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STATE UNIVERSITY OF MEDICINE AND PHARMACY
"NICOLAE TESTEMITANU"

Valentina NICOLAICIUC

**PRACTICAL GUIDE
CLINICAL PRACTICAL LESSONS
FOR IVth YEAR OF STUDY VIIIth SEMESTER**

Subject: PERIODONTAL DISEASE

CHISINAU
2012

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The Department of Therapeutical Dentistry

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Practical Guide for Clinical Practical Lessons is a methodological manual in accordance with the curriculum for students - dentists.

This Guide will help foreign students to study the etiology, clinic, diagnosis and treatment of dental diseases.

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STRUCTURE OF PRACTICAL LESSONS (5 HOURS)

1. Students' interrogatory - 5 minutes.
2. Discussion of topic - 45 minutes.
3. Demonstration of patient - 30 minutes.
4. Student's independently work - 130 minutes.
5. Summary (notebook's control, observation sheets, homework) - 15 minutes.

THE PLAN OF PRACTICAL LESSONS

1	Definition of the periodontium. Notion about periodontium. The structure of periodontium. Morphology of periodontium and dento - gingival junction. Gingival fluid, its formation, composition. Quantitative and qualitative modifications of gingival fluid depending on inflammatory changes of marginal periodontium.
2	Epidemiology of marginal periodontium diseases. Epidemiological indices used in periodontology. Etiology. Classification. Catarrhal gingivitis, ulcerous gingivitis. Etiology, pathogenesis, clinical picture, signs and differential diagnosis. Treatment.
3	Hyperplastic gingivitis. Etiology, pathogenesis, clinical picture, clinical signs and differential diagnosis. Treatment. Marginal periodontitis and periodontitis. Clinical picture, signs and differential diagnosis.
4	Clinical and auxiliary examination of marginal periodontitis. The scheme of patient's medical card for supporting the test attestation on this division.
5	Complex treatment of patients with periodontitis. The plan of treatment. Essence.
6	Local treatment of periodontitis. Principles. Methods.
7	General treatment of periodontitis. Principles. Methods.
8	Treatment of marginal periodontitis using physical agents. Outfits.
9	Local and general treatment of periodontitis.
10	Idiopathic lesions of the periodontal tissues, clinical features, treatment.
11-12	Treatment of the patients with the periodontal diseases. Presentation of medical card. Colloquium.

PRACTICAL LESSON № 1

Theme: Definition of the periodontium. Notion about periodontium. The structure of periodontium. Morphology of periodontium and dento – gingival junction. Gingival fluid, its formation and composition. Quantitative and qualitative modifications of gingival fluid depending on inflammatory changes of marginal periodontium.

Place to hold the lesson: Dentist's room.

Time: 5 hours

The purpose of the task: To assimilate notions about marginal periodontium, structure of periodontium, morphology and physiology of periodontium.

Control questions:

1. Main components of the marginal periodontium.
2. The Gingiva (coating periodontium) - adjacent areas.
3. Clinical aspects of healthy gingiva.
4. Histological composition of the gingiva.
5. Gingival sulcus.
6. Formation of the gingival liquid and composition of.
7. Gingival liquid, quantitative and qualitative changes in dependence on inflammatory modifications of periodontium.
8. Periodontium and cement.
9. Alveolar bone.

Homework:

1. Draw gingiva's adjacent areas.
2. Draw tomographic appearance of the periodontium.

PRACTICAL LESSON № 2

Theme: Epidemiology of marginal periodontium diseases. Etiology. Classification. Catarrhal gingivitis, ulcerous gingivitis. Etiology, pathogenesis, clinical picture, signs and differential diagnosis Treatment.

Place to hold the lesson: Dentist's room.

Time: 5 hours.

The purpose of the task: To assimilate the etiology and pathogenesis of periodontal diseases. Classification. To assimilate the clinic, differential diagnosis and treatment of catarrhal gingivitis and ulcerous gingivitis.

Control questions:

1. Modern vision about etiopathogenesis of periodontal disease.
2. Local factors:
 - Main factor–Bacterial plaque (supra and subgingival)
 - Irritation factors (soft deposits, food, calculus, oral hygiene, type of food, an qualitative dental treatments).
 - Local functional factors (absent teeth, anatomical abnormalities, malocclusion).
3. Systemic factors (endocrine, hereditary, metabolic diseases, blood diseases, psychological factors)
4. Pathogenesis of periodontal diseases.
5. Indices of gingival inflammation:
 - Gingival index by Loe and Silness, 1963.
 - PBI-Papilar bleeding index.
 - SBI-Sulcular bleeding index.
 - Evaluation index of gingival enlargement by Rossmann, Ingles, and Caffesse.
6. Indices of periodontal inflammation.
 - Periodontal diseases index PDI by Pamfjord.
 - Tooth mobility index.
 - Community Periodontal Index of Treatment Needs.
 - Index PMA.
 - Pariodontal Index by Russell.
 - OHI'S – Oral hygiene index by Greene-Vermillion.
7. Classification of periodontal diseases (adopted to XVI plenary of Union Scientific Society of Dentists in 1983).
8. Determination of gingivitis.
9. Etiology and pathogenesis of ulcerous gingivitis.
10. Etiology and pathogenesis of catarrhal gingivitis.
11. Clinical picture of catarrhal gingivitis.
12. Clinical picture of ulcerous gingivitis.
13. Differential diagnosis of catarrhal gingivitis.
14. Differential diagnosis of ulcerous gingivitis.

15. Methods of treatment the catarrhal gingivitis.

16. Methods of treatment the ulcerous gingivitis.

Homework:

1. Write in working notebooks gingivals inflammation indices.
2. Write in working notebooks periodontals inflammation indices.
3. Classification of periodontal diseases.
4. Write drugs prescriptions used to treat general and local catarrhal and ulcerative gingivitis.

PRACTICAL LESSON № 3

Theme: Hyperplastic ginivitis. Etiology, pathogenesis, clinical picture, signs and differential diagnosis. Treatment. Marginal periodontitis and periodontasis. Clinical picture, signs and differential diagnosis.

Place to hold the lesson: Dentist's room.

Time: 5 hours.

The purpose of the task: To assimilate the Clinic, differential diagnosis and treatment of hypertrophic gingivitis. Assimilate clinic differential diagnosis of periodontitis and periodontasis.

Control questions:

1. Etiological factors of hypertrophic gingivitis. (Gingival enlargement).
2. Clinical picture of hypertrophic gingivitis. (Gingival enlargement)
3. Clinical aspects of hypertrophic gingivitis caused by medicines.
4. Idiopathic gingival fibromatosis.
5. Conditioned enlargement:
 - enlargement in pregnancy
 - enlargement in puberty
 - enlargement in vit. C deficiency
 - plasma cell gingivitis
6. Methods of treatment for hypertrophic gingivitis.
7. Classification of periodontitis.
8. Clinical picture of acute periodontitis:
 - Mild form of periodontitis.
 - Medium form of periodontitis.
 - Severe form of periodontitis.

9. X-Ray examination (radiography) depending on the severity of marginal periodontitis.

10. Clinical signs of periodontitis.

11. Characteristic of X-Ray examination in periodontitis.

12. Differential diagnosis of periodontitis and periodontosis.

Homework:

1. Make a table with differential diagnosis of hyperplastic gingivitis.

2. Make a table with differential diagnosis of periodontitis based on its severity (mild, moderate, severe).

3. Make a table with differential diagnosis of periodontitis and periodontosis.

4. Drugs used in local and general treatment of hyperplastic gingivitis.

PRACTICAL LESSON № 4

Theme: Clinical examination and auxiliary examination of marginal periodontitis. The scheme of patient medical card for supporting the test attestation on this division.

Place to hold the lesson: Dentist's room.

Time: 5 hours.

The purpose of the task: To assimilate basic methods and supplementary in examination of periodontal lesions. Examination of patient with periodontal disease with the help of basic method and supplementary. To strengthen / reinforce theoretical knowledge in diagnosis, differential diagnosis and in treatment of this pathology.

Control questions:

1. Investigation of patient with periodontitis.

2. To collect information about life history.

3. Examination of the patient.

4. Supplementary methods of examination:

- Radiology
- Determination of indices (OHI – S, PMA, PI)
- Histamine probe
- Determination of capillary resistance.
- Clinical analyses of blood.
- Biochemical analyses of blood (to sugar, iron).
- Reoparodontography.

- Consultation of (therapist, endocrine therapist).
- 5. Organization forms the form periodontal assistance
- 6. Endowment and functions of periodontal room.
- 7. What are the purposes for dispensary system of patients with periodontal diseases.
- 8. The plan of examination for patients with periodontal disease.
- 9. Basic methods in patient examination with periodontal disease.

Homework:

1. Describe and draw odontoparadontogramm.
2. Describe the radiographic appearance of periodontal disease (6 cases).

The scheme of medical card for patient with periodontal disease

History of disease N_____

Patient _____

Diagnosis _____

Executor _____

Student of IVth year, group _____

I Passport data

1. Name, surname _____

2. Sex (genus) _____

3. Age _____

4. Job (occupation) _____

5. Address _____

6. Date of attending (time) _____

II. Patient accuses

III. Life history (personal history)

1. Profession _____

2. Alimentation _____

3. Hereditary history _____
4. Antecedent diseases _____
5. Oral cavity hygiene _____
6. Allergy history _____

IV. Patient history (medical history)

V. Local status of patient

1. General statement _____
2. Aspect of maxillo – facial region _____
3. Opening of oral cavity _____
4. Gingival mucosa _____

VI. Preventive Diagnosis _____

VII. Auxiliary methods _____

VIII. Differential diagnosis _____

IX. Clinic Diagnosis _____

X. Plan of treatment (local and general)

XI. Notebook _____

XII. Treatment results _____

XIII. Fore cast _____

XIV. Epicrisis _____

XV. Etiology and pathogenesis _____

XVI. Pathomorphology _____

PRACTICAL LESSON № 5

Theme: Complex treatment of patients with periodontitis. Treatment plan. Essence.

Place to hold the lesson: Dentist's room.

Time: 5 hours.

The purpose of the task: To assimilate the activity of general treatment and local – conservative, surgical, physical therapeutic and prosthetic.

Control questions:

1. Methods of complex treatment.
2. Purpose of – treatment.
3. Awareness and motivation of patients.
4. The plan treatment for patients with periodontal disease.
5. Preliminary phase:
 - Treatment of emergencies
 - Extraction of teeth
6. Phase I of therapy- etiological phase.
 - Plaque control.
 - Scaling and root planning.
 - Correction of restorative and prosthetic irritants.
 - Treatment of caries(simple and complicated).
 - Local or systemic antimicrobial therapy.
 - Occlusion therapy.
 - Orthodontics' mistakes.
 - Temporary immobilization.
7. Phase II of therapy - restorative phase (surgical, restorative)
 - Periodontal surgery (implants).
 - Endodontic therapy.
 - Restorations.
 - Fixed and removable prosthesis.
 - Balancing the occlusion.
8. Phase III of therapy – maintenance phase (periodic review and verification)
 - Oral hygiene.
 - Plaque and calculus.
 - Gingival conditions.
 - Occlusion and teeth mobility.

Homework:

1. Describe the plan of a complex treatment in mild form of periodontitis.
2. Describe the plan of a complex treatment in moderate form of periodontitis.
3. Describe the plan of a complex treatment in severe form of periodontitis.

PRACTICAL LESSON № 6

Theme: Local treatment of periodontitis. Principles. Methods.

Place to hold the lesson: Dentist's room.

Time: 5 hours.

The purpose of the task: To assimilate the local plan of treatment to avoid the local irritants factors (dental deposits, selective grinding, elimination of the biting anomalies, restoration for the contact points, effectuation of antiinflammatory treatment curettage of periodontal pockets). Attracting the attention to carefully oral hygiene.

Control questions:

1. Local plan of treatment.
2. The role of oral cavity hygiene in treatment of periodontitis.
 - Plaque auto control.
 - Determination plaque presents.
 - Gingivo-tooth brushing.
 - Rinsing the mouth.
 - Inter-dental hygiene.
3. Method and technique in elimination of the plaque and calculus.(supra and subgingival scaling)
 - Manual scaling
 - Ultrasonic scaling
4. Sub gingival scaling and root planning. Principles of scaling with Gracey's curettes.
5. The importance of selective grinding in treatment of periodontal disease, technique of performing.
6. Local anti-inflammatory treatment (medicaments).
7. Surgical methods in periodontitis treatment (curettage, opened curettage, gingivotomy, gingivectomy, graft procedures).

8. Selection of orthopedic methods of treatment and their role in local treatment of periodontitis.

Homework:

1. Make a local treatment plan of periodontitis (moderate form).
2. Write drug's prescriptions for local anti-inflammatory treatment.
3. Write recipes on chemical agents of plaque control (sol. Fucine, eritrosine)
4. Drug recipes for antiseptic processing of gingiva.

PRACTICAL LESSON № 7

Theme: General treatment of periodontitis. Principles. Methods.

Place to hold the lesson: Dentist's room.

Time: 5 hours.

The purpose of the task: to assimilate methods of general treatment for periodontitis, prescription of medicaments used in general treatment of periodontitis (pharmacotherapy of periodontal disease).

Control questions:

1. The importance (role) of general treatment in complex treatment of periodontitis.
2. Medicaments with antiinflammatory action.
3. Hyposensitization therapy in treatment of periodontitis.
4. Stimulation therapy.
5. Medicaments with tonic general effect.
6. Biostimulation remedies (stimulation substance).
7. Osteogenic remedies.
8. Systemic administration of antibiotics to prevent and treat periodontal disease.
9. Administration of bactericidal nitromidazole compounds-Imidazoli.
 - Metranidazoli.
 - Ornidazoli.
9. Vitamin therapy.

Homework:

1. Write drug prescriptions of antibiotics.
2. Write prescriptions of vitamins.
3. Write prescriptions of bactericidal nitromidazole compounds.

PRACTICAL LESSON № 8

Theme: The treatment of periodontitis with the physical agents. Instruments and devices.

Place to hold the lesson: Dentist's room. Physiotherapeutic cabinet.

Time: 5 hours.

The purpose of the task: to study physiotherapeutic methods of the treatment and to become aware about physiotherapeutic devices in the physiotherapeutic cabinets.

Control questions:

1. The importance of the physiotherapeutic methods in the complex treatment of the periodontal diseases.
2. Indications and contraindications in the management of physiotherapy methods.
3. Medicament electrophoresis.
4. Darsonvalization.
5. Fluctuorization.
6. Diadynamic currents.
7. Microwave therapy.
8. Hydroaeronization.
9. Different types of the massage.
10. Magnitotherapy.
11. Cryotherapy.
12. Laser therapy.

Homework:

1. In case of gingival bleeding during brushing, which drugs are used in electrophoresis.
2. Physiotherapeutic methods and drugs indicated in case of hyperplastic gingivitis
3. Physiotherapeutic methods and drugs indicated in case of hypersensitivity.

PRACTICAL LESSON № 9

Theme: Local and general treatment of the periodontitis

Place to hold the lesson: Dentist's room.

Time: 5 hours.

The purpose of the task: to study local and general treatment of the periodontitis.

Control questions:

1. The treatment of the concomitant affections
2. Elimination of the hypoxia of the periodontal tissues
3. Prevention of the inflammatory complications
4. Treatment of the teeth hyperesthesia
5. Obturation of the cuneiform defects and erosions
6. The importance of the protein methods in the treatment of the periodontitis
7. Physiotherapeutic methods in complex treatment of the periodontitis
8. Normalization of microcirculation and metabolic processes.
9. Vitamin therapy.

Homework:

1. Write drug prescriptions for local treatment of periodontitis
2. Write drug prescriptions for general treatment of periodontitis

PRACTICAL LESSON № 10

Theme: Idiopathic lesions of the periodontal tissues, clinical features, treatment.

Place to hold the lesson: Dentist's room.

Time: 5 hours.

The purpose of the task: to study clinical symptoms, diagnostic and treatment of the Idiopathic affections of the periodontal tissues.

Control questions:

1. Diagnostic signs of the periodontitis.
2. Diagnostic of the periodontolysis in diabetes mellitus.
3. Periodontolysis with the syndrome Papion-Lefevr.
4. Periodontolysis at persons with pathology Henda-Kristcina.
5. Treatment of the patients with the idiopathic lesions of the periodontal tissues.

Homework:

1. Describe the diagnostic signs of Periodontolysis.

PRACTICAL LESSON № 11-12

Theme: Treatment of the patients with the periodontal diseases.
Presentation of medical card. Colloquium

Place to hold the lesson: Dentist's room.

Time: 5 hours.

The purpose of the task: Student is obligated to study and to fulfill following practical skills in diagnosis and treatment of the patients with the periodontal affections.

Control questions:

1	To examine -: <ul style="list-style-type: none">• Catarrhal gingivitis• Ulcerous gingivitis• Hyperplasic gingivitis• Periodontitis (light, medium and severe types)• Paradontosis	6 patients 3 1 1 3 1
2	To determine Siller-Pisarev test	2
3	Culagenco probe	1
4	Determining of the periodontal bags	6
5	Determining of the mobility of the teeth	12
6	Examining of the radiologic cliché	12
7	Local anti-inflammatory treatment	4
8	General treatment	1
9	Scaling	10
10	Topical application of different drugs	10
11	Sublingual curettage	4
12	Participation in surgical interventions	2
13	Selective polishing	2
14	Other methods (immobilization of the teeth etc.)	1

Homework:

1. To complete and submit the observation sheet of the patient with periodontal diseases

2. Working and presentation of a patient's diary.

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