

THE MINISTRY OF PUBLIC HEALTH OF REPUBLIC MOLDOVA

**STATE MEDICAL AND PHARMASEUTICAL UNIVERSITY
" NICOLAE TESTEMIȚANU "**

DEPARTMENT OF PROSTHETIC DENTISTRY

METHODICAL ELABORATION

**to practical lessons
for the students of IV year VIII therm**

Chisinau 2018

The list of practical manual skills
on orthopedic dentistry for the students of IV year VIII semester

Name - _____

Gr. – _____

№	Practical manual skills	Obligatory	Demonstrated	The signature of the student	The signature of the teacher
1	a)Examination of the patients with complete edentation, diagnosing and planning of treatment. b)Taking part in examination of the patients	1	1		
2	a)Taking anatomical impressions with elastic impression material from each other. b)Taking part in examination of the patients	4 1			
3	a)Testing the individual tray at the patients with complete edentation b)Taking part in examination of the patients	1 1			
4	a)Getting functional impressions at complete edentation b)Taking part in examination of the patients	1 1			
5	a)Definition and fixation of the central intermaxilar jaws' relationships at complete or partial edentation b)Taking part in examination of the patients	1 1			
6	Taking part in examination of the patients	1			
7	Trial stage of complete or partial removable acrylic denture manufacturing	1			
8	a)Correction and imposing complete or partial removable denture on an orthopaedic field b)Taking part in examination of the patients	1	1		
9	Taking part in examination of patients with determination of indications to using total denture with metal base and elastic relining.	1			
10	Taking part in examination of the patients	1			
11	Taking part in examination of the patients	1			

Notes:

1. The practical skills necessary for independent performance and demonstration are carried out with materials destined for the students which are fixed in a special register book.
2. In case of not fulfilling the given list the student is obliged to get practical certification at extra classes (not according to the time-table).
3. According to the decision of department, in exclusive cases, the part of practical skills can be conditionally transferred for performance in the following semester.
4. Writing off materials, intended for performing the practical skills by the students, is carried out according to the working orders of the Ministry of public health Services with factor 2, authorized Administrative Council of Dental Clinic.

Methodical elaboration № 1.

Theme: Complete edentation. General signs. Etiology, pathogenesis. Clinic of complete edentation. Local, local-regional and general changes connected with complete losing teeth.

Place of the lesson: clinic.

The purpose of the lesson: the students materialize knowledge about the peculiarities of local, local-regional and general changes connected with complete loss of teeth, participating in clinical examination of the patients.

Practically students examine the patients, study diagnostic models, orthopantomogrames, thomogrames of TMJ, received from the patients with complete edentation with the purpose of definition of these changes, marking executed manual skills in their diaries.

Plan of the lesson:

1. Interrogation of the students - 30 min.
2. Demonstration of the thematic patient - 30 min.
3. Reception of the patients - 146 min.
4. Conclusion - 10 min.

Checking questions:

1. Etiology and pathogenesis of complete edentation.
2. Clinic of complete edentation.
3. Local factors causing resorption and atrophy of alveolar ridges.
4. General factors causing resorption and atrophy of alveolar ridges.
5. Dynamic of resorption of bone mass of the jaws (depending on the period of teeth extraction).
6. From which factors depends the degree of resorption and atrophy of alveolar ridge?
7. Changes in TMJ at complete edentation.
8. Changes of the mucosa of the oral cavity and face skin at complete edentation.
9. Changes of tongue, taste and salivation at complete edentation.
10. Changes in chewing muscles at complete edentation.
11. Mental disorders at complete edentation. Psychosomatics.

Methodical elaboration № 2-3

Theme: *Prosthetic field at complete edentation. Muscles surrounding prosthetic field. Functional zones of prosthetic field.*

Place of the lesson: clinic.

The purpose of the lesson: the students materialize knowledge about basic (support) zones of prosthetic field at complete edentation and elements forming them, muscles surrounding prosthetic field and its functional zones.

Practically students examine the patients, study diagnostic models at complete edentation, and determine zones and elements of prosthetic field on the maxillae and mandible, determine value their and practical importance, connection of atrophy degree with an attachment of muscles of stomatognathic area, marking executed manual skills in their diaries.

The plan of the lesson:

1. Interrogation of the students - 30 min.
2. Demonstration of the thematic patient - 30 min.
3. Reception of the patients - 146 min.
4. Conclusion - 10 min.

Checking questions:

1. **Classification of total edentia by Schröder, Köller and mucous membrane by Supple.**
2. **Forms of alveolar ridge and support zones of upper jaw. Classifications.**
3. **Kinds of palatal torus by Land.**
4. **Zones by Schröder. Their practical importance. Seal area (suction zone) of the upper jaw.**
5. **Prosthetic field of the lower jaw, support zone.**
6. **Characteristic of Seal area (suction zone) of the lower jaw.**
7. **What muscles surrounding prosthetic field have perpendicular insertion? What muscles surrounding prosthetic field have horizontal insertion?**
8. **Enumerate the muscles elevator, depressor and muscles moving the lower jaw forward.**
9. **Mimic muscles and their practical importance.**
10. **Name the surfaces of vestibular functional zone of the upper jaw.**
11. **Characteristics of distal zone of the upper jaw.**
12. **Enumerate functional zones of prosthetic field of the lower jaw.**
13. **Characteristic of lower jaw protuberance zone.**
14. **Enumerate the surfaces of Vestibular-functional zone of the lower jaw.**
15. **Lingual zone, limits and practical importance.**
16. **„Distal,, zone of the mandible, limits and practical importance.**

Methodical elaboration № 4.

Theme: *Clinical examination at complete edentation. Diagnosis. Methods of fixing artificial total denture.*

Place of the lesson: clinic.

The purpose of the lesson: the students materialize knowledge about the sequence of clinical and paraclinical examination, diagnosis of complete edentation, methods of fixation of total denture.

Practically students make clinical examination of the patients with complete edentation, study diagnostic models at complete edentation, X-rays, determine diagnosis, methods of fixation of total denture, marking executed manual skills in their diaries.

The plan of the lesson:

1. Interrogation of the students - 30 min.
2. Demonstration of the thematic patient - 30 min.
3. Reception of the patients - 146 min.
4. Conclusion - 10 min.

Checking questions:

1. Characteristic of subjective examination. Symptoms.
2. Extra-oral examination. Characteristic. Sequence.
3. Intra-oral examination. Characteristic. Sequence.
4. Paraclinical (additional) examination at complete edentation. Methods. Criteria of methods' choosing.
5. Components of the diagnosis at complete edentation.
6. Mechanical methods of fixation of artificial total denture.
7. Biomechanical methods of fixation of artificial total denture.
8. Physical methods of fixation of artificial total denture.
9. Biophysical method of fixation of artificial total denture.
10. What factors promote fixation and stabilization of artificial total denture?
11. What is the suction as a phenomenon?
12. What is the adhesion as a phenomenon?

Methodical elaboration № 5.

Theme: *Impressions getting at complete edentation. Types. Materials and technique of getting impressions.*

Place of the lesson: clinic.

The purpose of the lesson: the students materialize the knowledge about various methods of getting impressions at complete edentation depending on the condition of the prosthetic field.

Practically students get preliminary impressions, adapt individual impression trays and get functional impressions, marking executed manual skills in their diaries.

The plan of the lesson:

1. Interrogation of the students - 30 min.
2. Demonstration of the thematic patient - 30 min.
3. Reception of the patients - 146 min.
4. Conclusion - 10 min.

Checking questions:

1. Explain the purpose of getting preliminary impression. Materials used for getting impressions.
2. Criteria of choosing standard impression trays at getting impressions from toothless jaw.
3. Describe the method of getting a preliminary impression. Used materials.
4. Criteria of necessity of getting functional impressions.
5. Variants of functional (final) impressions depending on the height of the edges of the tray.
6. Variants of functional impressions by methods of impression edges formation.
7. Variants of functional impressions by the degree of compression of the mucousa of prosthetic field.
8. Indications for getting functional compressive, decompressive and differentiate impressions. Used materials.
9. The concept of dental technique of Bucharest school about functional impressions.
10. Materials used at manufacturing the individual trays.
11. Functional tests by Herbst for the upper jaw.
12. Functional tests by Herbst for the lower jaw.

Methodical elaboration № 5.

Theme: *Determination of centric jaws' relationships of toothless jaws.*

Place of lesson: clinic.

The purpose of the lesson: the students materialize knowledge about clinical stages of determination of centric jaw's relationships at complete edentation.

Practically the students with the help of the teacher form the vestibular surface of upper occlusal wax border, prosthetic plane direction and level, determine the vertical dimension of occlusion, determine and fix the centric jaws relationships, choose the artificial teeth and the method of their arrangement, marking the executed manual skills in their diaries.

The plan of lesson:

1. Interrogation of the students - 30 min.
2. Demonstration of the thematic patient - 30 min.
3. Reception of the patients - 146 min.
4. Conclusion - 10 min.

Checking questions:

1. Definition of concept " inter-jaw's relationships". Exemplified possible clinical situations.
2. Centric jaws relationships. Modern conception. Methods of determination.
3. Concept "free speech space".
4. Concept "physiological interocclusal space".
5. Antropometric method of determination of vertical dimension of occlusion.
6. Anatomical-physiological method of determination of vertical dimension of occlusion.
7. Functional method of determination of vertical dimension of occlusion. Stages of interjaws relationships at complete adentia.
8. Modelling vestibular surface of occlusal wax border.
9. Determination of height of upper occlusal wax border.
10. Determination of the prosthetic plane.
11. Determination and registration of the centric jaw's relationships.
12. Determination of orienteer for artificial teeth arrangement.

Methodical elaboration № 7.

Theme: *Checking the design of artificial prosthesis for toothless jaws. Possible mistakes made at definition of the centric jaw's relationships. Methods of their prevention and correction.*

Place of lesson: clinic.

The purpose of the lesson: the students materialize the received knowledge according the theme of the lecture.

Practically students take part at checking the design of complete artificial denture, define quality of artificial teeth arrangement, reveal possible mistakes made at previous stage and methods of their correction, receive the patients. In diaries the students mark executed manual skills.

The plan of lesson:

1. Interrogation of the students - 30 min.
2. Demonstration of the thematic patient - 30 min.
3. Reception of the patients - 146 min.
4. Conclusion - 10 min.

Checking questions:

1. Necessity of realization of checking the design of artificial total denture.
2. Extraoral checking the design of total denture.
3. Intraoral checking the design of total denture.
4. Method of checking the vertical dimension of occlusion. Signs or clinical symptoms of VDO increasing. Signs or clinical symptoms of VDO decreasing. Checking phonetic.
5. Checking rehabilitation of aesthetics.
6. Possible mistakes at definition of the vertical dimension of occlusion (interjaws relationships in vertical plane). Clinical symptoms. Correction.
7. Possible mistakes at definition of interjaws relationships in sagittal plane. Clinical symptoms. Correction.
8. Possible mistakes at definition of interjaws relationships in transversal plane. Clinical symptoms. Correction.
9. Mistakes appeared because of deformations of basis with occlusal rims. Correction.
10. Mistakes connected with compression of the fibro-mucosa of prosthetic field.
11. What is the essence of "spatulae" test and its practical importance.

Methodical elaboration № 8.

Theme: *Insertion of artificial total denture on a toothless jaw. Adaptation to artificial total denture.*

Place of lesson: clinic.

The purpose of the lesson: the students materialize the received knowledge about the sequence of carrying out the stage of insertion of artificial total denture, phases of adaptation to them, rules of correction.

Practically students take part at testing and insertion of artificial total denture, correction of the denture base, checking the interdental contacts, discuss recommendations about using artificial prosthesis. In diaries the students mark executed manual skills.

The plan of lesson:

1. Interrogation of the students - 30 min.
2. Demonstration of the thematic patient - 30 min.
3. Reception of the patients - 146 min.
4. Conclusion - 10 min.

Checking questions:

1. Extraoral checking artificial total denture.
2. Intraoral checking artificial total denture.
 - mechanical adaptation of the denture in the oral cavity
 - checking and adaptation of mandibular-cranian and mandibular-maxilla relations
 - functional adaptation
 - technique of checking the distal valve
 - technique of checking the lateral valve (right, left)
 - technique of checking the circular valve
3. Adaptation to total denture. Stages:
 - biological adaptation
 - psychological adaptation
4. What difficulties can be at applying the total denture in the oral cavity?
5. What recommendations are given to the patients?
 - hygiene of the denture
 - stages of adaptation to total denture
 - rules of correction of total denture
6. The criteria of determination the quality of treatment with total dentures.
7. Instruments used for correction of total dentures.

Methodical elaboration № 9.

Theme: *The indications and clinical-laboratory stages of manufacturing artificial total denture with two-layer and metal basis.*

Place of lesson: clinic.

The purpose of the lesson: the students materialize the received knowledge about indications and clinical-laboratory stages of manufacturing artificial total denture with two-layer and metal basis.

Practically students take part in reception of the patients and carry out clinical stages of prosthetic treatment with artificial total denture. In diaries the students mark executed manual skills.

The plan of lesson:

1. Interrogation of the students - 30 min.
2. Demonstration of the thematic patient - 30 min.
3. Reception of the patients - 146 min.
4. Conclusion - 10 min.

Checking questions:

1. Indications to manufacturing artificial total denture with two-layer basis.
2. Clinical-laboratory stages of manufacturing artificial total denture with two-layer basis.
3. Characteristic of elastic acrylic materials used in two-layer basis of total denture
4. Regime of polymerization of elastic acrylates.
5. Technique of packaging of elastic and tough acrylate.
6. Thickness of elastic material in total denture.
7. Advantages and disadvantages of artificial total denture with two-layer basis.
8. Indications to manufacturing artificial total denture with metal basis.
9. Clinical-laboratory stages of manufacturing artificial total denture with metal basis.
10. What represent retention elements used for fixation of plastic in metal basis.
11. Techniques of manufacturing metal basis of total denture.
10. Alloys of metals used for manufacturing metal basis of artificial total denture.
11. Thickness of metal basis of artificial total denture.
12. Advantages and disadvantages of metal basis of an artificial total denture.

Methodical elaboration № 10.

Theme: *Relining and repairing artificial total denture.*

Place of the lesson: clinic.

The purpose of the lesson: the students materialize the received knowledge about indications and methods of relining and repairing artificial total denture.

Practically the students take part in reception of the patients and they are demonstrated techniques of realization of relining and reparation of artificial total denture. In diaries the students mark executed manual skills.

The plan of lesson:

1. Interrogation of the students - 30 min.
2. Demonstration of the thematic patient - 30 min.
3. Reception of the patients - 146 min.
4. Conclusion - 10 min.

Checking questions:

1. **What is the rebazation of artificial total denture? Indications.**
2. **Method of checking marginal hermetic sealing the edges of artificial total denture on the upper jaw.**
3. **Method of checking marginal hermetic sealing the edges of artificial total denture on the lower jaw.**
4. **Direct technique of rebasing for closing „Ah,, line.**
5. **Direct technique of rebasing for vestibular and lingual margins closing. Used acrylicates.**
6. **Indirect technique of rebasing for vestibular and lingual margins closing. Used acrylicates.**
7. **The reasons of denture fractures.**
8. **In what consists mobile denture rebasing.**
9. **Possible complications at total denture rebasing using direct method and their prevention.**
10. **Acrylic materials used for total denture rebasing using indirect method. Characteristic.**
11. **What is reinforcing the artificial total denture? The indications. Technique. Used materials.**
12. **Technique of individualisation of occlusal relief of artificial total denture. The indications.**

Methodical elaboration № 11.

Theme: practical attestation.

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The document has been translated by assistent M.Ceban.