

40% - final exam

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| Grades | Points |
| 2 | 0-54 |
| 3 (passed) | 55 - 69 |
| 4 | 70 - 84 |
| 5 | 85 - 100 |

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| №№ | Topic | Type of Class | Hours | Tests/Essays |
| 1. | Orthopedic treatment of partial absence of teeth by clasp (resting) prostheses. Indications for treatment with clasp dentures. | practise | 3 | test |
| 2 | Characteristics of constructional elements of clasp prostheses. Indications for the production of artificial crowns for clamping fixation. | practise | 3 | test |
| 3 | Clinical and functional requirements for the natural crown of the tooth chosen for the location of the support-retaining clamp. Supporting clasps. Influence on the choice of the design of the clamp, the location of the lining and shoulder on the occlusal surface, the defect class - with a "distal" restriction and a single tooth without a "distal" restriction. "Work" of the clammer and "artificial saddle" when applying the masticatory load. The reaction of the periodontal supporting teeth and the "reaction of the saddle bed". | practise | 3 | test |
| 4 | Parallelometry (studying in the parallelometer models of jaws). Parallelometer. The main structural elements. Work principles. | practise | 3 | test |
| 5 | Clinical and laboratory stages of manufacturing clasp prostheses with clamping fixation. | practise | 3 | test |
| 6 | Orthopedic treatment of partial absence of teeth with clasp prostheses with telescopic, lock and beam fixation systems. Definition of the concepts "combined dentures" - non-removable and removable (combined). | practise | 3 | test |
| 7 | Methods for studying the periodontal condition and their diagnostic significance: probing, determining the mobility of teeth (periodontometry), occlusion, studying odontoparodontograms (panoramic X-ray images), filling the odontoparadontogram and analyzing it. The formulation of the diagnosis. Differential diagnosis. Removing prints. Study of diagnostic models in the middle anatomical articulator. Drawing up a plan for the complex treatment of periodontitis. Fundamentals of the choice of medical device designs. | practise | 6 | test |
| 8 | Traumatic overload of periodontal disease. Identification of areas of teeth that block the movement of the lower jaw. Occlusionogram. Elective grinding of the teeth blocking the movements of the lower jaw. Prophylaxis of hyperesthesia, caries. Focal parodontitis. Justification of the design of the tire (or prosthesis tire) and its extent on the basis of examination and analysis of odontoparodontograms. Types of stabilization and their justification. Structures of tires and tire-prostheses: non-removable, removable, combined. Requirements for medical devices, in the treatment of focal periodontitis. Conducting the clinical stage, depending on the design of the suture apparatus or prosthesis. | practise | 6 | test |
| 9 | Complex therapy of periodontitis. Indications for the removal of teeth in periodontal diseases. The method of temporary splinting, as a treatment stage, aimed at creating the stability of teeth and dentition in general. Indications for the use of temporary tires. Temporary removable plate prostheses are immediate prostheses. Indications for manufacture, their purpose: elimination of aesthetic and phonetic deficiencies in the removal of teeth with affected periodontium, redistribution of masticatory pressure and the achievement of the effect of splinting. Non-removable and removable types of implanted prostheses. The main stages of manufacturing the implied prostheses. Preparation of gypsum models in the manufacture of implied prostheses. The technique of immediate prosthesis application. Subsequent stages of treatment of patients. The importance of early prosthetics in periodontal disease. Overlay of complex tires and prosthetic tires. | practise | 6 | test |
| 10 | Generalized periodontitis. Types of medical devices used to treat generalized periodontitis and periodontitis. Justification of the choice of design features of tires and prostheses. Types of stabilization. | practise | 6 | test |
| 11 | Orthopedic treatment of partial absence of teeth from the use of implants. Types of implants. Indications and contraindications. Materials used for impressions, types of impressions. Surgical protocol of implantation. Clinical and laboratory stages of manufacturing single crowns with support for implants. Orthopedic treatment of partial absence of teeth with removable and conditionally removable dentures with support on implants. Forecast. | practise | 6 | test |
| 12 | Rehabilitation of patients with periodontitis at the stages of orthopedic treatment. The role of oral hygiene in patients with dentures in cases of periodontal disease. | practise | 2 | test |
| 13 | Checking the initial level of knowledge. Learning objectives (thematic plan, timetable, etc.). | practise | 6 | test |
| 14 | Abnormal abrasion of natural teeth. Etiology. Pathogenesis. Classification. Localized form of pathological abrasion in intact dentition. Methods of orthopedic or complex (orthopedic and orthodontic) treatment. | practise | 6 | test |
| 15 | A generalized form of pathological erasure in intact dentitions with a decrease in the height of the lower part of the face in the central occlusion. Facial symptoms. Otoneurologic syndrome. Tomography of the TMJ. A study of the nature of the motions n / h. Formulation of diagnosis. Definition of treatment tasks. | practise | 6 | test |
| 16 | A generalized form of pathological erasure in intact dentitions without lowering the height of the lower part of the face in the central occlusion. Diagnostics. The concept of "myotactic reflex by Rubinov" and its reorganization in the second-third degree of severity of the disease. Tactics of the doctor at all stages of combined (orthopedic and orthodontic) treatment. | practise | 6 | test |
| 17 | Orthopedic treatment of various forms of erasure of the third degree of severity with a decrease in the height of the occlusion. Clinic. Analysis of orthopantomograms; intraoral roentgenograms of the roots of all teeth, tomograms of the TMJ. Formulation of diagnosis. Substantiation of the tactics of treatment. | practise | 6 | test |
| 18 | Partial absence of teeth (complicated form). Deformation of dentition and bite with partial absence of teeth. Pathogenesis. Classification. Clinic. Study of diagnostic models in the occludator (articulator). Biometrics of models. Radiography. Survey radiography. Diagnostics. Differential diagnostics. Formulation of diagnosis. Justification of the tactics of managing patients with this pathology. | practise | 2 | test |

The Professors personal requirements for the course: attendance, homework, coming late, diaries of practical skills, medical dress.