

MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION
Pirogov Russian National Research Medical University (Pirogov Medical University)

Institution of Dentistry

ANNOTATION OF THE WORK PROGRAMDISCIPLINES

B.1.O.57 ENDODONTICS

for an educational program of higher education -
specialty programs
by specialty
05/31/03 Dentistry

Moscow 2024г.

1. General provisions

1.1. The purpose and objectives of mastering the discipline

1.1.1. The goal of mastering the discipline “Endodontics” is to obtain students the theoretical and practical knowledge necessary to provide outpatient dental care to patients with diseases of the pulp and periapical tissues.

1.1.1. Tasks solved during the development of the discipline program:

- formation of a knowledge system in the field of diagnostic methods used in examining patients with diseases of the pulp and periapical tissues;
- developing the student’s ability to plan and determine indications for therapeutic treatment of patients with diseases of the pulp and periapical tissues;
- formation of theoretical and practical skills in the therapeutic treatment of patients with diseases of the pulp and periapical tissues in outpatient settings;
- development of skills and abilities necessary to identify, eliminate and prevent possible complications in the treatment of diseases of the pulp and periapical tissues;
- development of professionally important personality qualities that are significant for the implementation of the developed competencies.

1.2. Place of discipline in the structure of the educational program

The discipline “Endodontics” is studied in the 6th and 7th semesters and belongs to the compulsory part of Block B1 of the Discipline.

The total labor intensity of the discipline is 9 points.

To successfully master this discipline, students must master the following disciplines: Human Anatomy; Biological chemistry; Biology; Histology, embryology, cytology; Immunology; Foreign language; History (history of Russia, general history); Cariesology and disease of hard dental tissues; Latin language; Materials Science; Medical informatics; Microbiology, virology; Normal physiology; Psychology and pedagogy; Physics mathematics; Philosophy; Chemistry; Bioethics; Foreign language in the professional sphere; History of Medicine; Medical law and patient focus; Assistant ward and procedural nurse; Psychological aspects of the work of a dentist.

Knowledge, skills and practical experience acquired in mastering this discipline are necessary for successful mastery of the disciplines: Gerontostomatology; Clinical dentistry; Modern methods of endodontic treatment; Forensic examination in dentistry; Modern methods of mechanical treatment and obturation of root canals; Dental assistant (therapist)

2. Contents of the discipline (module)

2.1 Contents of sections (modules), topics of the discipline (module)

6th semester

No. p/p	Cipher competencies	Name of the section (module), topic of the discipline (module)	Contents of the section and topics in didactic units
1	2	3	4
Section 1. Treatment of pulp diseases			
1.	UK-1.ID1	Topic 1. Anatomy and physiology of dental	Anatomy and physiology of dental

	OPK-2.ID1 OPK-4.ID1 OPK-5.ID1 PC-1.ID1 PC-2.ID1 PC-6.ID1	pulp. Anatomical and topographical structure of the dental cavities of the upper and lower jaws. Root canal configuration	pulp. Anatomical and topographic structure of the dental cavities of the upper and lower jaws. Root canal configuration.
2.		Topic 2. Etiology, pathogenesis of dental pulp inflammation. Classifications of pulp diseases. Methods for diagnosing inflammation of the dental pulp.	Etiology, pathogenesis of dental pulp inflammation. Classifications of pulp diseases. Methods for diagnosing inflammation of the dental pulp. Patient examination. Methods of examining a dental patient: basic, (questioning, external examination, examination of the oral cavity,) additional (electro-odontodiagnostics, x-ray examination), special laboratory methods: index assessment of the condition of teeth, periodontal disease. Drawing up a treatment plan.
3.		Topic 3. Clinic, diagnosis, differential diagnosis, treatment of acute forms of pulpitis.	Clinic, diagnosis, differential diagnosis of acute forms of pulpitis.
4.		Topic 4. Biological methods of treating pulpitis. Vital amputation method. Vital extirpation method.	Biological methods of treating pulpitis (direct and indirect pulp coating). Vital amputation method. Indications and contraindications for use.
5		Topic 5. Chronic pulpitis. Clinic. Diagnostics, differential diagnosis. Pulp necrosis. Dystrophic changes in the pulp. Treatment methods.	Chronic pulpitis. Clinic. Diagnostics, differential diagnosis.
6		Topic 6. Chronic pulpitis. Clinic. Diagnostics, differential diagnosis. Pulp necrosis. Dystrophic changes in the pulp. Treatment methods.	Pulp necrosis. Dystrophic changes in the pulp. Treatment methods.
7		Topic 7. Treatment methods for pulpitis that do not preserve pulp viability: vital and devital pulp extirpation.	Treatment methods for pulpitis that do not preserve pulp viability: vital and devital pulp extirpation.

8	Topic 8. Endodontic techniques. Selection and use of endodontic instruments. Classification of endodontic instruments. Selection of filling material and filling of root canals Characteristics of instruments for expanding canal mouths, for passing and expanding canals, instruments for filling canals. Endodontic tips, instruments for machine canal processing. Methods of instrumental treatment of canals, choice of technique depending on the clinical situation.	Endodontic techniques. Selection and use of endodontic instruments. Classification of endodontic instruments. Selection of filling material and filling of root canals. Characteristics of instruments for expanding canal mouths, for passing and expanding canals, instruments for filling canals. Endodontic tips, instruments for machine canal processing. Methods of instrumental treatment of canals, choice of technique depending on the clinical situation.
9	Topic 9. Errors and complications in the diagnosis and treatment of pulpitis. Their prevention and elimination.	Errors and complications in the diagnosis and treatment of pulpitis. Their prevention and elimination.

7th semester

No. p/p	Cipher competencies	Name of the section (module), topic of the discipline (module)	Contents of the section and topics in didactic units
1	2	3	4
Section 2. Treatment of periodontal diseases.			
1.	UK-1.ID1 OPK-2.ID1 OPK-4.ID1 OPK-5.ID1 PC-1.ID1 PC-2.ID1 PK-6.ID1	Topic 10. Anatomical and physiological features of the periodontium.	Anatomical and physiological features of periodontium.
2.		Topic 11. Etiology, pathogenesis of apical periodontium.	Etiology, pathogenesis of apical periodontium.
3.		Topic 12. Methods for diagnosing apical periodontitis. Patient examination.	Methods for diagnosing apical periodontitis. Patient examination.
4.		Topic 13. Classifications of apical periodontitis (MMSI, ICD-10)	Classification of apical periodontitis (MMSI, ICD-10)
5.		Topic 14. Clinical picture of acute apical periodontitis. Diagnosis and differential diagnosis of acute apical periodontitis. Methods for diagnosing periodontitis.	Clinical picture, diagnosis, differential diagnosis of acute apical periodontitis. The severity of clinical manifestations of acute apical periodontitis in the phase of intoxication and in the phase of pronounced exudative phenomena. General condition of a patient with periodontitis.

6.		Topic 15. Clinical picture of chronic apical periodontitis and exacerbation of chronic periodontitis. Diagnosis and differential diagnosis of chronic apical periodontitis. Methods for diagnosing apical periodontitis.	Clinical picture, diagnosis, differential diagnosis of chronic forms of apical periodontitis. Clinical picture of chronic and exacerbation of chronic apical periodontitis. General condition of the patient with exacerbation of chronic apical periodontitis. X-ray examination and electroodontometry.
7.		Topic 16. Planning and preparation for the treatment of apical periodontitis.	Planning and preparation for the treatment of apical periodontitis. Irrigation and disinfection of root canals. Temporary filling of root canals. Antibacterial agents. Selection of filling material and filling of root canals. Conservative surgical methods in endodontics. Endodontic preparation for surgical treatment of periodontal diseases: corono-radicular separation, hemisection, root amputation, root apex resection, tooth replantation.
8.		Topic 17. Emergency care in endodontics.	Emergency treatment of teeth with viable and non-viable pulp.
9.		Topic 18. Errors and complications in the diagnosis and treatment of periodontitis.	Errors and complications in the diagnosis and treatment of pulpitis and periodontitis.
10.		Topic 19. Treatment methods for teeth with “problematic” root canals.	Treatment methods for teeth with “problematic” root canals.
11.		Topic 20. Conservative surgical methods in endodontics.	Medicinal and physical methods of treating periodontitis. Long-term results and prognosis of treatment. Endodontic preparation for surgical treatment of periodontal diseases: corono-radicular separation, hemisection, root amputation, root apex resection, tooth replantation.

12.		Topic 21. Dental restoration after endodontic treatment.	Restoration of teeth after endodontic treatment. Use of pins. Whitening of discolored teeth.
13.		Topic 22. Methods for preventing and eliminating errors and complications in endodontics.	Methods for preventing and eliminating errors and complications in endodontics. Repeated endodontic treatment.

2.2 List of sections (modules), topics of the discipline (module) for self-study by students (if available).

Sections and topics of the discipline for independent study by students are not provided in the program.