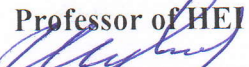
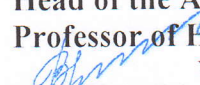


Ministry of Health of Ukraine  
National Pirogov Memorial Medical University, Vinnytsya

“Agreed”  
by Methodical Council  
of dentistry disciplines  
Protocol № 9  
From “24” 04 2024 y.  
Head of the Methodical Council  
Professor of HEI  
  
Serhii SHUVALOV

“Approved”  
by Academic Council of National Pirogov  
Memorial Medical University  
Protocol № 9  
From “25” 04 2024 y.  
Head of the Academic Council  
Professor of HEI  
  
Viktoriia PETRUSHENKO

Instructions for station # 2

“Solving a clinical situational case in therapeutic dentistry”

to an objective structured practical (clinical) exam  
in therapeutic dentistry  
Specialty – 221 “Dentistry”

## **Instructions for station # 2**

### **“Solving a clinical situational case in therapeutic dentistry”**

The practical component of the single state qualification exam OCP(C)E on the Faculty of Dentistry will be carried out in a one-day format according to the order of acting rector of Vinnytsia National Pirogov Memorial Medical University №31 dated May 8, 2023. In accordance with the Decree of the President of Ukraine dated 24.02.2022 №64/2022 “On the imposition of martial law in Ukraine”, the letter of the Ministry of Education and Science №1/3417-22 dated 10.03.2022 “At the end of the academic year”, the Order of Vinnytsia National Pirogov Memorial Medical University №157 dated 11.03.2022 “About restoration of educational process during the period of martial law”, “Regulation about organization of the educational process at Vinnytsia National Pirogov Memorial Medical University”, approved by the decision of the Academic Council, protocol №1 dated September 12, 2022, “Regulation about introduction of elements of distance learning at Vinnytsia National Pirogov Memorial Medical University”, approved by the decision of the Academic Council, protocol №8 dated May 26, 2020. OSK(C)E will be carried out in a mixed form.

On the day of the exam, the secretary of the State Examination Commission joins the examiner to the meeting to record the exam video. At the station, the student should greet and introduce himself, **show a document** (passport) proving his identity to the teacher. The student acquires a practical skill or scenario where you need to specify the algorithm of manipulation, interpret the results of basic and additional methods of examination, analyze the results of laboratory and instrumental methods of research, diagnose, perform a certain stage of treatment, justifying the choice of tools and materials for this stage.

***The duration of passing the station is up to 8 minutes.*** After the end of the stay at the station, the examiner does not accept the answer. Pay attention that the teacher is an observer of your actions and does not provide instructions, comments or questions.

#### **Requirements for passing the station:**

- Use a computer or laptop during the answer.
- the answer is accepted under the condition of the included camera, where the student who passes the exam is clearly visible, and the included microphone with a clear sound;
- video is recorded while working at the station.

**It is forbidden** to use a mobile phone and other electronic gadgets, to transmit, copy and take out any information related to the exam.

**Part of OSP (C) E in therapeutic dentistry consists of two stations.**

**Station 2 “Solving a clinical situational case in therapeutic dentistry”.**

#### **Competencies to be assessed:**

**Communicative:** the ability to present yourself, to explain the purpose of communication.

#### **Physical:**

1. Skills to collect medical information about the patient and analyze clinical data;
2. Skills to interpret the results of laboratory and instrumental research;
3. Skills to diagnose: to determine the preliminary, clinical, final, concomitant diagnosis, emergencies;
4. Skills to treat major diseases of the organs and tissues of the oral cavity.

**Cognitive:**

- Skills to determine the rational mode of work, rest, diet in patients in the treatment of diseases of the oral cavity
- Skills to determine the tactics of management of patients with diseases of organs and tissues of the oral cavity with concomitant somatic diseases
- Skills in planning and carrying out the process of providing dental care: to determine the approaches, plan, types and principles of treatment of diseases of the organs and tissues of the oral cavity

**Materials and technical support of the station:** dental phantoms, dental units, instruments for examination of the oral cavity, instruments for preparation and filling of carious cavities, endodontic instruments, materials and medicines used in the clinic of therapeutic dentistry, results of additional and laboratory research methods, answer sheet, checklist.

**List of diseases:**

1. Non-carious lesions of the hard teeth tissues (hyperesthesia, enamel hypoplasia, enamel hyperplasia, fluorosis, erosion of the hard tooth tissues, wedge-shaped defect, pathological abrasion of teeth, necrosis of hard tooth tissues, discoloration, traumatic damage of the teeth)
2. Caries and its complications (pulpitis, apical periodontitis)
3. Periodontal diseases (papillitis, gingivitis, generalized periodontitis, periodontosis, idiopathic periodontal diseases)
4. Diseases of the oral mucosa (traumatic lesions, autoinfectious diseases of oral mucosa, secondary bacterial diseases, oral mucosa disease in dermatoses with autoimmune component, changes in oral mucosa in allergic lesions, changes in oral mucosa in intoxications with heavy metal salts, symptomatic viral diseases, symptomatic changes of internal organs and systems, diseases of the tongue and lips)
5. Precancerous lesions of the oral mucosa and red lip border

**STATION DURATION AND TIME DISTRIBUTION:**

<b>№</b>	<b>Action</b>	<b>Time distribution (approximately)</b>
1.	Acquaintance with the task	1 min.
2.	Completion of the task	7 min.
	<b>Total:</b>	8 min.

**Clinical cases in therapeutic dentistry****Task 1.**

Patient K., 29-year-old male, complains of dry lips, the presence of scales, an aesthetic defect, constant peeling.

Objectively: the lips are swollen, the red zone of upper and lower lips is hyperemic, has numerous scales (photo) tightly attached in the center and slightly elevating on the periphery. During tearing off scales erosions are not formed. There is a cytogram of the patient (photo).

1. Communication.
2. Carry out a clinical examination of the patient (determine the most important diagnostic criteria).
3. Collect material for cytological examination by the impression method. Analyze the patient's cytogram.
4. Carry out a differential diagnosis.
5. Make a diagnosis.
6. Determine treatment tactics. Give recommendations to the patient.

**Task 2.**

Patient A., 23-year-old female, complains of pain and bleeding gums, increased formation of soft plaque.

Objectively: the mucosa of the gums is brightly hyperemic, swollen, painful on palpation. The gingival margin bleeds when probing. Periodontal pockets were not revealed, the teeth are stable, there are soft dental deposits, and in the area of the maxillary molars and lower frontal teeth there is supragingival calculus (photo).

1. Communication.
2. Carry out an examination of the patient (determine the most important diagnostic criteria).
3. Carry out the Schiller-Pysarev test.
4. Perform the PMA index.
5. Make a preliminary diagnosis.
6. Determine treatment tactics. Give recommendations to the patient.

**Task 3.**

Patient V., 15-year-old male, complains of overgrowing of the gums, pain and bleeding while teeth brushing, and difficult hygienic care.

Objectively: the gingival papillae of the upper and lower jaws are hyperemic, swollen, hypertrophied (photo). There are crowding of teeth and anomalies of localization of 13 and 23 teeth. There is abundant deposition of soft debris and supragingival calculus.

1. Communication.
2. Carry out an examination of the patient (determine the most important diagnostic criteria).
3. Perform the hygienic index of Green-Vermillion.
4. Perform Muehleemann's bleeding index.
5. Make a preliminary diagnosis.
6. Determine treatment tactics. Give recommendations to the patient.

**Task 4.**

Patient D., 45-year-old female, complains of dryness, burning, pain in the mouth when eating.

Objective examination: skin and red border of the lips without visible pathology. The oral mucosa of the tongue is slightly hyperemic, in the middle part and near the tip there are islands of white, in places white-yellow plaque, tightly attached to the mucosa (photo).

There are results of microscopic examination (photo).

1. Communication.
2. Carry out an examination of the patient (determine the most important diagnostic criteria).
3. Take the material for microscopic examination by the scraping method. Analyze the results.
4. Take material for bacteriological examination by smear method.
5. Make a diagnosis.
6. Determine treatment tactics. Give recommendations to the patient.

**Task 5.**

Patient L., 64-year-old male, complains of malaise, fever up to 38<sup>0</sup> C, the presence of "ulcers" on the oral mucosa.

Objectively: the oral mucosa is pale pink. On the unchanged mucosa of the hard palate there are two blisters measuring 1x0.7 cm and 0.8x0.5 cm in size, covered with dimness epithelium, soft, painful (photo). Erosions bleed easily, they are painful. There are results of cytological examination (photo).

1. Communication.
2. Carry out an examination of the patient (determine the most important diagnostic criteria).
3. Perform Nikolsky's sign (demonstrate different options for defining this symptom).
4. Take material for cytological examination. Analyze the results.

5. Make a diagnosis.
6. Determine treatment tactics. Give recommendations to the patient.

**Task 6.**

Patient P., 19-year-old male, complains of a slight burning sensation in the tongue and an unusual appearance.

Objectively: on the tongue dorsum there are multiple areas of desquamation of the epithelium of filiform papillae (photo). There are results of cytological examination (photo).

1. Communication.
2. Carry out an examination of the patient (determine the most important diagnostic criteria).
3. Take material for cytological examination. Analyze the patient's cytogram.
4. Carry out a differential diagnosis.
5. Make a diagnosis
6. Determine treatment tactics. Give recommendations to the patient. Apply the keratoplastics application on the affected area.

**Task 7.**

Patient T., 37-year-old female, complains of bleeding gums when eating solid food and teeth brushing.

Objectively: Periodontal pockets in the area of 12, 11, 21, 22 teeth are 3-4 mm, in other departments – 2-3 mm, with serous exudate (photo).

There is orthopantomogram (photo).

1. Communication.
2. Perform an examination of the patient (determine the most important diagnostic criteria).
3. Determine the periodontal index by Russel.
4. Analyze the patient's radiograph (by photo).
5. Make a diagnosis.
6. Determine treatment tactics. Give recommendations to the patient regarding individual oral hygiene.

**Task 8.**

A 56-year-old patient addressed to the dentist for the oral cavity treatment.

Objectively: In the posterior third of the tongue along the midline there is an oval area with elongated rounded shape, on which there are no papillae of the epithelium (photo).

There are cytological results.

1. Communication.
2. Perform an examination of the patient (determine the most important diagnostic criteria).
3. Take material for cytological examination. Analyze the patient's cytogram.
4. Carry out a differential diagnosis.
5. Make a diagnosis
6. Determine treatment tactics. Give recommendations to the patient.

**Task 9.**

Patient L., 33-year-old female, addressed to the clinic of therapeutic dentistry with complaints of aesthetic defect of 11 and 21 teeth.

Objectively: On the vestibular surface of 11 and 21 teeth there are defects with sloping walls and a dense floor within the enamel-dentinal junction (photo). The defect is painted weakly with methylene blue.

1. Communication.
2. Perform an examination of the patient (determine the most important diagnostic criteria).
3. Carry out a coloring test of vital dyeing.
4. Based on the anamnesis data, indicate the possible cause of the disease.

5. Make a diagnosis.
6. Determine treatment tactics. Choose means for remineralizing therapy. Apply the remineralizing agent to the causal tooth.

**Task 10.**

Patient O., 16-year-old female, addressed to the dentist with complaints of bad breath and the presence of carious cavities.

Objectively: on the masticatory surfaces of 16, 15, 14, 25, 26, 47, 46, 36, 37 teeth there are fillings, in 15, 14, 47, 46, 36 and 37 teeth there are fillings with signs of caries recurrences. Contact surfaces of 15, 13, 12, 11, 21, 25, 32, 31, 41, 42 teeth have deep carious cavities (photo).

Additional studies: there are results of salivation rate, pH, viscosity, CERRE-test (clinical estimation of rate remineralization of enamel).

1. Communication.
2. Perform an examination of the patient (determine the most important diagnostic criteria).
3. Determine the pH of saliva (carried out using litmus strips).
4. Based on the clinical and anamnestic data, establish the possible cause of the disease in this patient.
5. Make a diagnosis
6. Determine the tactics of local and general treatment. Give recommendations to the patient.

**Task 11.**

Patient D., 30-year-old, went to the clinic with complaints of a defect in the crown of 15 tooth.

Objectively: The crown part of the 15th tooth is destroyed by 1/3. Remains of filling material are visible in the orifices of root canals. In the area of the projection of root apex there is a fistula (photo). There is an intraoral radiograph of 15 teeth with a gutta-percha pin along the course of the fistula (photo).

1. Communication.
2. Perform an examination of the patient (determine the most important diagnostic criteria).
3. Determine the symptoms of Lukomsky, Marmasse, Dupuytren.
4. Analyze the patient's radiograph.
5. Make a diagnosis
6. Determine treatment tactics. Select instruments and medicines for root canal irrigation.

**Task 12.**

Patient Z., 57-year-old male, complains of pain when eating and talking.

Objectively: On the upper right jaw on the 13-16 teeth there is bridge prosthesis. The oral mucosa under the flushing part of the prosthesis is swollen, hyperemic. On the oral mucosa in the area of the alveolar process under the prosthesis there is erosion (photo).

There are results of cytological study.

1. Communication.
2. Perform an examination of the patient (determine the most important diagnostic criteria).
3. Take the material for cytological examination by the reprint method. Analyze the patient's cytogram.
4. Make a diagnosis
5. Determine treatment tactics. Give recommendations to the patient.
6. Provide emergency care for acute traumatic lesions of oral mucosa.

**Task: 13.**

Patient J., 35-year-old female, complains of food getting stuck in a tooth on her right upper jaw.

Objectively: Crown of 16 tooth is gray, there is an amalgam on the occlusal surface, its integrity is preserved, the marginal edge is broken (photo). Percussion, palpation, reaction to heat and cold stimuli are painless.

The patient's orthopantomogram is available (photo).

1. Communication.
2. Perform an examination of the patient (determine the most important diagnostic criteria).
3. Analyze the orthopantomogram of the patient.
4. Make a diagnosis
5. Determine the tactics of treatment in this case.
6. Select the necessary instruments for preparation of hard dental tissues in this case. Prepare the carious cavity.

**Task 14.**

A 28-year-old female complains of swelling of her upper lip.

Objectively: there is pronounced asymmetry of the face due to swelling of the upper lip. The area of edema is clearly limited with dense consistency, painless on palpation (photo). The skin over this area of warm, normal color, is not taken in fold. Itching in the area of edema is not revealed. The oral mucosa without visible pathological changes.

There are results of general complete blood test.

1. Communication.
2. Perform an examination of the patient (determine the most important diagnostic criteria).
3. Analyze the results of the patient's hemogram.
4. Carry out a differential diagnosis.
5. Make a diagnosis
6. Determine the tactics of treatment in this case. Provide emergency care when such a complication develops at a dental appointment.

**Task 15.**

Patient K., 65 years old, addressed to a dentist with the unpleasant sensations, dry mouth, tightness, discomfort when eating, using removable partial denture.

Objectively: On the oral mucosa of the right cheek at the level of the occlusal plane of the teeth there is greyish-white lesion of unevenly dimness epithelium with a smooth thin surface (photo). When scraping with a spatula, the surface of the epithelium is not removed.

There are results of cytological study.

1. Communication.
2. Perform an examination of the patient (determine the most important diagnostic criteria).
3. Take the material for cytological examination by the reprint method. Analyze the patient's cytogram.
4. Carry out a differential diagnosis.
5. Make a diagnosis.
6. Determine treatment tactics. Give recommendations to the patient. Apply the keratoplastics to the affected area.

**Instruction-scheme for the student for answer to clinical case:**

№	The answer includes	Estimated gradation	
1.	Communication.	0,25	
2.	Carry out an examination of the patient (determine the most important diagnostic criteria – according to the conditions of the task).	0,75	
3.	Collect material for certain studies. Analyze the results of additional research methods (choose the necessary support, method	1,0	

	of implementation, interpretation of results in this case).		
4.	Carry out a differential diagnosis or/and determine the etiology of the disease (name the diseases with which the differential diagnosis is carried out, indicate the most important differences).	1,0	
5.	Make a diagnosis (full clinical diagnosis).	1,0	
6.	Determine the tactics of treatment. Give recommendations to the patient (specify drugs for general and topical treatment, select individual oral hygiene products).	1,0	

#### **List of educational and methodical literature**

1. Lecture material of Therapeutic Dentistry Department.
2. Periodontal and Oral Mucosa Diseases: in 2 volumes. — Volume 2: textbook (IV a. l.) / A.V. Borysenko, L.V. Lynovytska, O.F. Nesyn et al.; edited by A.V. Borysenko— 1st edition, 2018, 624 p.
3. University textbook on oral mucosal diseases / Lydie Izakovičová Hollá, Antonín Fassmann, Hana Poskerová A Kol. — Masaryk University Press Brno, 2020. — 154 p. <https://munispace.muni.cz/book?id=1956>
4. Stomatology: textbook: in 2 books. Book 2 / M.M. Rozhko, Z.B. Popovych, V.D. Kuroiedova et.al.; edited by M.M. Rozhko. — Kyiv: AUS Medicine Publishing, 2020. — 792 p.
5. Enno Schmidt. Diseases of the Oral Mucosa. — 2021. — 550 p. DOI: <https://doi.org/10.1007/978-3-030-82804-2>
6. Oral Mucosa in Health and Disease: A Concise Handbook / Lesley Ann Bergmeier. — Springer; 1st ed., 2018. — 195 p.
7. Oral Mucosa Diseases: Textbook / M. Yu. Antonenko, O.F. Nesyn, S.A. Shnayder [et.al.] ed. by A.V. Borysenko — Odessa: Print house, 2015. — 328 p.
8. Operative Dentistry. Endodontics: in 2 volumes. Volume 1: textbook edited by Prof. A.V. Borysenko / M.Yu. Antonenko, L.F. Sidelnikova, O.F. Nesyn et al. — 2nd edition, 2020, 384 p. ISBN: 978-617-505-788-9.
9. Gadzhula N. Preclinical Operative Dentistry: textbook. — Vinnytsia: Nilan-LTD, 2015. — 240 p.
10. Sturdevant's Art and Science of Operative Dentistry / 7th Edition, ed. by Ritter DDS MS, V. Andre, 2018.
11. Clinical Textbook of Dental Hygiene and Therapy [Text] / ed. S. L. Noble, Wiley-Blackwell, 2018. - XVI, 414 p.
12. Textbook of Endodontology, 3rd Edition / Lars Bjorndal, Lise-Lotte Kirkevang, John Whitworth, 2018, 504 p.
13. Dental caries. Pulpitis. Apical periodontitis. Oral sepsis: a textbook / M. Yu. Antonenko, Yu.G. Romanova, S. A. Shnayder [et.al.]; ed. by A.V. Borysenko. — Odessa: Astro, 2015. — 314 p.
14. Cohen's Pathways of the Pulp /Louis H. Berman, Kenneth M. Hargreaves. —12th Edition, 2020.
15. Clinical Textbook of Dental Hygiene and Therapy [Text] / ed. S. L. Noble, Wiley-Blackwell, 2018. - XVI, 414 p.
16. Mosby's Dental Drug Reference [Text] / ed. A. H. Jeske, Elsevier, Philadelphia, 2018. - XVI, 1494 p.
17. Dhruvakumar D., Arun Kumar K. V., Ayilavarapu S. Hand Book on Bone regeneration: Materials, Techniques and Procedures: From Research to Clinical Practice. — Notion Press, 2019.
18. Petrushanko TA Dental aspects of allergy: A textbook for foreign students / T.A. Petrushanko, E.V. Nikolishina. K.: LLC SPE "Interservice, 2016. - 104 p.
19. Nikolishin AK Modern endodontics of a general practitioner / A.K. Nikolishin. - Poltava: Divosvit, 2017. — 232 p.



20. Newman M. G. et al. Newman and Carranza's Clinical Periodontology E-Book. – Elsevier Health Sciences, 2018.
21. Tsesis I. et al. (ed.). Endodontic-Periodontal Lesions: Evidence-Based Multidisciplinary Clinical Management. – Springer, 2019.
22. Yussif N., Akarslan Z. Periodontal Disease: Diagnostic and Adjunctive Non-surgical Considerations. – BoD–Books on Demand, 2020.