

Ministry of Health of Ukraine
Vinnytsya National Pirogov Memorial Medical University

"AGREED"

at Methodical meeting
of dental disciplines
Protocol № 8
from "26" "04" 2023


Head of Methodical meeting,
professor of HEI

 Serhii SHUVALOV

"APPROVED"

by Academic council
Vinnytsya National Pirogov
Memorial Medical University
Protocol № 7
from "27" "04" 2023

Head of Academic council,
professor of HEI

 Viktoriia PETRUSHENKO

Instruction for station №8

«Solving of clinical situational tasks on pediatric dentistry»

for the objective structured practical (clinical) examination (OSP(C)E) of the discipline
pediatric dentistry

Specialty 221 Dentistry

Instruction for station №8

«Solving of clinical situational tasks on pediatric dentistry»

Tasks:

1. Be able to establish the most probable or syndromic diagnosis of the disease on the basis of the obtained data.
2. Carry out differential diagnosis of diseases.
3. Be able to evaluate the results of additional laboratory and instrumental studies.
4. Assign a laboratory and / or instrumental examination of the patient by making an informed decision, based on the most probable or syndromic diagnosis.
5. To determine the tactics of treatment of the patient on the basis of a preliminary clinical diagnosis according to existing algorithms and standard schemes.

Station equipment:

dental tray and dental mirror and probe, barbell - compass, ruler, caries marker (Emerald), skull, upper jaw, lower jaw, syringe, impression mass, plaster, phantom of jaws, answer sheet, checklist, paper A4 .

In the case of **distance form** (in order to prevent the spread of acute respiratory disease COVID-19 caused by coronavirus SARS-CoV-2), **the procedure for OSP (K)E** is regulated by the Regulations on the introduction of elements of distance learning in VNMU. E. Pirogov and will take place on the **Google Meet platform**.

Equipment for remote form of OSP (K) I: situational tasks, data sets, virtual patients.

On the day of the exam, the secretary of the State Examination Commission joins the meeting of the examiner and the student, the group that passes the exam according to the schedule. At the station, the student must greet and introduce himself, present a document (passport) proving his identity to the teacher. The student receives a clinical task, which involves assessing the patient's complaints, anamnestic and objective data, interpret the results of laboratory and instrumental methods of examination of the patient, diagnose, determine the tactics of the patient and prescribe treatment, naming a group of drugs and a representative, give a short answer to additional questions, provided they are present in the task.

The duration of the station is 10 minutes. After the end of the stay at the station, the examiner does not accept the answer. Note that the teacher is an observer of your actions and does not provide instructions, comment or question.

Requirements for passing the station:

- Use a computer or laptop during the response.
- 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 for the usual form of the exam. It is forbidden to use textbooks, mobile phones and other electronic gadgets for remote form.

An example of evaluating the response of a higher education applicant (HEI) to a practical (situational) task.

Task 1. During a preventive examination of a 9-year-old child, chalk-like spots were found in the cervical region of 12, 11, 21, 22 teeth, which erupted unaffected. Spots without gloss. There is no reaction to temperature stimuli.

Answer to task 1:

№	The scheme of answer includes :
1.	What is the probable diagnosis?
2.	What additional research methods need to be conducted?
3	What diseases need to be differentiated?
4	What treatment do you suggest?
5.	What are the possible complications and prognosis of this disease?

Parameters to be assessed	Student response	Score / traditional assessment
What is the probable diagnosis?	Acute initial caries.	0,59 and less – «2» 0,6-0,79 – «3» 0,8-0,92 – «4» 0,93-1 – «5»
What additional research methods need to be	Use of "Caries marker", Ter-test, X-ray examination, electric light diagnostics.	0,59 and less – «2» 0,6-0,79 – «3» 0,8-0,92 – «4»

conducted?		0,93-1 – «5»
What diseases need to be differentiated?	Enamel hypoplasia, acute superficial caries, chronic initial.	0,59 and less –«2» 0,6-0,79 – «3» 0,8-0,92 – «4» 0,93-1 – «5»
What treatment do you suggest?	Remineralizing therapy with the use of fluorine, calcium, remineralizing solutions, fluorine-containing varnishes, etc. Electrophoresis of fluorine and calcium preparations. Sealing of cosmetic defects. Normalization of the diet with restriction of carbohydrate intake (not more than 30 g of sugar per day). If necessary, the need for the appointment of complex drugs of calcium, fluoride, trace elements, vitamins (a course of 30 days, 2 courses a year).	0,59 and less –«2» 0,6-0,79 – «3» 0,8-0,92 – «4» 0,93-1 – «5»
What are the possible complications and prognosis of this disease?	In the case of the effectiveness of the treatment - the disappearance or reduction of the size of the spots (white, chalky); increase of caries resistance of enamel (TER-test), restoration of natural gloss of enamel; pigmentation of a spot with consolidation of its surface is possible. In case of inefficiency of the carried-out treatment - emergence of a carious cavity within enamel (superficial and average caries) and the further development of carious process; the emergence of new lesions on other teeth.	0,59 and less –«2» 0,6-0,79 – «3» 0,8-0,92 – «4» 0,93-1 – «5»
Maximum number of points per station – 5		

List of task

Task 1. During a preventive examination of a 9-year-old child, chalk-like spots were found in the cervical region of 12, 11, 21, 22 teeth, which erupted unaffected. Spots without gloss. There is no reaction to temperature stimuli.

Answer to task 1:

N ^o	The scheme of answer includes :
1.	What is the probable diagnosis?
2.	What additional research methods need to be conducted?
3.	What diseases need to be differentiated?
4.	What treatment do you suggest?
5.	What are the possible complications and prognosis of this disease?

Task 2. The parents of a 12-year-old child complained of a plaque in her mouth, a feeling of dryness and heartburn for several months. Objectively: on the swollen and hyperemic mucous membrane of the lips and cheeks is determined by a light gray plaque. On the tongue plaque is dense, not removed. The child has a history of chronic bronchitis, systematic treatment with antibiotics

Answer to task 2:

N ^o	The answer scheme includes
1.	What is the probable diagnosis?

2.	What additional research methods need to be conducted?
3	What are the causes of this disease?
4	What method of treatment do you suggest?
5.	What are the methods of prevention of this disease?

Task 3. A 13-year-old girl went to the dentist due to deteriorating general condition, the appearance of rashes on the lips and in the mouth. Objectively: on the red border of the lips on the border with the skin found 4-5 blisters with serous content. On the mucous membrane of the cheeks on the background of edema and redness is determined by several grouped ulcerative elements 2-3 mm in size. Body temperature 37.4°C. Similar rashes with the same localization were noted about a year ago.

Answer to task 3:

№	The answer scheme includes
1.	What is the probable diagnosis?
2.	What additional research methods need to be conducted?
3	What are the causes of this disease?
4	What method of treatment do you suggest?
5.	What are the methods of prevention of this disease?

Task 4. A 10-year-old child complains of pain when eating in a lateral tooth on the upper left jaw. Objectively: a carious cavity filled with red tissue was found on the masticatory surface of 26 teeth. Its superficial probing is slightly painful, deep - causes sharp pain and bleeding. Tooth percussion is painless.

Answer to task 4:

№	The answer scheme includes
1.	What is the probable diagnosis?
2.	What additional research methods need to be conducted?
3	With what diseases it is necessary to differentiate?
4	What method of treatment do you suggest?
5.	What are the possible complications of this disease?

Task 5. On the 2nd day, a 15-year-old child complains of pain in the molar of the lower jaw on the left, which is aggravated by biting, and the feeling of a tooth that has grown. Objectively: the coronal part 46 of the tooth is gray, significantly destroyed. The tooth cavity is open. Tooth percussion is sharply painful. The mucous membrane in the projection of the tops of the roots in color is not changed, painless on palpation.

Answer to task 5:

№	The answer scheme includes
1.	What is the probable diagnosis?
2.	What additional research methods need to be conducted?
3	With what diseases it is necessary to differentiate?
4	What method of treatment do you suggest?
5.	What filling materials do you offer?

Task 6. A 15-year-old teenager complains of a tumor-like mild pain in the left parotid area, which appeared 2 months ago. Notes weakness, sometimes an increase in temperature to 37.2-37.6oC. Half a month ago, anti-inflammatory therapy was performed, which did not give positive results. Objectively: the face is asymmetrical due to a slight swelling in the left parotid area. Palpation reveals a round neoplasm of dense-elastic consistency with smooth contours, painless, not fused with the skin. A small amount of clear saliva is secreted from the stenotic duct. Formulate a diagnosis and determine further treatment tactics?

Answer to task 6:

№	The answer scheme includes
1.	Establish a diagnosis.
2.	Indicate the most likely cause of this disease.
3	What is the prevention of this disease?
4	With what diseases should the differential diagnosis of this pathology be carried out?
5.	Make a treatment plan.

Task 7. A 12-year-old patient complains of swelling in the left corner of the lower jaw. Objectively: in the area of the mandible at the level of the missing 46 teeth there is a thickening of the bone, the mucous membrane of the alveolar process is not changed, palpation is painless. Regional lymph nodes are not enlarged. The radiograph shows the focus of enlightenment of round bone up to 3.5 cm in diameter with clear smooth contours, on the periphery of the rim of sclerosed tissue. The coronal part of the retained 46 tooth is turned into the cavity of the focus of enlightenment. Formulate a diagnosis and determine further treatment tactics?

Answer to Task 7:

№	The answer scheme includes
1.	Make a diagnosis.
2.	Make a treatment plan.
3	Indicate the methods of cyst treatment known to you.
4	With which tumors and cysts should be a differential diagnosis of this pathology?
5.	List the possible complications after surgery.

Task 8. The parents of an 11-year-old child complained to the dentist about swelling in the area of the upper lip. Objectively: the asymmetry of the face is determined due to swelling of the upper lip, the nasolabial fold is smoothed. In the dorsum of the mouth in the area of the upper jaw, the transition fold at the level of 11, 21, 22 teeth is smoothed, hyperemic, during palpation there is pain and fluctuation. Formulate a diagnosis and determine further treatment tactics.

Answer to Task 8:

№	The answer scheme includes
1.	Make a diagnosis.
2.	Perform a differential diagnosis of this disease.
3	Choose the tactics of surgical treatment.
4	Indicate for how long days it is necessary to carry out drainage of a wound.
5.	Indicate which general treatment should be prescribed in the postoperative period.

Task 9. he parents of a 6-year-old child complained of swelling in her right ear around the ear, dry mouth, fever up to 37.6oC, and a taste of pus while eating. Similar phenomena were observed about 6 months ago. Objectively: hilly, painless infiltrate in the right parotid region. Saliva is viscous, a

small amount of secretion with whitish inclusions is secreted from the duct of the right salivary gland. Formulate a diagnosis and determine further treatment tactics.

Answer to Task 9:

No	The answer scheme includes
1.	Establish a preliminary diagnosis.
2.	Perform a differential diagnosis of this disease.
3.	Make a treatment plan and indicate the sequence of actions.
4.	Indicate what additional research methods should be used to clarify the diagnosis.
5.	Specify which ones symptoms help to determine the prevalence of the pathological process.

Task 10. The parents of a 16-year-old teenager turned to the dentist with complaints about a tumor on the upper lip on the left side, which appeared a few months ago. Objectively: wart-like growth on the leg, clearly demarcated from the surrounding tissues. The surface is hilly, coarse-grained, in appearance reminiscent of "cauliflower". Establish a diagnosis and determine further treatment tactics.

Answer to Task 10:

No	The answer scheme includes
1.	Establish a preliminary diagnosis.
2.	Indicate with which neoplasms it is necessary to conduct differential diagnostics.
3.	Conduct differential diagnostics between benign and malignant neoplasms in children.
4.	Indicate what additional research methods should be used to clarify the diagnosis.
5.	Make a treatment plan and indicate the sequence of actions.

Task 11. Patient 10 years old. Complaints of cosmetic defect. On external examination, the lower third of the face is reduced, the chin is moved forward, the upper lip is shortened, the nasolabial folds are pronounced, the corners of the mouth are lowered, the angle of the lower jaw is turned. When the teeth are closed, the inverse incisal overlap is determined with the presence of a sagittal slit of 3 mm. In the lateral areas, the contact of different teeth is determined, and the buccal medial mound 6 and 6 is in contact with the distal mound 6T6.

No	The answer scheme includes
1.	What is the diagnosis?
2.	What are the additional methods of examination?
3.	What are the possible causes of this anomaly?
4.	What is the treatment plan?
5.	What is the prognosis of treatment?

Task 12. The child is 10 years old. Complaints of cosmetic defect. Examination reveals an oral location 11, and its blockage by the lower teeth. Oral breathing. Biometric measurements: distances between 1 and 2 teeth - 8 mm., Width 1 - 10 mm., Polar molar index - 56, premolar - 74.

No	The answer scheme includes
1.	What is the diagnosis?
2.	What are the additional methods of examination?
3.	What are the possible causes of this anomaly?
4.	What is the treatment plan?
5.	What is the prognosis of treatment?

Task 13. Patient 9 years old. Complaints of difficulty eating. External examination shows smoothing of the nasolabial folds, tension of the circular muscle of the mouth, thickening of the base of the nose, oral type of breathing.

upper dentition V-like narrowed, palate Gothic, front teeth rotated along the axis with a slight shortage of space in the dentition; between the front teeth there is a sagittal gap - 6 mm

№	The response schema includes
1.	What is the diagnosis?
2.	What are the additional methods of examination?
3	What are the possible causes of this anomaly?
4	What is the treatment plan?
5.	what is the prognosis of treatment?

Task 14. Parents of a 4-year-old child complained of a violation of the facial configuration due to the smoothness of his lower third to the right and the shift of the middle line of the chin to the left, difficulty opening

Objectively: the middle line of the chin is shifted to the left by 1 cm. the right corner of the mouth is lowered, the opening of the mouth is 0.6 cm.

№	The answer scheme includes
1.	What is the diagnosis?
2.	What are the additional methods of examination?
3	What are the possible causes of this anomaly?
4	What is the treatment plan?
5.	What is the prognosis of treatment?

Task 15. The child is 9 years old. Complaints of incorrect tooth position, aesthetic disturbance.

When examining the oral cavity: the tooth shape corresponds to the age of the patient, the close position of the incisors on the upper jaw, rotation along the axis 11,21, 12,22. Tone index = 1.33.

№	The answer scheme includes
1.	What is the diagnosis?
2.	What are the additional methods of examination?
3	What are the possible causes of this anomaly?
4	What is the treatment plan?
5.	What is the prognosis of treatment?