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Valentina NICOLAICIUC

PRACTICAL GUIDE CLINICAL PRACTICAL LESSONS FOR THE IVth YEAR OF STUDY VIIth SEMESTER

Subject: APICAL PERIODONTITIS
NON-CARIOUS DISEASE

162

STATE UNIVERSITY OF MEDICINE AND PHARMACY "NICOLAE TESTEMITANU"

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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Nicolaiciuc, Valentina

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N 62

STRUCTURE OF PRACTICAL LESSONS (5 HOURS)

- 1. Student's 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	Apical periodontitis. Etiology. Pathogenesis. Classification. Clini-
	cal picture of acute and chronic exacerbated apical periodontitis.
	Differential diagnosis.
2	Clinical picture of chronic apical periodontitis. Differential diag-
	nosis.
3	Local and general treatment of acute apical periodontitis.
4	The treatment of chronic apical periodontitis.
5	The technique of mechanic treatment. Methods and stages of root
	canals Permeabilization.
6	Methods for root canals sterilization. Necessary remedies.
7	Methods of application the physical agents in treatment of acute
	and chronic apical periodontitis (diadynamic, sinusoidal, d'Arson-
	val direct, URV currents). Appliances, methods.
8	Obturation of root canals with different materials. Methods and
	Materials. Errors and complications in treatment of apical perio-
	dontitis.
9	Dental hypoplasia and fluorosis. Clinical picture. Differential diag-
	nosis. Treatment. Prophylaxis. Hyperplasia.
10	Hereditary unrests in development of hard dental tissues which
	appear after teeth eruption. Traumatic lesions. Acidic necrosis.
	Clinical signs, diagnosis and differential diagnosis. Treatment and
	prophylaxis.
11	Pathologic abrasion of hard dental tissue. Wedge-form defect. Ne-
	crosis and erosion of hard dental tissues. Hyperesthesia of hard
	dental tissue. Modifications in hard tissues in endocrine diseases.
	Clinical signs and differential diagnosis. Treatment.
12	Colloquium.
	1

STRUCTURE OF PRACTICAL LESSONS (5 HOURS)

- 1. Student's 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	Apical periodontitis. Etiology. Pathogenesis. Classification. Clinical picture of acute and chronic exacerbated apical periodontitis. Differential diagnosis.
2	Clinical picture of chronic apical periodontitis. Differential diagnosis.
3	Local and general treatment of acute apical periodontitis.
4	The treatment of chronic apical periodontitis.
5	The technique of mechanic treatment. Methods and stages of root canals Permeabilization.
6	Methods for root canals sterilization. Necessary remedies.
7	Methods of application the physical agents in treatment of acute and chronic apical periodontitis (diadynamic, sinusoidal, d'Arson- val direct, URV currents). Appliances, methods.
8	Obturation of root canals with different materials. Methods and Materials. Errors and complications in treatment of apical periodontitis.
9	Dental hypoplasia and fluorosis. Clinical picture. Differential diagnosis. Treatment. Prophylaxis. Hyperplasia.
10	Hereditary unrests in development of hard dental tissues which appear after teeth eruption. Traumatic lesions. Acidic necrosis. Clinical signs, diagnosis and differential diagnosis. Treatment and prophylaxis.
11	Pathologic abrasion of hard dental tissue. Wedge-form defect. Necrosis and erosion of hard dental tissues. Hyperesthesia of hard dental tissue. Modifications in hard tissues in endocrine diseases. Clinical signs and differential diagnosis. Treatment.
12	Colloquium.

Subject: Apical periodontitis. Etiology. Pathogenesis. Classification. Clinical picture of acute and chronic exacerbated apical periodontitis. Differential diagnosis.

Place to hold the lesson: Dentist's room.

Time: 5 hours

The purpose of the task: to assimilate the methods for diagnosis the acute and chronic exacerbated apical periodontitis.

Control questions:

- 1. Hystological structure of periodontium.
- 2. Functions of periodontium. It's meaning.
- 3. Etiology and pathogenesis of apical periodontitis.
- 4. Methods of examination in diagnosis the apical periodontitis.
- 5. Classification of apical periodontitis.
- 6. Clinical picture of acute and chronic exacerbated apical periodontitis.
- 7. Differential diagnosis of acute and chronic exacerbated apical periodontitis
 - 8. Roentgen diagnosis of acute and chronic exacerbated periodontitis.

Homework:

• Put down in the notebook classification of apical periodontitis, differential diagnosis of acute and chronic exacerbated periodontitis in scheme form.

- 1. Clinical Periodontology and Implant Dentistry 4th edition, Jan Lindhe Thorkild Karring . Niklaus P. Lang Editors Blackwell
 - 2. Color Atlas of Endodontics William T. Johonson, dds,ms.
- 3. Endodontics problem solving in clinical practice TR Pitt Ford, JS Rhodes, HE Pitt Ford.
- 4. Principles ad Practice of Endodontics 3rd edition Richard E. Walton, dmd, ms. Iowa City.
 - 5. Lecture material

Subject: Clinical picture of chronic apical periodontitis. Differential diagnosis.

Place to hold the lesson: Dentist's room.

Time: 5 hours

The purpose of the task:

Control questions:

- 1. The classification of chronic forms of periodontitis.
- 2. Etiopathogenesis of chronic forms of periodontitis.
- 3. Clinical picture and differential diagnosis of chronic fibrous periodontitis.
- 4. Clinical picture and differential diagnosis of chronic granulous periodontitis.
- 5. Clinical picture and differential diagnosis of chronic granulomatous periodontitis.
 - 6. Clinical picture of radicular cyst.
 - 7. Roentgenologic picture of chronic forms of periodontitis.

Homework:

- Schematic to draw in the working copy book the roentgenologic periodontitis data (facts) of chronic forms of periodontitis.
- In a table form to put down the differential diagnosis of chronic forms of peridontitis.

- 1. Clinical Periodontology and Implant Dentistry 4th edition, Jan Lindhe Thorkild Karring . Niklaus P. Lang Editors Blackwell
 - 2. Color Atlas of Endodontics William T. Johonson, dds,ms.
- 3. Endodontics problem solving in clinical practice TR Pitt Ford, JS Rhodes, HE Pitt Ford.
- 4. Principles ad Practice of Endodontics 3rd edition Richard E. Walton, dmd, ms. Iowa City.
 - 5. Lecture material

Subject: Local and general treatment of acute apical periodontitis.

Place to hold the lesson: Dentist's room.

Time: 5 hours

The purpose of the task: to assimilate the methods of treatment the acute and chronic exacerbated periodontitis.

Control questions:

- 1. Describe the stages of local treatment for acute apical periodontitis.
- 2. Describe the stages of local treatment for chronic apical exacerbated periodontitis.
- 3. The essence and indications of local treatment of acute apical periodontitis and chronic apical exacerbated periodontitis.
- 4. Describe the drainage way of the exudates from the periodontal tissue.
- 5. The stages of treatment the apical acute medicamentous periodontitis.

Homework:

- In the working copy-book to put down the plan of local treatment the apical acute periodontitis and chronic apical in stage of exacerbation.
- To put down the plan of general treatment for apical acute periodontitis and chronic apical in stage of exacerbation.

- 1. Clinical Periodontology and Implant Dentistry 4th edition, Jan Lindhe Thorkild Karring . Niklaus P. Lang Editors Blackwell
 - 2. Color Atlas of Endodontics William T. Johonson, dds,ms.
- 3. Endodontics problem solving in clinical practice TR Pitt Ford, JS Rhodes, HE Pitt Ford.
- 4. Principles ad Practice of Endodontics 3rd edition Richard E.Walton, dmd, ms. Iowa City.
 - 5. Lecture material

Subject: The treatment of chronic apical periodontitis.

Place to hold the lesson: Dentist's room.

Time: 5 hours

The purpose of the task: to assimilate the methods of treatment the periodontitis depending upon the form.

Control questions:

- 1. Describe the stages in treatment the chronic fibrous periodontitis.
- 2. Describe the stages in treatment the chronic granulous periodontitis.
- 3. Describe the stages in treatment the chronic granulomatous periodontitis.
 - 4. The treatment of radicular cyst.
 - 5. Conservative surgical methods of treatment the periodontitis.

Homework:

- In dependence on the forms enumerate the stages of treatment the chronic periodontitis;
- Enumerate the conservative surgical methods of treatment the periodontitis.

- 1. Clinical Periodontology and Implant Dentistry 4th edition, Jan Lindhe Thorkild Karring. Niklaus P. Lang Editors Blackwell
 - 2. Color Atlas of Endodontics William T. Johonson, dds,ms.
- 3. Endodontics problem solving in clinical practice TR Pitt Ford, JS Rhodes, HE Pitt Ford.
- 4. Principles ad Practice of Endodontics 3rd edition Richard E. Walton, dmd, ms. Iowa City.
 - 5. Lecture material

Subject: The technique of mechanic treatment. Methods and stages of root canals permeabilization.

Place to hold the lesson: Dentist's room.

Time: 5 hours

The purpose of the task: Student's must assimilate the stages of endodontic treatment.

Control questions:

- 1. Endodontics. Goals. Stages of endodontic treatment.
- 2. Describe the groups of endodontic instruments, in dependence on its functions.
 - 3. The characteristic of endodontic instruments. Call the groups.
 - 4. The standardization (ISO). Its meaning.
- 5. Describe the methods for mechanical permeabilization of root canals.
 - 6. The characteristic of Step-Back method.
 - 7. The characteristic of Crown-Down method.
- 8. The technique and the mechanism of root canal permeabilization.

Homework:

- To put down in the copy books the classification of endodontic instruments in dependence on their function.
- To write the prescriptions of medicines used in chemical method of permeabilization the root canals.

- 1. Clinical Periodontology and Implant Dentistry 4th edition, Jan Lindhe Thorkild Karring. Niklaus P. Lang Editors Blackwell
 - 2. Color Atlas of Endodontics William T. Johonson, dds,ms.
- 3. Endodontics problem solving in clinical practice TR Pitt Ford, JS Rhodes, HE Pitt Ford.
- 4. Principles ad Practice of Endodontics 3rd edition Richard E. Walton, dmd, ms. Iowa City.
 - 5. Lecture material

Subject: Methods for root canals sterilization. Necessary remedies.

Place to hold the lesson: Dentist's room.

Time: 5 hours

The purpose of the task: To assimilate the correct choice of medicinal remedies and methods for root canals sterilization.

Control questions:

- 1. The requirements to medicines used in medicamentous treatment (processing) or root canals and periapical tissues. Groups.
 - 2. The goal for sterilization the root canals.
- 3. What stages precede the medicamentous processing of the canals.
- 4. The technique of usage the turundae and other remedies in medicamentous treatment of root canals.

Homework:

- Count the groups of antiseptic medicines used in medicamentous treatment of root canals.
 - The recipe (Prescription).

- 1. Clinical Periodontology and Implant Dentistry 4th edition, Jan Lindhe Thorkild Karring. Niklaus P. Lang Editors Blackwell
 - 2. Color Atlas of Endodontics William T. Johonson, dds,ms.
- 3. Endodontics problem solving in clinical practice TR Pitt Ford, JS Rhodes, HE Pitt Ford.
- 4. Principles ad Practice of Endodontics 3rd edition Richard E. Walton, dmd, ms. Iowa City.
 - 5. Lecture material

Subject: Methods of application the physical agents in treatment of acute and chronic apical periodontitis (diadinamic, sinusoidal, d'Arsonval direct, URV currents). Appliances, methods.

Place to hold the lesson: Dentist's room.

Time: 5 hours

The purpose of the task: The assimilation of physical methods for the treatment of apical periodontitis.

Control questions:

- 1. Describe the physical methods used in the treatment of apical periodontitis. The essence of physical methods.
- 2. Indications and contraindications for the usage of physical methods in the treatment of apical periodontitis.
- 3. Describe the medicinal remedies used for treating the apical periodontitis.
- 4. Diadinamic, sinusoidal, modulated, fluctuation, URV, d'Arsonval direct currents. The essence. Method of use.
- 5. Appliances used for physical treating of apical periodontitis. Method of use.

Homework:

- Put down in the copy books indications to the usage of physical methods in the treatment of periodontitis.
- Put down in the copy books the medicinal remedies used in the treatment of periodontitis. Prescription.

- 1. Clinical Periodontology and Implant Dentistry 4th edition, Jan Lindhe Thorkild Karring. Niklaus P. Lang Editors Blackwell
 - 2. Color Atlas of Endodontics William T. Johonson, dds,ms.
- 3. Endodontics problem solving in clinical practice TR Pitt Ford, JS Rhodes, HE Pitt Ford.
- 4. Principles ad Practice of Endodontics. 3rd edition Richard E. Walton, dmd, ms. Iowa City.
 - 5. Lecture material

Subject: Obturation of root canals with different materials. Methods and Materials. Errors and complications in treatment of apical periodontitis.

Place to hold the lesson: Dentist's room.

Time: 5 hours

The purpose of the task: To assimilate the method of choosing and filling root canals with different materials; to teach the student's how to warn and eliminate the errors and complications in the treatment of apical periodontitis.

Control questions:

- 1. The purpose for filling the root canals.
- 2. Classification of filling materials used in obturation of root canals. Their properties.
 - 3. Indications and contraindications for their usage.
- 4. Describe the methods and instruments used for filling the root canals.
 - 5. The method of filling the root canals by lateral condensation.
 - 6. The method of filling the root canals by vertical condensation.
 - 7. Thermo-mechanical method of root canal filling.
- 8. Mistakes and complications by medicamentous processing of root canals.
- Mistakes and complications by instrumental processing of root canals.
 - 10. Mistakes and complications by root canal filling.
 - 11. Mistakes and complications during the treatment of periodontitis.
- 12. Physical methods used in the treatment of complications of apical periodontitis.

Homework:

- Count physical methods used in treatment of complications appeared in the process of periodontitis treatment.
- To put down the classification of filling materials for root canal obturation.

Bibliography:

- 1. Clinical Periodontology and Implant Dentistry 4th edition, Jan Lindhe Thorkild Karring. Niklaus P. Lang Editors Blackwell
 - 2. Color Atlas of Endodontics William T. Johonson, dds,ms.
- 3. Endodontics problem solving in clinical practice TR Pitt Ford, JS Rhodes, HE Pitt Ford.
- 4. Principles ad Practice of Endodontics 3rd edition Richard E.Walton, dmd, ms. Iowa City.
 - Lecture material

PRACTICAL LESSON N 9

Subject: Dental hypoplasia and fluorosis. Clinical picture. Differential diagnosis. Treatment. Prophylaxis. Hyperplasia.

Place to hold the lesson: Dentist's room.

Time: 5 hours

The purpose of the task: Student's should assimilate theoretical and practical part of the lesson about hypoplasia, hyperplasia, fluorosis.

Control questions:

- 1. Etiology of hypoplasia and fluorosis.
- 2. The classification of hypoplasia and fluorosis.
- 3. Clinical picture of hypoplasia and fluorosis.
- 4. The diagnosis of hypoplasia and fluorosis.
- 5. Differential diagnosis of hypoplasia and fluorosis.
- 6. The treatment of hypoplasia and fluorosis.
- 7. Prophylaxis.
- 8. Etiology, clinical picture and diagnosis of hyperplasia.
- 9. Rate of spreading for fluorosis in Moldova.

Homework:

- Put down in the working copy-books the classification of hypoplasia and fluorosis.
- In the form of charts put down the differential diagnosis of hypoplasia and fluorosis.

Bibliography:

- 1. Clinical Periodontology and Implant Dentistry 4th edition, Jan Lindhe Thorkild Karring. Niklaus P. Lang Editors Blackwell
 - 2. Color Atlas of Endodontics William T. Johonson, dds,ms.
- 3. Endodontics problem solving in clinical practice TR Pitt Ford, JS Rhodes, HE Pitt Ford.
- 4. Principles ad Practice of Endodonties 3rd edition Richard E.Walton, dmd, ms. Iowa City.
 - 5. Lecture material

PRACTICAL LESSON N 10

Subject: Hereditary unrests in development of hard dental tissues which appear after teeth eruption. Traumatical lesions. Acidic necrosis. Clinical signs, diagnosis and differential diagnosis. Treatment and prophylaxis.

Place to hold the lesson: Dentist's room.

Time: 5 hours

The purpose of the task: Student's must assimilate theoretical and practical part of the lesson on given subject.

Control questions:

- 1. Amelogenesis imperfecta.
- 2. Dentinogenesis imperfecta.
- 3. Osteogenesis imperfecta.
- 4. Displasia Cap-de Pont.
- 5. Marble bones (osteopetrosis, Albers-Schonberg disease).
- 6. The etiology of trauma.
- 7. The classification for acute trauma of teeth.
- 8. Clinical picture, diagnosis and treatment for teeth injury (bruise).
- 9. Clinical picture, diagnosis and treatment for teeth luxation (dislocation).
 - 10.Clinical picture, diagnosis and treatment for teeth fracture.
 - 11. The etiology for acidic necrosis of teeth.
 - 12. Clinical picture, diagnosis for acidic necrosis of teeth.
 - 13.Differential diagnosis.
 - 14. The treatment of acidic necrosis of teeth.

Homework:

- 1. Put down in the copy-books the classification for lesions of hard tissues, which appear after teeth eruption;
- 2. In form of charts put down the differential diagnosis of acidic necrosis.

Bibliography:

- 1. Clinical Periodontology and Implant Dentistry 4th edition, Jan Lindhe Thorkild Karring. Niklaus P. Lang Editors Blackwell
 - 2. Color Atlas of Endodontics William T. Johonson, dds,ms.
- 3. Endodontics problem solving in clinical practice TR Pitt Ford, JS Rhodes, HE Pitt Ford.
- 4. Principles ad Practice of Endodontics 3rd edition Richard E.Walton, dmd, ms. Iowa City.
 - 5. Lecture material

PRACTICAL LESSON N 11

Subject: Pathologic abrasion of hard dental tissue. Wedge-form defect. Necrosis and crosion of hard dental tissues. Hyperesthesia of hard dental tissue. Modifications in hard tissues in endocrine diseases. Clinical signs, signs and differential diagnosis. Treatment.

Place to hold the lesson: Dentist's room.

Time: 5 hours

The purpose of the task: Student's must assimilate theoretical and practical part of the lesson on given subject.

Control questions:

- 1. The etiology for pathologic abrasion of hard dental tissues, wedge-form defect, erosion and necrosis of hard dental tissues.
 - 2. The classification.
 - 3. Clinical picture. Diagnosis.
 - 4. Differential diagnosis.
 - 5. Treatment.
- 6. Determination of hyperesthesia. Clinical picture for hyperesthesia of hard dental tissues.

- 7. Diagnosis. Differential diagnosis of hyperesthesia.
- 8. Treatment. Prophylaxis.
- 9. Describe the endocrine diseases that cause changes of hard dental tissues. Clinical picture. Treatment.

Homework:

• To write in the working copy-books in form of scheme the differential diagnosis of wedge-form defect, pathologic abrasion of teeth, erosion, necrosis of hard dental tissues.

Bibliography:

- 1. Clinical Periodontology and Implant Dentistry 4th edition, Jan Lindhe Thorkild Karring. Niklaus P. Lang Editors Blackwell
 - 2. Color Atlas of Endodontics William T. Johonson, dds,ms.
- 3. Endodontics problem solving in clinical practice TR Pitt Ford, JS Rhodes, HE Pitt Ford.
- 4. Principles ad Practice of Endodontics 3rd edition Richard E. Walton, dmd, ms. Iowa City.
 - 5. Lecture material

PRACTICAL LESSON N 12

Subject: Colloquium lesson.

Place to hold the lesson: Dentist's room.

Time: 5 hours

The purpose of the task: Checking accumulated knowledge of the student's in time of the practical lessons.

At the last lesson student's who don't have absents at the practical lessons and lectures and assimilate practical skills are admitted. Student's can be asked by topics studied in time of the semester.

Student is admitted if:

- 1. Made practical skills
- 2. Made homework
- 3. Answered on the teachers questions.