

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE NATIONAL HIGHER
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«UZHHOROD NATIONAL UNIVERSITY»
FACULTY OF DENTISTRY
DEPARTMENT OF THERAPEUTIC DENTISTRY**

**Educational and methodological recommendations for 5-th year students in the
discipline «Therapeutic dentistry». Part 1.
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Educational and methodical recommendations are developed for studying the program in the discipline «Therapeutic Dentistry» by the 5th year students of the dental faculty. These methodical recommendations include methodological developments for practical classes in combination with control tasks and a list of recommended educational and methodical literature, which are aimed at deepening students' knowledge of diseases of the oral mucosa and red lip, studying the anatomical and histological features of the structure of the oral mucosa and red lip, assessing the impact of various etiological factors and pathogenetic mechanisms.

Educational and methodical recommendations were reviewed and approved at the meeting of the Department of Therapeutic Dentistry of the Faculty of Dentistry. «Uzhhorod National University». Protocol № 1 of January 18, 2024.

Lesson № 1

TOPIC: ANATOMICAL, PHYSIOLOGICAL, HISTOLOGICAL FEATURES OF THE ORAL MUCOSA AND RED BORDER OF THE LIPS. PROTECTIVE FACTORS. SALIVA, ITS COMPOSITION AND PHYSIOLOGICAL ROLE.

I. Relevance of the topic: The human oral mucosa has some structural and functional features. It is resistant to physical, thermal and chemical irritants, as well as to infection, and its regenerative capacity is increased. It is the site of primary manifestations of many diseases of internal organs and systems (blood diseases, infectious diseases, etc.). The prevalence of diseases of the oral mucosa is on average 3-5% among patients seeking dental care.

II. Educational goal:

2.1. The student should know:

- features of the mucous membrane' anatomy of the vestibule of the oral cavity;
- features of the histological structure of the mucous membrane of the oral cavity;
- concept of saliva, oral fluid and their role in the protective mechanisms of the oral cavity;
- principles of examination of patients with diseases of the oral mucosa.

2.2. Be able to:

- conduct a clinical examination of a patient with pathology of the oral mucosa;
- analyze the results of examination of a dental patient;
- assess the state of oral hygiene;
- to draw up a medical history, make a plan of examination and treatment of the patient;
- perform sampling of material for cytological and bacteriological studies.

III. Contents of the topic.

The oral mucosa is the “skin” inside the mouth, and it covers most of the oral cavity apart from the teeth.

Function of oral mucosa

The oral mucosa has several functions. Its main purpose is to act as a barrier. It protects the deeper tissues such as fat, muscle, nerve and blood supplies from mechanical insults, such as trauma during chewing, and also prevents the entry of bacteria and some toxic substances into the body.

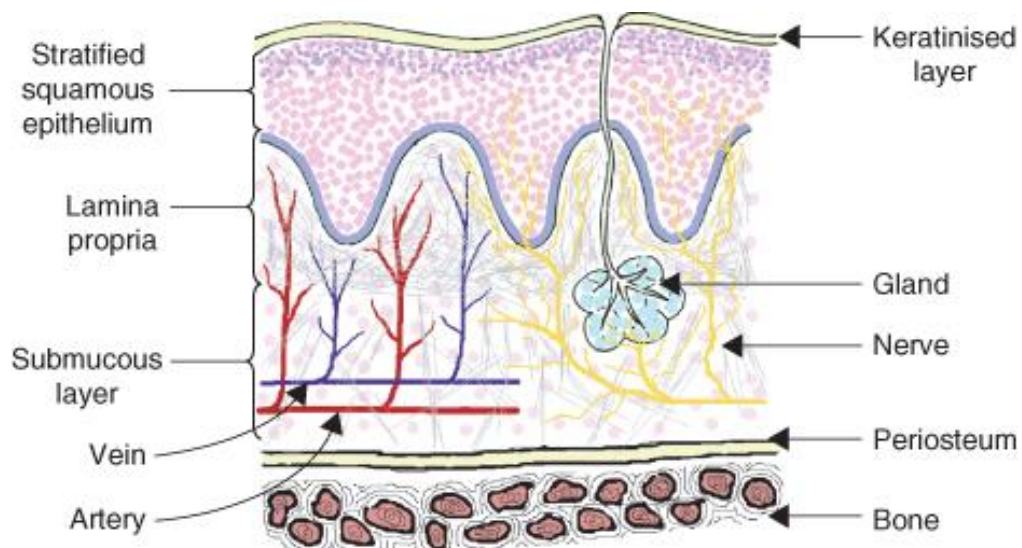


Diagram of the structure of the oral mucosa.

In general, maturation can undergo two different patterns:

1. Keratinisation;
2. Non-keratinisation. The most common cells that are required to undergo cell turnover are called keratinocytes. As the keratinocyte matures, it undergoes modification in its structure that causes it to progress towards the surface of the epithelium, and eventually die. Keratinocytes mature to different degrees. In some areas of the mouth, the keratinocytes will fully mature (orthokeratinisation), whereas in other areas the keratinocytes will only partially undergo keratinisation (parakeratinisation).

Keratosis (from kerat- + -osis) is a growth of keratin on the skin or on mucous membranes stemming from keratinocytes, the prominent cell type in the epidermis.

Hyperkeratosis is thickening of the stratum corneum (the outermost layer of the epidermis, or skin), often associated with the presence of an abnormal quantity of keratin, and also usually accompanied by an increase in the granular layer. As the corneum layer normally varies greatly in thickness in different sites, some experience is needed to assess minor degrees of hyperkeratosis.

Parakeratosis is a mode of keratinization characterized by the retention of nuclei in the stratum corneum. In mucous membranes, parakeratosis is normal. In the skin, this process leads to the abnormal replacement of annular squames with nucleated cells. Parakeratosis is associated with the thinning or loss of the granular layer and is usually seen in diseases of increased cell turnover, whether inflammatory or neoplastic. Parakeratosis is seen in the plaques of psoriasis and in dandruff.

Granular parakeratosis (originally termed axillary granular parakeratosis) is an idiopathic, benign, nondisabling cutaneous disease that manifests with intertriginous erythematous, brown or red, scaly or keratotic papules and plaques. It presents in all age groups and has no established clinical associations. Dyskeratosis is abnormal keratinization occurring prematurely within individual cells or groups of cells below the stratum granulosum.

Acantholysis is the loss of intercellular connections, such as desmosomes, resulting in loss of cohesion between keratinocytes, seen in diseases such as pemphigus vulgaris. It is absent in bullous pemphigoid, making it useful for differential diagnosis.

Acanthosis is diffuse epidermal hyperplasia (thickening of the skin, and not to be confused with acanthocytes). It implies increased thickness of the Malpighian layer (stratum basale and stratum spinosum)

Spongiosis is mainly intercellular edema (abnormal accumulation of fluid) in the epidermis, and is characteristic of eczematous dermatitis, manifested clinically by intraepidermal vesicles (fluid-containing spaces), "juicy" papules, and/or lichenification

Papillomatosis of skin is skin surface elevation caused by hyperplasia and enlargement of contiguous dermal papillae.

Primary lesions:

Macule: A macule is a change in surface color, without elevation or depression and, therefore, nonpalpable, well or ill-defined, variously sized, but generally considered less than either 5 or 10 mm in diameter at the widest point.

Patch: A patch is a large macule equal to or greater than either 5 or 10 mm across, depending on one's definition of a macule. Patches may have some subtle surface change, such as a fine scale or wrinkling, but although the consistency of the surface is changed, the lesion itself is not palpable.

Papule: A papule is a circumscribed, solid elevation of skin with no visible fluid, varying in size from a pinhead to less than either 5 or 10 mm in diameter at the widest point.

Plaque: A plaque has been described as a broad papule, or confluence of papules equal to or greater than 10 mm, or alternatively as an elevated, plateau-like lesion that is greater in its diameter than in its depth.

Nodule: A nodule is morphologically similar to a papule in that it is also a palpable spherical lesion less than 10 mm in diameter. However, it is differentiated by being centered deeper in the dermis or subcutis.

Tumour: Similar to a nodule but larger than 10 mm in diameter.

Vesicle: A *vesicle* is small blister, a circumscribed, fluid-containing, epidermal elevation generally considered less than either 5 or 10 mm in diameter at the widest point. The fluid is clear serous fluid.

Bulla: A bulla is a large blister, a rounded or irregularly shaped blister containing serous or seropurulent fluid, equal to or greater than either 5 or 10 mm, depending on one's definition of a vesicle.

Pustule: A pustule is a small elevation of the skin containing cloudy or purulent material (pus) usually consisting of necrotic inflammatory cells. These can be either white or red.

Cyst: A cyst is an epithelial-lined cavity containing liquid, semi-solid, or solid material.

Wheal: A wheal is a rounded or flat-topped, pale red papule or plaque that is characteristically evanescent, disappearing within 24 to 48 hours. The temporary raised bubble of taut skin on the site of a properly-delivered intradermal injection is also called a welt, with the ID injection process itself frequently referred to as simply "raising a wheal" in medical texts.

Telangiectasia: A telangiectasia represents an enlargement of superficial blood vessels to the point of being visible.

Burrow: A burrow appears as a slightly elevated, grayish, tortuous line in the skin, and is caused by burrowing organisms.

Secondary lesions

Scale: dry or greasy laminated masses of keratin that represent thickened stratum corneum.

Crust: dried sebum, pus, or blood usually mixed with epithelial and sometimes bacterial debris.

Lichenification: epidermal thickening characterized by visible and palpable thickening of the skin with accentuated skin markings.

Erosion: An erosion is a discontinuity of the skin exhibiting incomplete loss of the epidermis, a lesion that is moist, circumscribed, and usually depressed.

Excoriation: a punctate or linear abrasion produced by mechanical means (often scratching), usually involving only the epidermis, but commonly reaching the papillary dermis.

Ulcer: An ulcer is a discontinuity of the skin exhibiting complete loss of the epidermis and often portions of the dermis and even subcutaneous fat.

Fissure: A fissure is a crack in the skin that is usually narrow but deep.

Induration: dermal thickening causing the cutaneous surface to feel thicker and firmer.

Atrophy: refers to a loss of tissue, and can be epidermal, dermal, or subcutaneous. With epidermal atrophy, the skin appears thin, translucent, and wrinkled. Dermal or subcutaneous atrophy is represented by depression of the skin.

Maceration: softening and turning white of the skin due to being consistently wet.

Umbilication: formation of a depression at the top of a papule, vesicle, or pustule.

Phyma: A tubercle on any external part of the body, such as in phymatous rosacea.

IV. Control questions to the topic of the lesson:

1. Anatomical features of the oral mucosa.
2. Physiological features of the oral mucosa.
3. Protective mechanisms of the oral mucosa.
4. Name the types and functions of tongue papillae.
5. Name the functions of the oral mucosa.
6. Define the concept of saliva, oral fluid and their role in the protective mechanisms of the oral cavity.
7. Disorders of salivation. Etiology, pathogenesis.
8. Clinic, diagnosis, treatment, prevention of hypo- and hypersalivation.

V. Control test tasks and/or case studies:

1. Select and indicate the anatomical features of the mucous membrane of the cheeks:
 - A. The presence of a white line
 - B. Absence of submucosal layer
 - C. The presence of the papillary layer
 - D. Fordyce's glands
 - E. Gingival groove
2. Select and indicate the clinical and anatomical features of the tongue mucosa:
 - A. The presence of salivary glands
 - B. The presence of papillae
 - C. Fordyce's glands
 - D. Marginal and alveolar part
 - E. Accumulation of lymphoid tissue
3. Determine the histological structure of the mucous membrane of the alveolar processes:
 - A. Submucosa, epithelium, mucosa proper
 - B. Multilayered squamous partially keratinized epithelium, mucous membrane itself
 - C. Mucous membrane itself, multilayered squamous nonkeratinizing epithelium, submucosal layer
 - D. Epithelium, submucosa, mucosa proper
 - E. Fordyce's glands
4. Select the factors that determine the protective function of the oral mucosa:
 - A. Barrier properties against microorganisms and viruses
 - B. High mitotic activity of the epithelium
 - C. The presence of receptors
 - D. Desquamation of the epithelium
 - E. The presence of enzymes, Ig, leukocytes in the oral cavity
5. Identify the features of the histological structure of the mucous membrane of the hard palate:
 - A. The presence of submucosal layer
 - B. The presence of taste buds
 - C. The presence of salivary glands
 - D. Non-aging epithelium
 - E. The epithelium is keratinized
6. To accelerate the healing of the oral mucosa wound, the patient was prescribed a drug that is a thermostable protein found in tears, saliva, breast milk, and can also be found in chicken eggs. This protein is a factor of the body's natural resistance and is called:
 - A. Interferon
 - B. Complement
 - C. Imanin

D. Lysozyme

E. Interleukin

7. The initial examination of the patient revealed the absence of general sensitivity of the anterior 2/3 of the tongue. Taste sensitivity is preserved. Which nerve is affected?

A. The lingual branch of the trigeminal nerve after its union with the drumstick

B. The lingual pharyngeal nerve

C. The lingual branch of the trigeminal nerve before it joins the drumstick

D. Hyoid nerve

E. Drum string of the facial nerve

8. It is known that plasma cells produce specific antibodies to a given antigen. The number of plasma cells increases with the introduction of the antigen. Due to which cells is the increase in the number of plasma cells?

A. B-lymphocytes

B. Basophils

C. T-lymphocytes

D. Eosinophils

E. Neutrophils

9. The tip of the tongue was lubricated with novocaine. What changes will be observed?

A. Lack of perception of sweetness

B. Lack of perception of bitter

C. Lack of perception of sour

D. Lack of perception of taste sensitivity

E. Violation of general sensitivity

10. Patient C., complains of dry mouth, difficulty eating and talking, burning sensation, roughness of the mucous membrane. What drug is indicated for this patient for symptomatic treatment?

A. 0.1% atropine sulfate solution

B. Calendula tincture solution

C. 1% solution of pilocarpine hydrochloride

D. 5% solution of ascorbic acid

E. 1% solution of sodium mefenamate

VI. References

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3. Atlas of Oral Diseases: A Guide for Daily Practice 1st ed. 2016 Edition by Isaïc van der Waal. Publisher: Springer; 1st edition, 2016. – 198 p.
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Lesson № 2

TOPIC: CLASSIFICATION OF DISEASES OF THE ORAL MUCOSA (M.F. DANILEVSKY, P.T. MAXIMENKO, ICD-10).

I. Relevance of the topic: Among the dental diseases, a special place is occupied by the processes associated with the lesion of the oral mucosa. One of the reasons that make it difficult to create a complete picture of oral mucosa diseases is a wide variety of factors in their development. This is typical even for those observations when the clinical manifestations of the diseases are naturally the same and the mechanism of their development is the same. From this point of view, a complete understanding of the essence of a particular oral mucosa disease is possible only when analyzing etiological, pathogenetic factors and clinical manifestations of the disease as a single causal process. This approach was used by many researchers when creating classifications of oral mucosa diseases.

II. Learning objectives:

2.1. The student should know:

- general ideas about the classification of oral mucosa diseases;
- classification of oral mucosa diseases by M.F. Danilevsky;
- classification of oral mucosa diseases by P.T. Maksimenko;
- classification of oral mucosa diseases by ICD-10;
- features of clinical and laboratory examination of patients;
- anatomical, physiological, histological features of the oral mucosa and red border of the lips.

2.2. Be able to:

- to classify the diagnosis of oral mucosa diseases according to the systematization of M.F. Danilevsky;
- to classify the diagnosis of oral mucosa diseases according to the systematics of P.T. Maksimenko;
- to classify the diagnosis of diseases of oral mucosa diseases according to the systematics of ICD-10;
- conduct an examination of a dental patient;
- fill out an ambulatory card of a dental patient.

III. Contents of the topic.

One of the earliest systematizations of CO diseases is the classification by I.G.

Lukomsky:

1. The main group of stomatitis:
 - a) superficial - catarrhal, aphthous, mold, leukoplakia; b) deep - ulcerative, gangrenous, hypertrophic.
2. Symptomatic stomatitis - in case of infectious diseases, blood and metabolic diseases.
3. Dermatostomatitis:
 - a) stomatitis with hyperkeratosis; b) stomatitis with blistering and vesicular phenomena.
4. Specific stomatitis - syphilis, tuberculosis, leprosy.
5. Isolated lesions of the tongue and lips.

Systematics NMU (N.F. Danilevsky)

Independently	Symptomatic	Syndromes
<i>Traumatic lesions</i>		
Mechanical injury		
Chemical injury		
Physical trauma		
Leukoplakia		
<i>Infectious diseases</i>		
Influenza virus,	measles, foot and mouth disease, chickenpox, infectious mononucleosis	AIDS
Bacterial	Whooping cough, diphtheria, scarlet fever, tuberculosis, syphilis, leprosy	Biedermann
Mycotic		

<i>Diseases of the mouth</i>		
Eksfoliativny cheilitis	Eczematous cheilitis	
Meteorological cheilitis	Atopic cheilitis	
Actinic cheilitis		
Chronic crack		
Glandular cheilitis		Puente Acevedo
Lymphedema		Melkersson-Rosenthal, Miescher
<i>Diseases of the tongue</i>		
Desquamative glossitis		Brock Potro
Folded tongue		
Hairy tongue		
Rhomboid glossitis		
<i>Neoplasms</i>		
Precancer		
Benign tumors		
Cancer and other malignant neoplasms		
<i>In allergic lesions</i>		
	Immediate reactions	Angioedema
	The reactions of delayed-type- purpura	Henoch
	Chronic recurrent aphthous stomatitis	
	Erythema multiforme	Stevens-Johnson, Lyell
<i>When dermatoses with an autoimmune component</i>		
	Pemphigus	Dühring
	Pemphigoid	
	Cystic epidermolysis	
	Lichen planus	Greenspan
	Lupus erythematosus	
<i>When exogenous intoxications</i>		
	Mercurial stomatitis	
	Lead stomatitis	
	Bismuth stomatitis	
<i>In diseases of the organs and systems</i>		
	Alimentary canal	Rosolimo-spondylitis, Sebrella
	Cardiovascular system	Vesico-vascular, Rendu-Osler, Weber
	Endocrine	Addison, Cushing, Schmidt
	Nervous system	Glossodiniya
	Blood and blood-forming organs	Addison-Birmera, Vakeza, Verlgofa
	Hypovitaminosis	
	Collagenose	

The classification of diseases of the oral mucosa (P.T.Maksimenko)

Primary		Secondary (symptomatic)	
<i>Traumatic</i>		<i>When exogenous infections</i>	
Physical trauma	Manual Thermal Radiation Electric	Bacterial	Scarlet fever, diphtheria, typhoid fever, whooping cough, gonorrhoea, tuberculosis, syphilis, leprosy
Chemical injury		Virus	Measles, influenza, shingles, chicken pox, foot and mouth disease, AIDS
<i>Autoinfektsionnye</i>		<i>When noncommunicable diseases</i>	

Bacterial	Acute canker sores, necrotic stomatitis (gingivitis)	Gut gastro	Gastritis, colitis, peptic ulcer disease, hepatitis
Viral	Acute herpetic stomatitis, cheilitis Recurrent herpetic stomatitis, cheilitis	Blood and blood- forming organs	Anemia, leukemia, agranulocytosis, hemorrhagic diathesis (illness thrombocytopenic purpura), polycythemia vera (a disease Vakeza)
Mycotic	Candida stomatitis, cheilitis, glossitis Actinomyces RBCU	Cardiovascular	Trophic ulcers, cystic syndrome and other
<i>Contact allergic (stomatitis, cheilitis, glossitis)</i>		Radiation sickness	
		Endocrine	Diabetes
		Nervous system	Glossodiniya, xerostomia
		Skin	Pemphigus Lichen planus Lupus erythematosus
		Hypo-and avitaminosis	of Group B, C, A, E, PP
		Heterointoxication	Mercury, lead, bismuth, difyninyovy gingivitis, stomatitis
		Due to allergies	Stomatitis, glossitis, HRAS, Congenital syndromes, Stevens- Johnson syndrome
		Congenital syndromes	Folded language, rhomboid glossitis, nevi and other

IV. Control questions to the topic of the lesson:

1. Name the principles of constructing classifications of oral mucosa diseases.
2. Describe the classification of oral mucosa diseases by M.F. Danilevsky.
3. Name the independent, symptomatic diseases and syndromes according to the classification of oral mucosa diseases by Danilevsky.
4. Describe the classification of oral mucosa diseases ICD-10.
5. Describe the classification of oral mucosa diseases by P.T. Maksimenko.
6. Name the main groups of diseases depending on etiological factors and pathogenesis according to the classification of oral mucosa diseases by P.T. Maksimenko.

V. Control test tasks and/or case studies:

1. A 20-year-old patient complains of malaise, fever up to 38°C, pain in the oral cavity. Objectively: along the gingival margin and in the retromolar area on the hyperemic mucosa - ulcers that tend to merge. Acute ulcerative stomatitis is diagnosed. Make a diagnosis according to the classification of P.T. Maksimenko:
 - A. Primary traumatic stomatitis
 - B. Primary autoinfectious stomatitis
 - C. Independent bacterial disease of oral mucosa diseases
 - D. Symptomatic disease of oral mucosa diseases
 - E. Syndrome
2. A 20-year-old patient complains of malaise, fever up to 38°C, pain in the oral cavity. Objectively: along the gingival margin and in the retromolar area on the hyperemic mucosa - ulcers that tend to merge. Acute ulcerative stomatitis has been diagnosed. To which group of diseases does the diagnosis belong according to the classification of M.F. Danilevsky?
 - A. Independent viral lesion of oral mucosa diseases
 - B. Symptomatic stomatitis with exogenous intoxication
 - C. Independent bacterial lesion of oral mucosa diseases
 - D. Symptomatic infectious disease of oral mucosa diseases
 - E. Symptomatic stomatitis in allergic lesions
3. During breakfast, the student burned the oral mucosa with hot tea, which led to the development of acute catarrhal stomatitis. To which group of diseases according to the classification of M.F. Danilevsky belongs this condition?
 - A. Mechanical trauma of oral mucosa diseases
 - B. Physical trauma
 - C. Chemical trauma
 - D. Symptomatic lesions
 - E. Electrical trauma
4. During a preventive examination of a shoe factory worker D., 53 years old, a dentist found a mild form of leukoplakia. According to the classification of M.F. Danilevsky, this lesion of oral mucosa diseases belongs to:
 - A. Symptomatic
 - B. Independent
 - C. Syndromes
 - D. Neoplasms
 - E. Primary
5. Name the diseases that are classified as syndromes according to Danilevsky's classification:
 - A. Influenza
 - B. Lupus erythematosus
 - C. AIDS
 - D. Allergic stomatitis

- E. Traumatic stomatitis
6. Determine which of the following stomatitis are autoinfectious:
- Papular stomatitis in secondary syphilis
 - Contact allergic stomatitis
 - Filmy radiomucositis
 - Chronic recurrent aphthous stomatitis
 - Ulcerative necrotizing stomatitis of Vincennes
7. Stomatitis, the occurrence of which is associated with the action of certain causes on the oral mucosa, according to the classification of P.T. Maksimenko, are classified into a group:
- Independent
 - Primary
 - Symptomatic
 - Secondary
 - Syndromes
8. According to the classification of M.F. Danilevsky, AIDS refers to:
- Primary stomatitis
 - Symptomatic stomatitis
 - Syndromes
 - Independent diseases
 - Secondary stomatitis
9. Diseases caused by opportunistic microflora due to a decrease in the resistance of oral mucosa diseases and immunological reactivity of the body are called:
- Infectious
 - Symptomatic
 - Autoinfectious
 - Viral
 - Bacterial
10. How many main groups of pathological manifestations on the oral mucosa are distinguished according to the classification of NMU (MF Danilevsky)?
- 5
 - 4
 - 2
 - 3
 - 9

VI. References

6.1 Main literature

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Lesson № 3

TOPIC: PECULIARITIES OF EXAMINATION OF PATIENTS WITH DISEASES OF THE ORAL MUCOSA. PRIMARY AND SECONDARY ELEMENTS OF THE LESION.

I. Relevance of the topic: Examination of patients with diseases of oral mucosa is a complex of targeted studies that are carried out on the basis of analysis of patient complaints, history of development and nature of the disease, including an objective examination, supported by the results of the necessary auxiliary methods. The ultimate goal of the examination is to make a diagnosis, identify the patient's individual characteristics, predict the course of the disease and choose a rational method of treatment. A thorough study of the patient's local status, taking into account general changes in the body, allows the dentist to diagnose the disease, identify etiological factors and establish pathogenetic mechanisms.

II. Educational goal:

2.1. The student should know:

- general concepts of diseases of the oral mucosa and their systematics;
- basic clinical methods of examination of patients with oral mucosa diseases;
- primary elements of oral mucosa lesions;
- secondary elements of oral mucosa lesions;
- features of examination of patients with oral mucosa pathology.

2.2. Be able to:

- conduct an interview and objective examination of the patient;
- identify primary and secondary elements of oral mucosa lesions;
- write out a referral for microbiological examination, take material, interpret the data obtained;
- establish a clinical diagnosis, taking into account the etiology, severity and general condition of the body.

III. Contents of the topic.

Examination of patients with oral mucosa diseases is a set of targeted studies based on the analysis of patient complaints, history of development and nature of the disease, including an objective examination supported by the results of the necessary auxiliary methods. The ultimate goal of the examination is to make a diagnosis, identify the patient's individual characteristics, predict the course of the disease and choose a rational method of treatment.

Numerous methods are used in the examination process, which are divided into main and auxiliary methods.

The main methods include:

a) anamnesis (questioning), which consists of finding out the patient's complaints, life history and disease development, and

b) objective examination of the patient, which includes examination and palpation. If necessary, the examination is supplemented with auxiliary methods (laboratory, functional, immunological, instrumental and other tests), which are especially necessary to obtain information about the general state of health of the patient and to clarify certain details. Due to their high information content, accessibility, simplicity, and absolute harmlessness to the patient, basic methods are of paramount importance to the clinician. Sometimes they are quite enough to establish the diagnosis of a disease.

However, making a final diagnosis requires a creative combination of basic and auxiliary examination methods.

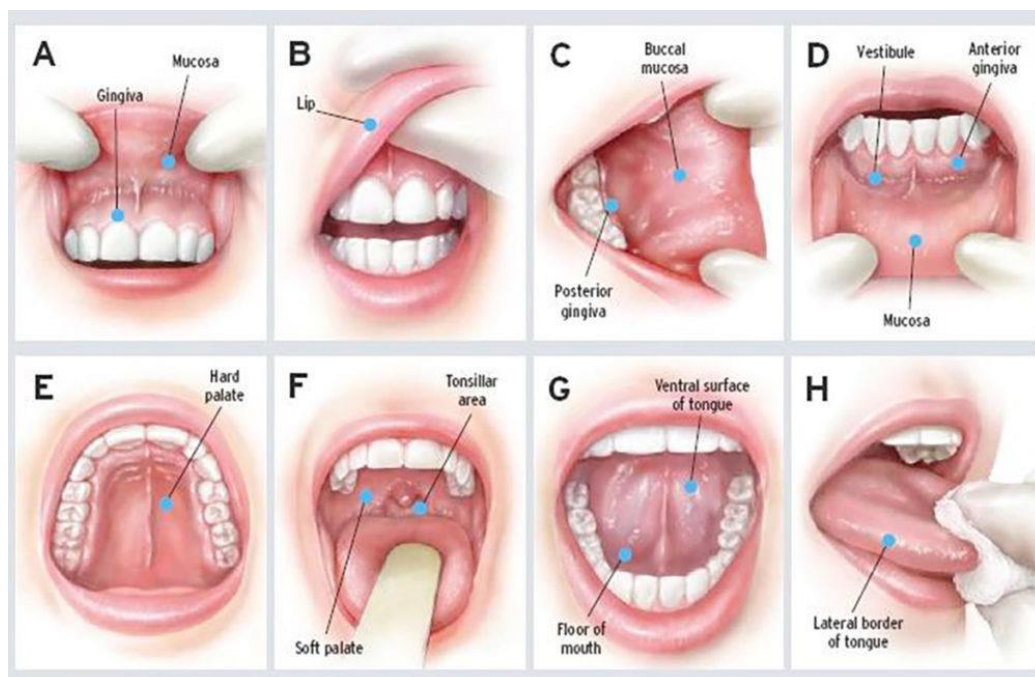
The choice of additional methods of examination, their focus and scope are determined by the expected type of pathology, the stage of the disease and the general health

of the patient, taking into account his or her individuality and the requirements of medical deontology.

The examination of a dispensary nature or that which is carried out for the purpose of prevention or monitoring the effectiveness of treatment has its own peculiarities.

Among the main methods of examination of patients with oral mucosa pathology, we should first of all highlight the need for a general clinical examination, as it contributes to the development of a generalized holistic view of the patient's health status and makes it possible to establish (or exclude) the relationship between oral mucosa lesions and disorders in the organs and systems of the body.

Before proceeding to the presentation of the methodology for examining patients with oral mucosa, it should be noted that it does not claim to be independent, but is only a link in the chain of a general examination of the patient and the study of the conditions of his or her existence in the environment. The examination of oral mucosa lesions has only certain features that somewhat distinguish it from general examination methods.



IV. Control questions to the topic of the lesson:

1. Anatomical and physiological features of the structure of the oral mucosa tissues.
2. The main clinical methods of examination of patients with the pathology of oral mucosa.
3. What are the primary elements of the oral mucosa lesion?
4. What are the secondary elements of the oral mucosa lesions?
5. What epithelial changes are characteristic of oral mucosa diseases?

V. Control test tasks and/or case studies:

1. After applying the tourniquet, the subject has spot hemorrhages on the surface of the forearm (15 pieces). With the violation of the function of which blood cells it is associated?
 - A. Erythrocytes
 - B. Neutrophils
 - C. Basophils
 - D. Platelets
 - E. Macrophages
2. Clinical blood tests should be performed on an empty stomach and in the morning. Changes in which components of peripheral blood are possible if blood is taken after eating?
 - A. Increase in plasma proteins

- B. Increase in the number of leukocytes
 - C. Increase in the number of red blood cells
 - D. Decrease in the number of red blood cells
 - E. Decrease in the number of platelets
3. A blister is:
- A. A hollow formation, larger than 5 mm, filled with exudate
 - B. A hollow formation, internally epithelial, filled with serous exudate
 - C. Pronounced limited edema of the mucous membrane itself
 - D. Degenerative changes in the cells of the spinous layer, accompanied by melting of intercellular cytoplasmic bonds
 - E. A cavity formation with an epithelial lining
4. Define erosion:
- A. Damage to the mucous membrane within the epithelium, which develops after the opening of the vesicle, blister, at the site of a papule
 - B. Damage to the skin due to injury, scarring after healing
 - C. Damage to the mucous membrane due to trauma, heals without scarring
 - D. Damage to the mucous membrane within the personal mucous layer
 - E. Damage to the mucous membrane of the oral cavity within the submucous layer
5. Define aphtha:
- A. A ruptured vesicle with a hyperemic rim
 - B. Erosion of oval shape, covered with fibrous plaque, with a rim of hyperemia
 - C. Resolution of the blister with the remains of its tire
 - D. This is a violation of the integrity of the epithelium of the oral mucosa of a polygonal shape
 - E. Ulcerative lesion of the oral mucosa surrounded by a corolla of hyperemia
6. In a 68-year-old patient, on the cheek mucosa, there are cavity-free lesions protruding above its surface of a semicircular shape with a diameter of 3-4 mm. These are:
- A. A nodule
 - B. Nodule
 - C. Tubercle
 - D. Vesicle
 - E. Cyst
7. A diabetic patient, 37 years old, is registered with a dentist. During an exacerbation of the disease, he consulted a doctor. A periodontal abscess was found in the area of 45.46 teeth. What should be done before prescribing antibiotic therapy?
- A. Determine the sensitivity of the microflora
 - B. Find out the allergic history
 - C. Consult an immunologist
 - D. Carry out professional oral hygiene
 - E. Prescribe antifungal agents
8. Patient V., 62 years old, complained of malaise, fever to 38.20 C, paroxysmal pain and rash on the skin and oral mucosa on the right. Objectively, there were multiple vesicles on the skin of the face and hyperemic oral mucosa along the branches of the trigeminal nerve. Regional lymphadenitis. What is the further evolution of the lesions on the oral mucosa?
- A. Scales
 - B. Ulcers
 - C. Cracks
 - D. Scars
 - E. Erosion

9. A 50-year-old patient complains of small ulcers in the oral cavity. Objectively: on the soft palate, on the cheeks in the distal region, on the lips, gums, there are erosions on the apparently unchanged mucous membrane, with fragments of blisters along their edges. What additional method of investigation should be prescribed?

- A. Biochemical
- B. Cytological
- C. Functional
- D. Diascopy
- E. Allergy tests

10. Patient V., 43 years old, after an acute respiratory illness complains of general weakness, intense pain in the gums, bleeding, bad breath. Objectively: enlargement and tenderness of submandibular lymph nodes, gums are hyperemic, swollen, numerous ulcerative foci covered with gray plaque are observed. What additional methods of examination should be prescribed?

- A. Bacterioscopy of the affected areas of the gums, clinical blood test
- B. Clinical blood test, immunological examination
- C. Radiography of the gums, clinical blood test
- D. Blood sugar test, cytological examination
- E. Biochemical blood test, cytological examination

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Lesson № 4

TOPIC: TRAUMATIC LESIONS OF THE ORAL MUCOSA (MECHANICAL, CHEMICAL, PHYSICAL, ELECTRICAL TRAUMA). ETIOLOGY, PATHOGENESIS, CLINIC, DIAGNOSIS, TREATMENT AND PREVENTION.

I. Relevance of the topic: Traumatic lesions of the oral mucosa occur as a result of exposure to various local factors (mechanical, physical, chemical), if the intensity of their impact exceeds the physiological safety margin of the oral mucosa. If these factors are low in intensity, the oral mucosa is not affected. However, with a stronger effect on the oral mucosa, pathological changes may occur. Knowledge of the etiology, mechanisms of development and clinical manifestations of trauma to the oral mucosa will help improve the quality of diagnosis, treatment and prevention of traumatic stomatitis.

II. Educational objective:

2.1. The student should know:

- basic, additional and special methods of examination of dental patients with diseases of the mucous membrane and red border of the lips;
- primary and secondary elements of the lesion in diseases of the oral mucosa and red border of the lips;
- etiology and pathogenesis of primary traumatic stomatitis;
- clinical manifestations of mechanical trauma, chemical injuries, thermal injuries and lesions of the oral mucosa in radiation therapy of the maxillofacial area;
- principles of treatment and prevention of traumatic stomatitis.

2.2. Be able to:

- make a plan of examination of a patient with traumatic stomatitis;
- to eliminate traumatic factors;
- prescribe additional methods of examination of a patient with a trauma of the oral mucosa;
- conduct differential diagnosis and diagnose traumatic stomatitis;
- to draw up a treatment plan for a patient with traumatic lesions of the oral mucosa;
- analyze the use of medications for the treatment of traumatic stomatitis;
- to carry out preventive measures to prevent the occurrence of traumatic lesions of the oral mucosa.

III. Contents of the topic.

Mechanical trauma can be acute or chronic. Acute mechanical trauma (trauma mechanicum acutum) of the oral mucosa occurs accidentally when biting, hitting or being wounded by various objects. Most often, the oral mucosa of the tongue, lips, and cheeks is damaged along the line of the teeth closure. In this case, pain initially appears, and a hematoma, excoriation, erosion, or ulcer may form at the site of injury. Often their size, shape and localization on the oral mucosa coincide with those of the traumatic agent.

Treatment. In case of acute traumatic injuries of the oral mucosa, if the traumatic factor comes from the oral cavity, it is necessary to examine the dentition and, in order to prevent chronic trauma, treat caries and its complications by restoring the anatomical shape of the crown of the affected tooth or simply grinding its sharp edge.

It is enough to treat shallow lesions with antiseptics (furacilin, ethonium, hydrogen peroxide, etc.) and prescribe rinsing the mouth with artificial lysozyme, potassium permanganate solution, sage leaf steam, citral, and in the presence of erosion, add applications with keratoplastic agents (Kalanchoe juice, ectericide, retinol oil solution, etc.).

Traumatic ulcers should be distinguished from cancerous ulcers, trophic ulcers, mylar ulcerative tuberculosis, and hard chancres.

Traumatic ulcers are characterized by the presence of an irritating factor, painfulness of the affected area, the presence of an inflammatory infiltrate, and the absence of specific

changes in cytological examination. Elimination of the traumatic factor, as a rule, leads to its healing in 5-6 days.

Physical trauma (trauma physicum) is a fairly common disorder of oral mucosa. The most common injuries of oral mucosa caused by physical factors are thermal (exposure to high and low temperatures), electric shock (burns, galvanosis) and radiation injuries (localized exposure to large doses of ionizing radiation).

Thermal injuries occur as a result of exposure to high (burns) or low (frostbite) temperatures. Oral mucosa burns can be caused by hot food, steam, hot objects, fire, and hot air. Under the influence of hot water or steam, acute catarrhal stomatitis develops, accompanied by pain. The oral mucosa becomes sharply hyperemic, and epithelial maceration is noted. With a severe burn, the epithelium exfoliates in large layers or blisters appear, followed by widespread superficial ulcers or erosions. Secondary infection and local irritants aggravate the course of stomatitis and slow down the epithelialization of the affected areas.

Oral mucosa **electrical injury** is often associated with electrotherapy (galvanization, electrophoresis) or the development of galvanism in the oral cavity.

A galvanic burn is formed at the site of contact between the active electrode and oral mucosa in case of violation of the electrophoresis or galvanization procedure. The lesion resembles the shape of an electrode and has a whitish-gray painful surface. Over time, it forms an almost continuous painful erosion, which is surrounded by reactive inflammation of the adjacent tissues and is accompanied by a painful reaction of the regional lymph nodes.

IV. Control questions to the topic of the lesson:

1. Define the concept of "primary stomatitis".
2. Etiology and pathogenesis of primary traumatic stomatitis.
3. Clinical manifestations of mechanical injuries of the oral mucosa.
4. Methods of diagnosis and treatment of mechanical injuries of the oral mucosa.
5. Clinical manifestations of thermal and electrical injuries of the oral mucosa.
6. Methods of diagnosis and treatment of thermal and electrical injuries of the oral mucosa.
7. Clinical manifestations of radiation damage to the oral mucosa.
8. Methods of diagnosis and treatment of radiation damage to the oral mucosa.
9. Measures of prevention of traumatic stomatitis.

V. Control test tasks and / or situational tasks:

1. Patient R., 54 years old, complains of fever, weakness, pain in the muscles, joints, eyes, sweating, severe headache, sore throat. He had been taking Coldrex for 2 days. Objectively: the mucous membrane of the soft palate, palatine rims, pharynx was hyperemic, swollen. On the mucous membrane of the soft palate there are millet-like granular rashes of red color. Make a preliminary diagnosis.

- A. Acute herpetic stomatitis
- B. Acute catarrhal stomatitis
- C. Allergic stomatitis
- D. Infectious mononucleosis
- E. Influenza

2. A 35-year-old woman, a veterinarian, complains of fever up to 39° C, chills, weakness, pain in muscles, joints, redness of the eyes, increased salivation, pain and burning sensation in the mouth. Objectively: numerous erosions with a diameter of 2-4 mm, bloody crusts on the lips were found on the oral mucosa. In the interdental folds, at the base of the nail bed, on the ocular mucosa - small vesicles with cloudy contents. Make a preliminary diagnosis:

- A. Acute herpetic stomatitis
- B. Foot and mouth disease
- C. Shingles of the skin

D. Allergic stomatitis

E. Blistering

3. During the examination of the oral cavity of patient A., 43 years old, the dentist found numerous vesicles and erosions located on a hyperemic background. Hypersalivation is expressed. Vesicular rashes on the skin of the interdental folds. It is known that 5 days ago the patient consumed dairy products that he bought at the market. After examination, the doctor suspected the presence of a viral disease. Which laboratory results are most likely?

A. Increased antibody titer to influenza virus type A

B. Increased antibody titer to herpes simplex virus

C. Increased antibody titer to foot-and-mouth disease picornavirus

D. Increased antibody titer to HIV

E. Increased antibody titer to Epstein-Barr virus

4. Patient V., 18 years old, complains of sore throat, fever to 39°C, pain in the liver and spleen. He became ill 7 days ago, took Gripocitron on his own, and does not feel any relief. Objectively: the palatal rims are sharply hyperemic, the tonsils are hyperplastic, and there are petechiae on the border of the hard and soft palate, the tongue is covered with a grayish-white coating, and there is a pronounced hyperplasia of the mushroom papillae. Maculopapular rashes on the skin of the trunk and extremities. In the blood test: leukocytosis, lymphocytosis, monocytosis, ESR - 28 mm/h, atypical mononuclears. Make a diagnosis.

A. Influenza

B. Infectious mononucleosis

C. Foot and mouth disease

D. AIDS

E. Measles

5. After examination of patient K., 20 years old, the dentist suspected the diagnosis of infectious mononucleosis. What is the dentist's further tactic?

A. Refer the patient for a consultation with a dermatovenerologist

B. Issue a sick leave

C. Carry out oral cavity sanitation

D. Refer the patient to an infectious disease specialist

E. Appoint a test for HIV infection

6. A 25-year-old patient has foci of necrosis along the gingival margin on both jaws, foci of hair leukoplakia. Leads a disorderly lifestyle, uses drugs. Over the past three months, she has been experiencing weakness, fever up to 38.0°C, and significant weight loss. The skin of the face is pale. There is a painless increase in the submandibular, posterior neck, supraclavicular, axillary lymph nodes. What specific method of investigation should be used to establish a definitive diagnosis?

A. Complete blood count

B. Immunogram

C. Biochemical blood test

D. Enzyme-linked immunosorbent assay

E. Virological examination

7. A 30-year-old patient consulted a dentist with complaints of pain when biting in a tooth on the lower jaw on the right. From the medical history it was found that the patient takes antiretroviral drugs. Which method of handpiece treatment should be chosen to prevent infection transmission?

A. Freezing to -273° C

B. Treatment with 70% alcohol solution

C. Double treatment with Aerodesin

D. Ultraviolet irradiation

E. Soaking in 6% hydrogen peroxide solution

8. A 21-year-old patient came to the dentist with complaints of general weakness, muscle pain, fever up to 38.3° C, digestive tract disorders, excessive salivation and rashes in the mouth, nose, as well as on the skin of the nasal wings and interdental folds. These symptoms appeared after drinking milk in the village. What is the most likely diagnosis?

A. Foot and mouth disease

B. Herpetic stomatitis

C. Operative herpes zoster

D. Behcet's syndrome

E. Infectious mononucleosis

9. Quite often the cause of acquired immunodeficiencies is an infectious disease, during which pathogens directly multiply in the cells of the immune system and destroy them. Select from the following diseases those in which such pathological processes are observed.

A. Cu-fever, typhus fever

B. Tuberculosis, mycobacteriosis

C. Dysentery, cholera

D. Infectious mononucleosis, AIDS

E. Poliomyelitis, hepatitis A

10. Acyclovir, bonafon, interferon - drugs:

A. Anti-inflammatory

B. Desensitizing

C. Vitamin

D. Antiviral

E. Nonspecific stimulants

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Lesson № 5

TOPIC: AUTOINFECTIOUS STOMATITIS. ACUTE CATARRHAL STOMATITIS. ETIOLOGY, PATHOGENESIS, CLINIC, DIAGNOSIS, TREATMENT, PREVENTION. ACUTE HERPETIC STOMATITIS. ETIOLOGY, PATHOGENESIS, CLINIC, DIAGNOSIS, TREATMENT, PREVENTION.

I. Relevance of the topic: Acute catarrhal, acute aphthous and acute herpetic stomatitis are referred to as infectious independent group of diseases of the oral mucosa (according to the NMU classification) or autoinfectious primary diseases of the oral mucosa (according to the Maximenko P.T. classification). Autoinfectious diseases occur as a result of the action of opportunistic microorganisms that vegetate in the oral cavity, with a decrease in the reactivity of the mucous membrane and the body as a whole. A thorough study of the patient's local status, taking into account general changes in the body and the identification of etiological factors, allows the dentist to diagnose the disease, identify etiological factors and establish pathogenetic mechanisms.

II. Educational objective:

2.1. The student should know:

- definition of primary autoinfectious stomatitis;
- etiologic factors and pathogenesis of acute catarrhal, acute herpetic, acute aphthous stomatitis;
- diagnosis and treatment tactics for various clinical manifestations of autoinfectious stomatitis;
- treatment plan for patients with acute catarrhal stomatitis, acute herpetic stomatitis, acute aphthous stomatitis;
- measures for the prevention of autoinfectious stomatitis.

2.2. Be able to:

- examine a patient with diseases of the oral mucosa;
- write a referral for a general blood test, interpret the data obtained;
- to write a referral for microbiological examination, to take material, to interpret the data obtained;
- establish a clinical diagnosis, taking into account the etiology, severity and general condition of the body;
- to make a treatment plan for a patient with acute catarrhal stomatitis;
- to make a treatment plan for a patient with acute aphthous stomatitis;
- to make a treatment plan for a patient with acute herpetic stomatitis.

III. Contents of the topic.

Infectious (autoinfectious) diseases of the oral mucosa include: catarrhal, herpetic, ulcerative necrotic, acute aphthous stomatitis.

Catarrhal stomatitis is an exudative inflammation of the oral mucosa, characterized by hyperemia, edema, increased epithelial desquamation, bleeding.

Etiology: local factors - microorganisms, mechanical, physical, chemical factors; general - infectious diseases, diseases of the gastrointestinal tract, endocrine system, hypo- and avitaminosis.

Pathogenesis. Under the influence of causative factors, an inflammatory reaction develops in the oral mucosa: alteration, exudation and proliferation. By localization, catarrhal stomatitis, cheilitis, glossitis, etc. are distinguished. By the course: acute, chronic and exacerbation of chronic.

Acute catarrhal stomatitis:

Clinic - aching pain, difficulty eating, dryness, bleeding from the gums, swelling, hyperemia, tooth marks, viscous saliva, whitish plaque, intoxication (fever, headache, sleep disturbance, appetite), lymph nodes are enlarged and painful to palpate.

Chronic catarrhal stomatitis: Clinical features: dryness, discomfort, itching, paresthesias. The mucous membrane is pasty, cyanotic, bleeding, painless, tooth marks are present. Treatment: local - elimination of local irritating factors, oral cavity sanitation, antiseptic irrigation, rinsing with hypertonic solution, physiotherapy (irrigation, aerosols, electrophoresis, ultraphonophoresis of galascorbin, vitamin E, catechin). Generally, multivitamins and calcium preparations are used.

ACUTE HERPETIC STOMATITIS

In the primary form of acute herpes stomatitis (stomatitis herpetica acuta), the primary contact of the lips and the oropharyngeal reflux tract with the herpes virus occurs. Primary herpes occurs more often in children aged 6 months to 3 years, when the antibodies specific to the herpes virus obtained from the mother's blood disappear. In most cases, primary herpes is subclinical, and only 1 to 10% of infected persons develop clinically severe symptoms of acute herpes stomatitis, which is the primary immune response to the invasion of the virus.

Clinically manifested primary herpes infection with oral mucosa - acute herpes stomatitis - is most often observed in children under 3 years of age. Weakened children are especially susceptible to the disease, and it is among them that a rather high mortality rate (up to 27%) is observed, which is mainly due to the dissemination of the virus. The liver is also usually affected.

The incubation period of acute herpetic stomatitis is usually 6-8 days. The disease begins acutely with general malaise, headache, and fever up to 37-41 °C. These symptoms are followed within 24-48 hours by pain in the oral cavity, which worsens when talking and eating. The oral mucosa becomes hyperemic and swollen. In the area of the lips, cheeks, tongue, floor of the mouth, palatal rims, small (millet grain) vesicles appear in groups (from 2-3 to dozens of vesicles). They are filled with a clear liquid that becomes cloudy over time. The vesicles can merge into 1-2 blisters and burst in 2-3 days, forming widespread erosions of bright red color, with finely scalloped outlines, covered with plaque. Herpetic stomatitis is accompanied by periodontal changes and is characterized by catarrhal and sometimes ulcerative gingivitis. Saliva secretion increases, it becomes viscous. Along with this, the red border of the lips, as well as the skin bordering it and the hands are often affected; other organs may also be affected: eyes, esophagus, pharynx.

IV. Control questions to the topic of the lesson:

1. Define the concept of autoinfectious stomatitis.
2. The main periods of development of acute autoinfectious diseases.
3. Explain the etiology and pathogenesis of acute catarrhal stomatitis.
4. Explain the etiology and pathogenesis of acute aphthous stomatitis.
5. Explain the etiology and pathogenesis of acute herpetic stomatitis.
6. What is the clinic of acute catarrhal stomatitis?
7. What is the clinic of acute aphthous stomatitis?
8. What is the clinic of acute herpetic stomatitis?
9. Describe the elements of oral mucosa lesions in acute aphthous stomatitis and acute herpetic stomatitis.
10. Principles of treatment and prevention of autoinfectious stomatitis.

V. Control test tasks and/or case studies:

1. What are the ways of transmission of herpes infection?
 - A. Contact
 - B. Parenteral
 - C. Air-droplet

D. Alimentary

2. How many periods are distinguished in the development of autoinfectious stomatitis:

- A. 3
- B. 2
- C. 4
- D. Not allocated
- E. 5

3. Elements of lesions in acute herpetic stomatitis:

- A. Papules, erosions
- B. Erythema, erosion
- C. Aphthae, atrophy
- D. Vesicles, erosion
- E. Ulcers, scars

4. In herpetic stomatitis, cells are found in the cytologic preparation:

- A. Acantholytic
- B. Giant multinucleated
- C. Atypical
- D. Pirogova - Langhans
- E. Monocytes

5. Results of bacteriological examination in acute herpetic stomatitis in acute herpetic stomatitis:

- A. Fungi of the genus Candida
- B. Pale treponema
- C. Streptococci
- D. Koch's bacillus
- E. Fusospirillum symbiosis

6. Localization of lesions in acute herpetic stomatitis:

- A. Mucosa of the nose, lips, cheeks
- B. Mucosa of the cheeks, nose
- C. Mucous membrane of the palate, gums, lips
- D. Mucous membrane of the larynx
- E. Mucous membrane of the tongue, cheeks

7. Patient E., 16 years old, consulted a doctor with complaints of pain in the oral cavity, ulcers, fever (38°C), headache. On examination: the oral mucosa is hyperemic, swollen. There are numerous erosions with scalloped edges on the palate, gums, and lips, covered with grayish-white plaque. What is the most likely diagnosis?

- A. Acute herpetic stomatitis
- B. Erythema exudatum multiforme
- C. Acute aphthous stomatitis
- D. Murrain
- E. Allergic stomatitis

8. Patient M., 27 years old, has a fever and the appearance of vesicles located at the border of the skin and mucous membranes. What research methods can be used to confirm the presence of herpes simplex virus in the patient's body?

- A. Microbiological and allergic tests
- B. Virological and biological
- C. Serological and biological
- D. Microbiological and serological
- E. Virological and serological

9. A 17-year-old boy complains of pain in the oral cavity, which makes it difficult to eat, headache, fever. He became ill 3 days ago after hypothermia. Objectively: crusts on the red border of the lower lip on the right against the background of hyperemia. On the mucous membrane of the lips, palate against the background of widespread hyperemia, there are separate and interconnected erosions covered with plaque, painful to touch. Which of the following additional methods of examination will confirm the diagnosis?

- A. Biopsy
- B. Luminescence
- C. Smear microscopy
- D. Cytology
- E. Complete blood count

10. Patient M., 25 years old, consulted a dentist with complaints of pain in the oral cavity and the appearance of "ulcers" on the mucous membrane. The doctor concluded that the lesions of the mucous membrane are herpetic in nature and prescribed a drug that inhibits the synthesis of nucleic acids of viruses. What is this drug?

- A. Acyclovir
- B. Remantadine
- C. Furazolidone
- D. Biseptol
- E. Oxoline

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Lesson 6

TOPIC: ACUTE APHTHOUS STOMATITIS. ETIOLOGY, PATHOGENESIS, CLINIC, DIAGNOSIS, TREATMENT, PREVENTION.

I. Relevance of the topic: Acute aphthous stomatitis is an autoinfectious disease that occurs under the influence of opportunistic streptococcal microflora of the oral cavity against the background of reduced body reactivity. As a result, a delayed immune reaction develops (similar to the Arthus phenomenon) with the formation of aphthae. Identification of etiologic factors and a thorough examination of the patient's local status, taking into account general changes in the body, allows to diagnose the disease and establish pathogenetic mechanisms. A thorough examination of the patient's local status, taking into account general changes in the body, allows the dentist to diagnose the disease, identify etiological factors and establish pathogenetic mechanisms.

II. Educational objective:

2.1. The student should know:

- definition of primary autoinfectious stomatitis;
- etiologic factors and pathogenesis of acute aphthous stomatitis;
- methods of diagnosis of acute aphthous stomatitis;
- treatment plan for a patient with acute aphthous stomatitis;
- measures of prevention of acute aphthous stomatitis.

2.2. Be able to:

- examine a patient with diseases of the oral mucosa;
- write a referral for a general blood test, interpret the data obtained;
- to write a referral for microbiological examination, to take material, to interpret the data obtained;
- diagnose acute aphthous stomatitis;
- establish a clinical diagnosis, taking into account the etiology, severity and general condition of the body;
- to make a plan of treatment and prevention of a patient with acute aphthous stomatitis.

III. Contents of the topic.

Acute aphthous stomatitis. The causative agent is conditionally pathogenic microflora of the oral cavity: staphylococci, streptococci, etc. Clinic and diagnosis of the disease is similar to acute herpetic stomatitis. Unlike it, the disease proceeds with less pronounced catarrhal phenomena and is not contagious. It is more common in adults with weakened immunity. Antimicrobial agents are used for treatment.

The informal term *canker sore* is also used, mainly in North America, although it may also refer to other types of mouth ulcers. The cause is not completely understood but involves a T cell-mediated immune response triggered by a variety of factors which may include nutritional deficiencies, local trauma, stress, hormonal influences, allergies, genetic predisposition, certain foods, dehydration, some food additives, or some hygienic chemical additives like SDS (common in toothpaste).

These ulcers occur periodically and heal completely between attacks. In the majority of cases, the individual ulcers last about 7–10 days, and ulceration episodes occur 3–6 times per year. Most appear on the non-keratinizing epithelial surfaces in the mouth – i.e. anywhere except the attached gingiva, the hard palate and the dorsum of the tongue – although the more severe forms, which are less common, may also involve keratinizing epithelial surfaces. Symptoms range from a minor nuisance to interfering with eating and drinking. The severe forms may be debilitating, even causing weight loss due to malnutrition.

IV. Control questions to the topic of the lesson:

1. Define the concept of autoinfectious stomatitis.
2. The main periods of development of acute autoinfectious diseases.

3. Explain the etiology and pathogenesis of acute aphthous stomatitis.
4. What is the clinic of acute aphthous stomatitis?
5. Describe the elements of oral mucosa lesions in acute aphthous stomatitis.
6. Principles of treatment and prevention of acute aphthous stomatitis.

V. Control test tasks and/or case studies:

1. Localization of lesions in acute aphthous stomatitis:
 - A. Mucous membrane of the nose, lips, cheeks
 - B. Mucous membrane of cheeks, lips, floor of the mouth, soft palate
 - C. Mucous membrane of the palate, cheeks, lips, gums
 - D. Mucous membrane of the larynx, hard palate
 - E. Mucosa of the tongue, cheeks, nose, palate
2. What is the gingival lesion in acute aphthous stomatitis?
 - A. Periodontitis
 - B. Ulcerative gingivitis
 - C. Hypertrophic gingivitis
 - D. Catarrhal gingivitis
 - E. No changes
3. Possible manifestations on the skin of the face in acute aphthous stomatitis:
 - A. Erosion
 - B. Pustules
 - C. Ulcers
 - D. Erythema
 - E. Blisters
4. Results of bacteriological examination in acute aphthous stomatitis:
 - A. Fungi of the genus *Candida*
 - B. Pale treponema
 - C. Streptococci
 - D. Koch's bacillus
 - E. *Fusospirillum symbiosis*
5. Patient Z., 23 years old, visited the dentist on the second day after the onset of the disease. The diagnosis was made: acute aphthous stomatitis, moderate severity. What means for the treatment of lesions should be prescribed in the first place?
 - A. Ointment with corticosteroids, antiseptics
 - B. Ointment with antibiotics, anesthetics
 - C. Antiviral ointment, pain reliever
 - D. Ointment with sulfonamides, enzymes
 - E. Ointment with proteolytic enzymes
6. During the objective examination of the patient, the doctor found an element of the lesion. A superficial epithelial defect of round or oval shape, covered with fibrinous effusion and surrounded by a crown of hyperemia. Indicate what kind of element it is.
 - A. Spot
 - B. Erosion
 - C. Ulcer
 - Д. Erythema
 - E. Aphtha
7. A young man V. suffered a severe form of acute aphthous stomatitis and is in the period of disease subsidence. What drugs should be used to supplement the treatment during this period?
 - A. Antiviral drugs
 - B. Proteolytic enzymes

C. Anesthetics

D. Weak anesthetics

E. Keratoplastic preparations

8. Patient Z., 27 years old, visited the dentist on the second day after the onset of the disease. The diagnosis was made: acute aphthous stomatitis, moderate severity. What means for the treatment of lesions should be prescribed in the first place?

A. Antiviral ointment, analgesic

B. Ointment with corticosteroids, antiseptics

C. Ointment with antibiotics, anesthetics

D. Ointment with sulfonamides, enzymes

E. Ointment with proteolytic enzymes

9. Patient N., 25 years old, complains of pain and rash in the mouth, sore throat. He fell ill after hypothermia. Objectively: body temperature 38.0°C, submandibular lymph nodes are enlarged, mobile, painful. On the oral mucosa there are multiple foci of necrotic epithelium that do not merge with each other. The doctor made a preliminary diagnosis of acute aphthous stomatitis. What is the primary element of the lesion in this disease?

A. Erosion

B. Papule

C. Aphtha

D. Blister

E. Ulcer

10. The dentist consulted a 28-year-old patient with multiple aphthous rashes in the oral cavity, which appeared after acute respiratory viral infection. On the basis of clinical and laboratory tests, the diagnosis was made: acute aphthous stomatitis. What is the gingival damage in this disease?

A. Ulcerative gingivitis

B. Periodontitis

C. Catarrhal gingivitis

D. Hypertrophic gingivitis

E. No changes

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Lesson № 7

TOPIC: CHRONIC RECURRENT HERPES. CAUSES, PATHOGENESIS, CLINIC, DIAGNOSIS, TREATMENT, PREVENTION.

I. Relevance of the topic: Chronic recurrent herpes occurs mainly in adults and in every tenth child (12.5%) who has had acute herpes stomatitis. After a primary herpes infection, the virus remains in the human body, apparently throughout life, and the disease enters a latent phase of long-term viral carriage, which is often accompanied by relapses (relapsing form). In the oral cavity, it includes chronic recurrent herpes (*Herpes chronica recidiva*), oral mucosa (recurrent herpes stomatitis, gingivostomatitis), recurrent herpes of the lips and herpes recurrent ganglionitis; in rare cases, there are recurrent herpes lesions of the esophagus, pharynx and larynx. The study of etiologic factors and a thorough examination of the patient's local status, taking into account general changes in the body, allows to diagnose the disease and establish pathogenetic mechanisms.

II. Learning objectives:

2.1. The student should know:

- definition of primary autoinfectious stomatitis;
- etiologic factors and pathogenesis of chronic recurrent herpes;
- diagnosis of chronic recurrent herpes;
- treatment plan for a patient with chronic recurrent herpes;
- measures of prevention of chronic recurrent herpes.

2.2. Be able to:

- examine a patient with diseases of the oral mucosa;
- write a referral for a complete blood count, interpret the data obtained;
- establish a clinical diagnosis taking into account the etiology, severity and general condition of the body;
- diagnose chronic recurrent herpes;
- to make a differential diagnosis of chronic recurrent herpes;
- to make a treatment plan for a patient with acute aphthous stomatitis.

III. Contents of the topic.

After a primary herpes infection, the virus remains in the human body, apparently throughout life, and the disease enters a latent phase of long-term viral carriage, which is often accompanied by relapses (recurrent form).

In the oral cavity, it includes **chronic recurrent herpes** (*Herpes chronica recidiva*), oral mucosa (recurrent herpes stomatitis, gingivostomatitis), recurrent herpes of the lips and herpes recurrent ganglionitis; in rare cases, there are recurrent herpes lesions of the esophagus, pharynx and larynx.

Chronic recurrent herpes occurs mainly in adults and in one in ten children (12.5%) who have had acute herpes stomatitis. The development of the disease is an indication of a decrease in general immunity and the reactivity of the oral mucosa, it can manifest itself on the skin (*Herpes simplex labialis, nasalis recidiva*) and oral mucosa (*Stomatitis herpetica recidiva*).

The clinical manifestations of both primary herpes infection and recurrent skin lesions can be the same. Recurrent herpes zoster is more often localized on the hard palate, cheeks, and tongue and occurs mainly due to the above-mentioned provoking factors. In most cases of recurrent herpetic stomatitis, the rash is limited, with a typical process dynamics: vesicles appear in groups, merge, burst, forming erosion with polycyclic outlines.

Depending on the frequency of relapses, there are mild (1-2 relapses within 3 years), moderate (1-2 relapses per year) and severe (4-5 relapses per year or permanent course) forms of recurrent herpes.

Pathologic examination reveals ballooning dystrophy, which is manifested by focal changes in the cells of the spiny layer, which take the form of balls and separate from each other. At the same time, multinucleated large cells are formed as a result of amitotic division. The serous exudate separates the altered cells, forming a vesicle cavity filled with exudate with epithelial cells suspended in it. An acute inflammatory process is observed in the adjacent CO lamina propria.

Cytologic examination reveals neutrophilic leukocytes with varying degrees of dystrophy and elements of histogenic origin (settled macrophages), as well as layers of epithelial cells with polymorphism and monster cells (giant multinucleated herpes cells - the so-called ballooning dystrophy cells).

IV. Control questions to the topic of the lesson:

1. Define the concept of chronic recurrent herpes.
2. The main periods of development of chronic recurrent herpes.
3. Explain the etiology and pathogenesis of chronic recurrent herpes.
4. What is the clinic of chronic recurrent herpes?
5. Describe the elements of oral mucosa lesions in chronic recurrent herpes.
6. Principles of treatment and prevention of chronic recurrent herpes.

V. Control test tasks and/or case studies:

1. Patient M., 34 years old, consulted a dentist with complaints of blisters on the lips that appeared 2 days ago. Objectively: the red border of the lips is swollen, there are grouped vesicles on the border of the red border and skin, hyperemia and tenderness to palpation are noted around the rash. The oral mucosa is unchanged. The causative agent of this disease is:

- A. Herpes simplex virus
- B. Lefler's bacillus
- C. Epstein-Barr virus
- D. Filterable virus
- E. Influenza virus

2. A 21-year-old female patient complained of the appearance of a rash on the red border of the lower lip on the left the night before, a feeling of itching and pain. Objectively: on the red border of the lower lip on the right against the background of hyperemia, grouped vesicles with serous content were found. Which drug should be used for the local treatment of this disease?

- A. Acyclovir cream
- B. Hydrocortisone cream
- C. Heparin ointment
- D. Clotrimazole cream
- E. Erythromycin cream

3. An 18-year-old girl complained of sharp pain in the oral cavity, fever up to 38.5 °C. After examination, the diagnosis was made: acute herpetic stomatitis. What additional examination method should be performed?

- A. Bacterioscopic
- B. Bacteriological
- C. Cytological
- D. Serological
- E. Luminescent

4. Patient Z., 23 years old, came to the clinic on the second day after the onset of the disease. The diagnosis was made: acute herpetic stomatitis, moderate severity. What ointment for the treatment of lesions should be prescribed in the first place?

- A. Ointment with proteolytic enzymes
- B. Ointment with antibiotics

- C. Ointment with corticosteroids
- D. Ointment with sulfonamides
- E. Antiviral ointment

5. Patient N., 34 years old, was diagnosed with chronic recurrent herpes. What drug should be prescribed for local treatment?

- A. Acyclovir
- B. Solcoseryl
- C. Butadione
- D. Methyluracil
- E. Aloe liniment

6. Patient K., 35 years old, complained of generalized malaise, fever, pain during meals. Herpetic lesion of the mucous membrane was determined. What was the nature of the changes in the mucous membrane?

- A. Grouped vesicles, erosions, crusts
- B. Drainage erosions, a symptom of perifocal epithelial detachment
- C. Erosion, fragments of intraepithelial blisters
- D. Blister fragments, ulcers
- E. Single aphthae of regular shape

7. A 16-year-old patient complained of pain in the oral cavity, ulcers, fever up to 38.0°C, headache. Objectively: The oral cavity was hyperemic and swollen. There are a large number of erosions on the hard palate, gums, lips, which merge with irregular outlines, covered with grayish-white plaque. Cytologically, giant multinucleated herpes cells are found in the lesions. Establish the diagnosis.

- A. Acute herpetic stomatitis
- B. Acute aphthous stomatitis
- C. Acute ulcerative necrotizing stomatitis
- D. Chronic herpetic stomatitis
- E. Chronic recurrent aphthous stomatitis

8. A woman of 33 years old periodically for 2 years has been worried about ulcers in the oral cavity and pain, especially during meals. Among the common concomitant diseases, she notes an acute respiratory illness for 2 days, fever to 37.7°C, headache, runny nose. Objectively: on the mucous membrane of the palate to the right of the median suture, 2 erosions of irregular shape, 4-5 mm in diameter, covered with a whitish-gray coating, sharply painful on palpation. Make a diagnosis.

- A. Chronic herpetic stomatitis
- B. Acute aphthous stomatitis
- C. Acute ulcerative necrotizing stomatitis
- D. Acute herpetic stomatitis
- E. Chronic recurrent aphthous stomatitis

9. Patient P., 16 years old, complained of pain in the oral cavity, ulcers, fever up to 38.0°C, headache. Objectively: The oral cavity was hyperemic and swollen. The hard palate, gums, and lips have a large number of erosions that merge with irregular outlines and are covered with grayish-white plaque. Cytologically, giant multinucleated cells are found in the lesions. Establish the diagnosis.

- A. Acute herpetic stomatitis
- B. Acute aphthous stomatitis
- C. Acute ulcerative necrotizing stomatitis
- D. Chronic herpetic stomatitis
- E. Chronic recurrent aphthous stomatitis

10. Patient M., 23 years old, a student, complains of an ulcer in the oral cavity and pain, especially during eating. Among the common concomitant diseases, she notes an acute respiratory illness for 2 days, fever to 37.70C, headache, runny nose. Past medical history: lack of sleep, stressful situation due to exams. Objectively: on the mucous membrane of the palate to the left of the median suture, single erosions of irregular shape, 5-6 mm in diameter, covered with a whitish-gray coating, painful to palpation. Make a diagnosis.

- A. Chronic herpetic stomatitis
- B. Acute aphthous stomatitis
- C. Acute ulcerative necrotizing stomatitis
- D. Acute herpetic stomatitis
- E. Chronic recurrent aphthous stomatitis

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Lesson № 8

TOPIC: ACUTE ULCERATIVE STOMATITIS. ETIOLOGY, PATHOGENESIS, CLINIC, DIAGNOSIS, TREATMENT, PREVENTION.

I. Relevance of the topic: Ulcerative stomatitis is an infectious alternative inflammatory disease of the oral cavity that occurs against the background of reduced body reactivity in the presence of adverse conditions in the oral cavity, develops as an immune reaction of the type of the Arthus phenomenon in response to sensitization of the oral cavity tissues by anaerobic fusospirillum microflora and is characterized by necrosis and ulceration. Ulcerative necrotizing stomatitis can be a symptom of blood diseases (in particular leukemia), intoxication with heavy metal salts, pathology of the digestive tract, food toxicity, diseases of the endocrine system, kidneys, liver, radiation damage, immunodeficiency, scurvy and HIV infection.

II. Learning objectives:

2.1. The student should know:

- definition of acute ulcerative stomatitis;
- etiological factors and pathogenesis of acute ulcerative stomatitis;
- methods of diagnosis of acute ulcerative stomatitis;
- treatment plan for a patient with acute ulcerative stomatitis;
- measures of prevention of acute ulcerative stomatitis.

2.2. Be able to:

- examine a patient with diseases of the oral mucosa;
- analyze the clinical manifestations of acute ulcerative stomatitis;
- conduct a clinical examination of a patient with acute ulcerative stomatitis;
- prescribe additional methods of examination for a patient with ulcerative stomatitis;
- to substantiate and draw up a treatment plan for a patient with ulcerative stomatitis;
- analyze the use of drugs for the treatment of ulcerative stomatitis;
- write prescriptions for medications.

III. Contents of the topic.

Vincent's ulcerative necrotizing stomatitis (stomatitis ulceronecrotica Vincenti; syn. ulcerative stomatitis, fusospirochetal stomatitis, trench mouth, Vincent's stomatitis) is an infectious altogether inflammatory disease of the oral cavity that occurs against the background of reduced body reactivity in the presence of adverse conditions in the oral cavity, develops as an immune reaction of the type of the Arthus phenomenon in response to sensitization of the oral cavity tissues by anaerobic fusospirillum microflora and is characterized by necrosis and ulceration.

Classification. According to the course, there are acute, subacute, chronic ulcerative necrotic stomatitis and relapse; according to the severity of the course - mild, moderate and severe forms.

Clinic. Ulcerative necrotizing stomatitis has a number of typical signs of an infectious disease. In the prodromal period, patients are concerned about lethargy, headache, subfebrile body temperature, and joint aches. In the oral cavity, there is bleeding from the gums, burning sensation and dry oral mucosa. Depending on the form of clinical course, this period can last for several days in the mild form and only a few hours in the severe form, after which it turns into the phase of advanced clinical manifestations of the disease. In this case, patients complain of increased general weakness, fever, headache, and decreased performance. Pain in the oral cavity increases sharply at the slightest touch. The tongue is inactive during conversation, and the patient uses eating and hygienic oral care are almost impossible. Salivation increases, regional lymph nodes become enlarged and painful, and a pungent putrid breath appears, which is very depressing for patients. In case of localization of the

lesion in the retromolar space, which mainly occurs in case of eruption of 8 | 8 teeth, the above complaints are accompanied by limited mouth opening - trismus.

Most often, the ulceration begins in the gums and always in those places where there are local irritants: tartar, deeply seated artificial crowns or decayed crowns of gangrenous teeth in areas with deep gingival pockets. Further, the lesion spreads to the oral mucosa bordering the primary focus of ulceration (lateral surfaces of the tongue, oral mucosa of the cheeks - along the line of tooth closure, soft palate, tonsils).

The majority of patients with ulcerative necrotizing stomatitis have a moderate form. It is characterized by moderately high body temperature (37.5-38 °C) and signs of generalized intoxication. Patients complain of generalized weakness, headache, insomnia, aching joints and muscles, lack of appetite, as well as severe pain, severe bleeding from the gums, a pungent putrid odor from the mouth, inability to bite off and chew food, sometimes trismus, and the inability to hygienically care for the oral cavity.

IV. Control questions to the topic of the lesson:

1. Etiological factors of acute ulcerative stomatitis.
2. Pathogenesis of acute ulcerative stomatitis.
3. Periods of development of acute ulcerative stomatitis.
4. Name the clinical manifestations of acute ulcerative stomatitis.
5. Identify additional diagnostic methods for acute ulcerative stomatitis.
6. Prescribe the general treatment of acute ulcerative stomatitis.
7. Prescribe local treatment of acute ulcerative stomatitis.
8. Specify the measures of prevention of acute ulcerative stomatitis.

V. Control test tasks and/or case studies:

1. Patient N., 20 years old, complains of pain, bleeding gums, bad breath, fever up to 37.6°C, general weakness. He has been ill for three days. Objectively: the oral mucosa is hyperemic, the gingival papillae are swollen with areas of necrotic plaque that can be easily removed, there is a symptom of "bloody dew", submandibular lymphadenitis. Prescribe general treatment:

- A. Vitamins, antifungals, plenty of fluids
- B. Hyposensitizing, anti-inflammatory, antimalarial
- C. Antibacterial, sorbents, keratoplastic
- D. Hyposensitizing, antibacterial, sorbents, vitamin C
- E. Anti-inflammatory, hyposensitizing, antiseptic

2. An 18-year-old patient complained of pain in the mouth, ulcers, fever, headache. Objectively: the oral mucosa is hyperemic, swollen. There are multiple ulcers with polycyclic outlines on the hard palate, gums, lips, covered with grayish-white plaque. Indicate the etiologic factor of the disease:

- A. Fusiform symbiosis
- B. Herpes simplex virus
- C. Fungus of the genus Candida
- D. Pale spirochete
- E. Diphtheria bacillus

3. In a 25-year-old man, a dentist suspected a severe form of acute ulcerative necrotizing stomatitis Vincent. Which method of sampling should be used to clarify the diagnosis?

- A. Flushing
- B. Puncture
- C. Scrape
- D. Biopsy
- E. All answers are correct

4. A 16-year-old patient has a fever and pain while swallowing. Objectively: general condition of moderate severity, body temperature 38.5°C. On the hyperemic mucous membrane of the alveolar processes, soft palate, palatine rims, tonsils, ulcers covered with necrotic plaque are determined. The submandibular lymph nodes are enlarged and tender to palpation. Prescribe etiotropic treatment:

- A. Proteolytic enzymes
- B. Antibacterial
- C. Antiviral
- D. Antifungal
- E. Painkillers

5. A 17-year-old female patient complained of sharp pain in the oral cavity, fever up to 38.3°C. After examination, the diagnosis was made: acute ulcerative necrotic stomatitis. Choose the drugs for local therapy of the disease:

- A. Anti-inflammatory, antibacterial, enzymes, hyposensitizing
- B. Antiseptics, antiviral, enzymes, keratoplastics
- C. Antifungal, antibacterial, sorbents, keratoplastics
- D. Antibacterial, analgesic, keratolytics
- E. Antiseptics, analgesics, enzymes, antibacterial, keratoplastics

6. Patient M., 23 years old, after the examination was diagnosed with acute ulcerative necrotic stomatitis of Vincent. What microflora will be found in the study of the material from the surface of the ulcers?

- A. Koch's bacillus
- B. Pseudomycelium of fungi of the genus *Candida*
- C. Pale spirochete
- D. Fusobacteria and spirochetes of Vincennes
- E. Strepto-staphylococcal microflora

7. Which symptoms are not characteristic of the clinical picture of acute ulcerative stomatitis?

- A. Patient's complaints of pain in the oral cavity
- B. The appearance of ulcers on the unchanged oral mucosa
- C. The appearance of ulcers on the hyperemic mucous membrane of the oral cavity
- D. Increased submandibular lymph nodes
- E. Increase in body temperature

8. Patient A., 22 years old, complained of generalized weakness, fever, gingival pain, bad breath. Objectively: gingival papillae and gingival margin are grayish, loose, easily removed with exposure of ulcerated, sharply painful surface. The mucous membrane of the cheek on the left is swollen and hyperemic. In the distal area at the level of the 38th tooth, there is a polygonal ulcer with necrotic plaque, painful to palpation. What is the most likely diagnosis?

- A. Acute ulcerative gingivitis
- B. Acute leukemia
- C. Scurvy stomatitis
- D. Acute ulcerative stomatitis
- E. Chronic ulcerative stomatitis

9. Acute ulcerative stomatitis is characterized by a symptom:

- A. Dew
- B. Apple jelly
- C. Blood dew
- D. Failure of the probe
- E. Nikolsky's

10. Patient R., 23 years old, was diagnosed by a dentist with acute ulcerative stomatitis. Choose the drugs for the general treatment of the patient:

- A. 0, 05% chlorhexidine solution, sea buckthorn oil, vitamin C
- B. Metronidazole, cetrin, vitamin C
- C. Cetrin, vitamin C, 1% hydrogen peroxide solution
- D. 0.05 % chlorhexidine solution, 10 % methyluracil ointment
- E. Metronidazole, claritin, 5% anesthetic suspension

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Lesson № 9

TOPIC: CHRONIC ULCERATIVE STOMATITIS. ETIOLOGY, PATHOGENESIS, CLINIC, DIAGNOSIS, TREATMENT, PREVENTION.

I. Relevance of the topic: Acute ulcerative necrotizing stomatitis in case of insufficient treatment and incomplete rehabilitation measures is capable of recurrence and transition to a chronic form. This transition is more often observed against the background of chronic somatic pathology, as well as in people with unsanitized oral cavity. Chronic ulcerative necrotic stomatitis develops mainly in the gingival areas where there are long-standing tartar deposits or other chronic local irritants. It often occurs as a consequence of an acute disease with insufficiently effective local treatment.

II. Educational objective:

2.1. The student should know:

- etiological factors of chronic ulcerative stomatitis;
- pathogenesis of chronic ulcerative stomatitis;
- methods of diagnosis of chronic ulcerative stomatitis;
- treatment plan for a patient with chronic ulcerative stomatitis;
- measures for the prevention of chronic ulcerative stomatitis.

2.2. Be able to:

- examine a patient with diseases of the oral mucosa;
- analyze the clinical manifestations of chronic ulcerative stomatitis;
- conduct a clinical examination of a patient with chronic ulcerative stomatitis;
- prescribe additional methods of examination for a patient with chronic ulcerative stomatitis;
- justify and develop a treatment plan for a patient with chronic ulcerative stomatitis;
- analyze the use of drugs for the treatment of chronic ulcerative stomatitis;
- write prescriptions for medications.

III. Contents of the topic.

Chronic ulcerative necrotizing stomatitis develops mainly in areas of the gums where there are long-standing tartar deposits or other chronic local irritants. It often occurs as a consequence of an acute disease with insufficiently effective local treatment. The vast majority of patients have a mild form. Only during an exacerbation do some general symptoms appear and stomatitis acquires signs of moderate severity.

Chronic stomatitis is characterized by the absence of severe form. Most often, the process is localized on the gums, near the 2nd and 3rd and lower 8th teeth in a limited area. In addition to a sluggish course, chronic ulcerative necrotizing stomatitis is characterized by a roller-like thickening of the gingival margin, the appearance of interdental pockets (due to the loss of interdental papillae), and ulceration. Pain and bleeding are moderate. The ulcers are covered with a small amount of necrotic tissue. In the area of ulceration, there is resorption of the edge of the alveolar ridge. With proper treatment, ulcers heal with the formation of a scar.

Treatment. Since the causative agent of ulcerative necrotizing stomatitis, the mechanism of the disease onset and development, and its symptoms are known, comprehensive (etiologic, pathogenetic, and symptomatic) therapy (both local and general) can be carried out completely, and thus ensure recovery. However, the effectiveness of the treatment of this disease is primarily determined by local therapy, which is based on the same principles as surgical treatment of infected wounds.

IV. Control questions to the topic of the lesson:

1. Etiological factors of chronic ulcerative stomatitis.
2. Pathogenesis of chronic ulcerative stomatitis.
3. Periods of development of chronic ulcerative stomatitis.
4. Name the clinical manifestations of chronic ulcerative stomatitis.
5. Identify additional diagnostic methods for chronic ulcerative stomatitis.

6. Prescribe the general treatment of chronic ulcerative stomatitis.
7. Prescribe local treatment of chronic ulcerative stomatitis.
8. Specify the measures of prevention of chronic ulcerative stomatitis

V. Control test tasks and/or case studies:

1. An 18-year-old girl complains of pain and bleeding gums while brushing her teeth and eating, bad breath. During the last week she was ill with influenza. Objectively: roller-like thickening of the gingival margin, interdental pockets (due to loss of interdental papillae), ulceration. Pain and bleeding are moderate. The ulcers are covered with a small amount of necrotic tissue. In the area of ulceration, there is resorption of the alveolar ridge margin.

Determine the preliminary diagnosis:

- A. Generalized periodontitis
 - B. Catarrhal gingivitis
 - C. Hypertrophic gingivitis
 - D. Localized periodontitis
 - E. Chronic ulcerative gingivitis
2. Choose anti-inflammatory drugs for the treatment of chronic ulcerative gingivitis
- A. Sodium mefenamate
 - B. Solcoseryl
 - C. Hemodesis
 - D. Hydrolysine
3. The patient is 30 years old, complains of malaise, fever, pain in the gums, bad breath. Objectively: gingival papillae and gingival margin are grayish, loose, covered with plaque that can be easily removed to reveal an ulcerated, bleeding and sharply painful surface. The oral mucosa is pink. What tests are necessary to make a diagnosis?
- A. Biochemical blood test
 - B. Histological examination
 - C. Complete blood count, microbiological examination
 - D. Cytological examination
 - E. Determination of the content of lysozyme in the oral fluid
4. A 30-year-old patient came to the clinic with complaints of an ulcer on the hard palate, painful eating, putrid breath, fever up to 38.7°C. Objectively: an ulcer on the hard palate, covered with necrotic masses of dirty yellow color, which can be easily removed. The edges of the ulcer are irregular, red, painful to palpation. What is the most likely diagnosis?
- A. Allergic stomatitis
 - B. Acute ulcerative stomatitis
 - C. Acute herpetic stomatitis
 - D. Scurvy
 - E. Acute ulcerative necrotizing stomatitis
5. Patient S., 19 years old, complains of pain in the oral cavity, unpleasant odor, fever up to 38°C. The disease is associated with difficult eruption of the 48th tooth. The patient is pale, regional lymph nodes are enlarged and painful. The interdental papillae and marginal gingiva are swollen, hyperemic, covered with necrotic plaque, and there is a large amount of dental plaque on the teeth. Indicate the symptom characteristic of this disease:
- A. Cut papillae
 - B. Failure of the probe
 - C. Apple jelly
 - D. Mowed onions
 - E. Apron

6. Patient A., 27 years old, has difficulty removing necrotic plaque during the treatment of ulcer surfaces in the oral cavity. After removing plaque from the tops of the gingival papillae, the interdental spaces "gape". Make a preliminary diagnosis:

- A. Acute leukemia
- B. Acute ulcerative necrotizing stomatitis of Vincennes
- C. Gonorrhoeal stomatitis
- D. Agranulocytosis
- E. Acute herpetic stomatitis

7. A 19-year-old male driver complains of malaise, fever, pain in the gums, bad breath. Objectively: gingival papillae and gingival margin are grayish, loose, easily removed with exposure of ulcerated, bleeding and sharply painful surface. The oral mucosa is pink. What is the most likely diagnosis?

- A. Acute ulcerative gingivitis
- B. Acute catarrhal gingivitis
- C. Lead gingivitis
- D. Gangrenous gingivitis
- E. Chronic ulcerative gingivitis

8. A 25-year-old girl has been diagnosed with a severe form of acute ulcerative necrotizing stomatitis Vincennes, the period of disease subsidence. What medications should be used to supplement the patient's treatment during this period?

- A. Analgesics
- B. Proteolytic enzymes
- C. Antivirals
- D. Antifungal
- E. Keratoplastic

9. A 22-year-old patient complains of fever to 39°C, headache and sore throat, especially when swallowing. Objectively: the oral mucosa is swollen and hyperemic. On the left cheek in the retromolar space against the background of hyperemia there was an ulcer covered with a gray bloom. The regional lymph nodes are significantly enlarged, tender to palpation. Choose a drug for etiotropic therapy:

- A. Erius
- B. Metronidazole
- C. Ascorbic acid
- D. Sorbex
- E. Ibuprofen

10. A 15-year-old girl has been ill for 3 days, refuses to eat, is lethargic, weak. There is an increase in body temperature to 38°C, painful "ulcers" in the oral cavity. Objectively: a necrotic border on the gingival margin, polygonal ulcers 2×2.5 cm in size, located on a hyperemic background, covered with necrotic plaque, were found on the left cheek and palate. The regional lymph nodes are enlarged and tender to palpation. Make a diagnosis:

- A. Acute aphthous stomatitis
- B. Acute catarrhal stomatitis
- C. Acute herpetic stomatitis
- D. Acute ulcerative necrotizing stomatitis of Vincennes
- E. Candida stomatitis

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Lesson № 10

TOPIC: FUNGAL LESIONS OF THE ORAL MUCOSA. ETIOLOGY, PATHOGENESIS, CLINIC, DIAGNOSIS, TREATMENT AND PREVENTION.

I. Relevance of the topic: Oral mycoses are diseases caused by saprophytic fungi of the oral cavity (*Candida albicans*, *C. pseudotropicalis*, *C. tropicalis*, *C. crusei*, *Aspergillus*, *Actinomyces*). In the case of a decrease in the body's defenses and barrier function of the oral mucosa and the development of dysbiosis, these fungi become pathogenic. An important prerequisite for the occurrence of oral candidiasis is also a certain condition of the oral cavity: humidity, temperature, aeration, and especially a shift in pH towards increased acidity. A thorough study of the patient's local status, taking into account general changes in the body, allows the dentist to diagnose the disease, identify etiological factors and establish pathogenetic mechanisms.

II. Educational objective:

2.1. The student should know:

- etiology and pathogenesis of fungal lesions of the oral mucosa;
- classification of diseases of fungal genesis by clinical signs and course;
- diagnostic methods for fungal lesions of the oral mucosa;
- clinical signs of various forms of fungal lesions of the oral mucosa;
- plan of treatment measures for fungal lesions of the oral mucosa;
- pharmacodynamics of special purpose drugs;
- preventive measures for fungal lesions of the oral mucosa.

2.2. Be able to:

- examine a patient with diseases of the oral mucosa;
- analyze the clinical manifestations of fungal lesions of the oral mucosa;
- conduct a clinical examination of a patient with fungal lesions of the oral mucosa;
- prescribe additional methods of examination for a patient with fungal lesions of the oral mucosa;
- justify and develop a treatment plan for a patient with fungal lesions of the oral mucosa;
- write prescriptions for medications.

III. Contents of the topic.

Oral mycoses are diseases caused by saprophytic fungi of the oral cavity (*Candida albicans*, *C. pseudotropicalis*, *C. tropicalis*, *C. crusei*, *C. quilliermondi*, *Aspergillus*, *Actinomyces*). In the case of a decrease in the body's defenses and barrier function of the gastrointestinal tract and the development of dysbiosis, these fungi become pathogenic.

The state of decreased immunological reactivity of the body can be caused by the effect of antibiotics, corticosteroids and cytostatic agents, radiation, development of malignant tumors, blood diseases, pathology of the digestive system, metabolic disorders (diabetes mellitus, hypovitaminosis), AIDS, etc.

An important prerequisite for the development of oral candidiasis is also a certain condition of the oral cavity: humidity, temperature, aeration, and especially a shift in pH towards increased acidity - unhygienic oral hygiene, sucking sugary foods, predominantly carbohydrate diet, violation of the rules for using removable dentures, un-sanitized oral cavity, the presence of carious cavities, periodontal pockets and chronic diseases of the oral cavity (catarrhal stomatitis, HPV, tuberculosis, recurrent aphthous stomatitis, etc.).

According to clinical manifestations, candidiasis is divided as follows:

- 1) lesions of the external coatings (skin and oral mucosa), including superficial (irritation) and deep (necrosis and sclerosis) lesions and lichens;
- 2) lesions of internal organs;
- 3) allergies;
- 4) poisoning;

5) intoxication.

Acute pseudomembranous candidiasis (mold; candidosis acuta, soor) develops in infants who are weakened by infectious diseases, bronchitis, dyspepsia, and in premature infants. In slightly older children, it is observed in rickets, exudative diathesis, hypovitaminosis, etc. The causative agent of mold is *Candida albicans*. In addition to autoinfection, infection can occur through the mother's nipple, contaminated nipple and utensils.

Clinic. In infants, mothers should pay attention to the appearance of white spots or a white curd-like coating on the cheeks, lips, tongue, and palate, which mostly accumulates in the retentive areas in the form of plaques or films. If the mold is caused by *Candida pseudotropicalis*, the plaque is foamy.

Acute atrophic candidiasis (candidosis acuta atrophica) develops when the oral mucosa is hypersensitive to fungi of the genus *Candida*.

The clinic of acute atrophic candidiasis is characterized by xerostomia, flaming red color of oral mucosa and its burning sensation, and the absence of plaque. Sometimes a very small number of crusts are observed on the red border of the lips.

If acute candidiasis is left untreated, chronic (hyperplastic or atrophic) candidiasis develops.

Chronic hyperplastic candidiasis (candidosis chronica hyperplastica) develops in people taking cytostatic agents, antibiotics, in patients with tuberculosis, blood diseases, and AIDS. It is characterized by the appearance of white plaques that can merge into continuous curd-like layers, which thicken over time and become yellowish in color. Depending on the topography of the lesion, candidal glossitis, cheilic, angular cheilitis (ulcers), palatinitis, and pareitis are distinguished.

Chronic atrophic candidiasis (candidosis chronica atrophica) often occurs in people who use removable dentures and is characterized by redness, swelling, dryness and burning oral mucosa with the release of viscous, viscous saliva.

A fairly common form of chronic atrophic candidiasis is candidal cheilitis, which is a lesion of the entire surface of the lips or the angular part (candidal ulcer). The disease is characterized by swelling, hyperemia, thinning, dryness of the red border, some deepening of the transverse furrows, and the formation and separation of scales of various sizes from the lip surface.

Treatment of candidiasis is aimed at eliminating clinical signs of the disease, eliminating the prerequisites for the development of fungi and the occurrence of candidiasis and increasing the body's resistance. Achievement of this goal involves a complex of etiotropic, pathogenetic and symptomatic therapy of candidiasis and is realized by the use of local and general agents. Of course, antifungal agents play a prominent role in the treatment of candidiasis. However, it should be borne in mind that there are important prerequisites for the effectiveness of etiotropic therapy of candidiasis of the oral mucosa:

1) discontinuation of antibiotics, sulfonamide and corticosteroid drugs, and if this is not possible, change of their administration method with mandatory prescription of antimycotic drugs;

2) general examination of the patient to identify concomitant diseases and, if necessary, start of treatment by an appropriate specialist;

3) patient's compliance with a diet with exclusion or restriction of carbohydrates;

4) prescription of general tonic agents: Adaptogens, biostimulants, vitamins, especially of group B (thiamine bromide, pyridoxine hydrochloride), nicotinic acid, calcium pantothenate or multivitamin complexes (Quadevit, Decamevit, Heptavit, Multitabs),

5) correction of the intestinal microflora composition (a sharp decrease in the number of bifidus and lactobacilli in the intestines and a decrease in the synthesis of vitamins require

replacement etiopathogenetic therapy with eubiotics - colibacillus, lactobacillus, bifidus bacterium, bificol, etc.);

6) hyposensitizing therapy;

7) use of immunomodulators (in combined and generalized forms).



Chronic hyperplastic candidosis. This white localised patch and its associated erythema are the result of candidal infection alone; no dysplasia was present despite the speckled clinical appearance.

IV. Control questions to the topic of the lesson:

1. Specify the etiological factors of mycotic lesions of the oral mucosa?
2. Pathogenesis of fungal lesions of the oral mucosa.
3. Classification of fungal lesions of the oral mucosa.
4. Clinical signs of various manifestations of fungal lesions of the oral mucosa.
5. Specify the volume of dental care for patients with candidal lesions of the oral mucosa.
6. Specify the measures of organization of prevention for patients with fungal lesions of the cavity.

V. Control test tasks and/or case studies:

1. A 30-year-old man complains of dryness, burning back of the tongue for a week. The burning sensation intensifies when eating. The day before he had pneumonia and received massive antibiotic therapy. Objectively: against the background of hyperemic and swollen tongue mucosa, in the folds of the mucosa, a cap-like gray-white plaque was found. There are areas of desquamation on the lateral surfaces of the tongue. The diagnosis is acute pseudomembranous candidiasis. Choose the most effective complex of drugs for local treatment.

- A. Hydrocortisone ointment + solcoseryl
- B. Furacilin + methylene blue
- C. Rinsing with soda solution + pimafucin
- D. Decamine + hydrocortisone ointment
- E. Chlorhexidine + aevit

2. In a patient K., 40 years old, with a preliminary diagnosis of acute pseudomembranous candidiasis, material was taken from the lesion for microscopic examination. Which of the answers makes it possible to confirm the diagnosis?

- A. Filaments of true mycelium
- B. Filaments of pseudomycelium
- C. Budding fungal cells
- D. Yeast cells

3. A 32-year-old patient came to the dentist with complaints of burning oral mucosa, fever and poor health. Objectively: there is a cheesy plaque on the hyperemic mucous membrane of the tongue, lips, cheeks, and palate, which can be easily removed with a swab. The regional lymph nodes are enlarged and painful during palpation. The doctor diagnosed acute pseudomembranous candidiasis. Specify the stages of pathogenesis of candidiasis of the oral mucosa.

- A. Adhesion, invasion, intratissue reproduction
- B. Adhesion, reproduction
- C. Adhesion, invasion
- D. Penetration and reproduction
- E. Adhesion and reproduction

4. Patient P., 60 years old, complains of dry mouth and unpleasant sensations when eating. The anamnesis revealed that the patient had been taking cytostatic drugs for a long time. Objectively: a yellowish plaque is noted on the back of the tongue. The mucous membrane is hyperemic and swollen. Which diagnosis corresponds to the clinical picture?

- A. Chronic hyperplastic candidiasis
- B. Chronic atrophic candidiasis
- C. Acute atrophic candidiasis
- D. Mold
- E. Chronic infiltrative candidal glossitis

5. A 62-year-old patient who has been using partial dentures for 14 years was diagnosed with chronic atrophic candidiasis. What therapy is indicated for this patient?

- A. No therapy is indicated
- B. A course of antibiotic therapy
- C. A course of vitamin therapy
- D. A course of vaccine therapy
- E. Replace dentures

6. A 63-year-old patient complains of cracks in the corners of the mouth and their pain. Objectively: pathological malocclusion. In the corners of the mouth there are radial cracks covered with scales and crusts. What is the most likely diagnosis?

- A. Mycotic ulcer
- B. Vitamin B6 deficiency
- C. Streptococcal ulcer
- D. Syphilitic eczema
- E. Staphylococcal eczema

7. When visiting a dentist, patient F., 48 years old, was diagnosed with chronic atrophic candidiasis. What drugs will be prescribed in the first place?

- A. Antimycotics
- B. Antibiotics
- C. Anti-inflammatory
- D. Sedatives
- E. Hyposensitizing

8. A 45-year-old patient complains of heartburn and dry mouth. Heartburn is worse during meals. Objectively: swelling of the tongue, the back of the tongue is covered with a white coating, which can be partially removed with a spatula. The patient has been suffering from diabetes mellitus for about 10 years. Indicate the most likely diagnosis:

- A. Chronic candidiasis
- B. Glossodynia
- C. Desquamative glossitis
- D. Leukoplakia

E. Lichen planus red

9. A 35-year-old woman complains of a burning sensation in the oral cavity, pain while eating. A course of antibiotics was prescribed 1.5 weeks ago. Objectively: the formation of films and milky plaque is noted on the oral mucosa, which can be easily removed with a cotton swab. What is the most likely diagnosis?

- A. Acute pseudomembranous candidiasis
- B. Allergic stomatitis
- C. Lichen planus
- D. Chronic atrophic candidiasis
- E. Leukoplakia, mild form

10. Patient M., 48 years old, complains of pain when opening the mouth, the presence of cracks in the corners of the mouth. She has been wearing removable dentures for about 8 years. The skin in the corners of the mouth is macerated, there are small cracks covered with white plaque. The red border of the lips is hyperemic and dry. Make a diagnosis.

- A. Meteorological cheilitis
- B. Streptococcal ulcer
- C. Hypovitaminosis B2
- D. Chronic mycotic eczema
- E. Primary syphiloma

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Lesson № 12

TOPIC: INFLUENZA. HERPES ZOSTER. ETIOLOGY, PATHOGENESIS, CLINICAL MANIFESTATIONS ON THE ORAL MUCOSA, DIAGNOSIS, TREATMENT AND PREVENTION.

I. Relevance of the topic: For a number of acute infectious diseases (influenza, measles, chickenpox, infectious mononucleosis, etc.), the oral cavity is the entrance gate, and the primary lesion occurs here in the form of various local changes. Influenza is an acute respiratory infection caused by influenza viruses A, B, C. Unlike shingles, the lesions of the oral mucosa in influenza are nonspecific, and the changes in the oral mucosa observed during the disease depend on the body's reactivity and the tropism of the virus in relation to certain systems or tissues.

II. Learning objectives:

2.1. The student should know:

- etiology and pathogenesis of viral lesions of the oral mucosa;
- methods of diagnosis of viral lesions of the oral mucosa;
- clinical signs of viral lesions of the oral mucosa - influenza, herpes zoster;
- treatment plan for viral lesions of the oral mucosa;
- pharmacodynamics of specialty drugs;
- principles of treatment of influenza and herpes zoster manifestations;
- preventive measures in case of viral lesions of the oral mucosa.

2.2. Be able to:

- conduct a clinical examination of a patient with manifestations of viral infections in the oral cavity;
- evaluate laboratory methods of examination of a patient with manifestations of viral infections in the oral cavity;
- determine the tactics of managing a patient with influenza, shingles;
- apply drugs for the treatment of influenza and shingles;
- provide recommendations for oral hygiene.

III. Contents of the topic.

Influenza (grippus) is an acute respiratory infection caused by influenza viruses A, B, C. Unlike shingles, the lesions of the oral mucosa in influenza are nonspecific, and the changes in the oral mucosa observed during the disease depend on the body's reactivity and the tropism of the virus in relation to certain systems or tissues. From the very beginning of influenza, catarrhal stomatitis develops with flaming hyperemia, paresthesias, and burning of the oral mucosa.

The most pronounced changes are observed on the oral mucosa of the soft palate, palatine rims, tongue, pharynx; less often - cheeks, tongue, gums. On the 1st - 2nd day of the disease, against the background of catarrhal changes, millet-like granular red rashes appear in the soft palate, formed due to hyperplasia of the epithelium of the salivary gland excretory ducts. The appearance of such rashes in healthy people during an influenza epidemic can be an early sign of the disease. Such early symptoms on the oral mucosa in the area of the cheeks, tongue, lips can be a desquamative and even degenerative-necrotic process, manifested by sharp hyperemia, increased epithelial desquamation, petechiae, the appearance of many small vesicles with hemorrhagic exudate, which quickly burst to form painful bright red erosions or aphthae, which rarely merge with each other

Herpes zoster is caused by a herpes-like virus (Varicella-herpes zoster, V-Z-virus), which in also causes chickenpox in children.

The disease occurs mainly in the cold season, mainly in middle-aged and elderly people. It can manifest as an independent disease, but more often it accompanies and complicates the course of generalized somatic diseases (nephritis, pneumonia, leukemia,

cancer), which create a background of immunodeficiency. Traumatic injuries in the rash area also contribute to the development of herpes zoster.

Although the disease has an acute onset, the history reveals that the rash was often preceded by malaise, headache, chills, fever up to 38-39 °C, neuralgia or paresthesia, and swollen regional lymph nodes 1-4 days before. In rare cases, the course of the disease stops at this stage, without reaching the stage of skin and vesicles. However, usually, one or more erythematous swollen spots appear on the skin or oral mucosa, localized only on one side along the course of the branches of the trigeminal nerve. After a few hours (sometimes days), a group of vesicles erupts on them.

The vesicles can also be located on the skin of the chin, cheek, forehead, scalp, nape, neck along the course of the nerve branches or on the oral mucosa (favorite localization is the hard palate, cheek, lip, tongue). These rashes are unilateral and are accompanied by extremely severe burning pain and regional lymphadenitis (i.e., nervous system lesions are characterized by segmentation, hyperesthesia in the rash area, and herpetic neuralgia).

IV. Control questions to the topic of the lesson:

1. Define the concept of influenza, shingles.
2. Name the etiological factors and pathogenesis of influenza, shingles.
3. Differential diagnosis of influenza, shingles.
4. Specify the tactics of the dentist when treating patients with manifestations of viral infections in the oral cavity.
5. Name the basic principles of treatment of viral infections.
6. Specify the drugs and methods of their use for the treatment of influenza and shingles.

V. Control test tasks and/or case studies:

1. A 28-year-old woman complains of pain during eating and swallowing, general weakness. The disease began acutely with a rise in body temperature to 37.9°C, muscle pain. Objectively: against the background of swollen and hyperemic mucosa of the soft palate, anterior palatine, posterior pharyngeal wall, grouped and single vesicles with serous-hemorrhagic contents, as well as eroded areas of various sizes with scalloped edges, covered with fibrinous plaque, slightly painful to touch, are determined. What is the most likely diagnosis?
 - A. Herpangina
 - B. Influenza stomatitis
 - C. Herpes zoster
 - D. Acute herpetic stomatitis
 - E. Murrain
2. A 63-year-old patient complains of multiple painful rashes in the oral cavity, on the skin of the face and torso, fever 3-4 days before the rashes, there was a burning sensation, followed by sharp pain reminiscent of a gunshot. The patient takes cytotoxic drugs for leukemia. Examination of the red border and mucous membrane of the lips, tongue and cheek on the right revealed multiple small erosions, located in the form of a chain, with rims of hyperemia, not prone to fusion, sharply painful on palpation. Vesicles and erosions are found on the right side of the face. Make a preliminary diagnosis:
 - A. Erythema exudatum multiforme
 - B. Secondary syphilis
 - C. Herpes zoster
 - D. Toxic-allergic dermatostomatitis
 - E. Chronic recurrent herpes
3. A 65-year-old patient complains of pain in the right side of the face, headache, fever. The patient has been ill for 3 days, associates the disease with hypothermia. Objectively: in the area of the right half of the forehead skin - inflammatory hyperemia, edema. Erosions with

necrotic plaque in the areas of blisters. Vesicles with inflammatory hyperemia along the edges of the lesion. What is the most likely pathology?

- A. Herpes zoster
- B. Erysipelas
- C. Dermatitis
- D. Eczema
- E. Tinea versicolor

4. The patient went to the hospital with complaints of generalized weakness, fever, and a painful rash on the skin of the trunk. The patient has been ill for 3 days. Objectively: on the lateral surface of the torso on the left side, against the background of hyperemia and edema, there are grouped vesicles with serous-complex and hemorrhagic contents. What is the most likely diagnosis?

- A. Herpes zoster
- B. Simple contact dermatitis
- C. Allergic contact dermatitis
- D. Microbial eczema
- E. Herpetiform dermatosis of Durring

5. A 20-year-old patient became acutely ill. On the 2nd day of illness, he complains of severe headache in the temples and orbital region, body aches, dry painful cough. Objective examination: Temperature is 39°C, the patient is adynamic, the mucous membrane of the oropharynx is "burning", no wheezing is heard in the lungs. What is the most likely diagnosis?

- A. Influenza
- B. Parainfluenza
- C. Respiratory mycoplasmosis
- D. Pneumonia
- E. Meningococcal infection

6. A 65-year-old patient complains of a rash, pain in the subscapular region on the right. Objectively: on the skin in the subscapular region on the right there are linear pink-red swollen foci, somewhat infiltrated, with clear boundaries. Vesicles with clear contents are grouped on the surface of the lesions. Your diagnosis.

- A. Herpes zoster
- B. Herpetiform dermatitis of Durings
- C. Erysipelas
- D. Acute allergic dermatitis
- E. Impetigo.

7. Two days ago, a 9-year-old child developed fever, headache, malaise. Objectively: on the right along the 4th, 5th intercostal nerves on the hyperemic skin there are groups of closely spaced vesicles with serous transparent contents, 2-4 mm to pea-sized. What etiotropic local treatment is indicated for the patient?

- A. Acyclovir ointment
- B. Indomethacin ointment
- C. Heparin ointment
- D. Syntamycin ointment
- E. Ofloxacin ointment

8. Patient R., 54 years old, complains of fever, weakness, pain in muscles, joints, eyes, sweating, severe headache, sore throat. He had been taking Coldrex for 2 days. Objectively: the mucous membrane of the soft palate, palatine rims, pharynx was hyperemic, swollen. On the mucous membrane of the soft palate there are millet-like granular rashes of red color. Make a preliminary diagnosis.

- A. Acute herpetic stomatitis
- B. Acute catarrhal stomatitis
- C. Allergic stomatitis
- D. Infectious mononucleosis
- E. Influenza

9. A patient came to the clinic of therapeutic dentistry with complaints of fever up to 38.5°C, runny nose, cough, pain when talking and eating. Symptoms appeared 3 days ago after hypothermia. Objectively: increased vascular pattern, petechiae on the oral mucosa, desquamation of the epithelium and grayish plaque on the tongue. Blood test: leukopenia, relative monocytosis and lymphocytosis. Which drug of etiotropic action will be most effective in this case?

- A. Remantadine
- B. Acyclovir
- C. Bonafonte
- D. Polyoxydonium
- E. Florenal

10. A 35-year-old woman, a veterinarian, complains of fever up to 39° C, chills, weakness, pain in muscles, joints, redness of the eyes, increased salivation, pain and burning sensation in the mouth. Objectively: numerous erosions with a diameter of 2-4 mm, bloody crusts on the lips were found on the oral mucosa. In the interdental folds, at the base of the nail bed, on the ocular mucosa - small vesicles with cloudy contents. Make a preliminary diagnosis:

- A. Acute herpetic stomatitis
- B. Foot and mouth disease
- C. Shingles of the skin
- D. Allergic stomatitis
- E. Blistering

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Lesson № 13

TOPIC: INFECTIOUS MONONUCLEOSIS. MURRAIN. ETIOLOGY, PATHOGENESIS, CLINICAL MANIFESTATIONS ON THE ORAL MUCOSA, DIAGNOSIS, TREATMENT AND PREVENTION.

I. Relevance of the topic: Infectious mononucleosis is a viral contagious disease that is transmitted by airborne droplets and possibly by food, and is characterized by the classic triad: fever, sore throat, adenosplicomegaly. Murrain disease is caused by a filter virus. The infection mainly occurs when eating dairy products and meat from animals with foot-and-mouth disease. Knowledge of the etiology, mechanisms of development and clinical manifestations of infectious mononucleosis and foot-and-mouth disease on the oral mucosa will help to improve the quality of diagnosis, treatment and prevention of viral diseases.

II. Educational objective:

2.1. The student should know:

- etiology and pathogenesis of viral lesions of the oral mucosa;
- methods of diagnosis of viral lesions of the oral mucosa;
- clinical signs of viral lesions of the oral mucosa - murrain, infectious mononucleosis;
- treatment plan for viral lesions of the oral mucosa;
- pharmacodynamics of special purpose drugs;
- principles of treatment of foot and mouth disease, infectious mononucleosis;
- preventive measures in case of viral lesions of the oral mucosa.

2.2. Be able to:

- conduct a clinical examination of a patient with manifestations of viral infections in the oral cavity;
- evaluate laboratory methods of examination of a patient with manifestations of viral infections in the oral cavity;
- determine the tactics of managing a patient with influenza, shingles;
- apply drugs for the treatment of viral infections in the oral cavity;
- provide recommendations for oral hygiene.

III. Contents of the topic.

Infectious mononucleosis (mononucleosis infectiosa, Filatov-Pfeiffer disease) is a viral contagious disease transmitted by airborne droplets and possibly by food, and is characterized by the classic triad: fever, sore throat, adenosplicomegaly.

The entrance gates of the infection are the pharynx and nasal pharynx. The virus spreads by lymphatic and hematogenous routes.

Clinical course. Infectious mononucleosis occurs more often in spring and autumn. Children and young people get sick, less often - the elderly symptoms is polyadenitis. The posterior neck and submandibular lymph nodes are especially clearly enlarged. Along with this, the liver and spleen become significantly enlarged and dense. A natural symptom of Filatov's disease is fever. In most patients, the body temperature rises rapidly to 39-41 °C, often without a chill. The temperature curve can be constant, remitting, or undulating. High body temperature can be maintained from 3-4 to 20 days or more, and it decreases gradually.

The pharynx is sharply hyperemic, sometimes with a cyanotic tint, and tonsil hyperplasia occurs as a manifestation of adenopathy. Sore throat (catarrhal, lacunar, follicular, necrotic, filmy) can develop at different stages of the disease, has a persistent long-term course and cannot be treated with antibiotics. On the 3rd - 4th day of the disease, petechiae appear at the border of the hard and soft palate.

The incubation period is from 7-15 to 49 days. The disease begins acutely. One of the first and rather permanent.

Murrain (aphthae epizooticae) is caused by a filamentous virus. The infection mainly occurs when eating dairy products and meat from animals with foot-and-mouth disease. The virus enters the human body through damaged skin and oral mucosa.

The incubation period is about 3 days. The disease begins acutely, with chills; body temperature rises to 38.5-39 °C within 3-4 hours. Typical symptoms are general weakness, headache, joint and muscle pain. There is a burning sensation in the mouth and excessive salivation.

After 1-2 days, small blisters appear on the hyperemic and swollen oral mucosa, which burst, and aphthous elements form in their place. Simultaneous lesions of the nose, eyes, and genitals are possible. Oral mucosa lesions are often accompanied by similar lesions of the skin near the wings of the nose, as well as interdigital folds, nail bases, and soles. Recovery occurs in 2-3 weeks.

IV. Control questions to the topic of the lesson:

1. Define the concept of murrain, infectious mononucleosis.
2. Name the etiological factors and pathogenesis of murrain, infectious mononucleosis.
3. Differential diagnosis of murrain, infectious mononucleosis.
4. Specify the tactics of the dentist when treating patients with manifestations of viral infections in the oral cavity.
5. Name the basic principles of treatment of viral infections.
6. Specify the drugs and methods of their use for the treatment of murrain, infectious mononucleosis.

V. Control test tasks and/or case studies:

1. Patient R., 54 years old, complains of fever, weakness, pain in the muscles, joints, eyes, sweating, severe headache, sore throat. He had been taking Coldrex for 2 days. Objectively: the mucous membrane of the soft palate, palatine rims, pharynx was hyperemic, swollen. On the mucous membrane of the soft palate there are millet-like granular rashes of red color. Make a preliminary diagnosis.

- A. Acute herpetic stomatitis
- B. Acute catarrhal stomatitis
- C. Allergic stomatitis
- D. Infectious mononucleosis
- E. Influenza

2. A 35-year-old woman, a veterinarian, complains of fever up to 39° C, chills, weakness, pain in muscles, joints, redness of the eyes, increased salivation, pain and burning sensation in the mouth. Objectively: numerous erosions with a diameter of 2-4 mm, bloody crusts on the lips were found on the oral mucosa. In the interdigital folds, at the base of the nail bed, on the ocular mucosa - small vesicles with cloudy contents. Make a preliminary diagnosis:

- A. Acute herpetic stomatitis
- B. Murrain
- C. Shingles of the skin
- D. Allergic stomatitis
- E. Blistering

3. During the examination of the oral cavity of patient A., 43 years old, the dentist found numerous vesicles and erosions located on a hyperemic background. Hypersalivation is expressed. Vesicular rashes on the skin of the interdigital folds. It is known that 5 days ago the patient consumed dairy products that he bought at the market. After examination, the doctor suspected the presence of a viral disease. Which laboratory results are most likely?

- A. Increased antibody titer to influenza virus type A
- B. Increased antibody titer to herpes simplex virus
- C. Increased antibody titer to picornavirus of murrain disease

D. Increased antibody titer to HIV

E. Increased antibody titer to Epstein-Barr virus

4. Patient V., 18 years old, complains of a sore throat, fever up to 39°C, pain in the liver and spleen. He became ill 7 days ago, took Gripocitron on his own, and does not feel any relief. Objectively: the palatal rims are sharply hyperemic, the tonsils are hyperplastic, and there are petechiae on the border of the hard and soft palate, the tongue is covered with a grayish-white coating, and there is a pronounced hyperplasia of the mushroom papillae. Maculopapular rashes on the skin of the trunk and extremities. In the blood test: leukocytosis, lymphocytosis, monocytosis, ESR - 28 mm/h, atypical mononuclears. Make a diagnosis.

A. Influenza

B. Infectious mononucleosis

C. Murrain

D. AIDS

E. Measles

5. After examination of patient K., 20 years old, the dentist suspected the diagnosis of infectious mononucleosis. What is the dentist's further tactic?

A. Refer the patient for a consultation with a dermatovenerologist

B. Issue a sick leave

C. Carry out oral cavity sanitation

D. Refer the patient to an infectious disease specialist

E. Appoint a test for HIV infection

6. A 25-year-old patient has foci of necrosis along the gingival margin on both jaws, foci of hair leukoplakia. Leads a disorderly lifestyle, uses drugs. Over the past three months, she has been experiencing weakness, fever up to 38.0°C, and significant weight loss. The skin of the face is pale. There is a painless increase in the submandibular, posterior neck, supraclavicular, axillary lymph nodes. What specific method of investigation should be used to establish a definitive diagnosis?

A. Complete blood count

B. Immunogram

C. Biochemical blood test

D. Enzyme-linked immunosorbent assay

E. Virological examination

7. A 30-year-old patient consulted a dentist with complaints of pain when biting in the tooth on the lower jaw on the right. From the medical history it was found that the patient takes antiretroviral drugs. Which method of handpiece treatment should be chosen to prevent infection transmission?

A. Freezing to -273°C

B. Treatment with 70% alcohol solution

C. Double treatment with Aerodesin

D. Ultraviolet irradiation

E. Soaking in 6% hydrogen peroxide solution

8. A 21-year-old patient visited a dentist with complaints of general weakness, muscle pain, fever up to 38.3°C, digestive tract disorders, excessive salivation and rashes in the mouth, nose, and on the skin of the nasal wings and interdental folds. These symptoms appeared after drinking milk in the village. What is the most likely diagnosis?

A. Foot and mouth disease

B. Herpetic stomatitis

C. Operative herpes zoster

D. Behcet's syndrome

E. Infectious mononucleosis

9. Quite often, the cause of acquired immunodeficiencies is an infectious disease, during which pathogens directly multiply in the cells of the immune system and destroy them. Select from the following diseases those in which such pathological processes are observed.

- A. Cu-fever, typhus fever
 - B. Tuberculosis, mycobacteriosis
 - C. Dysentery, cholera
 - D. Infectious mononucleosis, AIDS
 - E. Poliomyelitis, hepatitis A
10. Acyclovir, bonafon, interferon - drugs:
- A. Anti-inflammatory
 - B. Desensitizing
 - C. Vitamin
 - D. Antiviral
 - E. Nonspecific stimulants

VI. References

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6.2. Additional literature

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4. Color Atlas of Common Oral Diseases, Enhanced Edition by Robert P. Langlais, Craig S. Miller, Jill S. Gehrig. Publisher: Jones & Bartlett Learning; 5th edition, 2020. – 282 p.

Lesson № 14

TOPIC: AIDS. ETIOLOGY, PATHOGENESIS. MANIFESTATIONS ON THE ORAL MUCOSA, DIAGNOSIS. TREATMENT AND PREVENTION. TACTICS OF THE DENTIST.

I. Relevance of the topic: The course and prognosis of viral diseases is determined mainly by the state of the patient's immune system. Acquired immunodeficiency syndrome (AIDS, AIDS - syndromum immunodefektionis aguisitae) is a contagious immune disease of viral etiology. AIDS is caused by a virus that belongs to the retrovirus family, a subfamily of lentiviruses. Given the high risk of occupational infection in the treatment of patients with viral lesions on the oral mucosa, dentists need to take certain preventive measures.

II. Educational objective:

2.1. The student should know:

- etiology and pathogenesis of AIDS;
- diagnostic methods for viral lesions of the oral mucosa;
- clinical signs of viral lesions of the oral mucosa in AIDS;
- methods of clinical examination of a patient with AIDS;
- principles of treatment and prevention of AIDS manifestations;
- principles of prescribing medications for the treatment of viral diseases in the oral cavity.

2.2. Be able to:

- conduct a clinical examination of a patient with manifestations of viral infections in the oral cavity;
- evaluate laboratory methods of examination of a patient with manifestations of viral infections in the oral cavity;
- determine the tactics of managing a patient with AIDS;
- apply drugs for the treatment of viral infections in the oral cavity;
- provide recommendations on oral hygiene.

III. Contents of the topic.

Acquired immunodeficiency syndrome (AIDS, AIDS - syndromum immunodefektionis aguisitae) is a contagious immune disease of viral etiology.

Etiology. AIDS is caused by a virus belonging to the retrovirus family, subfamily of lentiviruses. It was named HIV (Human immunodeficit virus) by the WHO Taxonomy Committee, and human immunodeficiency virus (HIV) in Ukrainian. It was discovered by the French virologist L. Montagnier in 1983. 3 types of the virus have been identified.

Clinic. AIDS is characterized by a phased course. The duration of the incubation period varies from 6-8 months to several years. In about 50% of patients, it is 4 years.

The Center for Disease Control (Georgia, USA) and the WHO (1988) proposed the following classification of clinical stages of AIDS:

- I. Incubation.
- II. Acute HIV infection.
- III. Virus carriage: a) persistent infection; b) generalized infection.
- IV. Lymphadenopathy.
- V. AIDS-associated complex.
- VI. AIDS with the development of infections and tumors.

Pokrovsky's classification (1989) identifies 4 stages of HIV infection:

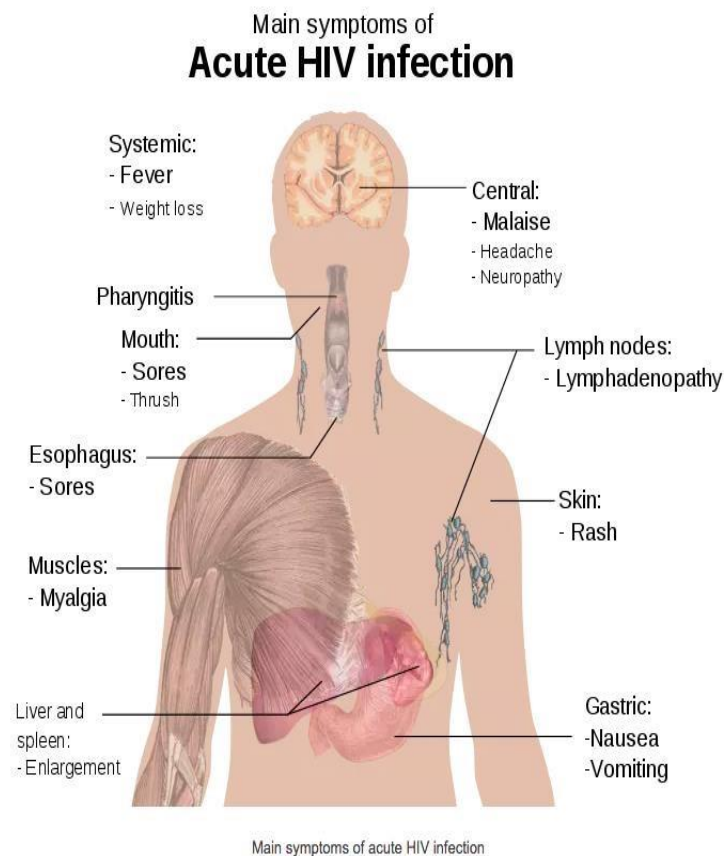
- I. Incubation.
- II. The stage of primary manifestations: a) acute fever phase; b) asymptomatic phase;
- c) persistent generalized lymphadenopathy.
- III. The stage of secondary diseases.

A. Body weight loss of less than 10%, superficial fungal, bacterial or viral skin and oral mucosa lesions, shingles, recurrent pharyngitis, sinusitis.

B. Progressive weight loss of more than 10%, diarrhea of unclear genesis, fever lasting more than 1 month, hair leukoplakia, pulmonary tuberculosis, recurrent or persistent bacterial, fungal, viral and protozoal skin lesions and oral mucosa, recurrent or disseminated herpes zoster, localized Kaposi's sarcoma.

B. Generalized bacterial, viral, protozoan parasitic diseases, pneumocystis pneumonia, esophageal candidiasis, atypical mycobacteriosis, extrapulmonary tuberculosis, cachexia, disseminated Kaposi's sarcoma, oral mucosa lesions of various etiologies.

IV. Terminal stage.



This classification can be based on the etiological factors or the strength of association. EC-Clearinghouse on Oral Problems Related to HIV Infection and WHO Collaboration centre on oral manifestations of the Human Immunodeficiency Virus uses strength of association of Oral lesions with HIV infection as basis for classification (ECC/WHO, 1993)

GROUP 1: Lesions Strongly Associated with HIV infection:

Candidiasis:

- Pseudomembraneous candidiasis
- Erythematous candidiasis
- Angular cheilitis
- Hairy leukoplakia
- Kaposi's sarcoma
- Non- Hodgkins lymphoma
- Periodontal diseases
- Linear gingival erythema (LGE)
- Necrotizing (ulcerative) gingivitis (NUG)
- Necrotizing (ulcerative) Periodontitis (NUP)

GROUP 2: Lesions Less Commonly Associated with HIV Infection

- Bacterial infections
- Mycobacterium avium intra-cellulare
- Mycobacterium tuberculosis
- Melanotic hyperpigmentation
- Necrotic (ulcerative) stomatitis
- Salivary gland diseases
- Xerostomia due to decreased salivary flow rate
- Unilateral or Bilateral swelling of major salivary glands
- Thrombocytopaenic purpura
- Ulceration NOS (Not-otherwise specified)

Viral infections:

- Herpes simplex virus
- Human papilloma virus (HPV)
- Condyloma acuminatum
- Focal epithelial hyperplasia
- Verruca vulgaris
- Varicella zoster
- Herpes zoster



Hairy leukoplakia in a patient with early symptomatic HIV infection. rapid progression to AIDS and a poor prognosis. The surface of the lesion is corrugated, accentuating the normal anatomy of the lateral border of the tongue.

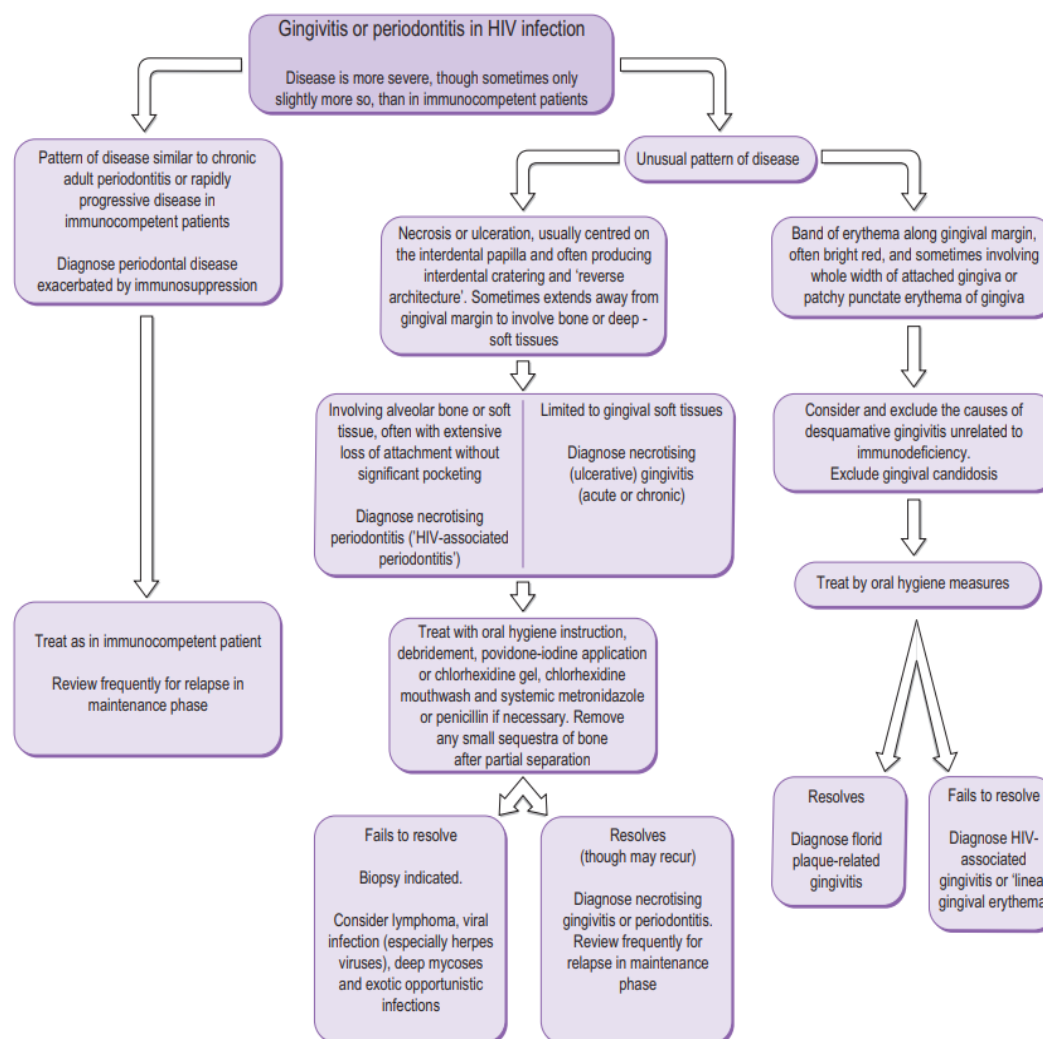


Erythematous candidosis. An extensive red patch on the palate without white flecks which appears as denture stomatitis but without any denture being worn. Such a presentation is characteristic of immunodeficiency.



Purpura. Patches such as these in AIDS can be mistaken for Kaposi's sarcoma.

Types of gingivitis and periodontitis seen in HIV infection.



IV. Control questions to the topic of the lesson:

1. Define the concept of AIDS.
2. Name the etiological factors and pathogenesis of AIDS.
3. Differential diagnosis of AIDS manifestations on the oral mucosa.
4. Specify the tactics of the dentist when treating patients with manifestations of viral infections in the oral cavity.
5. Name the basic principles of treatment of viral infections.
6. Specify the drugs and methods of their application for the treatment of AIDS.

V. Control test tasks and/or case studies:

1. A 30-year-old female patient after being on a labor trip turned to a dermatologist with complaints of rashes all over the skin. Over the past 3 months, she has noted a sharp weight loss, general weakness, and constant subfibrillation. For what disease should the patient be examined?
 - A. AIDS
 - B. Syphilis
 - C. Tuberculosis
 - D. Cytomegalovirus infection
 - D. Malignant neoplasms of the skin

2. Patient P., 27 years old, consulted a dentist with complaints of painful ulcers in the oral cavity, bleeding gums during brushing and eating solid food, weakness, fever up to 37.5 °C for 4 months, diarrhea, significant weight loss. He uses drugs and smokes. After the clinical examination, the doctor prescribed a complete blood count and immunogram. In the blood test: erythrocytes - 2.8×10^{12} ; Hb - 90 g/l; l. - 3.0×10^9 ; tr. - 160×10^9 . The immunoregulatory index is 1.0. What is the most likely diagnosis?

- A. AIDS
- B. Infectious mononucleosis
- C. Acute ulcerative stomatitis of Vincennes
- D. Acute leukemia
- E. Diabetes mellitus

3. A disease caused by a retrovirus with selective involvement of the T-system of immunity /lymphocytes, T-lymphocytes, macrophages/ and nerve cells:

- A. Infectious mononucleosis
- B. Leukemia
- C. Murrain
- D. CIS
- E. Recurrent herpes

4. Symptom complex - swollen lymph nodes, prolonged fever, chronic diarrhea, progressive weight loss, chronic pustular and inflammatory lesions of the skin and mucous membranes, pneumonia, resistant to conventional therapy - is characteristic of:

- A. Mycosis
- B. Diabetes mellitus
- C. Ulcerative colitis
- D. AIDS
- E. Hyperchromic anemia

5. The most likely diseases that manifest themselves in the oral cavity are candidiasis, ulcerative necrotic processes, herpes zoster, mild leukoplakia, Kaposi's sarcoma:

- A. Syphilis
- B. Tuberculosis
- C. Infectious mononucleosis
- D. AIDS
- E. Diabetes mellitus

6. For the diagnosis of oral AIDS, they are not informative:

- A. Anamnestic data
- B. General clinical signs
- C. Immunologic findings
- D. Microscopic findings of the lesion
- E. Results of complete blood count

7. If during the examination of the patient there is a suspicion of AIDS, you should:

- A. Observe the patient on an outpatient basis
- B. Consult an infectious disease specialist
- C. Hospitalize the patient immediately in an infectious disease unit or hospital
- D. Do a blood test
- E. Refer to a laboratory that specializes in AIDS for testing

8. Quite often, the cause of acquired immunodeficiencies is an infectious disease, during which pathogens directly multiply in the cells of the immune system and destroy them. Select from the following diseases those in which such pathological processes are observed.

- A. Infectious mononucleosis, AIDS
- B. Poliomyelitis, hepatitis A

- C. Dysentery, cholera
 - D. Cu-fever, typhoid fever
 - E. Tuberculosis, mycobacteriosis
9. Palpation revealed enlarged submandibular, cervical, occipital lymph nodes. What research is needed first of all?
- A. Clinical blood test
 - B. Fluorography
 - C. Pathological examination
 - D. Wasserman serologic reaction
 - E. Blood test for HIV infection
10. Symptom complex - enlarged lymph nodes, prolonged fever, chronic diarrhea, progressive weight loss, chronic pustular and inflammatory lesions of the skin and mucous membranes, pneumonia, resistant to conventional therapy - is characteristic of:
- A. Mycosis
 - B. Diabetes mellitus
 - C. Ulcerative colitis
 - D. AIDS
 - E. Hyperchromic anemia

VI. References

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Lesson № 15

TOPIC: DIPHTHERIA, SCARLET FEVER. ETIOLOGY, PATHOGENESIS, CLINICAL MANIFESTATIONS ON THE ORAL MUCOSA, DIAGNOSIS, TREATMENT AND PREVENTION.

I. Relevance of the topic: The course and prognosis of infectious diseases is determined mainly by the state of the patient's immune system. Scarlet fever (scarlatina) is an acute infectious disease in the development of which hemolytic streptococcus plays a major role. The entrance gates for scarlet fever are the pharynx and nasal pharynx with the involvement of lymph nodes. Diphtheria affects the pharynx and tonsils. In this case, catarrhal inflammation of the pharynx, palatine rims, palatine tongue, and tonsillar edema are observed. Given the high risk of occupational infection in the treatment of patients with infectious lesions on the oral mucosa, dentists need to take certain preventive measures.

II. Educational objective:

2.1. *The student should know:*

- etiology and pathogenesis of diphtheria and scarlet fever;
- methods of diagnosis of diphtheria and scarlet fever;
- clinical signs of infectious lesions of the oral mucosa - diphtheria, scarlet fever;
- methods of clinical examination of a patient with diphtheria, scarlet fever;
- principles of treatment and prevention of manifestations of diphtheria, scarlet fever;
- principles of prescribing medications for the treatment of infectious diseases in the oral cavity.

2.2. *Be able to:*

- conduct a clinical examination of a patient with infectious manifestations in the oral cavity;
- evaluate laboratory methods of examination of a patient with manifestations of diphtheria and scarlet fever in the oral cavity;
- determine the tactics of managing a patient with diphtheria and scarlet fever;
- apply drugs for the treatment of diphtheria and scarlet fever in the oral cavity;
- provide recommendations for oral hygiene.

III. Contents of the topic.

Diphtheria is an acute infectious disease transmitted by airborne droplets.

Etiology. The causative agent of diphtheria is diphtheria bacillus (Leffler).

Clinic. Diphtheria affects the pharynx and tonsils. In this case, catarrhal inflammation of the oral mucosa of the pharynx, palatine rims, palatine tongue, and tonsillar edema are observed. Massive fibrinous white or grayish-white filmy plaques are formed on them, which spread to the oral mucosa of the nasal pharynx, hard palate, palatine rims and soft palate. The filmy plaque is tightly adhered to the underlying tissues and is very difficult to remove, exposing a bleeding surface. The appearance of films is associated with a fibrinous form of inflammation and is a local reaction to the deepening of Leffler's bacillus and its toxins. With the progression of the disease, the plaque spreads and thickens, its color becomes dirty gray. If the films are removed, they form again. In the oral cavity, the films are also located on the gums and tongue. The submandibular lymph nodes are enlarged and painful.

Scarlet fever (scarlatina) is an acute infectious disease caused by hemolytic streptococcus. The entrance gates for scarlet fever are the pharynx and nasal pharynx with the involvement of lymph nodes.

Clinic. Changes in the oral mucosa in scarlet fever are very often early and characteristic symptoms of the disease. An important symptom, diffuse catarrhal stomatitis, occurs a day before or simultaneously with the skin rash. The oral mucosa of the tonsils and soft palate becomes bright red, the area of hyperemia is sharply limited. On the 2nd day, a small-dotted enanthema appears, which spreads to the cheeks and gums. At the same time, a small-dotted bright red rash appears on the background of erythematous skin. The skin of the

chin and around the oral cavity remains pale, forming the so-called nasolabial triangle of Filatov.

IV. Control questions to the topic of the lesson:

1. Define the concepts of diphtheria and scarlet fever.
2. Name the etiologic factors and pathogenesis of diphtheria and scarlet fever.
3. Differential diagnosis of diphtheria.
4. Differential diagnosis of scarlet fever.
5. Specify the tactics of the dentist when treating patients with manifestations of diphtheria and scarlet fever.
6. Name the basic principles of treatment of diphtheria and scarlet fever.
7. Specify the drugs and methods of their application for the treatment of AIDS.

V. Control test tasks and/or case studies:

1. The patient complains of fever to 38°C, pain when swallowing. On objective examination, there is hyperemia of the mucous membrane of the palatine rims, tonsils, dryness of the oral cavity. The tongue is covered with white layers, dry, tooth marks are visible on the lateral surfaces, the front third of it is bright red mushroom-shaped papillae are significantly enlarged. The submandibular lymph nodes are enlarged and tender to palpation. Determine the preliminary diagnosis:

- A. Infectious mononucleosis
- B. Diphtheria
- C. Rubella
- D. Scarlet fever
- E. Measles

2. A 14-year-old patient complains of fever to 39-40.1°C, which persists for 5 days, severe sore throat and plaque on the tonsils. The examination reveals signs of tonsillitis, pharyngitis, and swollen lymph nodes along the sternocleidomastoid muscle. Establish a preliminary diagnosis:

- A. Herpetic sore throat
- B. Tonsillitis
- C. Scarlet fever
- D. Infectious mononucleosis
- E. Candidiasis

3. Scarlet fever is caused by the following pathogen:

- A. Staphylococcus aureus
- B. Beta-hemolytic streptococcus group A
- C. Group B streptococcus
- D. All streptococci
- E. Virus

4. Scarlet fever is not found in the blood of patients with scarlet fever:

- A. Leukocytosis
- B. Neutrophilosis
- C. Shift of the formula to the left
- D. Early eosinophilia
- E. Anemia

5. A patient complained of fever to 37.8 °C, moderate sore throat for 3 days. Objectively: the submandibular lymph nodes are enlarged to 3 cm. The tonsils are hypertrophied, covered with gray plaque that extends to the tongue and anterior palatine rims. What is the most likely diagnosis?

- A. Diphtheria of the oropharynx
- B. Infectious mononucleosis

C. Simanovsky-Vansan sore throat

D. Agranulocytosis

E. Candidiasis of the oropharynx

6. The patient complains of weakness, fever up to 38.5C, sore throat. Objectively: on the hyperemic, swollen mucous membrane of the palatine rims, tonsils and posterior pharyngeal wall, a dense filmy gray-white plaque is found. There is increased salivation, bad breath, submandibular lymphadenitis. Identify the causative agent of this disease.

A. Leffler's bacillus.

B. Coxsackie virus.

C. Herpes simplex virus.

D. Bordetella bacillus.

E. Epstein-Barr virus.

7. The presence of dense dirty gray plaques on the mucous membrane of the gingiva, tonsils, gums, and tongue. A characteristic sweetish odor, swollen and painful submandibular lymph nodes occur in:

A. Noma

B. Infectious mononucleosis

C. Leukemia

D. Gangrenous stomatitis

E. Diphtheria

8. The appearance of necrotic angina simultaneously with a skin rash, a " raspberry " tongue, cracks on the lips give reason to make a diagnosis:

A. Scarlet fever

B. Diphtheria

C. Influenza

D. Infectious mononucleosis

E. Leukemia

9. Fever, disturbance of the general condition, hyperemia of the pharynx, swelling of the tonsils, grayish plaques that sit tightly on the tonsils and oral mucosa. Diagnosis:

A. Measles

B. Influenza

C. Diphtheria

D. Scarlet fever

E. Chickenpox

10. Acute disturbance of the general condition, fever, catarrhal stomatitis; in the distal parts of the oral cavity and on the skin rash, crimson tongue. Diagnosis:

A. Measles

B. Influenza

C. Scarlet fever

D. Chickenpox

E. Infectious mononucleosis

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Lesson № 16

TOPIC: TUBERCULOSIS. ETIOLOGY, PATHOGENESIS, CLINICAL MANIFESTATIONS ON THE ORAL MUCOSA, DIAGNOSIS. TREATMENT AND PREVENTION. TACTICS OF THE DENTIST.

I. Relevance of the topic: Tuberculosis (tuberculosis) is a chronic infectious disease caused by *Mycobacterium tuberculosis* (Koch's bacillus). It enters the oral mucosa by hematogenous, lymphogenous or exogenous (airborne or alimentary) routes, causing primary and secondary manifestations of infection. Given the high risk of occupational infection in the treatment of patients with infectious lesions on the oral mucosa, dentists need to take certain preventive measures.

II. Educational objective:

2.1. The student should know:

- etiology and pathogenesis of tuberculosis;
- methods of diagnosis of infectious lesions of the oral mucosa;
- clinical signs of tuberculosis;
- forms of tuberculosis lesions;
- methods of clinical examination of a patient with tuberculosis;
- principles of treatment and prevention of tuberculosis manifestations;
- principles of prescribing drugs for the treatment of infectious diseases in the oral cavity.

2.2. Be able to:

- conduct a clinical examination of a patient with infectious manifestations in the oral cavity;
- evaluate laboratory methods of examination of a patient with manifestations of tuberculosis in the oral cavity;
- determine the tactics of managing a patient with tuberculosis;
- provide recommendations for oral hygiene in a patient with tuberculosis.

III. Contents of the topic.

Tuberculosis is a chronic infectious disease caused by *Mycobacterium tuberculosis* (Koch's bacillus). It enters the oral mucosa by hematogenous, lymphogenous or exogenous (airborne or alimentary) routes, causing primary and secondary manifestations of infection.

In the oral, tuberculosis manifests itself mainly secondary in 1% of patients (as a consequence of tuberculosis of the lungs, joints, skin) in the form of tuberculous lupus, mylar-ulcerative tuberculosis and extremely rarely - colic tuberculosis (scrofuloderma).

The main primary element of tuberculous lesions of the oral mucosa is a lupoma - a specific tuberculous tubercle (tuberculum) of red or yellow-red color, soft consistency, 1-3 mm in diameter.

Lupus is located in groups: fresh ones are formed on the periphery, and those located in the center are prone to cheesy decay and merging with neighboring tubercles. Shallow ulcers with soft, uneven, undermined, swollen, mildly painful edges are formed, lined with bright red or yellow-red papillomatous raspberry-like growths that bleed easily and are covered with a clear or yellowish coating.

According to the clinical course, which is characterized by slowness, tuberculous lupus goes through infiltrative, tuberculous, ulcerative and scarring stages. The lesions of tuberculous lupus are located mainly on the skin of the face (in the form of a "butterfly"), spreading to the upper lip, red border, and less often to the oral mucosa of the gums and alveolar ridge of the upper jaw in the area of the front teeth, hard and soft palate, upper lip and cheeks, where the lesion is represented by an irregular ulcer with undermined edges and a bleeding granulation filled with the bottom.

Coliform tuberculosis (scrofuloderma) is a rarer form of secondary tuberculosis that occurs mainly in children. A typical feature of this form is the formation of nodules in the deep layers of the oral mucosa, which eventually decay. This results in irregularly shaped,

soft ulcers with eaten, undermined edges and flaccid granulations at the bottom. The ulcer is not very painful, and its healing results in uneven, so-called shaggy scars.

The dentist treats tuberculous lesions of the oral mucosa against the background of general therapy prescribed by a phthisiologist. Sanitation of the oral cavity, elimination of traumatic factors, treatment of teeth and periodontal pathology are prerequisites for local therapy of oral mucosa.

IV. Control questions to the topic of the lesson:

1. Etiology and pathogenesis of tuberculosis.
2. What are the most characteristic clinical manifestations of tuberculosis on the oral mucosa?
3. Differential diagnosis of tuberculosis.
4. Specify the tactics of the dentist when treating patients with manifestations of tuberculosis.
5. What are the basic principles of treatment of tuberculosis?
6. Specify the drugs and methods of their application for the treatment of tuberculosis.

V. Control test tasks and / or situational tasks:

1. The primary element of the lesion in tuberculous lupus of the oral mucosa
 - A. Blister
 - B. Vesicle
 - C. Bump
 - D. Spot
 - E. Cyst
2. Giant Pirogov-Langhans cells are found in the cytological examination
 - A. Vesicles
 - B. Erythema exudatum multiforme
 - C. Miliary ulcerative tuberculosis
 - D. Red flat lichen planus
 - E. Chronic recurrent aphthous stomatitis
3. The method of examination used in the diagnosis of tuberculous lupus of the oral mucosa:
 - A. Polarography
 - B. Rheography
 - C. Diascopy
 - D. Vacuum test
 - E. Formalin test
4. Symptom characteristic of tuberculous lupus of the oral mucosa:
 - A. Symptom of "dew"
 - B. Symptom of "apple jelly"
 - C. Snow-white glow of lesions in Wood's rays
 - D. Symptom of parchment crunch
 - E. Cooperman's symptom
5. An ulcer in mylar ulcerative tuberculosis is characterized by:
 - A. Saucer-like edges, oily bottom
 - B. Hyperemic, painful edges, necrotic tissue covered bottom
 - C. Infiltrated, painful edges, dirty gray bottom
 - D. Irregular edges, bottom covered with Trell's grains
6. Patient V., 40 years old, came to the clinic with complaints of tubercles on the gums of the upper jaw. Objectively: on the gums of the upper jaw tubercles of soft consistency, red in color, 5 mm in diameter, painless. When pressed with a glass, they exsanguinate and a yellow-brown formation is visible in the middle. What is the most likely diagnosis?
 - A. Tuberculous lupus
 - B. Humic ulcer
 - C. Cancer

D. Miliary ulcerative tuberculosis

E. Lupus erythematosus

7. Patient D., 38 years old, has yellow-red tubercles on the mucous membrane of the cheeks, soft consistency, 1-3 mm in diameter, slightly painful to palpation. Pospelov and apple jelly symptoms are positive. What is the most likely etiologic agent of this disease?

A. Koch's bacillus

B. Hansen's bacillus

C. Vincent's spirochete

D. Leffler's wand

E. Gonococcus

8. Patient N., 35 years old, complains of a painful ulcer on the cheek, weight loss, weakness. Objectively: against the background of swollen mucous membrane of the cheek on the right, an ulcer with uneven, soft edges, covered with yellow-gray plaque was found. The bottom and edges of the ulcer are granular. The submandibular lymph nodes are enlarged, densely elastic, painful. What is the most likely preliminary diagnosis?

A. Miliary ulcerative tuberculosis

B. Cancerous ulcer

C. Seton's aphtha

D. Decubitus ulcer

E. Trophic ulcer

9. A patient N., 40 years old, complained of a painful ulcer in the mouth. During the examination in the oral cavity on the mucous membrane of the palate, a sharply painful ulcer 1.5 by 2 cm, covered with yellowish plaque, with soft undermined edges and a pale red rim of inflammation. The bottom of the ulcer is uneven, gray in color. What is the preliminary most likely diagnosis?

A. Actinomycosis

B. Cancer of the mucous membrane of the palate

C. Primary syphilis

D. Tuberculous ulcer

E. Ulcerative necrotizing stomatitis

10. During the microscopic examination of the scraping materials from the bottom of the ulcer of the palatal mucosa, giant epithelial cells of Pirogov-Langhans were found. What disease is characterized by such a microscopic picture?

A. Tuberculosis

B. Actinomycosis

C. Acute leukemia

D. Syphilis

E. Lymphogranulomatosis

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Lesson № 17

TOPIC: SYPHILIS. GONORRHEA. ETIOLOGY, PATHOGENESIS, CLINICAL MANIFESTATIONS ON THE ORAL MUCOSA, DIAGNOSIS. TREATMENT AND PREVENTION. TACTICS OF THE DENTIST.

I. Relevance of the topic: Syphilis is a chronic infectious disease caused by a pale spirochete. It affects the skin, oral mucosa, internal organs, nervous system. Gonorrhoeic stomatitis is an acute infectious disease of the oral mucosa, the causative agent of which is gonococcus. A dentist should know the ways of infection transmission, general and local manifestations of syphilis and gonorrhoea on the oral and periodontal mucosa and, based on their analysis and generalization, be able to determine the possible presence of this disease in a timely manner and refer the patient for a special bacteriological and immunological examination and take measures to prevent the spread of the disease.

II. Educational objective:

2.1. The student should know:

- etiology and pathogenesis of syphilis and gonorrhoea;
- possible ways of infection with syphilis and gonorrhoea of the population;
- general signs of infectious disease;
- features of clinical manifestations of syphilis and gonorrhoea on the oral mucosa;
- timely methods of diagnosing the disease;
- tactics of the dentist in the detection of syphilis and gonorrhoea.

2.2. Be able to:

- conduct a clinical examination of patients to identify bacterial infectious diseases;
- identify lesions characteristic of syphilis and gonorrhoea;
- make a plan of auxiliary research methods;
- fill out forms for consultative referrals to related specialists;
- prescribe medications and conduct symptomatic therapy of diseases of the oral mucosa as a result of manifestations of an infectious disease.

III. Contents of the topic.

Syphilis (lues) is a chronic infectious disease caused by a pale spirochete. It affects the skin, oral mucosa, internal organs, and nervous system. There are acquired and congenital syphilis. As an infectious disease, acquired syphilis has incubation, primary, secondary and tertiary periods, and congenital syphilis has early and late periods.

In addition to the main sexual route, infection can also occur through infected common objects, including dental instruments, if the pathogen gets from them to damaged skin or oral mucosa. However, some authors believe that the pale spirochete can also penetrate intact oral mucosa. In congenital syphilis, the pathogen enters the fetus through the placenta from a sick mother.

The ors and the red border of the lips are affected at all stages of the disease, except during the incubation period. The incubation period of syphilis is usually 3-4 weeks and has no clinical signs.

The primary period of syphilis begins with the appearance of a hard chancre (ulcus durum) or primary syphiloma at the site of the pale treponema invasion. It is mostly localized on the lips, gums, tongue, and tonsils. The development of a hard chancre begins with the appearance of limited redness, in the center of which a seal appears in 2-3 days due to infiltration. In the central part of the infiltrate, necrosis develops and a bright red erosion forms, and less often an ulcer. The erosion is round or oval in shape, 3 mm in diameter (dwarf shankers) to 1.5 cm, with slightly raised and smooth edges; it is painless, with a cartilaginous infiltrate on palpation. The bottom of the erosion is initially flesh-red, dense, shiny, sclerotized, then grayish-white, with a "sebaceous" coating.

The secondary period of syphilis is manifested on the oral mucosa in the form of rosettes and papules.

Secondary syphilides, in addition to their inherent characteristics, have a number of common features:

- The rash does not compromise the integrity of the oral mucosa;
- As a rule, it is not accompanied by subjective sensations;
- When a rash of secondary syphilis appears, almost 100% of cases have accompanying positive serologic reactions (RW, sedimentary, RIBT);
- Simultaneously with the lesion of the oral mucosa (especially in case of fresh secondary syphilis), there are rosaceous, papular and pustular skin rashes;
- Secondary syphilis is accompanied by polyadenitis.

The tertiary period of syphilis begins 4-6 years after the onset of the disease and can last for decades. The lesion of the oral mucosa is characterized by the development of inflammatory infiltrates (gums and tubercles), which tend to disintegrate. Tertiary syphilis rashes are low in contagion because they contain almost no pale treponema.

Humic syphilis can be localized in any part of the oral cavity, but more often on the soft and hard palate and tongue. Most of the lesions are solitary. Initially, a painless seal (nodule) is formed in the thickness of the oral mucosa, which gradually increases, sometimes reaching the size of a walnut. Subsequently, the nodule necrotizes in the center, and a deep ulcer forms after the rubbery rod is removed. It has a crater-like shape, dense edges, painless, and its bottom is covered with granulations. The ulcer heals gradually with the formation of a stellate retracted scar. If the rubber is localized on the palate, perforation often occurs in its place.

Gonorrheal stomatitis (stomatitis gonococcica) is an acute infectious disease of the oral mucosa, caused by gonococcus.

The incubation period is from 1 day to 1 month or more. Gonococci, which got into the SOPR, reach the subepithelial connective tissue through intercellular spaces in 3-4 days and cause an inflammatory reaction with the formation of purulent exudate, which is considered as the migration of neutrophilic granulocytes and plasma cells to the site of invasion of the pathogen.

In children, the infection occurs at birth and is combined with oral mucosa damage to the eyes and nose.

Patients with gonorrheal stomatitis usually have no complaints. The oral mucosa of the lower oral cavity (lips, gums, lateral and lower surfaces of the tongue and the floor of the oral cavity), as well as the pharynx, tonsils, and larynx, is brightly hyperemic and covered with an extremely large amount of gray, sometimes greenish purulent plaque.

IV. Control questions to the topic of the lesson:

1. Etiology of syphilis and gonorrhea?
2. Ways of infection of syphilis and gonorrhea.
3. Classification of syphilis?
4. What additional methods are needed to confirm the diagnosis?
5. For what periods of syphilis is it possible to affect the oral mucosa?
6. Manifestations of syphilis in the oral cavity?
7. Clinical manifestations of gonorrhea in the oral cavity?
8. Describe the tactics of the dentist during ulcerative rashes in secondary syphilis.
9. Methods of prevention of gonorrhea?
10. Methods of prevention of syphilis?

V. Control test tasks and/or case studies:

1. Primary syphilis on the oral mucosa is manifested as:
 - A. Soft chancre

- B. Hard chancre
 - C. Rubber
 - D. Tubercous siphilid
 - E. Pustular syphilis
2. An infectious disease that affects the oral cavity and has four periods of course - incubation, primary, secondary and tertiary:
- A. Tuberculosis
 - B. AIDS
 - C. Influenza
 - D. Gonorrhoea
 - E. Syphilis
3. The period of syphilis lasts on average 3-4 weeks:
- A. Incubation
 - B. Primary
 - C. Secondary
 - D. Tertiary
4. The period of syphilis lasts an average of 6-7 weeks:
- A. Incubation
 - B. Primary
 - C. Secondary
 - D. Tertiary
5. The period of syphilis lasting on average 3-5 years:
- A. Incubation
 - B. Primary
 - C. Secondary
 - D. Tertiary
6. A period of syphilis that lasts for decades:
- A. Incubation
 - B. Primary
 - C. Secondary
 - D. Tertiary
7. The nature of regional lymph nodes in recurrent syphilis:
- A. Not palpable
 - B. Enlarged, painful, soft, adherent
 - C. Enlarged, dense, loose, not painful
 - D. Enlarged, loose, painful, dense
 - E. Enlarged, fused, painful, cartilaginous
8. A 36-year-old patient complained of an ulcer on the left lower lip. Three weeks ago, a slight rounded redness appeared on the lip, which became more intense and compacted over time. An ulcer formed in the center of it 2-3 days ago, and multiple nodules appeared under the jaw, which did not hurt the patient. Objectively: on the mucous membrane of the lower lip on the left there is an oval-shaped ulcer measuring 1.2 cm with smooth, clear borders. Bright red shiny bottom. The edges of the ulcer have the appearance of a roller that gradually descends to the bottom, and at its base there is a dense painless infiltrate. The submandibular lymph nodes are enlarged and painless. The skin over them is not changed. What disease does the clinical picture correspond to?
- A. Ulcerative cheilitis
 - B. Syphilis (primary period)
 - C. Trophic ulcer
 - D. Lupus erythematosus

E. Cancer of the lip

9. Which pathogen causes the chronic infectious disease syphilis?

A. Pale treponema

B. Koch's bacillus

C. Leffler's bacillus

D. Actinomycetes

E. Adenoviruses

10. What is the characteristic localization of lesions in the tertiary period of syphilis?

A. Soft and hard palate

B. Tongue

C. Bone tissue

D. Nervous system

E. All answers are correct

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Lesson № 19

TOPIC: CHANGES IN THE ORAL MUCOSA IN DISEASES OF THE DIGESTIVE TRACT (PEPTIC ULCER, GASTRITIS, ENTERITIS, COLITIS, CHRONIC HEPATITIS). DISCOLORATION, SWELLING OF THE ORAL MUCOSA. TAXED TONGUE. TACTICS OF THE DENTIST.

I. Relevance of the topic: The organs and tissues of the oral cavity are in close connection with various internal organs and systems of the human body, so a large group of lesions are the result of diseases of certain internal organs. Pathological changes in the oral cavity are most common in diseases of the digestive tract. This is due to the commonality of functions and the unity of all its departments. The most common signs of disease are discoloration of the salivary fluid, swelling of the tongue, plaque on the tongue, smoothness or hypertrophy of the filiform papillae, focal desquamation of the epithelium, and ulcerative lesions.

II. Educational objective:

2.1. The student should know:

- changes in the oral mucosa in the pathology of the digestive tract;
- possible changes in the oral mucosa in gastritis and gastric ulcer;
- possible changes in the oral mucosa in case of enteritis and enterocolitis;
- possible changes in the oral mucosa in case of liver diseases;
- methods of diagnosis and treatment of changes in the oral mucosa in diseases of the digestive tract.

2.2. Be able to:

- identify the relationship between changes in the oral mucosa and diseases of the digestive tract;
- conduct basic and additional methods of examination;
- to conduct differential diagnosis of changes in the oral mucosa in diseases of the digestive tract;
- to draw up a treatment plan for dental patients with manifestations of diseases of the digestive tract.

III. Contents of the topic.

Pathological changes in the oral cavity are the most common in diseases of the digestive tract. This is due to the commonality of functions and the unity of all its departments. The most common signs of disease are discoloration of the salivary fluid, swelling of the tongue, plaque on the tongue, smoothness or hypertrophy of the filiform papillae, focal desquamation of the epithelium, and ulcerative lesions.

Changes in the tongue. They are the most common in diseases of the digestive tract. The most common is the occluded tongue. An important role in the formation of plaque on the tongue belongs to the disruption of the process of keratinization and rejection of epithelial cells on the tongue papillae due to neurotrophic disorders.

During an exacerbation of peptic ulcer, gastritis, enterocolitis, tongue coating is more pronounced. Plaque covers the back of the tongue, mainly its posterior parts. It looks like a gray, sometimes whitish layer, but under the influence of pigment-forming bacteria, food, and medications, plaque can be colored yellow or brown. It is not usually accompanied by subjective sensations, but in the presence of dense plaque, an unpleasant sensation in the tongue and dullness of taste sensitivity may appear.

The second sign of stomach and intestinal diseases is tongue *swelling*. It does not cause subjective sensations in patients, and only in case of a significant increase in the size of the tongue, an unpleasant sensation may occur. Swelling of the tongue is observed in chronic intestinal diseases, which is due to impaired intestinal absorption capacity and barrier function. Swelling of the tongue is detected by the presence of tooth marks on its tip and lateral surfaces, as well as by an increase in the size of the tongue.

Hyperplastic glossitis is observed in patients with gastritis with high acidity. It is accompanied by papillary hypertrophy, plaque, and some increase in the size of the tongue due to edema. Hypertrophy of the mushroom papillae, which rise above the surface of the oral mucosa in the form of bright black dots, is observed in patients with gastric and duodenal ulcers.

Hypoplastic glossitis is characterized by papillary atrophy, sometimes severe, resulting in a "lacquered" appearance of the tongue with bright spots and stripes. Atrophy of the tongue papillae causes a burning sensation, tingling, pain while eating. Such changes in the tongue papillae are observed in gastritis with decreased secretion, peptic ulcer, gastroenteritis, and biliary tract diseases.

IV. Control questions to the topic of the lesson:

1. Describe possible changes in the oral mucosa in gastritis and gastric ulcer.
2. Describe possible changes in the oral mucosa in enteritis and enterocolitis.
3. Describe possible changes in the oral mucosa in liver disease.
4. Name the methods of examination of patients with diseases of the digestive tract.
5. Specify the scope of dental care for patients with manifestations of diseases of the digestive tract.

V. Control test tasks and/or case studies:

1. A 20-year-old man complains of a painful mass in the oral cavity that interferes with eating. This symptom first appeared 2 years ago. Past medical history: chronic colitis. Objectively: sanitized oral cavity, no orthodontic pathology. A small painful oval-shaped erosion with a clear hyperemic contour, covered with a grayish-white plaque, was found on the oral mucosa of the lower lip on the left. The lymph nodes are not enlarged. What is the diagnosis?

- A. Chronic recurrent herpetic stomatitis
- B. Seton's aphtha
- C. Chronic recurrent aphthous stomatitis
- D. Papular syphilis
- E. Acute herpetic stomatitis

2. A 32-year-old patient complains of the presence of a painful mass in the oral cavity that interferes with eating. Similar symptoms were first noted 2 years ago, suffers from gastric ulcer. At the bottom of the oral cavity, a small oval-shaped erosion was found, covered with a gray-white plaque with hyperemic and infiltrated edges. Which local treatment regimen should be chosen for the treatment of this pathology?

- A. Anesthesia, antiseptics, keratoplastic agents.
- B. Anesthesia, etiologic therapy, keratoplastic agents.
- C. Removal of the traumatic factor, suturing of the injury.
- D. Elimination of the irritating factor, antiseptic treatment, anesthesia of keratoplasty.
- E. Desensitizing agents, keratoplasty.

3. During a routine examination of patient P., reddish-colored areas in the form of circular spots of various sizes were found on the back of the tongue. A narrow whitish stripe is noted around the lesion. The patient suffers from a disease of the digestive tract. When interviewed, the patient notes that the changes on the surface of the tongue are not permanent. The red foci appear periodically, over many years, and do not cause the patient any trouble. What is the most likely diagnosis?

- A. Secondary syphilis.
- B. Leukoplakia.
- C. Red tinea versicolor.
- D. Desquamative glossitis.

E. Rhomboid glossitis.

4. A 32-year-old patient complains of a painful ulcer on the mucous membrane of the lower lip, which appeared the day before. The patient has a history of chronic enterocolitis. On examination, the mucous membrane of the lower lip on the right side shows a superficial tissue defect of a rounded shape, surrounded by a crown of hyperemia. The surface of the defect is covered with fibrinous plaque. Palpation is painful. Determine the diagnosis?

- A. Chronic recurrent aphthous stomatitis
- B. Traumatic erosion
- C. Seton's stomatitis
- D. Recurrent herpes
- E. Secondary syphilis

5. A woman P., 40 years old, consulted a dentist with complaints of burning sensation, tingling and pain in the tongue while eating. Examination - the tongue has a lacquered appearance with bright spots and stripes. What pathology of internal organs is characterized by such changes?

- A. Pancreatitis
- B. Gastritis with increased secretion
- C. Gastroenteritis
- D. Gastritis with decreased secretion
- E. Peptic ulcer disease

6. A 55-year-old patient complains of burning sensation, unpleasant sensations in the tongue. He has been suffering from hypoacid gastritis for about 5 years. What changes in the tongue are most likely for this patient?

- A. Atrophy and smoothing of the papillae
- B. Hypertrophy of the papillae
- C. Erosion on the lateral surfaces of the tongue
- D. Tongue lining
- E. Folding of the tongue

7. Patient O., 67 years old, complains of heartburn and bad breath. Past medical history: complaints first appeared 17 years ago. Objectively: the tongue is swollen, there is a white coating on the back of the tongue and atrophy of the filiform papillae. Determine which specialist the patient should be referred to for consultation.

- A. Cardiologist
- B. General practitioner
- C. Hematologist
- D. Neurologist
- E. Gastroenterologist

8. Patient T., 47 years old, complains of bleeding gums, bitterness in the mouth, significant sensitivity of teeth to thermal stimuli. Objectively: slight swelling of the mucous membrane of the cheeks, gums, hard palate; there are isolated hemorrhages, telangiectasias. The soft palate and the floor of the oral cavity have a yellow tint, hyposalivation is noted. Determine which general pathology is characterized by the described changes.

- A. Hyperacid gastritis
- B. Reflux disease
- C. Gastric ulcer
- D. Chronic hepatitis
- E. Hypoacid gastritis

9. During the dental examination of patient K., 44 years old, the presence of grayish-yellow layers on the back of the tongue was determined. The lateral surfaces and the tip of the tongue are bright red. Specify the manifestation of what pathology is this symptomatology?

- A. Chronic enterocolitis
- B. Chronic gastritis
- C. Acute enterocolitis
- D. Chronic cholecystitis
- E. Acute pancreatitis

10. Patient M., 47 years old, complains of abdominal pain after eating, unpleasant sensations in the oral cavity. Objectively: in the oral cavity there is hypertrophy of the filiform papillae of the tongue and tooth marks on its lateral surface. What disease of the gastrointestinal tract is characterized by such clinical manifestations?

- A. Hyperacid gastritis
- B. Hypoacid gastritis
- C. Pancreatitis
- D. Peptic ulcer of the stomach
- E. Enterocolitis

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Lesson № 20

TOPIC: CHANGES IN THE ORAL MUCOSA IN DISEASES OF THE CARDIOVASCULAR SYSTEM (CIRCULATORY FAILURE, ARTERIAL HYPERTENSION). TROPHIC ULCER. VESICOVASCULAR SYNDROME. TACTICS OF THE DENTIST.

I. Relevance of the topic: Most diseases of the blood and hematopoietic organs are accompanied by functional and organic changes in the oral mucosa, which are often the only initial symptom of hematological disease. In addition, changes in the oral mucosa largely depend on the degree of circulatory failure, the state of the vascular wall, etc. Therefore, timely detection and correct interpretation of them by a dentist contribute to the early detection of blood diseases.

II. Learning objectives:

2.1. The student should know:

- changes in the oral mucosa in diseases of the cardiovascular system;
- changes in the oral mucosa in arterial hypertension;
- changes in the oral mucosa in myocardial infarction and atherosclerosis;
- methods of diagnosis and treatment of changes in the oral mucosa in diseases of the cardiovascular system.

2.2. Be able to:

- identify the relationship between changes in the oral mucosa and diseases of the cardiovascular system;
- conduct basic and additional methods of examination;
- to diagnose vasculo-vascular syndrome;
- to conduct differential diagnosis of changes in the oral mucosa in diseases of the cardiovascular system;
- to draw up a treatment plan for dental patients with manifestations of cardiovascular diseases on the oral mucosa.

III. Contents of the topic.

Changes in the oral mucosa in cardiovascular diseases are determined by the degree of circulatory disorders and changes in the vascular wall. In case of cardiovascular insufficiency accompanied by circulatory disorders, cyanosis of the mucous membranes and cyanosis of the lips are usually observed. Swelling of the mucous membranes may occur, which causes tongue enlargement, and tooth marks appear on the mucous membranes of the cheeks and tongue.

In myocardial infarction, especially in the first days of the disease, changes in the tongue are noted: desquamative glossitis, deep cracks, hyperplasia of the filiform and mushroom papillae.

Against the background of cardiovascular and cardiopulmonary disorders of the II - III degree, trophic changes in the oral mucosa may occur, up to the formation of ulcers. The ulcers have uneven torn edges, the bottom is covered with a grayish-white coating, there is no inflammatory reaction (reactive course). The ulcerative-necrotic process on the mucous membrane in case of circulatory disorders occurs against the background of a decrease in redox processes. The accumulation of metabolic products in the tissues leads to changes in blood vessels and nerves, which disrupts tissue trophism. In such conditions, even with a minor injury to the mucous membrane, an ulcer forms.

A. L. Mashkillason et al. (1972) described the vesicovascular syndrome. It consists in the appearance of bubbles with hemorrhagic contents on the oral mucosa of various sizes after trauma in patients with cardiovascular diseases. Women aged 40-70 years are more likely to be affected. The bubbles exist unchanged from several hours to several days. Reverse development occurs either by opening the bladder or by resorption of its contents.

When the bubble is opened, the resulting erosion is quickly epithelialized. Bubbles occur more often in the area of the soft palate, tongue, and less often on the mucous membrane of the gums and cheeks.

There are usually no signs of inflammation in the vesicles and underlying tissues. Nikolsky's symptom is negative. Acantholytic cells are absent in smear-prints from the surface of erosions of the detected bubbles. Most patients with vesicovascular syndrome have a history of hypertension. The association of hemorrhagic blisters with vascular changes as a result of cardiovascular disease is not excluded. In the genesis of the vasculo-vascular syndrome, the permeability of capillary vessels and the strength of the contact of the epithelium with the connective tissue layer of the mucous membrane (basement membrane condition) are important.

IV. Control questions to the topic of the lesson:

1. Describe possible changes in the oral mucosa in diseases of the cardiovascular system.
2. Describe possible changes in the oral mucosa in arterial hypertension.
3. Describe possible changes in the oral mucosa in myocardial infarction and atherosclerosis.
4. Explain the concept of vesicovascular syndrome.
5. Name the methods of examination of patients with diseases of the cardiovascular system.
6. Specify the scope of dental care for patients with manifestations of diseases of the cardiovascular system.

V. Control test tasks and/or case studies:

1. Patient M., 40 years old, complains of blisters and ulcers in the oral cavity. She became ill 2 days ago, when suddenly, while eating, dark-colored blisters appeared on the mucous membrane of the cheeks and tongue. On the mucous membrane of the cheek and the lateral surface of the tongue on the right, there are single erosions up to 0.5-0.6 cm in size, without plaque. A dense blister with hemorrhagic contents is detected on the tongue next to the erosion. Nikolsky's symptom is negative. The smear-prints contain elements of peripheral blood. What is the pathology of the patient?

- A. Multiform exudative erythema
- B. Vesicovascular syndrome
- C. Ulcerative necrotic stomatitis
- D. Angioma
- E. Vesicular disease

2. Patient K., who came to the dentist with complaints of frequent bleeding from the oral and nasal mucosa, indicates that his father had the same problems. Objectively: there are multiple telangiectasias and angiomatous growths on the skin of the face and mucous membranes of the nose, cheeks, lips. Blood test is within normal limits

- A. Vaccaeus disease
- B. Werlhoff's disease.
- C. Osler's disease
- D. Itzen-Cushing's disease.
- E. Addison-Birmer disease.

3. A 49-year-old patient complains of pain in the oral cavity, difficulty eating. Suffers from coronary heart disease. Objective examination reveals shortness of breath, swelling of the extremities. The oral cavity is not sanitized. On the mucous membrane of the cheek on the right there is an ulcer with irregular edges, covered with grayish-white necrotic plaque, with a slightly pronounced inflammatory reaction around it. The patient has bad breath. What is the most likely diagnosis?

- A. Cancerous ulcer
- B. Traumatic ulcer
- C. Tuberculosis ulcer

D. Trophic ulcer

E. Ulcerative necrotic stomatitis

4. A 57-year-old patient complains of a periodic blister in the oral cavity. On examination, on the lateral surface of the tongue on the right, a blister 7*7 mm in size, with hemorrhagic contents. Palpation is painless. Nikolsky's symptom is negative. Blood pressure is 120/180 mm Hg. What is the most likely diagnosis?

A. Vesicovascular syndrome

B. Vesicular vesicle

C. Angioma of the tongue

D. Erythema exudatum multiforme

E. Herpetiform dermatitis of Durring

5. Patient A., 60 years old, complains of the presence of a blister with blood content on the soft palate. Objectively: a small blister with blood content is observed on the hyperemic background of the soft palate mucosa. What disease most often causes such changes in the oral cavity?

A. Diabetes mellitus

B. Myocardial infarction

C. Hemorrhagic angiomatosis

D. Cardiovascular insufficiency

E. Hypertension

6. Patient G., 60 years old, complains of dryness and burning in the oral cavity. Objectively: cyanosis of the lips and mucous membrane, ulcers on the oral mucosa. Indicate the most likely cause of this condition.

A. Enterocolitis

B. Gastric ulcer

C. Cardiovascular insufficiency

D. Myxedema

E. Diabetes mellitus

6. During the professional examination of patient A., 36 years old, the dentist was diagnosed with Randu-Osler's disease. What is the cause of this pathology?

A. Acquired factors: alcohol consumption

B. Acquired factors: smoking

C. Hereditary factors

D. Harmful working conditions

E. Circulatory disorders in the small circle of blood circulation

7. During the vocational examination of patient P., 58 years old, the dentist found the presence of a trophic ulcer in the oral cavity. At the final stage of treatment, the patient was recommended physiotherapy. Which procedure promotes epithelialization of the oral mucosa?

A. Ultraviolet light therapy

B. UHF therapy

C. D'Arsonval currents

D. Diadynamic therapy

E. Galvanization

8. Patient G., 60 years old complains of dryness and burning in the oral cavity. Objectively: cyanosis of the lips and mucous membrane, ulcers on the oral mucosa. Indicate the most likely cause of this condition.

A. Hypertension

B. Cardiovascular insufficiency

C. Myocardial infarction

D. Myxedema

E. Diabetes mellitus

9. Patient L., 67 years old, complains of periodically occurring blister in the oral cavity. The patient has a history of hypertension. Objectively: a 6×12 mm blister with hemorrhagic contents is observed on the right lateral surface of the tongue, the adjacent tissues of normal color are painless to palpation. The blood pressure is 180/100 mm Hg. What medications should be prescribed for local treatment after the hemorrhagic bladder is opened?

A. Anti-inflammatory steroid group

B. Antibiotics

C. Keratoplasty

D. Anti-inflammatory nonsteroidal group

E. Keratolytics

10. Patient S., 47 years old, consulted a dentist for oral cavity rehabilitation. The patient has a history of hypertension. During the endodontic intervention, pain in the heart area, facial flushing, tachycardia, blood pressure 180/100 mm Hg appeared. What drugs are more effective to prescribe in case of this pathology?

A. Nifedipine 10 mg under the tongue

B. Validol under the tongue

C. Diazepam 10 mg orally

D. Analgin orally

E. Furosemide by mouth

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Lesson № 21

TOPIC: CHANGES IN ORAL MUCOSA IN DISEASES OF THE ENDOCRINE SYSTEM (ACROMEGALY, ITZENKO-CUSHING'S DISEASE, DIABETES MELLITUS). XEROSTOMIA. TACTICS OF THE DENTIST.

I. Relevance of the topic: Disruption of the function of the endocrine glands is caused by clearly manifested metabolic disorders, trophic disorders. Dental manifestations of some endocrine disorders are of great diagnostic importance, as they often precede the onset of clinical symptoms of the underlying disease. Therefore, knowledge of the peculiarities of changes in the oral mucosa in endocrine disorders helps to identify the early stages of endocrine disease, as well as the correct assessment of local manifestations of general pathology and the choice of treatment methods.

II. Learning objectives:

2.1. The student should know:

- local and general factors in the development of endocrine diseases;
- possible changes in the oral mucosa in diseases of the endocrine system;
- the classification, clinic, diagnosis of lesions of the oral mucosa in diseases of the endocrine system;
- methods of examination of a patient with diseases of the oral mucosa and explain their features in the detection of endocrine diseases.

2.2. Be able to:

- identify the relationship between changes in the oral mucosa and diseases of the endocrine system;
- conduct basic and additional methods of examination;
- diagnose xerostomia;
- to conduct a differential diagnosis of changes in the oral mucosa in diseases of the endocrine system;
- to make a treatment plan for dental patients with manifestations of endocrine system diseases.

III. Contents of the topic.

The dysfunction of the endocrine glands is associated with clearly manifested metabolic and trophic disorders. Dental manifestations of some endocrine disorders are of great diagnostic importance, as they often precede the onset of clinical symptoms of the underlying disease. Therefore, knowledge of the peculiarities of changes in the SOPR in endocrine disorders helps to identify the early stages of endocrine disease, as well as the correct assessment of local manifestations of general pathology and the choice of treatment methods.

Diabetes mellitus. The disease is based on carbohydrate metabolism disorder. It is accompanied by changes in the oral cavity, the degree of manifestation of which depends on the severity and duration of diabetes mellitus. The most characteristic of them are xerostomia, catarrhal stomatitis and glossitis, fungal stomatitis, mycotic jellyfish, oral mucosa paresthesia, and trophic disorders.

Xerostomia (dry mouth) is one of the early symptoms of diabetes mellitus, the development of which is a consequence of dehydration.

Catarrhal stomatitis is caused by infection, easy vulnerability, a sharp decrease in the barrier function of oral mucosa and its unsatisfactory purification. This is facilitated by a decrease in salivation. In places of minor mechanical trauma, oral mucosa damage is observed in the form of hemorrhages and sometimes erosions.

Fungal stomatitis and mycotic ulcers develop as a result of dysbiosis against the background of a sharp decrease in the body's resistance, a decrease in the content of many

enzymes in saliva, especially lysozyme. The development of these lesions is facilitated by a violation of the acid-base state, which is caused by an increase in the amount of underoxidized metabolic products (peracetic and lactic acids).

The trophic lesions of oral mucosa are characterized by the occurrence of trophic ulcers, which are characterized by a long course with slow regeneration. The decrease in the regenerative properties of oral mucosa is due to impaired redox processes.

The described changes in oral mucosa do not have specific features that are unique to diabetes mellitus. Therefore, in the diagnosis, anamnesis and general examination of the patient, including laboratory tests, are of great importance. In diabetes mellitus, there is an increase in blood glucose and its appearance in the urine.

Myxedema. It develops in case of thyroid gland dysfunction. Mostly women are affected. The patient's face has a peculiar appearance: the lips and nose are thickened, the upper eyelids are sharply swollen, and the facial expression is indifferent. Anemia, swelling, and dryness of the nasal cavity are noted. Myxedema is accompanied by a significant enlargement of the tongue (sometimes it does not fit in the oral cavity), lips, and gums. As a result of laryngeal oral mucosa swelling, the voice becomes deaf.

Gingivitis of pregnant women. Inflammation of the gums that first occurs during pregnancy or is exacerbated by pregnancy. The development of the disease is associated with the restructuring of hormonal balance during this period. The onset of gingivitis depends on the gestational age. Its first signs appear in the 3-4th month of pregnancy, when the most intense neurohumoral changes occur in the body of pregnant women. In the first half of pregnancy, a mild form, mainly catarrhal gingivitis, is noted, in the second half - the course of the disease is severe, with the development of a proliferative process in the gums.

Hypertrophic gingivitis of pregnant women is prone to polypoid proliferation of individual papillae. Sometimes false epulids develop. Hypertrophied gums cover the entire tooth crown, bleed easily, and are prone to ulceration.

Itsenko-Cushing's disease. The disease is based on a disorder of the main types of metabolism. The disease develops as a result of hyperproduction of glucocorticoids, which is a consequence of:

- a) primary adrenal cortex dysfunction;
- b) hyperproduction of ACTH by the adenohypophysis;
- c) pituitary dysfunction.

Addison's disease. It is caused by the cessation or decrease in the production of cortical hormones of the adrenal glands. The most characteristic feature of the disease is specific pigmentation of the skin and oral mucosa. Small spots or streaks of bluish, grayish-black color appear in the oral cavity, on the lips, along the edge of the tongue, gums, and oral mucosa shik. There are no subjective sensations. Changes in the mouth and skin occur due to the deposition of large amounts of melanin.

IV. Control questions to the topic of the lesson:

1. Describe possible changes in the oral mucosa in diseases of the endocrine system.
2. Describe possible changes in the oral mucosa in diabetes mellitus.
3. Explain the concept of xerostomia.
4. Name the methods of examination of patients with diseases of the endocrine system.
5. Specify the amount of dental care for patients with pathological changes in the oral mucosa in diseases of the endocrine system.

V. Control test tasks and/or case studies:

1. What disease develops as a result of the cessation or reduction of the production of cortical hormones of the adrenal glands?

- A. Myxedema
- B. Diabetes mellitus

- C. Acromegaly
 - D. Itzenko-Cushing's disease
 - E. Addison's disease
2. What is the symptom of dry mouth due to decreased salivation?
- A. Xerostomia
 - B. Greenspan's symptom
 - C. Nikolsky's symptom
 - D. Behcet's syndrome
 - E. Sjogren's syndrome
3. What laboratory tests are performed primarily in diabetes mellitus?
- A. Complete blood count and urine test
 - B. Complete blood count, blood and urine glucose test
 - C. Biochemical blood test
 - D. Immunological methods
 - E. Allergic methods
4. Identify the main laboratory tests for Itzenko Cushing's disease?
- A. Biochemical blood test
 - B. Complete blood count and urinalysis
 - C. Determination of the content of cortisol and corticotropin in the blood
 - D. Determination of vitamin C
 - E. Determination of sugar in the blood and urine
5. What are the basic principles of treatment of the endocrine system' diseases?
- A. General treatment is carried out by a hematologist. Local: etiotropic and symptomatic treatment.
 - B. General and local treatment is carried out by a dentist
 - C. General treatment is performed by a general practitioner. Local: symptomatic treatment.
 - D. General treatment is performed by an endocrinologist. Local: oral cavity sanitation and symptomatic treatment.
 - E. General treatment is performed by a cardiologist. Local: pathogenetic and symptomatic treatment.
6. What elements of the lesion include erosion and ulceration?
- A. To the secondary elements of the lesion
 - B. To the primary elements of the lesion
 - C. To the tertiary elements of the lesion
 - D. To the primary and secondary elements of the lesion
 - E. All of the above are true
7. During the preventive examination of a man K., 38 years old, the following was found: the face is slightly puffy, the lips are thick, the nose and auricles are large, the lower jaw is massive and protrudes forward, the bite is progenitor, the tongue is enlarged, tooth impressions are determined on the lateral surfaces, and on the back - deep folds, diastemas and trema between the teeth. There are periodontal pockets 3-4 mm deep, and gum inflammation is slightly expressed. Which endocrine glands should be examined in this patient?
- A. Pituitary gland
 - B. Hypothalamus
 - C. Adrenal glands
 - D. Thyroid gland
 - E. Thymus
8. Woman S., 52 years old, turned to the dentist with complaints of pain while eating. During the objective examination on the mucous membrane of both cheeks in the retromolar region

against the background of hyperemia, large ulcerated surfaces surrounded by small white papules merging into an openwork pattern were found. Which specialists should examine this patient first of all to find out the mechanisms of development of this pathology?

- A. Endocrinologist
- B. Family doctor
- C. Infectious disease specialist
- D. Hematologist
- E. Cardiologist

9. A woman V., 45 years old, was diagnosed with generalized periodontitis of the second degree, acute course with frequent abscessing. Recently, the patient has been noticing a deterioration in her general condition, itchy skin, and dry mouth. Which of the following methods of blood test should be performed on this patient first of all to find out the cause of the deterioration?

- A. Determination of blood glucose content.
- B. Dermatological tests
- C. Allergy tests
- D. Wasserman reaction
- E. Blood test for HIV

10. Patient N., 49 years old, complains of burning sensation in the mouth, dryness. The burning sensation increases when eating spicy food. Objectively: the tongue is swollen with tooth marks. The back of the tongue is covered with a white-gray coating, which is removed by scraping with a spatula, the filiform papillae are hypertrophied. On the lateral surfaces and the tip of the tongue, round desquamation areas are determined. Saliva is viscous, stretches in thin threads. The patient has diabetes mellitus. What medications should be prescribed to the patient in the complex treatment?

- A. Antifungal drugs
- B. Probiotics
- C. Antibiotics
- D. Hyposensitizing drugs
- E. Vitamins

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Lesson № 22

TOPIC: CHANGES IN THE ORAL MUCOSA IN DISEASES OF THE BLOOD AND HEMATOPOIETIC ORGANS. LEUKEMIA. AGRANULOCYTOSIS. TACTICS OF THE DENTIST.

I. Relevance of the topic: The problem of diseases of the blood system is one of the most pressing problems in medicine. Most diseases of the blood and hematopoietic organs are accompanied by functional and organic changes in the oral mucosa, which are often the only initial symptom of a hematological disease. Therefore, timely detection and correct interpretation by the dentist contribute to the early recognition of blood diseases.

II. Educational objective:

2.1. The student should know:

- local and general factors in the development of blood and hematopoietic diseases;
- the relationship between the etiopathogenetic factors of hematopoietic diseases and the development of changes in the oral mucosa;
- know the classification, clinic, diagnosis of lesions of the oral mucosa in diseases of the hematopoietic organs;
- methods of examination of a patient with diseases of the oral mucosa and explain their features in the detection of diseases of the hematopoietic organs;
- changes in the oral mucosa in diseases of the hematopoietic organs.

2.2. Be able to:

- identify the relationship between changes in the oral mucosa and diseases of the blood and hematopoietic organs;
- conduct basic and additional methods of examination;
- to carry out differential diagnosis of changes in the oral mucosa in diseases of hematopoietic organs;
- to make a plan of examination of a patient with pathology of blood and hematopoietic organs and to interpret the data of laboratory blood tests;
- perform therapeutic dental manipulations in the oral cavity in case of blood pathology;
- to draw up a treatment plan for dental patients with manifestations of hematopoietic diseases.

III. Contents of the topic.

Leukemia is a malignant disease of the hematopoietic organs that occurs as a result of progressive cellular hyperplasia in the hematopoietic organs, when the processes of cell division (proliferation) prevail over the processes of maturation (differentiation). The pathomorphologic substrate of the disease is leukemic blast cells, which correspond to the progenitor elements of one of the hematopoietic sprouts.

There are acute and chronic leukemia. According to the data of clinical morphological and cytological studies, there are separate variants of acute leukemia: myelo-, lympho-, monoblastic, promyelocytic, and undifferentiated.

Acute leukemia. It occurs mainly at a young age.

The disease mostly develops unnoticed, with its precursors appearing long before an acute attack. General malaise, easy fatigue, pain in muscles, joints, bones, throat, swollen submandibular and cervical lymph nodes, subfebrile body temperature are determined.

Symptoms of the advanced phase of untreated acute leukemia are diverse and affect all major body systems. The main clinical picture consists of 4 leading syndromes: hemorrhagic, hyperplastic, anemic, and intoxication. The basis of the hemorrhagic syndrome is a sharp thrombocytopenia, the development of which is due to the suppression of normal hematopoiesis due to hyperplasia and infiltration of the bone marrow. The hemorrhagic syndrome manifests itself in the form of petechiae, ecchymoses, hematomas on the skin and CO, and profuse bleeding.

In the oral cavity, the most characteristic manifestations of acute leukemia are severe gingival bleeding, hemorrhages on the cheeks along the line of dental closure, on the tongue, and palate. Sometimes significant hemorrhages and hematomas are found.

Manifestations of acute leukemia on oral mucosa should be differentiated from hypertrophic gingivitis of other etiologies, Vincent's ulcerative-necrotizing stomatitis, hypovitaminosis C, and intoxication with heavy metal salts. Blood test results are crucial in the diagnosis of leukemia.

Treatment. Cytostatic agents, corticosteroids, broad-spectrum antibiotics, vitamins are prescribed. Blood transfusions are performed. Treatment of leukemic stomatitis is symptomatic. Tooth extraction is contraindicated.

Chronic leukemia. It occurs less often than acute. Its development is more favorable and its course is long.

Chronic leukemia is divided into myeloid and lymphocytic leukemia depending on the nature of the hematopoietic organ damage. Chronic myeloid leukemia goes through two stages: benign (lasting several years) and malignant (terminal), which lasts 3-6 months.

In chronic myeloid leukemia, hemorrhagic manifestations are the leading sign of the oral cavity disease, but their intensity is much lower compared to acute leukemia. Bleeding gums do not occur spontaneously, but only in case of trauma or tooth extraction. Erosive and ulcerative lesions of the oral mucosa are observed; necrotic lesions of the oral mucosa indicate an exacerbation of the process.

IV. Control questions to the topic of the lesson:

1. Describe possible changes in the oral mucosa in diseases of the blood and hematopoietic organs.
2. Describe possible changes in the oral mucosa in leukemia.
3. Describe the possible changes in the oral mucosa in agranulocytosis.
4. Name the methods of examination of patients with diseases of the blood and hematopoietic organs.
5. Specify the scope of dental care for patients with manifestations on the oral mucosa in diseases of the blood and hematopoietic organs.

V. Control test tasks and/or case studies:

1. A 31-year-old patient has a change in her general condition (weakness, malaise), pallor of the skin, fever. In the oral cavity there are hemorrhages, gingival hyperplasia, ulcerative necrotic processes. What disease are these symptoms associated with?

- A. Acute leukemia.
- B. Hypertrophic gingivitis.
- C. Ulcerative necrotizing stomatitis of Vincent.
- D. Hypovitaminosis C.
- E. Intoxication with heavy metal salts.

2. During the dispensary examination of a student aged 20 years, chronic candidiasis of the oral mucosa, generalized lymphadenopathy were found. During the year, chronic recurrent herpes has been a concern, body temperature is constantly elevated to 37.4-37.5 °C, body weight has decreased by 8 kg over the past month. What disease can this clinical picture indicate?

- A. AIDS
- B. Infectious mononucleosis
- C. Acute leukemia
- D. Chronic leukemia
- E. Lymphogranulomatosis?

3. A 36-year-old patient complains of discomfort while eating, fever, malaise, and swollen lymph nodes. He smokes and drinks alcohol moderately. Three years ago he was on a business trip to Africa. Objectively: the submandibular, cervical, axillary lymph nodes are enlarged, mobile, painless on palpation. On the lateral surface of the tongue there are areas of whitish, elongated filiform papillae 3-4 mm long. Which of the following tests should be done to clarify the diagnosis:

- A. Blood test for glucose content
- B. Blood test for RW
- C. Complete blood count
- D. Blood test for HIV
- E. Blood test for rheumatic fever?

4. Patient B., 68 years old, complains of generalized weakness, bleeding and gingival proliferation, bad breath, soreness of the oral mucosa. Objectively: the crowns of the teeth are covered by a loose, bleeding gingival margin in the form of a shaft. Regional lymph nodes are enlarged. In the blood test: lymphocytes $60 \times 10^9 /l$, the presence of Botkin-Humbrecht cells, ESR 40 mm/h. What is the most likely diagnosis?

- A. Acute lymphoblastic leukemia.
- B. Vincent's ulcerative necrotic gingivitis.
- C. Hypovitaminosis C.
- D. Hypertrophic gingivitis.
- E. Chronic lymphocytic leukemia.

5. A 40-year-old patient suffering from rheumatoid polyarthritis and taking amidopyrine developed sore throat, teeth, gums, severe pathological tooth mobility and ulcerative necrotic lesions of the tonsils and gums with apparently unchanged mucous membrane. What additional investigation should be performed to establish the correct diagnosis:

- A. Radiography of the jaws
- B. Blood test for glucose content
- C. Microscopy of plaque from the gingival papilla
- D. Testing for the presence of HIV
- E. Complete blood count?

6. During a preventive examination of the oral cavity in a patient M., 40 years old, an increase in the size of the tongue, tooth marks on the tip and lateral surfaces, hypertrophy of the papillae, the presence of gray plaque on the back of the tongue and its posterior parts were found. What pathology of the system can we talk about?

- A. Diseases of the digestive tract.
- B. Cardiovascular pathology.
- C. Endocrine diseases.
- D. Diseases of the blood and hematopoietic organs.
- E. Hypo- and avitaminosis.

7. An 18-year-old patient complains of ulcers in the oral cavity, spontaneous bleeding of the oral mucosa, pain during eating and talking, nosebleeds. Past medical history: deterioration of general condition, weakness, fever up to 39°C , headache, joint pain. What diagnostic tests should be performed to clarify the diagnosis?

- A. Clinical blood test
- B. Blood sugar test
- C. Immunogram
- D. HIV test
- E. Allergy tests

8. A 42-year-old man complains of bleeding, gingival overgrowth, bad breath, and soreness of the oral mucosa. Objectively: the crowns of the teeth are covered by 1/2 of the loosened

gingival margin, which bleeds. The submandibular and cervical lymph nodes are enlarged. In the blood test: leukocytes - $62.0 \times 10^9/L$, p/o - 1%, s/o - 10%, eosinophils - 2%, monocytes - 5%, lymphocytes - 82%, ESR - 40 mm/h. What is the most likely diagnosis?

- A. Chronic lymphocytic leukemia
- B. Chronic myeloid leukemia
- C. Acute leukemia
- D. Infectious mononucleosis
- E. Agranulocytosis

9. Patient A., suffering from rheumatoid polyarthritis and taking amidopyrine, developed sore throat, teeth, gums, severe tooth mobility and ulcerative necrotic lesions of the tonsils and gums with unchanged mucous membrane. What is the most likely diagnosis?

- A. Agranulocytosis
- B. Erythema exudatum multiforme, toxic-allergic form
- C. Infectious mononucleosis
- D. Stevens-Johnson syndrome
- E. Simanovsky-Vansan sore throat

10. A 31-year-old man became ill a week ago when he developed generalized weakness, bone pain, intermittent fever, and bleeding gums while biting down on food and brushing his teeth. Observations: oral mucosa, the gums are not discolored, the gums bleed at the slightest touch. Petechial hemorrhages on the mucous membrane of the cheeks and soft palate. Blood tests: Hb - 40 g/l, erythrocytes - $3.0 \times 10^{12}/l$, CPV - 0.9, leukocytes - $25 \times 10^9/l$, nondifferentiated blasts - 60%, p/y - 5%, s/y - 20%, lymphocytes - 20%, ESR - 60 mm/h, platelets - $40 \times 10^9/l$. What is the diagnosis?

- A. Acute leukemia
- B. Agranulocytosis
- C. Thrombocytopenic purpura
- D. Chronic myeloid leukemia
- E. Chronic lymphocytic leukemia

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Lesson № 23

TOPIC: CHANGES IN THE ORAL MUCOSA IN DISEASES OF THE BLOOD AND HEMATOPOIETIC ORGANS. ANEMIA. VAQUEZ DISEASE. WERLHOFF'S DISEASE. TACTICS OF THE DENTIST.

I. Relevance of the topic: Most diseases of the blood and hematopoietic organs are accompanied by functional and organic changes in the oral mucosa, which are often the only initial symptom of hematological disease. Polycythemia vera (Vaquez's disease) is a chronic disease of the hematopoietic system characterized by a persistent increase in the number of red blood cells, hemoglobin, and circulating blood volume. Thrombocytopenic purpura (Werlhoff disease) is a disease associated with impaired maturation of megakaryocytes and a decrease in their ability to produce platelets. As a result, the number of platelets in the peripheral blood decreases significantly. Therefore, timely detection and correct interpretation by the dentist contribute to the early recognition of blood diseases.

II. Learning objectives:

2.1. The student should know:

- the relationship between the etiopathogenetic factors of hematopoietic diseases and the development of changes in the oral mucosa;
- know the classification, clinic, diagnosis of lesions of the oral mucosa in diseases of the hematopoietic organs;
- changes in the oral mucosa in case of anemia;
- changes in the oral mucosa in case of Vaquez disease;
- changes in the oral mucosa in case of Werlhoff's disease;
- methods of examination of a patient with diseases of the oral mucosa and explain their features in the detection of anemia, Werlhoff's disease and Vaquez disease.

2.2. Be able to:

- identify the relationship between changes in the oral mucosa and diseases of the blood and hematopoietic organs;
- conduct basic and additional methods of examination of a patient with diseases of the blood and hematopoietic organs;
- diagnose diseases of the blood and hematopoietic organs based on changes in the oral mucosa;
- to carry out differential diagnosis of changes in the oral mucosa in anemia, Werlhoff's disease and Vaquez's disease;
- to make a plan of examination of a patient with pathology of blood and hematopoietic organs and to interpret the data of laboratory blood tests;
- to perform therapeutic dental procedures in the oral cavity in anemia, Werlhoff disease and Vaquez disease;
- to draw up a treatment plan for dental patients with manifestations of hematopoietic diseases.

III. Contents of the topic.

Anemia is a condition characterized by a decrease in the number of red blood cells and a decrease in hemoglobin content per unit volume of blood. There are many types of anemia. We will focus only on those that result in changes in the BCC.

Ferrous deficiency anemia (FDA). The onset and development of iron deficiency anemia is associated with iron deficiency in the body due to a deficiency of iron in food, loss during bleeding, impaired absorption, and iron metabolism disorders. There are early and late chlorosis. Early chlorosis is caused by endogenous iron deficiency, which occurs due to the increased need of the body - the period of growth, pregnancy, lactation. Late chlorosis is observed in women aged 30-50 years.

The clinical picture of hypochromic anemia is characterized by numerous caries lesions, increased tooth abrasion, loss of the natural shine of the enamel. The oral mucosa of the lips, cheeks, and gums is pale and swollen. The tongue is also swollen. The papillae of the tongue, especially in its front half, are atrophied, making it bright red, smooth, as if polished. Deep folds appear on it. Sometimes there are hemorrhages. Cracks appear in the corners of the mouth.



Glossitis in iron-deficiency anaemia. The tongue is smooth, due to atrophy of the papillae, and is red and sore. Anaemia is the commonest diagnosable cause of glossitis and must always be looked for by haematological examination.

Hypoplastic anemia is a disease that occurs under the influence of exogenous factors - physical (radiation), clinical and medicinal, as well as endogenous bone marrow aplasia. The causes of congenital hypoplastic anemia have not been established. They are characterized by severe anemia of all organs, bone marrow aplasia, and atrophy of the endocrine glands.

In addition to the general clinical symptoms, changes in the oral mucosa are observed. Against the background of a particularly pale oral mucosa, hemorrhages of various sizes appear. Interdental papillae are swollen, cyanotic, bleeding; periodontal pockets are deep. In addition to petechiae, erosions, ulcers, and necrotic areas are observed on the oral mucosa.

B12- and folate-deficiency anemia (malignant anemia, pernicious anemia, Addison-Birmer disease) is characterized by erythropoiesis disorders. This type of anemia is caused by a lack of cyanocobalamin (vitamin B12) in the body, which occurs as a result of atrophy of the glands of the gastric epithelium and mucoprogesterone deficiency. The presence of the latter is necessary for the absorption of the vitamin from food.

Erythremia (polycythemia, Vaccine disease). The disease is based on hyperplasia of bone marrow cell elements, especially the erythrocyte sprout. Erythremia is observed at the age of 40-60 years, mainly in men.

Clinical signs of erythremia are caused by an increase in the mass of circulating red blood cells, circulating blood volume, blood viscosity, platelet count, as well as a slowdown in blood flow and increased blood clotting.

Thrombocytopenic purpura (Werlhoff disease). The disease is associated with impaired maturation of megakaryocytes and a decrease in their ability to produce platelets. As a result, the number of platelets in the peripheral blood decreases significantly.

According to the clinical course, there are acute, chronic, and cyclic forms of thrombocytopenic purpura. Symptomatic thrombocytopenia is observed in allergic conditions and infectious diseases, radiation sickness, and drug intoxication.

IV. Control questions to the topic of the lesson:

1. Describe possible changes in the oral mucosa in diseases of the hematopoietic organs.
2. Name the etiologic factors of anemia.
3. Describe the possible changes in the oral mucosa in anemia.
4. Changes in the oral mucosa in Werlhoff's disease.
5. Describe the possible changes in the oral mucosa in Vaccine disease.
6. Describe the features of additional methods of examination of dental patients with blood diseases.
7. Indicate the scope of dental care for patients with manifestations of blood and hematopoietic diseases.

V. Control test tasks and / or situational tasks:

1. Patient A., 15 years old, turned to the dentist with complaints of various disorders of taste sensitivity, pain when eating spicy and salty foods, dry mouth. Objectively: sharp pallor of the skin, with a greenish tint. Oral mucosa pale, swollen, dry, gums unchanged. The tongue is swollen, the tongue papillae are atrophied. What additional diagnostic methods should be performed?

- A. Radiography of the jaws
- B. Complete blood count
- C. Flush according to Yasinovsky
- D. Blood test for sugar
- E. Allergy tests

2. During an additional examination of patient P., the doctor received the following blood test: erythrocytes - 2.1×10^{12} g/l, Hb - 60 g/l, CP up to 0.5. Other indicators are almost no different from the norm. What diagnosis can be made on the basis of the blood test?

- A. Chronic leukemia
- B. Pernicious anemia
- C. Iron deficiency anemia
- D. Agranulocytosis
- E. Thrombocytopenic purpura

3. During the additional examination of the patient, the doctor received the following blood test: erythrocytes - 2×10^{12} g/l, leukocytes 2.1×10^9 Nv - 100 g/l, CP - 1.3. Anisocytosis, poikilocytosis of megaloblasts, Joly bodies, Cabot rings. What diagnosis can be made on the basis of the blood test?

- A. Ferrous deficiency anemia
- B. Chronic leukemia
- C. Agranulocytosis
- D. Pernicious anemia
- E. Thrombocytopenic purpura

4. A 50-year-old patient complains of spontaneous bleeding from the gums. Objectively: The skin is pale. Tourniquet and pinch symptoms are sharply positive. The gums are cyanotic, there is hemorrhage in the soft palate, tongue, cheeks, lips, reminiscent of the color of the rainbow. Make a preliminary diagnosis?

- A. Acute leukemia
- B. Chronic leukemia

- C. Pernicious anemia
 - D. Agranulocytosis
 - E. Thrombocytopenic purpura
5. A 40-year-old patient visited a dentist with complaints of bleeding gums. Objectively: the skin of the face is red-cherry in color. Telangiectasias on the cheeks and tip of the nose. The soft palate is red-cherry in color, which contrasts sharply with the pale hard palate. What disease is characterized by these changes?
- A. Vaquez's disease
 - B. Chronic leukemia
 - C. Pernicious anemia
 - D. Agranulocytosis
 - E. Thrombocytopenic purpura
6. Choose the most characteristic blood counts for pernicious anemia:
- A. Erythropenia
 - B. Leukocytosis
 - C. Leukopenia
 - D. Anisocytosis
 - E. Poikilocytosis
7. Choose the most characteristic blood parameters for ferrous deficiency anemia:
- A. Erythropenia
 - B. Leukocytosis
 - C. Leukopenia
 - D. Anisocytosis
 - E. Thrombocytopenia
8. Select the most characteristic blood parameters for thrombocytopenic purpura:
- A. Thrombocytopenia
 - B. Leukocytosis
 - C. Leukopenia
 - D. Monocytopenia
 - E. Eosinophilia
9. Gunther-Miller's glossitis is a characteristic feature of:
- A. Agranulocytosis
 - B. Werlhoff's disease
 - C. Vaquez's disease
 - D. Addison-Birmer disease
 - E. Ferrous deficiency anemia
10. The rainbow symptom is a characteristic feature of:
- A. Agranulocytosis
 - B. Werlhoff disease
 - C. Vaquez's disease
 - D. Addison-Birmer disease
 - E. Ferrous deficiency anemia

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Lesson № 24

TOPIC: CHANGES IN THE ORAL MUCOSA IN HYPO- AND AVITAMINOSIS A, C. TACTICS OF THE DENTIST.

I. Relevance of the topic: Vitamins play an important role in the vital activity of the body. Hypo- and avitaminosis cause a variety of diseases that are accompanied by various pathological processes in the oral cavity. Most hypovitaminosis in the early stages appears on the oral mucosa. Practitioners most often have to deal with endogenous hypovitaminosis, which is caused by a decrease in vitamin supply of the body due to a pathological process, in particular chronic infections.

II. Educational objective:

2.1. The student should know:

- the relationship between the etiopathogenetic factors of changes in the oral mucosa in hypo- and avitaminosis A, C;
- the role of vitamins of group A, C in the human body;
- changes in the oral mucosa in case of vitamin A deficiency;
- changes in the oral mucosa in case of vitamin C deficiency;
- principles of treatment and prevention of hypovitaminosis and vitamin A, C deficiencies;
- methods of examination of a patient with diseases of the oral mucosa and explain their features in the detection of anemia, Werlhoff disease and Wakez disease.

2.2. Be able to:

- identify the relationship between changes in the oral mucosa and hypo- and avitaminosis A, C;
- to conduct basic and additional methods of examination of the patient with hypo- and avitaminosis A, C;
- to establish the presence of vitamin A, C deficiencies in the patient based on the presence of changes in the oral mucosa;
- to carry out differential diagnostics of changes in the oral mucosa in case of vitamin A, C deficiencies;
- to make a plan of examination of a patient with vitamin A, C deficiency;
- to carry out therapeutic dental manipulations in the oral cavity in case of vitamin A, C deficiencies;
- to draw up a treatment plan for dental patients with vitamin A, C deficiencies.

III. Contents of the topic.

Hypovitaminosis C. Insufficiency of vitamin C (ascorbic acid) in the body leads to disorders of metabolic processes in the body, collagen synthesis, growth and development processes, decreased reactivity (decreased phagocytic activity, impaired antibody formation, etc.), and a sharp decrease in the permeability of capillaries and connective tissue structures.

Changes associated with vitamin C deficiency include manifestations of hemorrhagic syndrome and complications caused by secondary infection. Hypovitaminosis is accompanied by malaise, weakness, fatigue, loss of appetite, fatigue, and pain in the limbs. The skin becomes dark (due to the accumulation of melanin), dry, and easily peels off. Vitamin C deficiency is always manifested by changes in the oral cavity.

One of the earliest and most frequent symptoms of the disease is scurvy stomatitis, which has *three stages*: I - scurvy stomatopathy (initial stage); II - scurvy reparative stomatitis (advanced stage); III - scurvy ulcerative stomatitis (complicated stage).

Clinical manifestations of hypovitaminosis A are caused by a decrease in the barrier properties of the skin and oral mucosa, and a violation of the normal differentiation of epithelial tissue. In case of hypovitaminosis A, the oral mucosa is pale, cloudy, dry, and loses its characteristic shine. On the oral mucosa of the cheeks, hard and soft palate, whitish layers appear, resembling a mild form of leukoplakia. The epithelium of the salivary glands'

excretory ducts becomes keratinized. This leads to a decrease in saliva secretion - hyposalivation. Keratinization is also detected in the secretory cells of the large salivary glands, which causes a delay in secretion in the glands, and thus the development of sialoadenitis. Along with dryness of the oral cavity, dryness of the pharynx is noted. The oral mucosa of the lips becomes bluish; there is increased epidermization, especially at the border of the red border.

IV. Control questions to the topic of the lesson:

1. The role of vitamins in the human body.
2. Describe the possible changes in the oral mucosa in vitamin A deficiency.
3. Name the etiological factors of development of vitamin A, C deficiencies.
4. Describe the possible changes in the oral mucosa in vitamin C deficiency.
5. Describe the features of additional methods of examination of dental patients with vitamin A, C deficiencies.
6. Specify the amount of dental care for patients with vitamin deficiencies.

V. Control test tasks and / or situational tasks:

1. Select natural sources of vitamin A:
 - A. Butter
 - B. Fish oil
 - C. Beetroot
 - D. Tomato
 - E. All of the above
2. Choose the natural sources of vitamin C:
 - A. Rose hips
 - B. Fish oil
 - C. Pepper
 - D. Lemon
 - E. All of the above
3. The Rother test is used to determine the presence of a deficiency:
 - A. Vitamin C
 - B. Vitamin A
 - C. Vitamin B
 - D. Vitamin PP
 - E. Vitamin E
4. Identify the stages of zingotic stomatitis:
 - A. Stomatopathy
 - B. Reparative gingivitis
 - C. Hypertrophic gingivitis
 - D. Ulcerative gingivitis
 - E. Atrophic gingivitis
5. b-carotene is a prototype of :
 - A. Vitamin C
 - B. Vitamin A
 - C. Vitamin B
 - D. Vitamin PP
 - E. Vitamin E
6. Fat-soluble vitamins include:
 - A. Vitamin C
 - B. Vitamin A
 - C. Vitamin B
 - D. Vitamin D

E. Vitamin E

7. Patient M., 45 years old, consulted a dentist with complaints of bleeding gums. Objectively: the face is symmetrical, the skin is dry, the mucous membrane is anemic, the gums are swollen, loose, covering most of the crowns of the teeth. The gingival margin is cyanotic in color, bleeds when touched. Numerous petechiae and ecchymoses are observed on the oral mucosa. Establish a preliminary diagnosis and stage of the disease.

- A. Hypovitaminosis of vitamin C. Zingotic reparative stomatitis.
- B. Hypovitaminosis of vitamin C. Hypertrophic gingivitis, first degree, edematous form.
- C. Hypovitaminosis of vitamin C. Hypertrophic gingivitis, second degree, edematous form.
- D. Hypovitaminosis of vitamin C. Hypertrophic gingivitis, third degree, edematous form.
- E. Hypovitaminosis of vitamin C. Hypertrophic gingivitis, third degree, fibrous form.

8. A man R., 27 years old, complains of bleeding gums, pain in the mouth while eating, general malaise, weakness, rheumatic pain in the limbs, loss of appetite, and fatigue. Local treatment was ineffective. Suffers from antacid gastritis. Objectively: the skin is dry, the symptom of goose skin is observed on the legs. The gums are sharply swollen, the gingival papillae overlap the crowns of the teeth by 1/3 of their height, cyanotic, bleed when touched. The tops of the gingival papillae and the gingival margin are necrotic, covered with gray plaque. Petechial hemorrhages on the mucous membrane. Unpleasant breath odor. What vitamin deficiency can be a manifestation of this clinical picture? What additional research method can be used to confirm this?

- A. Hypovitaminosis of vitamin C, Rother's test
- B. Hypovitaminosis of vitamin A, Schiller-Pisarev test
- C. Hypovitaminosis of vitamin PP, Aldrich test
- D. Hypovitaminosis of vitamin B1, benzidine test
- E. Hypovitaminosis of vitamin B2, Kecske test

9. Patient K., 36 years old, complains of dry mouth, deterioration of twilight vision. Objectively: the red border of the lips is dry, covered with thin transparent scales, cracks in the corners of the mouth, the mucous membrane is cloudy, pale, dry. Make a preliminary diagnosis.

- A. Hypovitaminosis of vitamin A
- B. Hypovitaminosis of vitamin C
- C. Hypovitaminosis of vitamin PP
- D. Hypovitaminosis of vitamin B1
- E. Hypovitaminosis of vitamin B2

10. Patient L., 41 years old. Complaints: lack of appetite, general weakness, dry mouth, diarrhea. Objectively: keratinization of the epithelium of the salivary gland excretory ducts; oral mucosa pale, dry, whitish layers on the cheeks, hard and soft palate; chalky crowns of teeth. What is the manifestation of vitamin deficiency?

- A. Retinol
- B. Ascorbic acid
- C. Nicotinic acid
- D. Calciferol
- E. Thiamine

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Lesson № 25

TOPIC: CHANGES IN THE ORAL MUCOSA IN HYPO- AND AVITAMINOSIS OF GROUP B AND NICOTINIC ACID. TACTICS OF THE DENTIST.

I. Relevance of the topic: Vitamins play an important role in the vital activity of the body. Hypo- and avitaminosis cause a variety of diseases that are accompanied by various pathological processes in the oral cavity. The physiological significance of nicotinic acid is determined by its participation in redox processes, carbohydrate and protein metabolism. In case of PP vitamin deficiency, pellagra develops, which is accompanied by characteristic changes in the oral cavity. Lack of vitamin B2 (thiamine) causes a disease known as beri-beri. In the absence or deficiency of riboflavin (vitamin B2) in the diet, ariboflavinosis develops, a disease manifested by lip inflammation, angular cheilitis, glossitis, and conjunctivitis. A practitioner most often has to deal with endogenous hypovitaminosis, which is caused by a decrease in vitamin supply of the body due to a pathological process, in particular chronic infections.

II. Educational objective:

2.1. The student should know

- the relationship between etiopathogenetic factors of changes in the oral mucosa in hypo- and avitaminosis of group B, PP;
- the role of vitamins of group B, PP in the human body;
- changes in the oral mucosa in case of vitamin B deficiency;
- changes in the oral mucosa in case of PP vitamin deficiency;
- therapeutic dental manipulations in the oral cavity in case of hypo- and avitaminosis B, PP;
- principles of treatment and prevention of hypovitaminosis and avitaminosis B, PP.

2.2. Be able to:

- identify the relationship between changes in the oral mucosa and hypo- and avitaminosis B, PP;
- to conduct basic and additional methods of examination of the patient with hypo- and avitaminosis B, PP;
- to establish the presence of vitamin B, PP deficiencies in the patient based on the presence of changes in the oral mucosa;
- to carry out differential diagnostics of changes in the oral mucosa in case of vitamin B, PP deficiencies;
- to make a plan for the examination of a patient with vitamin B, PP deficiencies;
- to carry out therapeutic dental manipulations in the oral cavity in case of vitamin B, PP deficiencies;
- to draw up a treatment plan for dental patients with vitamin B, PP deficiencies.

III. Contents of the topic.

Hypovitaminosis B. Lack of vitamin B2 (thiamine) causes a disease known as beriberi. The disease develops against the background of a lack of other vitamins, in particular PP. Berry-bery is observed mainly in people who eat exclusively carbohydrate foods, such as rice. The disease is most common in some Asian countries (India, Indonesia, etc.). Vitamin B deficiency can also be caused by its incomplete absorption in the intestines or an increased need for it (during pregnancy and lactation, thyrotoxicosis).

In the clinical picture, the most characteristic manifestations are lesions of the nervous and cardiovascular systems, as well as the development of edema (without kidney damage). Patients complain of decreased appetite and weight loss, muscle cramps, sometimes diarrhea, and pain in the extremities. The appearance of such symptoms indicates the development of polyneuritis.

Hypovitaminosis B2. In the absence or lack of riboflavin (vitamin B2) in the diet, ariboflavinosis develops, a disease that manifests itself as inflammation of the lips, angular

cheilitis, glossitis, and conjunctivitis. These signs form a symptom complex characteristic of hypovitaminosis B2. In addition to malnutrition, hypovitaminosis B2 can also be caused by stomach diseases accompanied by a decrease in the acidity of gastric juice, liver and intestinal diseases that cause difficulty in absorbing riboflavin.

Clinic. Angular cheilitis begins with redness in the corners of the mouth, then painful cracks resembling splinters appear in these areas. The lips become red, swollen, and cracks and erosions appear on their surface. At the same time, glossitis develops, which is accompanied by sharp pain. The filiform papillae atrophy and hypertrophied mushroom-shaped papillae of bright red color appear along the entire back of the tongue.

PP hypovitaminosis. The physiological significance of vitamin PP (nicotinic acid) is determined by its participation in redox processes, carbohydrate and protein metabolism. It has been established that nicotinic acid has an effect on the functional state of blood vessels, especially its vasodilating effect on peripheral vessels. Under the influence of nicotinic acid, blood circulation accelerates and venous pressure increases.

In case of PP vitamin deficiency, pellagra develops, which is accompanied by characteristic changes in the oral cavity. At present, there are no bright manifestations of this disease. Nicotinic acid deficiency is accompanied by the development of pellagra. Its manifestation is a deficiency not only of nicotinic acid but also of other B vitamins (thiamine, riboflavin, folic acid).

IV. Control questions to the topic of the lesson:

1. Describe the possible changes in the oral mucosa in vitamin B deficiency.
2. Name the etiologic factors of development of hypovitaminosis B, PP.
3. Describe the possible changes in the oral mucosa in hypovitaminosis PP.
4. Name the general changes in the body and oral mucosa in hypovitaminosis and avitaminosis of vitamins B, PP.
5. Describe the features of additional methods of examination of dental patients with vitamin B, PP deficiencies.
6. Indicate the amount of dental care for patients with vitamin B, PP deficiencies.

V. Control test tasks and / or situational tasks:

1. Patient D., turned to the dentist with complaints of pain in the tongue, increased fatigue, decreased appetite, muscle weakness, cramps. Objectively: the tongue is of normal size, the mushroom shaped papillae of the tongue are hypertrophied. Additional examination reveals an increase in the content of pyruvic acid in the blood and urine. Establish a preliminary diagnosis:

- A. Hypovitaminosis of vitamin B1
- B. Hypovitaminosis of vitamin B6
- C. Hypovitaminosis of vitamin C
- D. Hypovitaminosis of vitamin B12
- E. Hypovitaminosis of vitamin C

2. Patient R., 45 years old, complains of taste disorders, burning sensation in the nose, gastrointestinal disorders (loss of appetite, nausea), itching of the skin, irritability. Objectively: the face is symmetrical, the mucous membrane is anemic, there are cracks in the corners of the mouth, the tongue is smooth, shiny, painful. Establish a preliminary diagnosis.

- A. Hypovitaminosis of vitamin B6
- B. Hypovitaminosis of vitamin B1.
- C. Hypovitaminosis of vitamin B6.
- D. Hypovitaminosis of vitamin B12.
- E. Hypovitaminosis of vitamin A.

3. Patient A., 40 years old, complains of taste disorders, burning sensation in the mouth, gastrointestinal disorders (loss of appetite, nausea), itching of the skin, irritability.

Objectively: the face is symmetrical, the mucous membrane is anemic, there are cracks in the corners of the mouth, the tongue is smooth, shiny, painful. Establish a preliminary diagnosis.

- A. Hypovitaminosis of vitamin B6
 - B. Hypovitaminosis of vitamin B1.
 - C. Hypovitaminosis of vitamin B6.
 - D. Hypovitaminosis of vitamin B12.
 - E. Hypovitaminosis of vitamin A.
4. During the treatment of patient G., 45 years old, due to hypovitaminosis, a "sunburn phenomenon" appeared - redness of the face and upper half of the body with a burning sensation. With prolonged use of which vitamin is this phenomenon possible?
- A. With the use of vitamin PP.
 - B. With the use of vitamin A.
 - C. With the use of vitamin B6.
 - D. With the use of vitamin B1.
 - E. With the use of vitamin B2.
5. Patient L., 64 years old, complains of impaired taste sensations, weakness, fatigue, drowsiness. Six months ago he underwent gastric resection. Objectively: the face is symmetrical, the skin is pale, the mucous membrane is anemic, the tongue is smooth, hyperemic on the lateral surfaces and the tip. What additional diagnostic method should be prescribed to the patient to make a definitive diagnosis?
- A. Complete blood count.
 - B. Complete blood count.
 - C. Biochemical blood test.
 - D. Blood sugar test.
 - E. Glycated hemoglobin.
6. Select the main clinical manifestations characteristic of hypovitaminosis B1:
- A. Hemorrhagic syndrome
 - B. Paresthesias
 - C. Angular cheilitis
 - D. Hyperplasia of the mushroom papillae of the tongue
 - E. Hypersalivation
7. What is the characteristic feature of Miller-Gunter glossitis?
- A. Hypovitaminosis B1
 - B. Hypovitaminosis B6
 - C. Hypovitaminosis B12
 - D. Hypovitaminosis B2
 - E. Hypovitaminosis PP
8. Select the main clinical manifestations characteristic of hypovitaminosis B6:
- A. Desquamative glossitis
 - B. Parasthesias
 - C. Angular cheilitis
 - D. Hyperplasia of the mushroom papillae of the tongue
 - E. Hypersalivation
9. Choose natural sources of vitamin B1:
- A. Butter
 - B. Yeast
 - C. Beetroot
 - D. Wholemeal bread
 - E. All of the above

10. The patient, 58 years old, complains of pain, burning sensation in the tongue when eating solid, sour, hot food, and impaired taste. On examination, the skin is pale, on the back and tip of the tongue there are bright red spots of desquamation, devoid of thread-like papillae, painful to touch and palpation. Blood test - erythrocytes $2.5 \times 10^{12}/l$, anisocytosis, poikilocytosis; Hb-100g/l, color index 1.4, leukocytes - $4.2 \times 10^9/l$, polymorphonuclear-1%, segmented-nuclear-36%, eosinophilic-4%, basophilic-2%, lymphocytes-53%, monocytes-4%, platelets $180 \times 10^9/l$, ESR 20 mm/h. With what preliminary diagnosis should the patient be referred to a hematologist?

- A. B12 and folate deficiency anemia
- B. Hypoplastic anemia.
- C. Werlhoff's disease.
- D. Acute leukemia.
- E. Iron deficiency anemia.

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Lesson № 26

TOPIC: CHANGES IN THE ORAL MUCOSA IN DERMATOSES WITH AN AUTOIMMUNE COMPONENT. VESIKEL. OBJECTIVES. ETIOLOGY, PATHOGENESIS, CLINIC, DIAGNOSIS. TACTICS OF THE DENTIST.

I. Relevance of the topic: In the practice of a dentist, true (acantholytic) pemphigus is a serious disease, the essence of which is acantholysis of cells of the squamous (malpighian) layer of the epidermis and mucous membrane, which leads to the formation of non-inflammatory intraepithelial and intraepidermal blisters. A thorough study of the patient's local status, taking into account general changes in the body, allows the dentist to diagnose the disease, identify etiological factors and establish pathogenetic mechanisms.

II. Educational goal:

2.1. The student should know:

- know the anatomical, histological structure of the tissues of the oral cavity;
- the influence of autoimmune reactions of the body on the state of the mucous membrane of the oral cavity;
- forms of vesicles;
- pathophysiological processes in the dystrophy of the oral cavity;
- methods of subjective and objective examination of patients with changes in the oral mucosa in dermatoses with an autoimmune component;
- principles of treatment and prevention of vesiculitis.

2.2. Be able to:

- to identify the relationship between changes in the oral mucosa and the presence of dermatoses with an autoimmune component;
- collect complaints, anamnesis of the disease;
- apply basic and additional methods of examination of the patient with dermatoses with an autoimmune component;
- to establish the presence of dermatoses with an autoimmune component based on the presence of changes in the oral mucosa;
- to conduct a differential diagnosis of changes in the oral mucosa in dermatoses with an autoimmune component;
- to draw up a treatment plan for dental patients with dermatoses with an autoimmune component.

III. Contents of the topic.

Blistering disease

This term unites a group of chronic dermatoses of unclear etiology, which differ in their course, clinical picture, and pathological anatomy, characterized by homogeneous blistering.

According to M.D. Sheklakov (1961), the following forms of vesicular disease are distinguished:

A. Vesicular disease with acantholytic blistering - true vesicular disease, which is divided into vulgar, vegetative, leafy, seborrheic (erythematous), or Senier-Asher syndrome.

B. Benign chronic familial vesicular disease of Huguereau-Haley-Haley.

B. Vesicular disease with non-acantholytic blistering - pemphigoid: a) actual non-acantholytic vesicle (Lever's bullous pemphigoid); b) vesicle of the eyes (synechial atrophic bullous dermatitis of Lor-ta-Jacob); c) benign non-acantholytic vesicle of SOPR only.

In the practice of a dentist, the most commonly encountered is true (acantholytic) pemphigus - a serious disease, the essence of which is acantholysis of cells of the squamous (malpighian) layer of the epidermis and mucous membrane, which leads to the formation of non-inflammatory intraepithelial and intraepidermal blisters.

The etiology of bullous disease has not yet been established. There are a number of theories: viral, bacterial, endocrine, neurogenic, enzyme, toxic, hereditary origin and the theory of salt retention. Today, the most common theory is the theory of autoimmune genesis of vesicles.

Classification. There are 4 clinical forms of true acantholytic vesicles: vulgar, vegetative, leaf-shaped and seborrheic (erythematous), or Sjögren-Asher syndrome.

Pemphigus vulgaris affects men and women, mostly in their 50s and 60s. However, vulgar and vegetative vesicles are more common in women, while lichen planus and seborrheic vesicles are equally common in men and women, regardless of profession and place of residence.

Vulgar pemphigus vulgaris. Among the varieties of acantholytic pemphigus, it accounts for 75%. The oral mucosa in this form is affected in most patients, and for a long time this lesion may be the only manifestation of the disease. Most often, the lesions are localized and are located on the soft palate, in the retromolar region cheeks, on the floor of the mouth, lips, gums (desquamative gingivitis) and pharynx.

Vegetative pemphigus (pemphigus vegetans). Very often, the first signs of this form of pemphigus are found in the oral cavity, with the cheeks, closer to the corners of the mouth, tongue and palate being affected. The blisters that form are usually smaller than those of pemphigus vulgaris. After their lids are broken, which mostly goes unnoticed, erosions covered with a dirty gray coating form.

Pemphigus foliaceus begins suddenly against the background of a good general condition of the patient: in some patients, flat, flaccid blisters and crusts appear on the skin of the face and scalp, and the lesion remains localized for a long time; in others, the process generalizes very quickly: almost the entire skin is affected.

Pemphigus erythema - tosus, or Sjögren-Ascher syndrome, is an unusual type of blistering that is quite rare and resembles lupus erythematosus, seborrheic dermatitis, and pemphigus vulgaris. This form is often transformed into a leaf-shaped or vulgar form. The seborrheic form begins with the appearance of rashes on the skin of the face, which are arranged in the form of a butterfly. The rashes are erythematous foci on the background of oily seborrhea with a layer of thin or loose yellow crusts.

IV. Control questions to the topic of the lesson:

1. What is a vesicle?
2. Clinical forms of vesicles.
3. What is the etiology and pathogenesis of vesicles?
4. What are the subjective manifestations of vesicles in the clinical examination of patients?
5. What are the objective manifestations of vesicles in the clinical examination of patients?
6. Name additional methods of examination of patients with vesicles.
7. Clinical and laboratory methods of research in benign vesicles.
8. The tactics of the dentist in the treatment of patients with vesicles.
9. Features of local treatment of patients with vesicles.
10. Features of the general treatment of patients with vesicles.

V. Control test tasks and/or case studies:

1. A 62-year-old patient complains of painful blisters that quickly burst and form an erosive surface. An objective examination revealed a positive Nikolsky's symptom. Cytologic examination revealed acantholytic cells of the malpighian layer of the epidermis (Tzank cells). Establish the diagnosis:

- A. Pemphigoid
- B. Herpetic stomatitis
- C. Multiform exudative erythema

D. Chancre

E. Vesicle

2. The cytological examination of the material taken from the patient's oral cavity revealed epithelial cells with one or more hyperchromatic loose nuclei and vacuoles, dark blue cytoplasm. Multinucleated epithelial cells are also observed. What disease is this characteristic of?

A. Vulgar vesicle

B. Herpes

C. Shingles of the skin

D. Foot and mouth disease

E. AIDS

3. A 55-year-old woman has a preliminary diagnosis of vulgaris vesiculosa. What additional examination is necessary to determine the final diagnosis?

A. Virological

B. Immunological

C. Cytological

D. Bacteriological

E. Allergic

4. A 60-year-old woman has a preliminary diagnosis of vulgar vesicle. She is sent for cytologic examination. What is likely to be found on it?

A. Cells of ballooning dystrophy

B. Giant multinucleated cells

C. Tzank cells

D. Atypical cells

E. Pirogov-Langhans cells

5. A 50-year-old woman was diagnosed with vulgar vesicle. What drugs should be prescribed in this case?

A. Corticosteroids, cytostatics

B. Antibiotics, vitamins

C. Antiviral, immunomodulatory

D. Anti-allergic, anti-inflammatory

E. Antiseptic, keratoplastic

6. A 60-year-old female patient complains of unpleasant sensations in the throat when swallowing, the appearance of bubbles in the mouth. She considers herself sick for 3 months. Objectively: erosions with fragments of bubbles were found on the palate and gums of the upper jaw. Nikolsky's symptom is positive. What is the preliminary diagnosis?

A. Herpetiform dermatitis of Durringa

B. Erythema exudatum multiforme

C. Acute herpetic stomatitis

D. Non-acantholytic vesicles

E. Vulgar vesicle

7. Patient A., 50 years old, complains of pain while eating and talking. The doctor noted Nikolsky's symptom. Cytological examination: Tzank's cells. Diagnosis: Pemphigus vulgaris. What primary morphologic element of the lesion should be detected in this case?

A. Nodule

B. Erosion

C. Blister

D. Aphtha

E. Plaque

8. In case of vulgar vesicle in the cytological preparation are determined:

- A. Cells of ballooning dystrophy
 - B. Giant multinucleated cells
 - C. Tzank cells
 - D. Atypical cells
 - E. Pirogov-Langhans cells
9. For the general pathogenetic treatment of vulgaris vesiculosa prescribe:
- A. Antibiotics
 - B. Glucocorticoids
 - C. Vitamins
 - D. Hyposensitizing agents
 - E. Sedatives
10. For the local treatment of vulgaris vesiculosa prescribe:
- A. Corticosteroids
 - B. Antibiotics
 - C. Keratolytics
 - D. Proteolytic
 - E. Antifungal

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Lesson № 27

TOPIC: CHANGES IN THE ORAL MUCOSA IN DERMATOSES WITH AN AUTOIMMUNE COMPONENT. LICHEN PLANUS. ETIOLOGY, PATHOGENESIS, CLINIC, DIAGNOSIS. TACTICS OF THE DENTIST

I. Relevance of the topic: Lichen planus is a chronic disease manifested by the formation of keratinized papules on the skin and oral mucosa. Among the lesions of the oral mucosa (OM) in dermatoses, lichen planus is the most common and is an urgent problem of modern dentistry. Oral lichen planus most often occurs in middle-aged people, mainly women. Very rarely, this disease is observed in younger people, as well as in children. A thorough study of the patient's local status, taking into account general changes in the body, allows the dentist to diagnose the disease, identify etiological factors and establish pathogenetic mechanisms.

II. Educational goal:

2.1. The student should know:

- know the anatomical, histological structure of the tissues of the oral cavity;
- the influence of autoimmune reactions of the body on the state of the mucous membrane of the oral cavity;
- etiology, pathogenesis, clinical manifestations of lichen planus;
- forms of lichen planus;
- methods of subjective and objective examination of patients with changes in the oral mucosa in dermatoses with an autoimmune component;
- principles of treatment and prevention of lichen planus.

2.2. Be able to:

- to identify the relationship between changes in the oral mucosa and the presence of dermatoses with an autoimmune component (lichen planus);
- collect complaints, medical history;
- apply basic and additional methods of examination of the patient with dermatoses with an autoimmune component (lichen planus);
- to establish the presence of dermatoses with an autoimmune component based on the presence of changes in the oral mucosa;
- to conduct a differential diagnosis of changes in the oral mucosa in lichen planus;
- to draw up a treatment plan for dental patients diagnosed with lichen planus.

III. Contents of the topic.

Lichen ruber planus (Lichen ruber planus) is the chronic disease, which is manifested on the skin and the mucous membranes by formation of the keratinized papules. LRP oral mucosa is usually encountered in people of middle age, predominantly in women. Very rarely this illness can be found at younger age, and also in children.

Elements of lesion. Separate papules which appear on the skin are more often miliary. Their base is slightly infiltrated, round, oval, and sometimes elongated. Here at first the papules have lusterless colour, then they turn pink, reddish and even lilac-violet; sometimes longexisting papule turn brown. Since the papules are cornification, they slightly rise above the surrounding skin, The favourite places of the precipitations of papules LRP on the skin are flex- ible surfaces. On the hands – this is the region of radiocarpal joint. The development of disease is possible on mucosa membrane in different parts of gastrointestinal tract.

LRP of oral mucosa has predominantly two localizations: The most typical is the distal part of the cheek or the pear-shaped region, where the polygonal papules, after merging between themselves, form a figure in the form of fern leaves or grid; they are clearly defined and can be palpated. The tongue (dorsal and lateral surface), in which the signs of disease are

represented very diversely: the polygonal knots, which form an area either covered with scar-like strips as grids, the atrophic sections of oral mucosa, or hypertrophic papules.



Lichen planus, striate pattern. This is the most common site and type of lesion, a lacy network of white striae on the buccal mucosa. The lesions are usually symmetrically distributed.



Lichen planus, atrophic type. There are shallow irregular zones of erythema surrounded by poorly defined striae.



Severe erosive lichen planus. Thick plaques of fibrin cover extensive ulcers on the dorsum of the tongue in this case.

IV. Control questions to the topic of the lesson:

1. What is lichen planus?
2. What is the etiology and pathogenesis of lichen planus?
3. Name the clinical forms of lichen planus.
4. What are the subjective manifestations of lichen planus in the clinical examination of patients?
5. What are the objective manifestations of lichen planus in the clinical examination of patients?
6. Name additional methods of examination of patients diagnosed with lichen planus.
7. Clinical and laboratory methods of research in lichen planus.
8. The tactics of the dentist in the treatment of patients with lichen planus.
9. Features of local treatment of patients diagnosed with lichen planus.
10. Features of the general treatment of patients diagnosed with lichen planus.

V. Control test tasks and/or case studies:

1. The patient, 45 years old, complains of a feeling of tightness of the buccal mucosa, roughness, unpleasant sensation. Objectively: whitish-gray areas on the buccal mucosa, slightly elevated above its level and prone to fusion in the form of a lace pattern, are localized in the posterior parts of the oral cavity. The surface of the area is not scraped off. What disease is characterized by such a clinical picture?
 - A. Secondary syphilis
 - B. Lichen planus
 - C. Verrucous leukoplakia
 - D. Chronic hyperplastic candidiasis
 - E. Lupus erythematosus
2. A woman, 44 years old, complained of hoarseness of voice, rashes on the oral mucosa. Examination of the right cheek mucosa and retromolar space revealed erosions measuring 2×3 mm on an unchanged background. Hyperemia was observed in the affected area. Nikolsky's symptom was negative. The cytogram from the lesion shows individual epithelial cells of the superficial layers. A large number of young epithelial cells. There are cells with dyskeratosis phenomena. A large number of leukocytes. The diagnosis was made: tinea versicolor. Determine the form of the disease.
 - A. Atypical form
 - B. Hypertrophic form
 - C. Pemphigoid form
 - D. Erosive and ulcerative form
 - E. Exudative and hyperemic form
3. A woman, 50 years old, complained of hoarseness of voice, rash on the oral mucosa. On examination, the mucous membrane of the right cheek and retromolar space shows Wickham's symptom. How is Wickham's symptom manifested on the oral mucosa?
 - A. When pulling on a fragment of the bladder lid, the upper layers of the epidermis are detached within the apparently healthy mucosa.
 - B. The location of the lesions is linear at the sites of excoriation.
 - C. Small whitish dots intertwine in the form of a spider web, lace or fern leaf, which can be seen through the stratum corneum.
 - D. Pulling on the tire of an unopened blister increases its area.
 - E. Sharp contrast between the cyanotic soft palate and the pale color of the hard palate.
4. A woman, 50 years old, complained of hoarseness of the voice, rashes on the oral mucosa. On examination, the mucous membrane of the right cheek and retromolar space are observed

nodules with vesicles with serous-bloody contents. For which form of lichen planus is this characteristic?

- A. Atypical form
 - B. Hypertrophic form
 - C. Pemphigoid form
 - D. Erosive and ulcerative form
 - E. Exudative and hyperemic form
5. During prosthetics, the patient's typical form of lichen planus has developed into an erosive ulcerative form. What should the dentist do for further successful treatment of the patient?
- A. Change the patient's diet
 - B. Adjust the dentures
 - C. Change the method of treatment
 - D. All answers are correct
 - E. None of the answers are correct
6. What are the primary elements of the oral mucosa lesion characteristic of lichen planus?
- A. Nodule, blister
 - B. Tubercle, pustule
 - C. Blister, cyst
 - D. All answers are correct
 - E. None of the answers are correct
7. What form of lichen planus is it if the papules are located against the background of edema and hyperemia of the oral mucosa?
- A. Atypical form
 - B. Hypertrophic form
 - C. Pemphigoid form
 - D. Erosive and ulcerative form
 - E. Exudative and hyperemic form
8. What are the secondary elements of the oral mucosa lesion characteristic of lichen planus?
- A. Cracks, vegetation
 - B. Erosion, ulceration
 - C. Scales, lichenization
 - D. All answers are correct
 - E. None of the answers are correct
9. In what form of lichen planus, vesicles with serous or serous-bloody contents are formed next to typical nodules?
- A. Atypical form
 - B. Hypertrophic form
 - C. Pemphigoid form
 - D. Erosive and ulcerative form
 - E. Exudative-hyperemic form
10. What changes in the epithelium occur in the case of lichen planus:
- A. Spongiosis
 - B. Hyperkeratosis
 - C. Papillomatosis
 - D. All answers are correct
 - E. None of the answers are correct

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Lesson № 28

TOPIC: CHANGES IN THE ORAL MUCOSA IN DERMATOSES WITH AN AUTOIMMUNE COMPONENT. PEMPHIGOIDS.

I. Relevance of the topic: Pemphigoid (in contrast to blistering) is characterized by severe inflammation, lack of acantholysis, subepithelial blistering, negative Nikolsky's symptom and absence of acantholytic cells in the cytological examination of erosion material. Pemphigoid affects the elderly and senile. Its course is benign; the general condition of patients is not much affected, the prognosis is favorable. The study of the patient's local status, taking into account general changes in the body, allows the dentist to diagnose the disease, identify etiological factors and establish pathogenetic mechanisms.

II. Educational goal:

2.1. The student should know:

- know the anatomical, histological structure of the tissues of the oral cavity;
- the influence of autoimmune reactions of the body on the state of the mucous membrane of the oral cavity;
- etiology, pathogenesis, clinical manifestations of pemphigoid;
- forms of pemphigoid;
- methods of subjective and objective examination of patients with changes in the oral mucosa in dermatoses with an autoimmune component;
- principles of treatment and prevention of pemphigoid.

2.2. Be able to:

- to identify the relationship between changes in the oral mucosa and the presence of dermatoses with an autoimmune component (pemphigoid);
- collect complaints, medical history;
- to apply basic and additional methods of examination of the patient with dermatoses with an autoimmune component (pemphigoid);
- to establish the presence of dermatoses with an autoimmune component based on the presence of changes in the oral mucosa;
- to conduct a differential diagnosis of changes in the oral mucosa of a patient with pemphigoid;
- to draw up a treatment plan for dental patients diagnosed with pemphigoid.

III. Contents of the topic.

Nonacantholytic vesicles. Non-acantholytic manifestations of vesicles (pemphigoid) include: non-acantholytic vesicles (Lever's bullous pemphigoid); vesicles of the eyes (mucosal-synecological atrophic dermatitis of Lort-Jacob, mucocutaneous chronic bullous dermatitis); benign non-acantholytic vesicles of oral mucosa only.

The etiology of diseases of the non-acantholytic vesicles group is unknown.

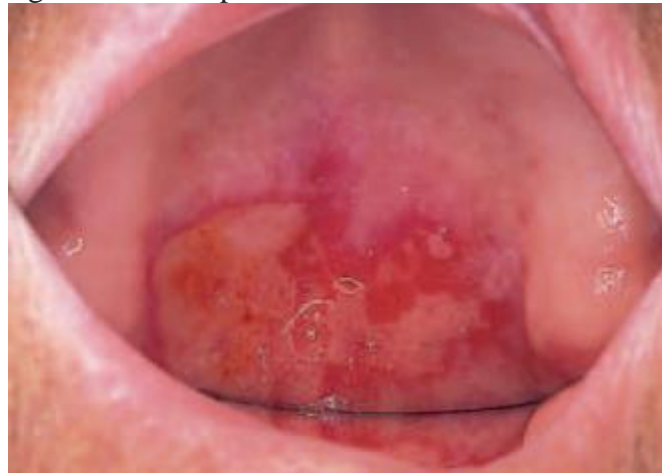
Pemphigoid (in contrast to vesiculitis) is characterized by severe inflammation, absence of acantholysis, subepithelial blistering, negative Nikolsky's symptom and absence of acantholytic cells in the cytological examination of erosion material. Pemphigoid affects the elderly and senile. Its course is benign; the general condition of patients is not much affected, the prognosis is favorable.

Actually non-acantholytic vesicle (bullous pemphigoid). Recently, some authors have considered bullous pemphigoid as a toxic-allergic reaction in toxicosis, tumors, diseases of internal organs and systems in the presence of focal infection in the body. At the same time, immunoglobulin class G (IgG) is detected in the basement membrane area, which has tropism to it.

Clinical manifestations. Non-acantholytic vesiculitis is manifested by a rash of blisters 5-20 mm in diameter, which occur against the background of hyperemia and tissue

edema. Bullous pemphigoid is observed mainly in people over 60 years of age, rarely in children. The primary localization of blisters is on the extremities and trunk.

Lesions of oral mucosa occurs in no more than 50% of patients. The blisters occur on an eczematous or erythematous background. As a rule, they are round in shape, tense, their contents are serous, often hemorrhagic; erosions epithelialize quickly (in 3-4 weeks), there is no peripheral spread. Nikolsky's symptom is rarely caused, acantholytic cells are not detected. Histologic examination of a fresh rash reveals the absence of acantholysis and subepithelial placement of blisters. Direct immunofluorescence (DIF) reveals an accumulation of circulating immune complexes in the basement membrane.



Mucous membrane pemphigoid. Typical oral presentation with persistent erythema and ulceration of the palate. On close examination tags of epithelium are sometimes seen at the ulcer margins.



Desquamative gingivitis as a result of mucous membrane pemphigoid. There is patchy reddening involving the attached gingivae around several teeth and in places the erythema extends to the alveolar mucosa. Unlike desquamative gingivitis caused by lichen planus, there are no flecks or striae and occasionally tags of separating epithelium may be found.

IV. Control questions to the topic of the lesson:

1. What is a pemphigoid?
2. What is the etiology and pathogenesis of pemphigoid?
3. Name the types of pemphigoid.
4. What are the subjective manifestations of pemphigoid?
5. What are the objective manifestations of pemphigoid?
6. Name additional methods of examination of patients diagnosed with pemphigoid.
7. Clinical and laboratory methods of research in pemphigoid.
8. Tactics of the dentist in the treatment of patients with pemphigoid.
9. Features of local treatment of patients diagnosed with pemphigoid.

10. Features of the general treatment of patients diagnosed with pemphigoid.

V. Control test tasks and/or situational tasks:

1. Patient 55 years old complains of pain while eating, the presence of erosion on the oral mucosa. first became ill more than a month ago. Objectively: on the unchanged gingival membrane of the soft palate and the rims there are large erosions of bright red color. The mucosa is easily injured and exfoliates during friction. Painful sensations are insignificant. In the smears - imprints of Tzank's cell. Determine the diagnosis.

- A. Vulgar vesicle
- B. Lever's bullous pemphigoid
- C. Benign non-acantholytic vesicle
- D. Erythema exudatum multiforme
- E. Bullous form of lichen planus

2. Woman O., 55 years old, complains of ulcers in the oral cavity, pain when eating and talking. The disease began suddenly more than a month ago. On examination: apparently unchanged mucous membrane of the gums, soft palate and palatal rims, large erosions of bright red color. The intact mucosa easily exfoliates with slight friction with the formation of erosions, bleeding. Which diagnostic sign is the leading one in the differential diagnosis of the disease?

- A. Tzank's cells in the smear prints
- B. Positive Nikolsky's symptom
- C. The presence of blisters in the oral cavity
- D. The presence of Wickham's grid
- E. The presence of macrophages in the smear-prints

3. Patient A., 56 years old, came to the clinic with complaints of rapidly bursting blisters on the mucous membrane of the hard and soft palate. Examination of the unchanged palatal mucosa reveals erosions with fragments of epithelium that easily peel off when pulled by an instrument. Determine the most likely diagnosis?

- A. Vulgar vesicle
- B. Erythema exudatum multiforme
- C. Herpetiform dermatitis of Durring
- D. Chronic recurrent aphthous stomatitis
- E. Herpetic stomatitis

4. A 24-year-old patient complains of pain in the tongue while eating and talking for 2 weeks. On examination, the mucous membrane of the lateral surface of the tongue on the right side has an irregular ulcer covered with necrotic plaque. The edges of the ulcer are hyperemic, painful to palpation. Crowns 46, 47 are destroyed. What are the primary actions of the dentist?

- A. Elimination of traumatic factors
- B. Anesthesia of the lesion
- C. The use of anti-inflammatory drugs
- D. The use of keratoplastic agents
- E. Surgical treatment

5. A 56-year-old woman complains of gingival tenderness when eating hard foods. She has been ill for a year and a half, when an "ulcer" and gum pain first appeared. Within a month, the gums "heal". Objectively: on the apparently unchanged gingival mucosa, erosive surfaces of bright red color, slightly painful, are determined. On the gingiva in area 14, there is a 0.5 cm in diameter bubble with transparent contents. Nikolsky's symptom is negative. What is the most likely diagnosis?

- A. Benign non-acantholytic vesicle of the oral mucosa only
- B. Bowen's disease

C. Bullous pemphigoid

D. Vulgar vesicle

E. Herpetiform dermatitis of Durring

6. A 55-year-old patient complains of pain while eating, erosion of the oral mucosa, hoarseness of the voice. She first became ill more than a month ago. On examination, large bright red erosions were found on the unchanged mucous membrane of the gums, soft palate and arch. The mucous membrane is easily injured and exfoliates with slight friction with the appearance of erosions. The pain is insignificant. Name the most likely diagnosis.

A. Vulgar vesicle

B. Bullous pemphigoid

C. Benign non-acantholytic vesicle of the oral mucosa only

D. Bullous form of lichen planus

E. Multiform exudative erythema

7. A 47-year-old patient complains of pain in the oral cavity, which increases with eating and talking. Objectively: oval erosions in the retromolar area on both sides, painful to palpation, on the unchanged mucosa. Nikolsky's symptom is positive. What is the most likely diagnosis?

A. Vulgar vesicle

B. Erythema exudatum multiforme

C. Chronic recurrent aphthous stomatitis

D. Acute herpetic stomatitis

E. Bullous form of lichen planus

8. The form of blistering that is most severe:

A. Vulnerable

B. Leaf-shaped

C. Vegetative

D. Non-acantholytic

9. The true and false forms of vesicles are different:

A. Clinic

B. The course

C. Prognosis

D. Treatment

10. A 72-year-old patient complains of periodic appearance of blisters and erosions in the mouth. On the mucous membrane of the cheek there is a blister up to 1 cm in diameter, with hyperemia around it. Subepithelial location of the blister. No acantholytic cells were found. Diagnosis:

A. Vulgar vesicle

B. Leafy vesicle

C. Herpetiform dermatitis of Durings

D. Benign non-acantholytic vesicle of the oral cavity

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Lesson № 29

TOPIC: CHANGES IN THE ORAL MUCOSA IN DERMATOSES WITH AN AUTOIMMUNE COMPONENT. LUPUS ERYTHEMATOSUS. TACTICS OF THE DENTIST.

I. Relevance of the topic: Lupus erythematosus is an autoimmune disease in which skin lesions and oral mucosa are persistent, clearly demarcated red-pink spots of inflammatory nature, round, oval or garland-like in shape. The spots slowly increase in size along the periphery and merge, forming red symmetrical lesions, accompanied by infiltration of the deep layers, hyperkeratosis, and development of scarring atrophy in the center of the lesion. The study of the etiology, pathogenesis and clinical manifestations of this disease is important for understanding the mechanisms of occurrence and early diagnosis in the practice of a dentist.

II. Educational objective:

2.1. The student should know:

- know the anatomical, histological structure of the tissues of the oral mucosa;
- the influence of autoimmune reactions of the body on the state of the mucous membrane of the oral cavity;
- etiology, pathogenesis, clinical manifestations of lupus erythematosus;
- forms of lupus erythematosus;
- methods of subjective and objective examination of patients with changes in the oral mucosa in lupus erythematosus;
- principles of treatment and prevention of lupus erythematosus.

2.2. Bimim:

- to identify the relationship between changes in the oral mucosa and the presence of dermatoses with an autoimmune component (lupus erythematosus);
- collect complaints, medical history;
- to apply basic and additional methods of examination of the patient with dermatoses with an autoimmune component (lupus erythematosus);
- to establish the presence of dermatoses with an autoimmune component based on the presence of changes in the oral mucosa;
- to conduct a differential diagnosis of changes in the oral mucosa of a patient with lupus erythematosus;
- to draw up a treatment plan for dental patients diagnosed with lupus erythematosus.

III. Contents of the topic.

Lupus erythematosus is an autoimmune disease in which skin lesions and oral mucosa are persistent, clearly defined red-pink inflammatory spots of a round, oval or garland-like shape. The spots slowly increase in size along the periphery and merge, forming red symmetrical lesions, accompanied by infiltration of the deep layers, hyperkeratosis, and development of scarring atrophy in the center of the lesion.

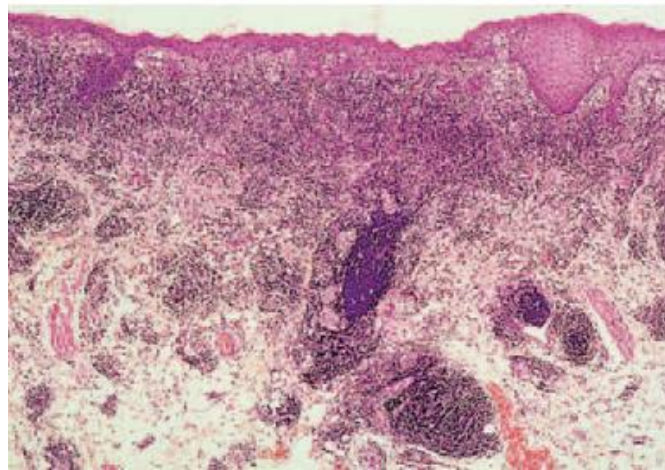
The disease requires two factors: a hereditary predisposition and some factor that can trigger the disease. In most cases, these are a viral infection, certain medications (hydralazine derivatives, antibiotics), and strong sun exposure.

Etiology. For some time, CF was considered to be a disease of tuberculosis origin (due to the similarity of its clinical picture to that of tuberculous lupus). Some authors consider it as an angioedema, a consequence of intoxication, a viral disease, a manifestation of infectious allergy, a focal infection (because with the removal of the foci of infection, the course of the process improves, even recovery) or as a manifestation of collagen disease (systemic mesenchymal damage).

Clinical course. The course of chronic lupus erythematosus has 3 stages: erythematous (inflammatory), plaque formation, and end-stage (scarring).



Lupus erythematosus. The clinical presentation is often very similar to lichen planus, with ulceration, atrophy and striae. Lesions on the soft palate or with radiating striae, as here, should be investigated for lupus erythematosus.



Lupus erythematosus. The histological picture is similar to that seen in lichen planus, with a subepithelial band of lymphocytes, basal cell degeneration and epithelial atrophy. The dense perivascular infiltrates of lymphocytes in the deeper tissues are characteristic of lupus erythematosus

IV. Control questions to the topic of the lesson:

1. What is lupus erythematosus?
2. What is the etiology and pathogenesis of lupus erythematosus?
3. Name the types of lupus erythematosus.
4. What are the subjective manifestations of lupus erythematosus?
5. What are the objective manifestations of lupus erythematosus?
6. Name additional methods of examination of patients diagnosed with lupus erythematosus.
7. Clinical and laboratory methods of research in lupus erythematosus.
8. Tactics of the dentist in the treatment of patients with lupus erythematosus.
9. Features of local treatment of patients diagnosed with lupus erythematosus.
10. Features of the general treatment of patients diagnosed with lupus erythematosus.

V. Control test tasks and/or case studies:

1. "Lupus erythematosus is a disease of:"
 - A. Hereditary
 - B. Endocrine
 - C. Infectious and allergic

D. Neurogenic

2. "The factor that most often provokes an exacerbation of lupus erythematosus is:"

A. Mechanical trauma

B. Ultraviolet rays

C. Overwork

D. Virus

3. "The element of the lesion that first appears in lupus erythematosus is:"

A. Scar

B. Papule

C. Atrophy

D. Erythema

4. Disease characterized by false polymorphism of rashes:

A. Lupus erythematosus

B. Operative lichen planus

C. Blistering

D. Erythema exudatum multiforme

5. Disease in which there is a symptom of "butterfly" (lesions of the skin on the cheeks and nasal septum):

A. Tuberculous lupus erythematosus

B. Malignant vesicle

C. Lupus erythematosus

D. Psoriasis

6. A 36-year-old woman complains of dryness and peeling of the red border of the lower lip. Dryness and peeling have been disturbing for a month. Lubrication with indifferent ointments has no effect. Objectively: the red border of the lower lip is deep red, moderately infiltrated, covered with densely packed whitish-gray scales, which cause pain and bleeding when trying to remove them. On the periphery of the lesion, areas of epithelial opacity in the form of unevenly expressed white stripes are determined, and in the center of the lesion - areas of depression. What is the most likely diagnosis?

A. Candida cheilitis

B. Lichen planus red

C. Leukoplakia

D. Lupus erythematosus

E. Exfoliative cheilitis

7. A 53-year-old female patient complains of pain in the mucous membrane of the cheek and the lateral surface of the tongue on the right. Objectively: there are erosions on the mucous membrane of the cheek and tongue, which are painful and bleed when touched. Around the erosions on the slightly hyperemic mucosa there are keratinized papules up to 1 mm in size, which merge into a reticular pattern. The papules cannot be removed with a spatula. What is the most likely diagnosis?

A. Mild leukoplakia

B. Vulgar vesicle

C. Acute pseudomembranous candidiasis

D. Multiform exudative erythema

E. Lichen planus red

8. A 53-year-old patient complains of a feeling of tightness of the mucous membrane, red border and skin of the face, its roughness. Objectively: the cheek lesion is dark red in color, which has the shape of a butterfly. The red border of the lips is infiltrated, dark red in color, densely filled with hyperkeratotic scales. When trying to remove them, pain and bleeding occur. What disease is characterized by such a clinical picture?

- A. Tinea versicolor.
- B. Lupus erythematosus.
- C. Secondary syphilis.
- D. Chronic hyperplastic candidiasis.
- E. Tuberculous lupus.

8. Patient M., 45 years old, came for oral cavity sanitation. Anamnesis: mild form of diabetes. On examination: against the background of unchanged mucous membrane of the cheeks, whitish polygonal papules were found symmetrically, mainly in the retromolar area. They barely rise above the level of the mucous membrane and, merging, form a lace pattern. There are two soldered bridges on the upper jaw, an amalgam filling in the 47th tooth, and a steel crown on the 46th tooth. What is the most likely diagnosis?

- A. Lupus erythematosus
- B. Chronic atrophic candidiasis
- C. Galvanosis
- D. Leukoplakia
- E. Red tinea versicolor

9. Patient V., 30 years old, complains of burning lips, pain in the mouth when eating. For several days she has been experiencing pain in the joints, in the heart and kidneys, and skin rashes. Objectively, there are bright red plaques with edema on the lips and cheek mucosa, single vesicles with bloody contents, erosions, which form atrophic scars when healed. LE cells and antibodies to native DNA were found in the blood. What is the most likely preliminary diagnosis?

- A. Secondary syphilis
- B. Leprosy
- C. Lupus erythematosus
- D. Miliary ulcerative tuberculosis
- E. Acute herpetic stomatitis

10. Patient V., 20 years old, was preliminarily diagnosed with dermatitis herpetiformis. What changes in laboratory parameters are characteristic of this disease:

- A. Eosinophilia in the blood
- B. Eosinophilia in the contents of the blisters
- C. Neutropenia
- D. Thrombocytopenia
- E. Lymphocytosis

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Lesson № 31

TOPIC: ANAPHYLACTIC SHOCK. QUINCKE'S EDEMA. CAUSES, CLINICAL MANIFESTATIONS, EMERGENCY CARE. ETIOLOGY, PATHOGENESIS, CLINIC, DIAGNOSIS, TREATMENT AND PREVENTION. ALLERGIC DRUG STOMATITIS. ETIOLOGY, PATHOGENESIS, CLINIC, DIAGNOSIS, TREATMENT AND PREVENTION.

I. Relevance of the topic: anaphylactic shock and Quincke's edema are immediate allergic reactions that develop within minutes after a specific allergen enters the body. Anaphylactic shock is a generalized anaphylactic reaction due to the interaction of the injected AG with cytophilic AT. Quincke's edema is a localized accumulation of a large amount of exudate in the connective tissue, most often in the area of the lips, eyelids, external genitalia, as well as the tongue and larynx. The study of the causes, frequency, clinical manifestations of allergic diseases and their modern methods of treatment and prevention is important for dentists.

II. Educational objective:

2.1. The student should know:

- know the etiology and pathogenesis of allergies;
- types and stages of allergic reactions, have an idea of the frequency and prevalence of clinical manifestations of allergy;
- clinic of allergic reactions of immediate type;
- clinic of delayed allergic reactions;
- methods of examination of patients with allergic diseases;
- principles of treatment and prevention of allergic diseases.

2.2. Be able to:

- identify the manifestations of anaphylactic shock;
- identify clinical signs of Quincke's edema;
- identify delayed allergic reactions;
- to conduct differential diagnosis of changes in the oral mucosa of a patient with allergic reactions;
- to draw up a treatment plan for dental patients with allergic reactions;
- to draw up a prevention plan to prevent the occurrence of allergic reactions.

III. Contents of the topic.

IMMEDIATE ALLERGIC REACTIONS

These reactions include anaphylactic shock, Quincke's edema, and urticaria. They develop within a few minutes after a specific drug enters the body.

ANAPHYLACTIC SHOCK

Anaphylactic shock (choc anaphylacticus) is a generalized anaphylactic reaction when the injected AG interacts with cytophilic AT.

Clinic. Anaphylactic shock is the highest degree of manifestation of an immediate allergic reaction. It develops suddenly in a few minutes or even immediately after the administration of the drug. The patient shows anxiety caused by a feeling of fear, heat, chest tightness. He is concerned about shortness of breath, which is frequent at first, then becomes convulsive; nausea, vomiting, profuse sweating, flushing of the skin, headache, and a feeling of throbbing in the head. These symptoms are followed by loss of balance, falls, and convulsions. Involuntary urination and defecation occur.

QUINCKE'S EDEMA

Quincke's edema (oedema Quincke) is a localized accumulation of a large amount of exudate in the connective tissue, most often in the area of the lips, eyelids, external genitalia, as well as the CO of the tongue and larynx.

Swelling appears quickly, persists for several hours to 2 days, and disappears without leaving any changes. If localized in the larynx, stenotic asphyxia may develop. Diseases is

recurrent. Often, such patients know the allergen, especially if it is found in food, so stopping their use helps prevent relapses. The edema has an elastic consistency. The tissues in the area of edema are tense, but no "dimple" is formed during palpation. In case of Quincke's edema, there is a violation of the systems of deactivation and inhibition of barbiturates. It develops in case of hereditary deficiency of an inhibitor common to kallikrein and complement; in case of insufficiency of enzymes that destroy the BAR, dysfunction of the organs that deactivate the BAR. In these patients, activation of BARs occurs very easily, which can be caused not only by the AG-AT complex, but also by non-immune agents (e.g., cold).

IV. Control questions to the topic of the lesson:

1. Define the concept of "allergy".
2. Types of allergic reactions that occur in the maxillofacial region.
3. Name the causes of anaphylactic shock.
4. Name the causes of Quincke's edema.
5. Clinical manifestations of anaphylactic shock.
6. Clinical manifestations of Quincke's edema.
7. Features of emergency care in allergic reactions.
8. Laboratory methods for the diagnosis of allergic reactions.
9. Clinical signs of drug and contact allergic stomatitis.
10. Principles of treatment of allergic diseases in the maxillofacial area.
11. Specify measures for the prevention of allergic reactions.

V. Control test tasks and/or case studies:

1. The patient has anaphylactic shock. How much epinephrine should be administered in the first place?
 - A. 1.2-1.3 ml of 0.1% epinephrine solution
 - B. 0.2-0.3 ml of 0.1% epinephrine solution
 - C. 1 ml of 0.1% epinephrine solution
 - D. 0.5 ml of 0.1% epinephrine solution
 - E. 2 ml of 0.1% epinephrine solution
2. The diagnosis is anaphylactic shock. How is the epinephrine solution administered according to the protocol?
 - A. Subcutaneously in the forearm
 - B. Prick around the injection site
 - C. Intramuscularly in the middle of the outer thigh
 - D. Make an intracardiac injection
 - E. Intramuscularly in any part of the body
3. A diagnosis of erosive drug-induced allergic stomatitis has been made. What type of allergic reaction is this?
 - A. Atypical
 - B. Immunocomplex
 - C. Reaginous
 - D. Cellular
 - E. Cytotoxic
4. What is the most effective method of treating allergies?
 - A. Detoxification
 - B. Hyposensitization
 - C. Elimination
 - D. Inactivation
 - E. Vitaminization

5. What changes in the patient's blood test will indirectly confirm the allergic nature of the disease?
- A. Neutrophilia
 - B. Eosinophilia
 - C. Lymphocytosis
 - D. Monocytosis
 - E. Agranulocytosis
6. The patient was diagnosed with Quincke's edema. What type of allergic reaction is this?
- A. Immediate type
 - B. Delayed type
 - C. Delayed type
 - D. Fast type
 - E. Conditional type
7. A 32-year-old patient, 10 minutes after anesthesia, developed tachycardia, dyspnea, cyanosis, and loss of consciousness. Diagnosis: anaphylactic shock. Later it turned out that she had chronic bronchitis and was 12 weeks pregnant. What type of allergic reaction is this? type of allergic reaction?
- A. Cellular
 - B. Reaginous
 - C. Cytotoxic
 - D. Immunocomplex
 - E. Atypical
8. A 43-year-old patient, after anesthesia, developed tachycardia, dyspnea, cyanosis, and loss of consciousness. Diagnosis: anaphylactic shock. Later it turned out that the patient was intolerant to sulfonamides. Where did the doctor go wrong?
- A. He chose the wrong anesthetic
 - B. He did not take into account cross-determinants
 - C. Poorly collected the patient's history
 - D. Did not take into account concomitant pathology
 - E. Did not take into account pregnancy
9. Patient A., 31 years old, complains of lip enlargement, itching, burning, redness. The patient associates her condition with the use of sunscreen during the rest at sea. On examination: the lips are enlarged, tense, bright red, covered with fine silver scales. On palpation, they are firm, elastic, painless, lymph nodes are not changed. What ointment should be used to relieve acute inflammation?
- A. Retinol ointment
 - B. Heparin ointment
 - C. Hydrocortisone ointment
 - D. Lanolin
 - E. Lidocaine
10. During the examination of a woman A., 34 years old, with erosive lesions of the esophagus, the doctor suggested an allergic genesis of the disease and sent her to the laboratory for a complete blood count. What changes in the blood test of this patient will indirectly confirm the allergic nature of the disease?
- A. Monocytosis
 - B. Neutrophilia
 - C. Lymphocytosis
 - D. Eosinophilia
 - E. Agranulocytosis
 - E. Atypical

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Lesson № 32

TOPIC: ERYTHEMA EXUDATUM MULTIFORME. STEVENS-JOHNSON SYNDROME. ETIOLOGY, PATHOGENESIS, CLINICAL MANIFESTATIONS, DIAGNOSIS, TREATMENT AND PREVENTION.

I. Relevance of the topic: Allergic reactions of delayed type are realized not by humoral ATs, but by cellular ones, primarily T-lymphocytes - subpopulations of killer cells and mediators of delayed hypersensitivity. These reactions exist in the body primarily for immune surveillance of its antigenic composition and removal of mutant clones of somatic cells of the body. Clinically, allergic lesions of delayed-type oral mucosa are manifested in the form of catarrhal, catarrhal-hemorrhagic, vesicular-erosive, ulcerative-necrotic stomatitis, CRAS, prosthetic stomatitis, Stevens-Johnson, Lyell syndromes, etc. Therefore, the study of the causes, frequency, clinical manifestations of allergic diseases and their modern methods of treatment and prevention is important for dentists.

II. Educational objective:

2.1. The student should know:

- know the etiology, pathogenesis of allergic reactions of immediate and delayed allergic reactions;
- types and stages of allergic reactions, have an idea of the frequency and prevalence of clinical manifestations of allergy;
- clinic of allergic reactions of immediate type;
- clinic of delayed allergic reactions;
- methods of examination of patients with allergic diseases;
- etiology and pathogenesis of erythema exudatum multiforme;
- etiology and pathogenesis of Stevens-Johnson syndrome;
- clinical manifestations of Stevens-Johnson syndrome;
- clinical manifestations of erythema exudatum multiforme;
- principles of treatment and prevention of allergic diseases.

2.2. Be able to:

- identify delayed allergic reactions;
- identify signs of erythema exudatum multiforme;
- identify signs of Stevens-Johnson syndrome;
- to conduct a differential diagnosis of changes in the oral mucosa of a patient with allergic reactions;
- to draw up a treatment plan for dental patients with allergic reactions;
- to draw up a prevention plan to prevent the occurrence of allergic reactions.

III. Contents of the topic.

Erythema exudativum multiforme is an allergic disease with an acute cyclic course, prone to relapses, manifested by polymorphism of skin rashes and oral mucosa. A single point of view on the etiology and pathogenesis of erythema exudatum multiforme (EE) has not yet been established: some authors consider it a multi etiologic disease, others consider it a viral disease, but most adhere to the view of infectious or non-infectious allergic nature.

According to clinical manifestations, there are 2 main forms of EAE:

- infectious-allergic and toxic-allergic. In the infectious allergic form, in most cases, it is possible to determine the causative allergen of microbial origin. The most realistic source of sensitization of the body is foci of chronic infection, and the provocative moment is usually acute respiratory infections, hypothermia, hyperthermia, exacerbation of chronic tonsillitis and diseases of internal organs, sinusitis, trauma.

STEVENS-JOHNSON SYNDROME

Stevens-Johnson syndrome was described in 1922. Synonyms include acute mucocutaneous and ocular syndrome, Baader's dermatostomatitis, or ectodermatosis with

localization near physiological openings - oral, nasal, vaginal, anal. The disease is an extremely severe form of EAE, which occurs with a significant impairment of the general condition of patients.

Etiology. Like Lyell's syndrome, Stevens-Johnson syndrome develops as a drug-induced disorder. In the process of development, it can transform into Lyell's syndrome. The drugs that cause this disease are non-steroidal anti-inflammatory drugs, sulfonamide drugs, etc. Recently, most researchers tend to believe that Stevens-Johnson, Fissange-Randoux, and BAE syndromes are the same pathological process caused by a virus.

The main changes occur in the integumentary epithelium. They are manifested by spongiosis, ballooning dystrophy; in the papillary layer of the lamina propria - by edema and infiltration.

IV. Control questions to the topic of the lesson:

1. Define the concept of "allergy".
2. Types of allergic reactions that occur in the maxillofacial region.
3. Name the causes of erythema exudatum multiforme.
4. Name the causes of Stevens-Johnson syndrome.
5. Clinical manifestations of erythema exudatum multiforme.
6. Clinical manifestations of Stevens-Johnson syndrome.
7. Features of emergency care in allergic reactions manifested in the maxillofacial area.
8. Laboratory methods for the diagnosis of allergic reactions manifested in the maxillofacial region.
9. Principles of treatment of allergic diseases in the maxillofacial region.
10. Specify measures for the prevention of allergic reactions that occur in the maxillofacial region.

V. Control test tasks and/or case studies:

1. A patient T., 36 years old, complained of a fever to 38.50 C, general weakness, skin rash, ulcers in the mouth, conjunctiva and genital mucosa. She did not engage in self-medication. Objectively: on the skin of the extremities, papules are determined, which fall in the center, acquiring the shape of a cockade. On the lips and oral mucosa, numerous erosions merging with each other, covered with yellow-gray fibrinous layers, are detected. Removal of the layers causes severe pain and is accompanied by bleeding. A complete blood count is prescribed for the purpose of differential diagnosis. Establish the diagnosis and interpret the hemogram parameters characteristic of this disease.
 - A. Stevens-Johnson syndrome. Leukocytosis, leukocyte shift to the left, lymphopenia, eosinopenia, increased ESR.
 - B. Chronic recurrent aphthous stomatitis
 - C. Behcet's syndrome
 - D. Multiform exudative erythema
 - E. Quincke's angioedema
2. Patient M., 42 years old, complains of a sharp increase in lip size, itching and a feeling of tension. The patient attributes her condition to the use of a new lipstick. On examination: the lips are greatly enlarged, tense, dense, elastic consistency, painless, regional lymph nodes are not changed. Choose the most likely diagnosis of the disease.
 - A. Stevens-Johnson syndrome
 - B. Chronic recurrent aphthous stomatitis
 - C. Behcet's syndrome
 - D. Multiform erythema exudatum
 - E. Contact allergic cheilitis
3. Patient K., 26 years old, complained of pain when eating, swelling of the gums, facial asymmetry, and enlargement of the upper lip. A few days later, the patient felt generalized

weakness. He self-medicated by taking Biseptol. Symptoms from the oral cavity appeared in 2 days. He has been noticing an enlargement of the upper lip for 6 years. Objectively: swelling of the upper lip, hyperemia and swelling of the gums, a bright red tongue. Blood test: eosinophilia, lymphocytosis, thrombopenia. Determine the diagnosis.

- A. Quincke's angioedema
- B. Contact allergic cheilitis
- C. Catarrhal gingivitis of allergic genesis, glossitis in the setting of Melkerson-Rosenthal syndrome.
- D. Melkerson-Rosenthal syndrome
- E. Stevens-Johnson syndrome

4. Patient G., 67 years old, complains of burning, itching, painful eating, taste disorders, dry mouth, which is associated with the use of a partial removable denture on the upper jaw.

Examination of the oral cavity reveals bright red hyperemia, edema, epithelial desquamation, and pinpoint hemorrhages on the oral mucosa of the hard palate and cheeks. The upper lip is covered with serous-hemorrhagic crusts, swollen, dense-elastic consistency, tense, palpation is painless. Regional lymph nodes are not enlarged. Determine the diagnosis.

- A. Quincke's angioedema
- B. Fixed sulfonamide erythema
- C. Multiform exudative erythema
- D. Contact allergic cheilitis
- E. Stevens-Johnson syndrome

5. Patient M., 35 years old, complains of burning, itching of the cheeks and tongue. He has a history of taking sulfadimethoxine for acute respiratory infections. On examination: on the mucous membrane of the cheeks in the area of the molars, pinkish cyanotic spots up to 1.5 cm in diameter. There are painful erosions in the center of the cyanotic spots. The mucous membrane around the spots is swollen. Regional lymph nodes are slightly enlarged and painful. Determine the diagnosis. Name the possible cause of the disease.

- A. Chronic recurrent aphthous stomatitis
- B. Contact allergic stomatitis
- C. Fixed sulfonamide erythema
- D. Multiform exudative erythema
- E. Mercury stomatitis

6. Patient K., 46 years old, complained of fever to 39 0 C, general weakness, headache, muscle and joint aches, and erosions in the oral cavity. A few days ago, the patient felt generalized weakness. He was self-medicating by taking Biseptol. Oral symptoms appeared in 2 days. Objectively: on the lips and oral mucosa there were numerous erosions, merging with each other, covered with yellow-gray fibrinous layers. Removal of the layers causes sharp pain and is accompanied by bleeding. Blood test: eosinophilia, lymphocytosis, thrombopenia. Establish the diagnosis.

- A. Stevens-Johnson syndrome
- B. Chronic recurrent aphthous stomatitis
- C. Behcet's syndrome
- D. Erythema exudatum multiforme, toxic-allergic form
- E. Contact allergic stomatitis

7. A man V., 45 years old, complained of heartburn, itching in the tongue, changes in taste and pain when eating spicy food, dry mouth. This condition appeared after taking levomycetin. Objectively: hyperemia of the tongue mucosa of bright red color with a cyanotic tint and swelling of the tongue. The filiform papillae are partially atrophied, the back of the tongue is smooth, shiny, as if polished, mushroom papillae are enlarged. Make a diagnosis.

- A. Drug-induced allergic glossitis

B. Melkerson-Rosenthal syndrome

C. Desquamative glossitis

D. Ferrous deficiency anemia

E. Diabetes mellitus

8. Patient Z., 18 years old, complains of burning sensation oral mucosa, appearance of blisters and vesicles, pain when eating food, especially spicy food and when talking, malaise, subfibrillation. Objectively: regional lymph nodes are enlarged, tender, painful to palpation. The mucous membranes of the lips, cheeks, tongue, palate are bright red, swollen, gingival papillae and the marginal part of the gums in the area of the front teeth of the lower and upper jaws are hyperemic, swollen, bleeding during probing. Erosions with fringed edges are formed and the bottom is covered with necrotic plaque. There are moderate mineralized deposits on the anterior teeth. Past medical history: the athlete often took non-narcotic analgesics during training. Establish the diagnosis.

A. Erythema exudatum multiforme

B. AIDS

C. Vesiculitis

D. Red tinea versicolor

E. Erosive drug-induced allergic stomatitis

9. Patient P., 36 years old, complains of general weakness, malaise. Objectively: oral mucosa lesions are characterized by hemorrhagic rashes on the gums, cheeks, tongue and palate. Petechiae and hemorrhagic hemorrhages with a diameter of 3-5 mm to 1 cm do not protrude above the level of oral mucosa and do not disappear when pressed with glass. Allergic anamnesis reveals urticaria, Botkin's disease. Make a diagnosis.

A. Erythema exudatum multiforme

B. Behcet's disease

C. Chronic recurrent aphthous stomatitis

D. Red lichen planus

E. Schoenlein-Henoch disease

10. Patient R., 28 years old, complains of a painful ulcer on the mucous membrane of the lower lip, which appeared the day before. The anamnesis revealed that the patient suffers from chronic enterocolitis. During the examination, a superficial tissue defect of a rounded shape, surrounded by a crown of hyperemia, was found on the mucous membrane of the lower lip on the right. The surface of the defect is covered with fibrinous plaque, palpation is painful. Diagnose and prescribe appropriate treatment for this patient.

A. Erythema exudatum multiforme

B. Behcet's disease

C. Chronic recurrent aphthous stomatitis

D. Lichen planus red

E. Chronic recurrent herpetic stomatitis

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Lesson № 33

TOPIC: CHRONIC RECURRENT APHTHOUS STOMATITIS. BEHCET'S SYNDROME. PATHOGENESIS, CLINIC, DIAGNOSIS, TREATMENT AND PREVENTION

I. Relevance of the topic: Chronic recurrent aphthous stomatitis is an allergic disease manifested by a rash of single aphthae, which recur mostly without a specific pattern, and is characterized by a long, long-term course. The etiologic factors of Behcet's syndrome are viruses, infectious allergy, autoaggression, genetic predisposition; the pathologic substrate is vasculitis of small arteries and veins, clinical manifestations of allergic diseases and their modern methods of treatment and prevention are important for dentists. The study of the etiology, pathogenesis and clinical manifestations of allergic diseases, their modern methods of treatment and prevention is important for dentists.

II. Educational objective:

2.1. *The student should know:*

- know the etiology, pathogenesis of allergic reactions of immediate and slow-onset allergic reactions;
- types and stages of allergic reactions, have an idea of the frequency and prevalence of clinical manifestations of allergy;
- clinic of allergic reactions of immediate type;
- clinic of delayed allergic reactions;
- methods of examination of patients with allergic diseases;
- etiology and pathogenesis of chronic recurrent aphthous stomatitis;
- etiology and pathogenesis of Behcet's syndrome;
- clinical manifestations of recurrent aphthous stomatitis;
- clinical manifestations of Behcet's syndrome;
- principles of treatment and prevention of allergic diseases.

2.2. *Be able to:*

- identify delayed allergic reactions;
- identify signs of Behcet's syndrome;
- identify signs of recurrent aphthous stomatitis;
- to conduct differential diagnostics of changes in the oral mucosa of a patient with allergic reactions;
- to make a treatment plan for dental patients with allergic reactions;
- to draw up a prevention plan to prevent the occurrence of allergic reactions.

III. Contents of the topic.

Chronic recurrent aphthous stomatitis (stomatitis aphtosa chronica recidiva) is an allergic disease manifested by a rash of single aphthae, which repidivate mostly without a certain pattern, and is characterized by a long, long-term course.

Etiology. The factors that can cause chronic recurrent aphthous stomatitis (CRAS) include adenovirus, staphylococcus, allergies (food, microbial, drug), immune (including autoimmune) disorders, diseases of the digestive system, especially the liver, neurotrophic disorders, genetic predisposition and exposure to various harmful factors, including industrial ones (chromium compounds, cement, gasoline, phenol, denture materials, etc.)

Clinic. Patients seek help, as a rule, during an exacerbation, when they develop an aphthous rash. They often point to the presence of one, rarely two, sharply painful "ulcerative lesions" that make it difficult to eat and speak. It is quite easy to find out the nature of the disease from the anamnesis: patients note that the disease has not gone away for several years; at first it recurred periodically (in spring and autumn), and later the recurrence became unsystematic. Remissions can last from several months, even years, to a few days. In some cases, CRAS does not have a cyclic pattern, but occurs due to oral mucosa exposure, contact

with laundry detergent, hair dye, animals, etc. or has a clear dependence on the menstrual cycle.

Types of recurrent aphthae

Minor aphthae

- The most common type
- Non-keratinised mucosa affected
- Ulcers are shallow, rounded, 5–7 mm across, with an erythematous margin and yellowish floor
- One or several ulcers may be present

Major aphthae

- Uncommon
- Ulcers frequently several centimetres across
- Sometimes mimic a malignant ulcer
- Ulcers persist for several months
- Masticatory mucosa such as the dorsum of the tongue or occasionally the gingivae may be involved

- Scarring may follow healing

Herpetiform aphthae

- Uncommon
- Non-keratinised mucosa affected
- Ulcers are 1–2 mm across
- Dozens or hundreds may be present
- May coalesce to form irregular ulcers
- Widespread bright erythema round the ulcers



Aphthous stomatitis, minor form. A single, relatively large shallow ulcer in a typical site. There is a narrow band of periulcer erythema. These features are non-specific and the diagnosis must be made primarily on the basis of the history.



Aphthous stomatitis, major type. This large, deep ulcer with considerable surrounding erythema has been present for several weeks



Recurrent aphthous stomatitis, herpetiform type. There are numerous small, rounded and pinpoint ulcers, some of which are coalescing. The surrounding mucosa is lightly erythematous and the overall picture is highly suggestive of viral infection, but the attacks are recurrent and no virus can be isolated.

Behcet's syndrome is a dento-oculo-genital syndrome described by the Turkish dermatologist Behcet in 1937: a) mouth (aphthae); b) genitals (ulcerative lesions); c) eyes (iritis, iridocyclitis, which can lead to blindness).

This syndrome is most common in residents of Japan, the Kuril Islands, and the Mediterranean basin. Behcet's syndrome affects mostly men aged 30-40 years. In people over 45 years of age, the course of the syndrome is milder, it manifests itself only in skin and oral mucosa lesions without involvement of the eyes and nervous system.

The etiologic factors of Behcet's syndrome are viruses, infectious allergy, autoaggression, genetic predisposition; the pathologic substrate is vasculitis of small arteries and veins. Significant importance is attached to circulating immune complexes, the level of which usually correlates with the severity of the disease. Organ damage may depend on the class of immunoglobulins that make up the immune complexes, as well as on genetic factors.

Behcet's syndrome usually begins with malaise, which may be accompanied by fever and myalgias. There are often many aphthae, they are up to 10 mm in diameter, surrounded by an inflammatory rim of bright red color. The surface of the aphthae is densely filled with yellow-white fibrinous plaque. They heal without scarring. Aphthae localized on the genitals are sometimes painless and in some cases heal with scarring. Eye lesions are less common in women (57-68% of cases) than in men (86-94%). It is manifested by severe bilateral iridocyclitis with hypopyon and vitreous opacification, which leads to gradual formation of synechiae, pupil overgrowth and progressive visual impairment, and sometimes to complete blindness.

IV. Control questions to the topic of the lesson:

1. Define the concept of "allergy".
2. Types of allergic reactions that occur in the maxillofacial region.
3. Explain the etiology and pathogenesis of recurrent aphthous stomatitis.
4. Explain the etiology and pathogenesis of Behcet's syndrome.
5. Clinical manifestations of Behcet's syndrome.
6. Clinical manifestations of recurrent aphthous stomatitis.
7. Features of emergency care in allergic reactions manifested in the maxillofacial area.

8. Laboratory methods for the diagnosis of allergic reactions manifested in the maxillofacial region.
9. Principles of treatment of allergic diseases in the maxillofacial region.
10. Specify measures for the prevention of allergic reactions that occur in the maxillofacial area.

V. Control test tasks and/or case studies:

1. A 30-year-old patient complains of a deterioration in general condition, fever, which he attributes to the appearance of ulcers in the oral cavity. In anamnesis for 10 years on the mucous membrane there are seals that gradually increase and turn into ulcers. Objectively: on the mucous membrane of the cheek on the left and on the tongue, ulcers with raised, compacted edges, covered with fibrinous plaque, sharply painful to the touch. What is the most likely diagnosis?
 - A. Seton's stomatitis
 - B. Traumatic ulcer
 - C. Tuberculous ulcer
 - D. Behcet's syndrome
 - E. Secondary syphilis
2. A 39-year-old woman complains of mouth ulcers up to 3-4 times a year for 4 years. Objectively: at the tip of the tongue - a superficial defect of the epithelium of a round shape, 0.3 mm in diameter, covered with a yellowish coating, surrounded by a bright red rim. Sharp pain when talking and eating. What examinations should be done to prescribe treatment?
 - A. Cytological
 - B. Immunological
 - C. Histological
 - D. Luminescent
 - E. Microbiological
3. A 39-year-old patient was diagnosed with Seton's stomatitis, which was characterized by formation of deep, sharply painful ulcers on the mucous membrane of the cheeks and under the tongue. What is the risk of ulcers in the corners of the mouth?
 - A. Constant bites
 - B. Formation of cracks
 - C. Maceration
 - D. There is no threat
 - E. Development of microstoma
4. A patient diagnosed with deforming form of chronic recurrent aphthous stomatitis stomatitis has been repeatedly treated in the inpatient allergy department. The last time the dentist conducted a course of complex therapy in an outpatient the patient's outpatient visit. What drugs are the drugs of choice for topical therapy, and did the doctor use them?
 - A. Anti-inflammatory
 - B. Keratoplastics
 - C. Keratolytics
 - D. Corticosteroids
 - E. Vitamins
5. A 39-year-old patient complains of ulcers in the mouth, which have been occurring periodically for 4 years. Objectively: on the lateral surface of the tongue on the right there is an aphtha covered with grayish-white plaque, surrounded by a crown of hyperemia What is the most likely mechanism of development of this disease?
 - A. Autoimmune disorders

- B. Viral infection
 - C. Staphylococcal infection
 - D. Allergic reaction
 - E. Mechanical trauma
6. A 33-year-old woman complains of periodic ulcers in the oral cavity. She has been ill for 5 years. She is registered with a general practitioner for chronic colitis. Objectively: on the lateral surface of the tongue, a rounded superficial tissue defect with a diameter of 0.5 cm with clear contours, covered with a fibrinous plaque that is difficult to remove, was found. The lesion is surrounded by a crown of hyperemia, sharply painful to the touch. Name the element of the lesion:
- A. Aphtha
 - B. Erosion
 - C. Ulcer
 - D. Crack
 - E. Lichenization
7. Which disease is considered to be a severe manifestation of CRAS?
- A. Stevens-Johnson syndrome
 - B. Merckelson-Rosenthal syndrome
 - C. Behcet's disease
 - D. Lyell's disease
 - E. Greenspan syndrome
8. What does Behcet's syndrome include?
- A. Lesions of the oral mucosa, joints, skin
 - B. Lesions of the oral mucosa and conjunctiva
 - C. Lesions of the conjunctiva, genitals, and oral mucosa
 - D. Lesions of the skin, oral mucosa, joints
 - E. Lesions of all mucous membranes, skin and joints
9. What is the primary element of the lesion observed in CRAS?
- A. Aphtha
 - B. Spot
 - C. Vesicle
 - D. Ulcer
 - E. Papule
10. What physiotherapeutic treatment is used at the primary stage of treatment of chronic recurrent aphthous stomatitis?
- A. D'Arsonval
 - B. Hypothermia
 - C. Ultraviolet
 - D. Electrophoresis
 - E. UHF therapy

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Lesson № 34

TOPIC: CHANGES IN THE ORAL MUCOSA IN EXOGENOUS INTOXICATION. DIAGNOSIS. TACTICS OF THE DENTIST.

I. Relevance of the topic: The damage to the oral mucosa is possible with the toxic effects of certain drugs and occupational hazards. Drug intoxication is caused by an overdose of a drug or erroneous use of drugs. Occupational intoxication can occur in cases of non-compliance with protective measures and safety precautions when working in industries and agriculture in which the technological process involves the use or production of harmful substances. The study of the etiology, pathogenesis and clinical manifestations of exogenous intoxication, their modern methods of treatment and prevention is important for dentists.

II. Educational objective:

2.1. The student should know:

- know the types of exogenous intoxication;
- etiology and pathogenesis of exogenous intoxication;
- clinical manifestations of mercury stomatitis;
- clinical manifestations of lead stomatitis;
- clinical manifestations of bismuth stomatitis;
- methods of examination of patients with exogenous intoxication;
- principles of treatment and prevention of exogenous intoxication.

2.2. Be able to:

- identify clinical manifestations of mercury stomatitis;
- identify clinical manifestations of lead stomatitis;
- identify clinical manifestations of bismuth stomatitis;
- to conduct differential diagnosis of changes in the oral mucosa of a patient with exogenous intoxication;
- to draw up a treatment plan for dental patients with exogenous intoxication;
- to draw up a prevention plan to prevent the occurrence of exogenous intoxication.

III. Contents of the topic.

Damage to the oral mucosa is possible due to the toxic effects of certain medications and occupational hazards. Medication intoxication is caused by an overdose of a drug or by the erroneous use of drugs. Occupational intoxication can occur in cases of non-compliance with protective measures and safety precautions when working in those industries and agriculture in which the technological process involves the use or formation of harmful substances.

The most interesting in dental practice are metal intoxication (mercury, lead, bismuth, zinc, antimony, etc.), in which catarrhal and ulcerative stomatitis develop in the oral cavity.

Mercury stomatitis (stomatitis mercurialis) is observed in people who have ingested mercury in one way or another.

Clinic. The first symptom of mercury stomatitis is increased salivation, which is associated with irritation of the salivary glands by mercury. The patient complains of a metallic taste in the mouth, a feeling of heat, severe throbbing pain in the gums, and headache. The gums are inflamed, hyperemic, swollen. A grayish-white, foul-smelling plaque, consisting of necrotic epithelial cells and detritus, appears along the edge of the gums and gingival papillae. If the necrotic process deepens, ulcers form.

Lead stomatitis (stomatitis plumbica seu saturnina). Lead is widely used in industry, and therefore lead intoxication is quite common. People of various professions come into contact with lead and lead products (mining of lead ores, manufacturing of lead pipes, wire, shot, production of batteries, lead paints, and fonts).

Clinic. Lead stomatitis develops gradually: one of the first symptoms is a metallic taste in the mouth and a peculiar odor from the oral cavity, the so-called leaden odor. A lead

border appears - a bluish-black stripe along the gingival margin, around the necks of the front teeth, mainly on the vestibular side. Chronic catarrhal gingivitis gradually develops. Lead deposits in the form of black and blue spots can appear simultaneously in different parts of the oral cavity and in the oral mucosa of the cheeks, lips, tongue, hard and soft palate.

Bismuth stomatitis (stomatitis bismuthina) develops when bismuth preparations (bioquinol, bismoverol, etc.) are used for the treatment of syphilis, as well as non-syphilitic nervous system lesions. Its occurrence is associated with the formation of a highly insoluble organic compound of bismuth with proteins - bismuth albuminate. As a result of its combination with hydrogen sulfide in the oral cavity, bismuth sulfide is formed, which is deposited in the form of blue cotton-black rim on the gums around the necks of the teeth.

Bismuth sulfur pigmentation is also observed on the oral mucosa of the cheeks, tongue, lips, and hard palate. In the diagnosis of the disease, anamnesis and laboratory results are important.

Clinic. Bismuth stomatitis usually occurs without subjective sensations, causing little disturbance to the patient. In the case of severe lesions, ulcerative gingivostomatitis develops, which is accompanied by a fetid odor, increased salivation, inflammation of the lymph nodes; in some cases, limited necrosis of the alveoli and even part of the jaw body. It should be borne in mind that kidney disease, diabetes mellitus, tuberculosis, and diseases of the digestive system are contraindications to the administration of bismuth therapy.

IV. Control questions to the topic of the lesson:

1. Define the concept of "exogenous intoxication".
2. Etiology, pathogenesis of mercury stomatitis.
3. Etiology, pathogenesis of lead stomatitis.
4. Etiology, pathogenesis of bismuth stomatitis.
5. Clinical manifestations of mercury stomatitis, lead and bismuth stomatitis.
6. Clinical manifestations of recurrent aphthous stomatitis.
7. Features of emergency care for exogenous intoxication manifested in the maxillofacial area.
8. Principles of treatment of exogenous intoxication in the maxillofacial region.
9. Specify measures for the prevention of exogenous intoxication, manifested in the maxillofacial region.

V. Control test tasks and/or case studies:

1. Which of the drugs is used for the pathogenetic treatment of mercury stomatitis?
 - A. Prednisolone
 - B. Ascorbic acid
 - C. Unithiol
 - D. Vitamin PP
 - E. Lincomycin
2. In lead stomatitis, the gingival margin around the teeth:
 - A. Blue-black in color
 - B. Gray-black color with a necrotic film
 - C. Bright red in color
 - D. Gray-black color with areas of hyperkeratosis
 - E. Cyanotic color
3. In which parts (tissues) of the body lead compounds are primarily accumulated?
 - A. The cerebral cortex
 - B. Hypothalamic parts of the brain stem
 - C. Adrenal cortex

- D. Bone tissue
 - E. Periodontal tissue
4. After treatment of syphilis, the patient developed stomatitis. Which one is it?
- A. Mercury stomatitis
 - B. Lead stomatitis
 - C. Melanosis
 - D. Bismuth stomatitis
 - E. Ulcerative necrotic stomatitis
5. In which parts (tissues) of the body do bismuth compounds accumulate first? (bismuth sulfide) accumulate in which parts of the body?
- A. The cerebral cortex
 - B. Bone tissue
 - C. The walls of blood and lymphatic vessels
 - D. Salivary glands of the oral mucosa
 - E. Liver
6. What confirms the diagnosis of lead stomatitis?
- A. Low level of hemoglobin in the blood
 - B. Increased content of lead in the urine and blood
 - C. Increased platelet count
 - D. Reduced red blood cell count
 - E. Increased level of white blood cells in the blood
7. The patient is 54 years old, consulted a dentist about the discoloration of the gums on the lower and upper jaws. After the examination, the diagnosis was made lead stomatitis. In lead stomatitis, the gingival margin around the teeth is affected:
- A. Blue-black in color
 - B. Gray-black in color with a necrotic film
 - C. Bright red color
 - D. Gray-black color with areas of hyperkeratosis
 - E. Cyanotic color
8. Patient N., 22 years old, who works at a battery manufacturing plant, complains of a metallic taste and bad breath. Objectively: the gums are swollen, hyperemic, painful to palpation. On the gingival margin around the necks of the anterior teeth there is a blue-black stripe along the gingival margin around the necks of the anterior teeth. Determine the diagnosis:
- A. Bismuth stomatitis
 - B. Mercury stomatitis
 - C. Lead stomatitis
 - D. Melanosis
 - E. Ulcerative necrotic stomatitis
9. A 48-year-old patient who works at a service station complains of pain, bleeding gums, increased salivation, headache. He has been ill for a year. Objectively: the skin is pale; regional lymph nodes are enlarged, painful on palpation. The gums are swollen, painful on palpation, bleeding on probing; a blue-black border is detected along the gum margin, which is not removed by scraping. Make a diagnosis:
- A. Mercurialism
 - B. Saturnism
 - C. Aryboflavinosis
 - D. Pelagra
 - E. Skorbut

10. A patient came to the dentist with complaints of pigmentation of the gums around the necks of the teeth, mucous membranes of the cheeks, lips, and hard palate. After the examination, the diagnosis was made: bismuth stomatitis. The doctor was assisted by the anamnesis data. What were they?

- A. The use of crisanol for the treatment of rheumatoid arthritis
- B. Worked in a printing house for 16 years
- C. Taking hydantoin to treat epilepsy
- D. Taking hormonal drugs
- E. Treatment of syphilis with bioquinol

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Lesson № 35

TOPIC: LESIONS OF THE ORAL MUCOSA IN RADIATION SICKNESS.

I. Relevance of the topic: During radiotherapy of neoplasms of the maxillofacial area, unaffected areas of the oral mucosa are also exposed to radiation. The reactions of different areas of the oral mucosa to radiation are not identical. Their inherent clinical features depend on the type of radiation therapy, single and total radiation dose, tissue radiosensitivity and the state of the oral cavity before radiation. Knowledge of the etiology, mechanisms of development and clinical manifestations of oral mucosa lesions will help improve the quality of diagnosis, treatment and prevention of radiation sickness.

II. Educational objective:

2.1. The student should know:

- know the etiology and pathogenesis of radiation disease;
- clinical manifestations of radiation disease;
- principles of treatment and prevention of radiation disease;
- methods of examination of patients with radiation disease.

2.2. Be able to:

- identify clinical manifestations of radiation sickness;
- to carry out differential diagnosis of radiation sickness;
- to conduct a differential diagnosis of changes in the oral mucosa of a patient with radiation sickness;
- to draw up a treatment plan for dental patients with radiation sickness;
- to draw up a prevention plan to prevent the occurrence of radiation sickness.

III. Contents of the topic.

During radiation therapy of tumors of the maxillofacial area, unaffected areas of the oral mucosa are also exposed to radiation. The reactions of different areas of the oral mucosa to radiation are not identical. Their inherent clinical features depend on the type of radiation therapy, single and total radiation dose, tissue radiosensitivity and the state of the oral cavity before radiation.

The first clinical signs of oral mucosa disorder appear in areas covered with non-cornified epithelium: hyperemia, edema, which increase with increasing radiation dose. Subsequently, due to increased keratinization of the oral mucosa, it becomes cloudy, loses its luster, becomes compacted, and becomes folded. With further irradiation, focal rejection of the keratinized epithelium occurs, and thus erosions covered with adhesive necrotic plaque appear. If the necrosis spreads to adjacent areas, the erosions merge and confluent filmy radiomucositis occurs.

The soft palate is especially sensitive to oral mucosa irradiation: here, radiomucositis occurs immediately, without a keratinization phase. In areas of oral mucosa, which are normally covered with keratinized epithelium, only focal desquamation of the epithelium or single erosions are noted.

Later, the process is complicated by damage to the salivary glands, whose epithelium is very sensitive to radiation. In the first 5 days, salivation may be increased, and then persistent hyposalivation quickly occurs. After 12-14 days, xerostomia develops, which is accompanied by dysphagia and distortion and loss of taste. Later, hyperemia of the tip and lateral surfaces of the tongue and atrophy of its papillae appear.

Radiation changes in the oral cavity are largely reversible. In 2-3 weeks after the cessation of radiation, the oral mucosa state returns to relative normal. However, with a large absorbed dose (5000-6000 rad), irreversible changes in the salivary glands and oral mucosa (hyperemia, atrophy, radiation ulcers) may occur.

IV. Control questions to the topic of the lesson:

1. Define the concept of "radiation sickness".

2. Etiology, pathogenesis of radiation sickness.
3. Clinical manifestations of radiation sickness.
4. Features of emergency care for radiation sickness manifested in the maxillofacial area.
5. Principles of treatment of radiation sickness in the maxillofacial region.
6. Specify the measures of prevention of radiation sickness manifested in the maxillofacial region.

V. Control test tasks and/or case studies:

1. What dose of ionizing radiation causes acute radiation sickness?
 - A. 0.01 - 0.1 Gray
 - B. 0.1 - 1.0 Gray
 - C. 2.0 - 8.0 Gray
 - D. 10.0 - 15.0 Gray
 - E. 16.0 - 20.0 Gray
2. What dose of ionizing radiation causes chronic radiation sickness?
 - A. 0.01 - 0.1 Gr/day
 - B. 0.1 - 0.5 Gr/day
 - C. 0.6 - 1.0 Gr/day
 - D. 1.0 - 5.0 Gr/day
 - E. 5.0 - 10.0 Gr/day
3. The period of primary reactions in acute radiation sickness continues?
 - A. 1 - 2 hours
 - B. 3 - 10 hours
 - C. 12 - 24 hours
 - D. Up to 2 days
 - E. 3 to 5 days
4. What is characteristic of radiation stomatitis?
 - A. Burning sensation, mucous membrane is anemic, dry, decreased taste sensitivity
 - B. Hyperemia, swelling of the oral mucosa, hyperesthesia
 - C. Keratosis, hyperkeratosis
 - D. Desquamative glossitis
 - E. Loosening of teeth, multiple caries
5. In the first three days after radiation therapy, salivation is impaired?
 - A. It is not disturbed
 - B. Increased salivation
 - C. Decrease in salivation
 - D. Xerostomia
 - E. Salivation
6. How does the taste sensitivity of the tongue change with radiation damage?
 - A. Change in sensitivity
 - B. Hypersensitivity
 - C. Hypersensitivity
 - D. Loss of sensitivity
 - E. All of the above
7. An 18-year-old patient after a session of intracanal electrophoresis of 46th tooth with 5% iodine solution developed a lesion on the mucous membrane of the hard palate on the right side in the form of strokes with a white-gray surface. Which of the following could be the cause of this lesion?
 - A. Electrical trauma
 - B. Mechanical trauma
 - C. Galvanism

- D. Chemical trauma
 - E. Thermal trauma
8. What symptoms are not characteristic of manifestations of galvanosis in the oral cavity?
- A. The patient's complaints of a metallic taste in the mouth
 - B. The presence in the oral cavity of microcurrents of 8-10 μA
 - C. The presence of 2 metal inclusions in the oral cavity
 - D. Pale pink color of the mucous membrane
 - E. Improvement of health after removal of dentures
9. Patient S., 18 years old, after transcanal electrophoresis 46 with 5% iodine solution, a stippled lesion with a whitish-gray surface appeared on the palatal mucosa. Indicate the probable cause of the lesion:
- A. Chemical trauma
 - B. Mechanical trauma
 - C. Electrical trauma
 - D. Physical trauma
 - E. Radiation injury
10. Select and indicate what changes in the oral mucosa will be observed during radiation therapy of the maxillofacial area:
- A. Formation of small vesicles
 - B. Filmy radiomucositis
 - C. Catarrhal inflammation
 - D. Formation of small keratinizing papules
 - E. Hard shanker

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Lesson № 37

TOPIC: PRIMARY GLOSSITIS. DESQUAMATIVE AND RHOMBOID GLOSSITIS. FOLDED AND HAIRY TONGUE. CLINIC, DIAGNOSIS, TREATMENT AND PREVENTION.

I. Relevance of the topic: Diseases of the tongue are largely related to its anatomical features, function and various connections with the organs and systems of the patient. They make up a large group among the diseases of the oral mucosa. Changes in the tongue are often observed in systemic diseases of the body, and in some of them such changes are an obligatory symptom of a general disease. It is believed that the oral mucosa state of the tongue reflects a number of general changes in the body. A thorough study of the patient's local status, taking into account general changes in the body, allows the dentist to diagnose the disease, identify etiological factors and establish pathogenetic mechanisms.

II. Educational goal:

2.1. The student should know:

- know the anatomical and histological structure of the tongue;
- know the classification of tongue diseases;
- etiology and pathogenetic mechanisms of development of desquamative, rhomboid glossitis, folded and hairy tongue;
- clinical manifestations of desquamative, rhomboid glossitis, folded and hairy tongue;
- methods of diagnosis of desquamative, rhomboid glossitis, folded and hairy tongue;
- methods of treatment of glossitis.

2.2. Be able to:

- conduct an examination of the patient;
- diagnose clinical signs of tongue lesions;
- conduct differential diagnosis of tongue lesions;
- make a treatment plan for dental patients with tongue lesions;
- to draw up a prevention plan to prevent the occurrence of tongue lesions.

III. Contents of the topic.

Diseases of the tongue are largely related to its anatomical features, function and various connections with the organs and systems of the patient. They make up a large group among the diseases of the ENT system.

In most cases, the tongue is affected by diseases of the oral health care system, which are caused by a mixed infection. The most common pathogens are staphylococci, streptococci, fusospirillum symbiosis, yeast-like fungi, and viruses.

Changes in the tongue are often observed in systemic diseases of the body, and in some of them such changes are a mandatory symptom of a general disease. It is believed that the state of the tongue's oral mucosa reflects a number of general changes in the body.

A large group includes diseases of the tongue that occur in isolation, without oral mucosa lesions in other parts of the oral cavity: desquamative glossitis (geographic tongue), black (hairy) tongue, folded tongue, rhomboid glossitis, neurogenic tongue diseases. These diseases will be discussed in this section.



Desquamative glossitis (geographical tongue - glossitis desquamatica) is an inflammatory and dystrophic disease of the tongue's own lamina propria, which is accompanied by characteristic changes in the appearance of the back and lateral surfaces of the tongue. It is manifested by focal disruption of epithelial keratinization processes and dystrophic changes in the tongue papillae.

Clinic. Desquamative glossitis is usually not accompanied by subjective sensations, it is detected by chance during an oral examination. Only in exceptional cases, patients complain of a burning sensation in the tongue, paresthesias in case of unhygienic oral hygiene, as well as significant colonization of oral mucosa with fungi in case of microbial imbalance.

The areas of epithelial desquamation look like reddish nests of various shapes (rings, semi-rings) and sizes. Fungiform papillae are thickened and enlarged. A slight keratosis is detected around the lesion, which permanently causes the formation of a narrow whitish stripe.

Hairy tongue (black; lingua villosa; nigra) is a rare disease of the tongue, which consists in the keratinization of thread-like papillae that have grown and become brown or black in color. The disease occurs in both children and adults.

The etiology of hairy tongue is not fully understood. Often the disease is observed after infectious diseases, in case of disorders of the digestive tract and liver function. The occurrence of hairy tongue is associated with the use of antibiotics that disrupt the microbial balance in the oral cavity, inhibit the development of coccal and rod-shaped forms, which promotes the development of yeast-like fungi. An interesting point of view is the possibility of the disease occurring as a result of constitutional changes, which, by affecting the trophism, cause metabolic disorders in the tongue epithelium. Recently, it has been suggested that physicochemical factors (alcohol, tobacco, drugs) play a role in the onset of the disease.

Clinic. Changes in the appearance of the tongue are localized mainly in the posterior and middle third of its back. The filiform papillae thicken, lengthen and become horny, sometimes reaching 2-3 cm in length. The altered part of the tongue surface is usually oval, rarely triangular in shape with varying color intensity - from brown to black-brown or black.

Rhombiform glossitis (glossitis rhombia mediana) is a chronic inflammatory process of characteristic appearance and localization.



Median rhomboid glossitis. The typical lozenge-shaped area of depapillation in the midline of the tongue

The etiology of rhombic glossitis is not well understood. Most authors consider it to be a congenital formation - due to the complex embryogenesis of the tongue, an excess layer of epithelium is formed, which, gradually growing (under the influence of stimuli), causes the appearance of rhombic glossitis. Some authors refer rhomboid glossitis to chronic candidiasis.

Clinical features. In the posterior third of the tongue, strictly along the midline, in front of the grooved papillae, a rhomboid or oval-shaped area of oral mucosa, 0.5-2.5 cm in size, red or bluish in color, clearly demarcated from the surrounding oral mucosa of the tongue is detected. The altered area is at the level of the oral mucosa surface, sometimes slightly protruding above it, in rare cases - noticeably. Its surface is smooth, in some cases it has elevations.

There are three forms of rhomboid glossitis: smooth (flat), tuberous, and papillomatous.



Median rhomboid glossitis. There is a whitish patch of depapillation with sharply demarcated borders in the midline of the tongue.

The folded tongue (lingua plicata) resembles the skin of the scrotum in appearance, which is why it is called the "scrotal tongue" (lingua scrotalis). It is a congenital anomaly of

the shape and size of the tongue that occurs in both children and adults. Often, a folded tongue is accompanied by a moderate enlargement of the entire tongue - macroglossia.



Hairy tongue. In this patient there are numerous elongated papillae but a brown rather than black pigmentation.

IV. Control questions to the topic of the lesson:

1. Classification of tongue diseases.
2. Name the etiological factors and mechanisms of development of primary glossitis.
3. Clinical symptoms of primary glossitis.
4. Additional methods of examination of patients with primary glossitis.
5. Identify etiologic, pathogenetic and symptomatic approaches to the treatment of primary glossitis.
6. Etiology and pathogenesis of desquamative glossitis.
7. Name the clinical manifestations and results of additional examination of patients with various forms of desquamative glossitis.
8. Principles of treatment of patients with desquamative glossitis.
9. Etiology of folded, rhomboid and black hairy tongue.
10. Name the clinical manifestations and results of additional examination of patients with folded, rhomboid and black hairy tongue.
11. Methods of treatment of folded, rhomboid and black hairy tongue.

V. Control test tasks and/or case studies:

1. Patient K., 35 years old, came to the Department of Therapeutic Dentistry for a consultative examination with complaints of impaired taste sensations during meals and brown threadlike growths on the tongue. Objectively: on the posterior third of the back of the tongue, the filiform papillae are thickened, elongated, keratinized, brown in color. Establish a probable diagnosis.

- A. Desquamative glossitis
- B. Rhomboid glossitis
- C. Glossalgia
- D. Black hairy tongue
- E. Folded tongue

2. Patient V., 49 years old, was diagnosed with rhomboid glossitis, papillomatous form during oral cavity rehabilitation. The patient notes the progression of the process. Your treatment tactics.

- A. Dispensary observation
- B. Keratolytic agents

- C. Proteolytic enzymes
- D. Anti-inflammatory drugs
- E. Cryodestruction

3. During a preventive examination of patient S., 17 years old, areas of desquamation were found on the back of the tongue, which resemble a "geographical map". According to the patient, the tongue has looked like this since childhood. What can be recommended to the patient?

- A. Keratoplastic agents
- B. Keratolytic agents
- C. Proteolytic enzymes
- D. Anti-inflammatory drugs
- E. Dispensary observation

5. Patient A., 26 years old, came to the dentist with complaints of an unusual appearance of the tongue. Objectively: on the tongue spoke there are different depths of transverse and longitudinal folds, the tongue is mobile and slightly enlarged. The tongue is soft and tender to palpation. Taste sensations do not change. There is no facial asymmetry. What diagnosis did the doctor make?

- A. Desquamative glossitis
- B. Rhomboid glossitis
- C. Glossalgia
- D. Hairy tongue
- E. Folded tongue

6. Patient P., 57 years old, complains of burning in the tongue, which is aggravated by eating spicy and salty foods. He has been ill for the last 3 years. Objectively: rounded areas of epithelial desquamation with a diameter of 0.6×0.9 cm are determined on the back of the tongue. In the center, such areas are bright red in color, there are no filiform papillae. Establish the diagnosis.

- A. Candida glossitis
- B. Desquamative glossitis
- C. Syphilitic glossitis
- D. red lichen planus, erosive form
- E. Leukoplakia, erosive form

7. Patient N., 25 years old, after a thorough medical examination was diagnosed with rhomboid glossitis. Indicate the etiology of this disease.

- A. Diseases of the thyroid gland
- B. Diseases of the gastrointestinal tract
- C. Disorders of embryogenesis
- D. Chronic mechanical trauma
- E. Secondary syphilis

8. During a preventive examination, the dentist found a rhomboid glossitis, flat in shape. Determine the most rational method of treatment.

- A. Surgical removal
- B. Cryodestruction
- C. Antiseptic treatment
- D. Local anti-inflammatory therapy
- E. No treatment is required

9. Patient D., 50 years old, complains of a foreign body sensation on the tongue, difficulty speaking, dry mouth. Objectively: on the back of the tongue - elongated up to 5 mm of dark color thread-like papillae. What is the most likely diagnosis?

- A. Desquamative glossitis

- B. Rhomboid glossitis
 - C. Glossalgia
 - D. Hairy tongue
 - E. Folded tongue
10. What is another name for "desquamative glossitis" in the literature?
- A. Folded tongue
 - B. Scrotal tongue
 - C. Geographic tongue
 - D. Hairy tongue
 - E. Black tongue

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Lesson 38

TOPIC: NEUROGENIC DISEASES OF THE TONGUE. ETIOLOGY, PATHOGENESIS, CLINIC, DIAGNOSIS, TREATMENT AND PREVENTION

I. Relevance of the topic: Motor neuroses of the tongue occur in most cases with lesions of the hyoid nerve and are expressed by paralysis and paresis. Neurotrophic disorders are manifested mainly by a picture of focal desquamation, which is observed in different parts of the back of the tongue, and sometimes over its entire surface. The most practical significance is given to tongue sensitivity disorders, which are manifested by anesthesia, neuritis, neuralgia, glossodynia, and glossalgia. A thorough study of the patient's local status, taking into account general changes in the body, allows the dentist to diagnose the disease, identify etiological factors and establish pathogenetic mechanisms.

II. Educational goal:

2.1. The student should know:

- know the anatomical and histological structure of the tongue;
- know the classification of tongue diseases;
- etiology and pathogenetic mechanisms of lingual nerve neuralgia;
- clinical manifestations of lingual nerve neuralgia;
- etiology and pathogenetic mechanisms of glossalgia, glossodynia;
- clinical manifestations of glossalgia;
- methods of diagnosis of neurogenic diseases of the tongue;
- methods of treatment of neurogenic diseases of the tongue.

2.2. Be able to:

- conduct an examination of a patient with neurogenic diseases of the tongue;
- diagnose clinical signs of lingual nerve neuralgia;
- diagnose clinical signs of glossalgia, glossodynia;
- to conduct differential diagnosis of neurogenic diseases of the tongue;
- to make a treatment plan for dental patients with neurogenic diseases of the tongue.

III. Contents of the topic.

There are *motor and trophic neuroses*, as well as sensory disorders. Motor neuroses of the tongue occur in most cases with lesions of the hyoid nerve and are expressed by paralysis and paresis. Neurotrophic disorders are manifested mainly by a pattern of focal desquamation, which is observed in various parts of the back of the tongue, and sometimes over its entire surface. The most practical significance is given to tongue sensitivity disorders, which are manifested by anesthesia, neuritis, neuralgia, glossodynia, and glossalgia.

Neuralgia of the lingual nerve. It rarely occurs in isolation. In most cases, there is a simultaneous lesion of the lingual and mandibular nerves as a manifestation of the disease of the third branch of the trigeminal nerve.

Clinical signs. Pain in the tongue is severe, paroxysmal; localized mainly in the anterior and middle thirds of the tongue. It occurs in the corresponding half of the tongue from various stimuli - tactile, mechanical, chemical, thermal. Pain attacks are short-lived, lasting 1-2 minutes. The pain can occur from the touch of a spoon, as well as during eating or talking from tongue movements. This circumstance forces the patient to limit his movements. Due to the lack of mechanical cleaning, the tongue is covered with a significant amount of grayish or brownish plaque.

Glossalgia is a neurogenic disease of the tongue characterized by paresthesia (tingling, burning, tingling, itching sensations), which is localized in the front two-thirds of the tongue, sometimes only at the tip.

In the vast majority of cases, paresthesias are symmetrical, but they can also be unilateral and asymmetrical. They occur spontaneously or after eating irritating food (spicy, spicy, sour, salty). The duration of the attacks varies: in some patients, paresthesia occurs

frequently but lasts for several minutes, in others, the unpleasant sensation in the tongue persists constantly, is painful, intensifying in the evening and subsiding at night.

Clinic. Glossalgia is usually not accompanied by visible changes in the tongue. Usually, the oral mucosa, even in the presence of complaints of dryness, is well moisturized. However, in some cases there are signs of hyposalivation: The oral mucosa is hyperemic, shiny; saliva is viscous, foamy. Sometimes there is swelling of the tongue, which is detected by the presence of tooth marks on it.

The clinical picture of glossalgia is dominated by a sharply expressed pain syndrome. The pain is characterized by persistence, sometimes against the background of constant pain there are attacks of particularly burning pain with irradiation to the shock, the lateral parts of the neck. This has a depressing effect on the psyche of patients, and some of them develop carcinophobia. The disease can last for months in some cases and years in others. Sometimes remission occurs without treatment, but after a while an exacerbation occurs again.

IV. Control questions to the topic of the lesson:

1. Name the classification of neurogenic diseases of the tongue.
2. Define the concepts of lingual nerve neuralgia and glossalgia.
3. Specify the etiology and pathogenesis of lingual neuralgia.
4. Specify the etiology and pathogenesis of glossalgia, glossodynia.
5. Clinical manifestations of glossalgia, glossodynia.
6. Clinical manifestations of neuralgia of the lingual nerve.
7. Identify the features of additional examination of patients with neurogenic diseases of the tongue.
8. Scheme of complex treatment and prevention of patients with neurogenic diseases of the tongue.

V. Control test tasks and/or case studies:

1. Patient V., 33 years old, complained of pain in the lower jaw tooth on the right, which is constant, periodically twitching, can occur both day and night. Anamnesis: tooth 4.6 was treated 5 days ago for exacerbation of chronic granulating periodontitis. The pain disappears with the use of analgesics. Objectively: the mucous membrane in the area of tooth 4.6 is hyperemic, painful to palpation. Radiographically: in the distal root of the tooth, the filling material is observed to extend beyond the apex by 3 mm. Determine the diagnosis.

- A. Trigeminal neuralgia
- B. Exacerbation of periodontitis 4.6
- C. Neuropathy of the trigeminal nerve
- D. Glossalgia
- E. Neuritis of the trigeminal nerve

2. Patient O., 68 years old, complains of constant burning and unpleasant taste in the mouth. Anamnesis: the patient does not notice any complaints during meals, chews gum or tries to eat more often to reduce paresthetic syndrome. The patient is emotionally agitated. Objective: oral mucosa is of natural color, without pathological changes. Determine the diagnosis.

- A. Shegren's syndrome
- B. Stomalgia
- C. Neuropathy
- D. Glossalgia
- E. Neuralgia

3. Patient D., 63 years old, complains of a burning sensation and "crawling of goosebumps" on the back of the tongue. Anamnesis: these sensations decrease during meals. Several years ago, she suffered from a stressful situation and has chronic gastritis. Objectively: no pathological changes in the mucous membrane were found during the examination, the oral cavity was sanitized. Determine the diagnosis.

- A. Trigeminal neuritis
- B. Neuralgia of the trigeminal nerve
- C. Stomalgia
- D. Astheno-depressive disorders
- E. Glossalgia

4. Patient I., 32 years old, after treatment of periodontitis of the tooth 2.6 months ago, complains of constant, tearing, aching pain with a paresthetic component in the gums and teeth of the upper jaw on the left, which has a wave-like character. During the intensification of the pain syndrome, redness of the skin of half of the face is observed. The pain decreases with the intake of solid food (in case of biting on the tooth). During palpation, the patient notes pain along the transitional fold in the projection of the tooth 2.6.

the diagnosis.

- A. Glossalgia
- B. Neuralgia
- C. Neuritis of the trigeminal nerve
- D. Dental plexalgia on the right
- E. Dental plexalgia on the left

5. Patient R., 70 years old, complains of a burning sensation at the tip of the tongue, taste disorders. Anamnesis: suffers from carcinophobia, depressed nervous state, often looks at her tongue in the mirror, takes folds on the tongue as pathological formations. Objectively: no pathological changes in the mucous membrane were found during the examination. Determine the diagnosis.

- A. Folded glossitis
- B. Gunther's glossitis
- C. Stomalgia
- D. Astheno-depressive disorders
- E. Desquamative glossitis

6. Patient S., 73 years old, complains of tingling sensation, "crawling ants" on the tongue, which appeared a month ago after her son's illness. Past medical history: symptoms disappear during eating and sleeping. Objectively: no pathological changes in the mucous membrane were found during the examination, the oral cavity was sanitized. What drugs should be prescribed first?

- A. Antibiotics
- B. Anti-inflammatory drugs
- C. Sedatives
- D. Antiseptics
- E. Antioxidants

7. What can be accompanied by an attack of lingual nerve neuralgia?

- A. Hypertensive crisis
- B. Syncopal crisis
- C. Epileptic attack
- D. Hypoglycemic state
- E. Myasthenic crisis

8. The neuropathy of the hyoid nerve is characterized by:

- A. Painful paroxysms
- B. Paresis of the tongue
- C. Irradiation of pain to the lower jaw
- D. Chronic pain in the tongue
- E. Acute prolonged pain

9. To relieve the painful attack of neuralgia of the lingual nerve is used:

- A. Prednisolone
- B. Carbamazepine
- C. Penicillin
- D. Anaprylene
- E. Indomethacin

10. Patient O., 43 years old, complains of severe, paroxysmal pain in the anterior and middle thirds of the tongue. The tongue is covered with plaque. The pain attacks are short-lived, occur during eating or talking, and are aggravated by various tactile, chemical, and mechanical stimuli. What is the diagnosis?

- A. Neuritis
- B. Recurrent peripheral facial paresis
- C. Stomalgia
- D. Astheno-depressive disorders
- E. Glossalgia

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Lesson № 39

TOPIC: CHEILITIS. ETIOLOGY, CLINIC, DIAGNOSIS, TREATMENT AND PREVENTION.

I. Relevance of the topic: Cheilitis is an inflammation of the red border, oral mucosa and skin of the lips. This term combines independent diseases of the lips of various etiologies, as well as their lesions as a symptom of other diseases of the oral mucosa, skin, metabolic disorders, etc. The study of the anatomical and physiological features of the lips, clinical manifestations of their injuries and diseases, tactics of clinical and additional examination of patients with lip lesions contributes to timely and effective treatment. The study of the local status of the patient, taking into account general changes in the body, allows the dentist to diagnose the disease, identify etiological factors and establish pathogenetic mechanisms.

II. Educational goal:

2.1. The student should know:

- know the classification of cheilitis;
- etiology and pathogenetic mechanisms of cheilitis;
- clinical manifestations of primary and secondary cheilitis;
- methods of examination of patients with cheilitis;
- principles of differential diagnosis of cheilitis;
- methods of treatment of various types of cheilitis;
- methods of prevention of cheilitis.

2.2. Be able to:

- to examine a patient with inflammation of the red border, oral mucosa and skin of the lips;
- diagnose clinical signs of primary cheilitis;
- diagnose clinical signs of secondary cheilitis;
- to conduct a differential diagnosis of cheilitis;
- to make a treatment plan for dental patients with cheilitis.

III. Contents of the topic.

Cheilitis is an inflammation of the red border, oral mucosa and skin of the lips. This term includes independent lip diseases of various etiologies, as well as their lesions as a symptom of other diseases of the ENT, skin, metabolic disorders, etc.

Independent cheilitis includes exfoliative, glandular, allergic contact, meteorological, and actinic. Symptomatic cheilitis includes atopic, eczematous, cheilitis accompanied by macrochemia, etc.

This section provides information about cheilitis that are most commonly encountered in dental practice.

Exfoliative cheilitis (cheilitis exfoliativa) is a chronic disease of the exclusively red lip border, which is accompanied by exfoliation of epithelial cells and is associated with impaired keratinization.

Cheilitis actinica is an inflammation caused by the increased sensitivity of the red lip border to insolation. It was first described by S. Ayres in 1923.

The main etiologic factor is exposure to ultraviolet rays in the presence of sensitization of the red lip border to sunlight. The process occurs and exacerbates in the spring and summer, and can be combined with solar eczema of the face. The lower lip is affected more often than the upper lip.

Cheilitis meteorologica is an inflammatory disease of the lips caused by meteorological factors (high or low humidity, wind, cold, dust, sunlight, etc.).

The disease is more common in men, as well as in people with delicate skin or diseases accompanied by increased skin dryness (seborrhea, neurodermatitis, ichthyosis, etc.).

The clinical manifestation of meteorological cheilitis is congestive hyperemia of the red lip border, which is infiltrated and covered with small scales. The course of the disease is chronic, regardless of the season. Malignization is rarely observed, but the development of precancerous diseases is possible against the background of meteorological cheilitis.

Cheilitis glandularis is a disease caused by inflammation of the small salivary glands located in the red border, their hypertrophy and hyperfunction. This term was first introduced into the medical literature by Volkmann (1870), who described purulent glandular cheilitis.

Contact allergic cheilitis (cheilitis allergica contactilis) is a disease of the lips that develops due to sensitization of the lip tissues to various chemicals. The clinical manifestations of contact cheilitis were first described in 1925 by Miller and Taussing.

Eczematous cheilitis (cheilitis exzematosa) is a chronic allergic disease of the red border and skin of the lips. It is observed as an isolated lesion, as well as a symptom of facial eczema.

Atonic cheilitis (cheilitis atopicalis) is a symptom of dermatitis or neurodermatitis. It is most common in children and adolescents aged 7-17 years. In its etiology, a significant role is played by genetic factors that create a predisposition to the development of the so-called atonic allergy.

Miescher's granulomatous cheilitis (macrocheilitis granulomatosa) was described in 1945. G.Miescher. It is characterized by macrocheilia - persistent inflammatory thickening of the lips, more often the lower one.

Melkerson-Rosenthal syndrome is a symptom complex characterized by a combination of recurrent lip edema, recurrent unilateral, rarely bilateral facial nerve paresis and tongue folding.

The etiology of the syndrome has not been fully elucidated. Most likely, it has an infectious and allergic origin; it may be a consequence of vasomotor disorders in neurodystrophic disorders. A number of authors consider the disease to be constitutional and hereditary.

IV. Control questions to the topic of the lesson:

1. Name the classification of cheilitis.
2. Define the concepts of primary and secondary cheilitis.
3. Specify the etiology and pathogenesis of various types of cheilitis.
4. Clinical manifestations of exfoliative cheilitis
5. Clinical manifestations of meteorological cheilitis
6. Clinical manifestations of eczematous cheilitis
7. Differential diagnosis of cheilitis
8. Features of additional examination of patients with cheilitis.
9. Scheme of complex treatment and prevention of patients with cheilitis.

V. Control test tasks and/or case studies:

1. Patient A., 30 years old, complains of itching and pain of the lower lip, which occurs mainly in the summer. He works as a lifeguard at the beach. Which of the following independent diseases of the lips can be suspected?

- A. Actinic cheilitis
- B. Granulomatous cheilitis
- C. Atopic cheilitis
- D. Eczematous cheilitis
- E. Exfoliative cheilitis

2. Patient K., 18 years old, complains of pain and burning in the corners of the mouth, which makes it difficult to open. Past medical history: long-term antibiotic treatment for bilateral pneumonia. Objectively: in the corners of the mouth there are areas of hyperemia and maceration of the skin, which are covered with erosions with a grayish-white coating.

What is the most likely diagnosis?

- A. Candida cheilitis
- B. Eczematous cheilitis
- C. Exfoliative cheilitis
- D. Atopic cheilitis
- E. Contact allergic cheilitis

3. Patient T., 56 years old, works as a mechanic in a rural area, complained of dry lips, a feeling of "tightness". Anamnesis: the patient has bad habits - smokes, licks his lips to reduce dryness. Objectively: the lips are dry, infiltrated, the red border of the lip is stagnantly hyperemic, covered with small scales. Name the preliminary diagnosis.

- A. Actinic cheilitis
- B. Glandular cheilitis
- C. Atopic cheilitis
- D. Meteorological cheilitis
- E. Exfoliative cheilitis

4. Patient K., 18 years old, complains of pain and burning in the corners of the mouth, making it difficult to open. Past medical history: long-term antibiotic treatment for bilateral pneumonia. Objectively: in the corners of the mouth there are areas of hyperemia and maceration of the skin, which are covered with erosions with a grayish-white coating. What drugs of pathogenic action should be prescribed for general treatment?

- A. Antimycotics
- B. Hyposensitizers
- C. Vitamins
- D. Antibiotics
- E. Analgesics

5. The pathological examination revealed - a sharp hypertrophy of the small salivary glands, expansion of their individual acini and excretory ducts. Inflammatory infiltration with polymorphic cells and proliferation of connective tissue structures are noted around the excretory ducts. Which lip disease is characterized by this histologic picture?

- A. Glandular cheilitis
- B. Macrocheilitis of the lips
- C. Quincke's edema
- D. Allergic cheilitis
- E. Melkerson-Rosenthal syndrome

6. Patient H., 25 years old, complains of dry, peeling lips. She has been ill for several years, notes mood instability, irritability. On examination: on the red border of the lower lip from the Klein zone to its middle there are mica-like scales of gray color, which are easily removed to form a bright red surface. What kind of cheilitis is diagnosed in the patient?

- A. Exfoliative
- B. Atopic
- C. Allergic
- D. Meteorological
- E. Actinic

7. Patient P., 35 years old, complains of itching, burning, swelling of the lips, which appeared for the first time. Objectively: redness of the red border of the lips, skin, the presence of vesicles, erosions, on the surface of which serous fluid is released - serous "wells", crusts, small cracks, which are located on the background of erythematous lesions of the red border of the lips. The diagnosis is eczematous cheilitis. Which group of drugs for topical use should be prescribed in the first place?

- A. Antibiotics

B. Sulfonamides

C. Antifungal

D. Corticosteroids

E. Herbal preparations of anti-inflammatory action

8. Patient H., 25 years old, complains of dry, peeling lips. She has been ill for several years, notes mood instability, irritability. On examination: on the red border of the lower lip from the Klein zone to its middle there are mica-like scales of gray color, which are easily removed to form a bright red surface. What drugs should be prescribed for general treatment?

A. Sedatives

B. Hyposensitizing

C. Vitamins

D. Antimycotics

E. Antibiotics

9. Patient M., 28 years old, complains of painful lips, especially when closing them, the presence of crusts. Objectively: on the red border of the lips from the Klein zone to its middle there are yellowish-brown crusts, after removal of which a bright red smooth surface without erosion appears. Establish the diagnosis.

A. Exfoliative cheilitis, exudative form

B. Actinic cheilitis, exudative form

C. Acantholytic vesicle

D. Meteorological cheilitis

E. Eczematous cheilitis

10. Patient Z., 21 years old, complains of painful lips, especially when closing them, notes mood instability, irritability. On the red border of the lips from the Klein zone to its middle there are yellowish-brown crusts, after removal of which a bright red smooth surface without erosion appears. The mucous membrane in the Klein's zone is hyperemic and swollen. Consultation of which specialist should be included in the treatment plan?

A. Neurologist

B. Allergist

C. Surgeon

D. Hematologist

E. Dermatologist

6.1 Main literature

1. Stomatology: textbook: in 2 books. Book I / M.M. Rozhko, Z.B. Popovych, V.D. Kuroiedova et al. : edited by M.M. Rozhko. – Kyiv: AUS Medicine Publishing, 2020. – 792 p.: color edition
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6.2. Additional literature

1. Oral Pathology: Clinical Pathologic Correlations 7th Edition by James Skubba, Joseph A. Regesi, Richard K. K. Jordan.: edited by Elsevier, 2016. – 496 p.
2. Diseases of the Oral Mucosa: Study Guide and Review 1st ed. 2022 Edition by Enno Schmidt. Publisher: Springer; 1st edition, 2021. – 563 p.
3. Atlas of Oral Diseases: A Guide for Daily Practice 1st ed. 2016 Edition by Isaäc van der

- Waal. Publisher: Springer; 1st edition, 2016. – 198 p.
4. Color Atlas of Common Oral Diseases, Enhanced Edition by Robert P. Langlais, Craig S. Miller, Jill S. Gehrig. Publisher: Jones & Bartlett Learning; 5th edition, 2020. – 282

Lesson № 40

TOPIC: PRECANCEROUS DISEASES. CLASSIFICATION OF PRECANCEROUS LESIONS OF THE ORAL MUCOSA AND RED LIP BORDER. PROGNOSIS AND PREVENTION OF PRECANCEROUS DISEASES.

I. Relevance of the topic: The processes that precede the development of a tumor are called pre-tumor, and in relation to cancer - precancerous. The latter differ from cancer in the absence of one or more signs that give the right to diagnose cancer. The development of cancer is primarily facilitated by trauma, chronic inflammatory diseases accompanied by erosion and ulcers, proliferative processes, and benign tumors. Knowledge of the etiology and pathogenesis of precancerous diseases contributes to the timely detection of these pathological processes and their treatment. The study of the patient's local status, taking into account general changes in the body, allows the dentist to diagnose the disease, identify etiological factors and establish pathogenetic mechanisms.

II. Educational goal:

2.1. The student should know:

- know the definition of precancer;
- causes of precancer of the red border of the lips and oral mucosa;
- clinical manifestations of obligatory and optional precursors;
- methods of examination of patients with precancerous diseases;
- principles of differential diagnosis of precancerous diseases;
- methods of treatment of various types of precancerous diseases;
- methods of prevention of precancerous diseases.

2.2. Be able to:

- conduct an examination of a patient with precancerous diseases;
- diagnose elective precancerous diseases;
- diagnose obligatory precancerous diseases;
- conduct differential diagnosis of precancerous diseases;
- to make a treatment plan for dental patients with precancerous diseases.

III. Contents of the topic.

The terms precancer, precursor lesions, premalignant, intraepithelial neoplasia and potentially malignant have been used in the international literature to broadly describe clinical presentations that may have a potential to become cancer. A precancerous lesion is a morphologically altered tissue in which oral cancer is more likely to occur than in its apparently normal counterpart. A precancerous condition is a generalized state associated with a significantly increased risk of cancer.

A.L.Mashkilleyson precancers classification

I. Obligate precancers:

- 1) Bowen's disease and Kejer's erythroplasia;
- 2) warty or nodular lips red border precancer;
- 3) abrasive precancerosis cheilitis Manganotti;
- 4) lips red border limited precancerous hyperkeratosis.

II. Optional precancers with high potential malignancy:

- 1) erosive and verrucous leukoplakia;
- 2) papilloma and papillomatosis of palate;
- 3) cutaneous horn;
- 4) keratokantoma.

III. Optional precancers with less potential malignancy:

- 1) flap leukokeratosis;
- 2) oral mucosa chronic ulceration;
- 3) lips red border lupus erythematosus and red flap leave hiperkeratotal and erosive forms;

- 4) chronic lips cracks;
- 5) postirradiation cheilitis and stomatitis;
- 6) meteorological and actinic cheilitis.

The processes that precede the development of a tumor are called pre-tumor, and in relation to cancer, pre-cancerous. The latter differ from cancer in the absence of one or more signs that give the right to diagnose cancer.

The development of cancer is primarily facilitated by trauma, especially chronic trauma. Often, cancer is preceded by chronic inflammatory diseases accompanied by erosion and ulcers, proliferative processes, and benign tumors.

Depending on the frequency of transition to cancer, *obligatory* and *optional precancerous processes* are distinguished.

Obligatory precancerous processes without treatment necessarily lead to the development of cancer at different intervals.

Optional precursors are processes that do not always cause cancer.

Obligatory precursors include Bowen's disease, warty precancer of the red lip border, abrasive precancerous cheilitis of Manganotti, and limited precancerous hyperkeratosis of the red lip border. Optional precancerous lesions include: erosive and verrucous leukoplakia, papillomatosis, erosive-ulcerative and hyperkeratotic forms of lichen planus and lupus erythematosus, chronic lip fissures, skin horn (Unna's fibrokeratoma), keratoacanthoma, post-radiation stomatitis.

IV. Control questions to the topic of the lesson:

1. Define the term "precancer".
2. Etiological factors of precancerous diseases of the red border of the lips and oral mucosa.
3. Mechanisms of development of precancerous diseases.
4. Types of bonded precancerous lesions of the oral mucosa.
5. Types of facultative precursors of the oral mucosa.
6. Specify the obligate precursors of the red border of the lips.
7. Name the optional precursors of the red border of the lips.
8. Specify the signs of malignization of precancerous diseases.
9. Specify the methods of treatment and prevention of precancerous diseases of the red border of the lips and oral mucosa.

V. Control test tasks and/or case studies:

1. In a patient S., 57 years old, suffering from chronic cholecystitis, during the treatment of odontopathology on the mucous membrane of the right cheek, closer to the corner of the mouth, a tuberous white formation was found, painless, with a slight induration at the base. There is a dark smoker's plaque on the teeth. What is the primary tactic of the dentist in this situation?

- A. Vitamin therapy
- B. Elimination of traumatic factors and background pathology
- C. Hygienic measures
- D. Sanitary and educational work
- E. Implementation of any measures that "delay old age"

2. During the examination of the oral cavity of patient S., 65 years old, the dentist noticed a bright red spot with a velvety surface on the cheek mucosa, 1×2 cm in size. The lesion is somewhat sunken compared to the surrounding tissues, painless, soft in texture. Regional lymph nodes are not palpable. Diagnosis: Bowen's disease. What group of precursors does this disease belong to?

- A. Obligatory precursors
- B. Facultative precursors
- C. Chronic inflammation

D. Dystrophic lesion

E. Background pathology

3. Pathological examination of the lesion from the cheek mucosa in patient S., 65 years old, revealed: polymorphism of spinous layer cells up to atypia, increased number of basal cell mitoses, giant cells, multinucleated cells with pronounced basophilia of nuclei, hyperkeratosis and parakeratosis. The basement membrane and basal layer are preserved. In the upper part of the stroma there is a small infiltrate of plasma cells and lymphocytes. What condition does this pathomorphology correspond to?

A. Allergy

B. Inflammation

C. Dystrophy

D. Precancer

E. Necrosis

4. A 62-year-old man visited a dentist with complaints of an ulcer on the lip, which periodically heals and then reappears. He has been a smoker for 40 years. On objective examination, an irregularly shaped erosion of bright red color with a smooth surface is detected on the red border of the lower lip. The erosion is soft and painless on palpation. Regional lymph nodes are not palpable. Diagnosis: Manganotti's cheilitis. To which group of precancerous lesions of the red border of the lips by A.L. Mashkillason does this disease belong?

A. Obligate precursors

B. Facultative precursors

C. Optional precursors with a high possibility of degeneration

D. Optional precursors with a lower possibility of degeneration

E. Background pathology

5. Patient K., 57 years old, complains of a neoplasm on the lip. On objective examination, a painless hemispherical nodule with a diameter of 6 mm, covered with gray scales that are difficult to remove, is found on the red border of the lower lip. The dentist has made a preliminary diagnosis: warty precancer. To which group of precancerous lesions of the red border of the lips does this disease belong?

A. Obligatory precancer

B. Facultative pre-cancer

C. Chronic inflammation

D. Dystrophic lesion

E. Background pathology

6. The pathomorphological examination of the erosion of the red border of the lower lip in patient D., 62 years old, revealed a defect in the epithelium with areas of proliferation. The epithelium along the edges of the erosion is in a state of acanthosis. In the zone of proliferation in the lower rows of the spinous and basal layers, the phenomena of cell discomplexity and atypia are observed. In the underlying tissue, massive inflammatory infiltration of lymphoid and plasma cells is determined. What condition does this pathomorphology correspond to?

A. Allergy

B. Inflammation

C. Dystrophy

D. Precancer

E. Necrosis

7. Patient N., 63 years old, was diagnosed by a dentist with abrasive precancerous cheilitis Manganotti. What are the histological changes of the epithelium in this pathology?

A. Signs of chronic inflammation

- B. Acanthosis, hyperkeratosis of cells of the basal and spinous layers
 - C. Necrosis
 - D. Hyperkeratosis
 - E. Parakeratosis
8. Prevention of precancerous diseases includes a whole range of actions to improve the health of patients. What are the most important preventive measures?
- A. Vitamin therapy
 - B. Elimination of traumatic factors and background pathology
 - C. Hygienic measures
 - D. Sanitary and educational work
9. In recent years, the number of precancerous diseases has increased significantly. Who should organize the work on the examination of patients with precancerous diseases of the oral cavity and red lip?
- A. Periodontal office
 - B. The office for the treatment of oral health diseases
 - C. Therapeutic department of the dental clinic
 - D. Surgical department of the dental clinic
 - E. Onco-dental center
10. What objective criteria should be used to evaluate the effectiveness of conservative treatment of patients with elective precancerous diseases?
- A. Recovery
 - B. Stabilization of the process
 - C. Reducing the focus of the lesion
 - D. Absence of malignant degeneration
 - E. Absence of relapses

6.1 Main literature

1. Stomatology: textbook: in 2 books. Book I / M.M. Rozhko, Z.B. Popovych, V.D. Kuroiedova et al. : edited by M.M. Rozhko. – Kyiv: AUS Medicine Publishing, 2020. – 792 p.: color edition
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6.2. Additional literature

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4. Color Atlas of Common Oral Diseases, Enhanced Edition by Robert P. Langlais, Craig S. Miller, Jill S. Gehrig. Publisher: Jones & Bartlett Learning; 5th edition, 2020. – 282

Lesson № 41

TOPIC: OBLIGATE PRECANCEROUS LESIONS OF THE ORAL MUCOSA AND RED BORDER OF THE LIPS. ELECTIVE PRECANCEROUS LESIONS OF THE ORAL MUCOSA AND RED BORDER OF THE LIPS. ETIOLOGY, PATHOGENESIS, CLINIC, DIAGNOSIS, TREATMENT AND PREVENTION.

I. Relevance of the topic: The processes that precede the development of a tumor are called pre-tumor, and in relation to cancer - precancerous. Depending on the frequency of transition to cancer, there are obligatory and optional precancerous processes. Obligatory precancerous processes without treatment necessarily lead to the development of cancer at different intervals. Optional precancerous processes are those that do not always cause cancer. Knowledge of the etiology and pathogenesis of precancerous diseases contributes to the timely detection of these pathological processes and their treatment.

II. Learning objectives:

2.1. The student should know:

- know the definition of precancer;
- classification of facultative and obligatory precancer;
- clinical manifestations of obligatory and optional precursors;
- methods of examination of patients with precancerous diseases;
- principles of differential diagnosis of precancerous diseases;
- methods of treatment of various types of precancerous diseases;
- methods of prevention of precancerous diseases;

2.2. Be able to:

- conduct an examination of a patient with precancerous diseases;
- diagnose elective precancerous diseases;
- diagnose obligatory precancerous diseases;
- conduct differential diagnosis of precancerous diseases;
- to draw up a plan for the treatment and prevention of dental patients with precancerous diseases.

III. Contents of the topic.

Bowen's disease (morben Bowen). It was first described by the American dermatologist J. Bowen in 1913. It has the highest potential malignancy among all precancerous diseases and is included in the concept of cancer in situ. The most commonly affected areas are the soft palate, tongue, retromolar area, and tongue.

Clinic. The lesion (more often one, less often two) is a limited stagnant red spot with a smooth or velvety surface, on which small papillary outgrowths are observed. Due to oral mucosa atrophy, the lesion is slightly sunken compared to the surrounding tissue. If the lesion is localized on the tongue, the tongue papillae in this area disappear.

Warty precancer (praecancer verrucosus). It was described by A.L. Mashkillason in 1965. It occurs almost exclusively on the red border of the lower lip. It looks like a nodule of a semi-spherical shape, 4-10 mm in diameter, which rises above the oral mucosa level by 4-5 mm, is located on an unchanged red border. The top of the node is covered with densely attached gray scales.

Pathologic examination reveals a pronounced limited proliferation of the epithelium due to the expansion of the spinous layer; hyperkeratosis often alternates with parakeratosis, discomplete and polymorphism of spinous cells are observed. The basement membrane is not affected. Round cell infiltration is noted in the connective tissue.

Manganotti's abrasive preaecal cheilitis (cheilitis abrasiva praecancrosa Manganotti). It was described in 1933 by the Italian dermatologist Manganotti. It occurs mainly in men. Clinical picture. The clinical picture is characterized by the presence of one, rarely two or more round, oval or irregular erosions on the red border of the lip, located

laterally, closer to the middle of the red border. The surface of the erosion is smooth, bright red. In some patients, it is covered with a thin layer of epithelium or crusts form on it. There is no underlying tissue compaction around the erosions. Erosions exist for a long time, sometimes epithelialize, and then reappear in the same or another place.

Cornu cutaneum is a limited hyperplasia of the epithelium with pronounced hyperkeratosis, resembling a horn in appearance and density. It occurs on the red border of the lip, more often the lower one, in people over 60 years of age.

The clinic is quite typical. The lesion is a well-defined focus up to 1 cm in diameter, from which a cone-shaped protrusion no more than 1 cm high extends. Its color is dirty or brownish-gray.

Keratoacanthoma is a benign epidermal tumor that is most often localized on the red border of the lower lip, less often on the tongue.

Clinical picture. The disease begins with the formation of a gray-red nodule on the lip or tongue with a crater-like depression in the center, which is filled with horny masses. Within 1 month, the tumor reaches its maximum size (2.5 x 1 cm). There are different stages of keratoacanthoma development. Most often, in 6-8 months it either disappears by itself, with an atrophic pigmented scar forming in its place, or transforms into cancer.

IV. Control questions to the topic of the lesson:

1. Define the term "precancer".
2. Etiological factors of precancerous diseases of the red border of the lips and oral mucosa.
3. Mechanisms of development of precancerous diseases.
4. Types of obligate and facultative precursors of the oral mucosa.
5. Specify the obligatory precursors of the red border of the lips.
6. Name the optional precursors of the red border of the lips.
7. Specify the signs of malignization of precancerous diseases.
8. Specify the methods of treatment and prevention of precancerous diseases of the red border of the lips and oral mucosa.

V. Control test tasks and/or case studies:

1. During an objective examination of patient P. 62 years old, the dentist found on the red border of the gray-white center of gangrene, polygonal in shape, not rising above the level of healthy tissue, but falling. Its surface is covered with thin, tightly attached scales. The tissues surrounding the lesion are unchanged. Regional lymph nodes are not enlarged. Make a preliminary diagnosis.

- A. Cutaneous horn
- B. Papilloma
- C. Limited precancerous hyperkeratosis of the red border
- D. Flat leukoplakia
- E. Abrasive precancerous cheilitis of Manganotti

2. During the objective examination of patient T., 69 years old, the dentist found on the cheek mucosa a sharply limited painless oval pink-red lesion with a velvety surface, with slight peeling. It is known from the anamnesis that this lesion appeared about five years ago. The regional lymph nodes are not enlarged. Make a preliminary diagnosis.

- A. Keratoacanthoma
- B. Papilloma
- C. Bowen's disease
- D. Leukoplakia
- E. Skin horn

3. During a routine examination of patient K., 48 years old, the dentist found a small gray-red nodule on the red border of the lower lip with a crater-like depression in the center, which is

filled with horny masses. The nodule is painless, movable, not connected to the surrounding tissues. What is your diagnosis?

- A. Keratoacanthoma
- B. Warty precancer
- C. Bowen's disease
- D. Cancer
- E. Skin horn

4. During a routine examination of patient S., a 49-year-old construction worker, the dentist found a small gray-red nodule on the red border of the lower lip with a crater-like depression in the center, filled with horny masses. The nodule is painless, mobile, not connected to the surrounding tissues. What is the likely cause of the disease?

- A. Chronic trauma
- B. Allergy
- C. Acute trauma
- D. Stress
- E. Exogenous intoxication

5. During the examination of patient K., 20 years old, the dentist on the red border of the lower lip laterally from the center found a polygonal center of keratinization 3×4 mm in size, which is sunken compared to the surrounding tissue. Its surface is covered with thin, tightly fixed scales. The lesion is located on an unchanged red border. Make a preliminary diagnosis.

- A. Limited hyperkeratosis of the lips
- B. Warty precancer
- C. Bowen's disease
- D. Cancer
- E. Skin horn

6. Patient L., 46 years old, is being treated by a dentist for erosive ulcerative form of lichen planus. Complex conservative therapy for a month did not give any effect. Choose the most rational method of treatment for this patient in order to prevent the development of cancer.

- A. Surgical
- B. Therapeutic
- C. Vacuum therapy
- D. Does not require treatment
- E. Observation

7. During a routine examination of a patient E., 48 years old, a bricklayer, a dentist found a small gray-red nodule on the red border of the lower lip with a crater-like depression in the center, filled with horny masses. The nodule is painless, mobile, not connected to the surrounding tissues. What is the prevention of the disease?

- A. Exclude the effect of traumatic factors
- B. X-ray therapy
- C. Ultraviolet light therapy
- D. Gum massage
- E. Keratoplasty

8. During a routine examination of a patient L., 38 years old, a dentist found a small gray-red nodule on the red border of the lower lip with a crater-like depression in the center, filled with horny masses. The nodule is painless, mobile, not connected to the surrounding tissues. Prescribe the treatment.

- A. Surgical
- B. Therapeutic
- C. Cryotherapy
- D. Does not require treatment

E. Observation

9. During the examination of a patient D., 26 years old, the dentist found a polygonal center of keratinization 3×4 mm in size on the red border of the lower lip laterally from the center, which is sunken in comparison with the surrounding tissues. Its surface is covered with thin, tightly fixed scales. The lesion is located on an unchanged red border. Make a preliminary diagnosis.

- A. Cancer
- B. Warty precancer
- C. Bowen's disease
- D. Limited hyperkeratosis of the lips
- E. Skin horn

10. A 37-year-old man complained of a mass on the lower lip, which interferes with his speech and eating. Objectively: on the red border of the lower lip - a hemispherical mass, up to 1 cm in diameter, rising above the level of the surrounding tissues. The surface of the lesion is covered with tightly attached scales, palpation is painless. Make a preliminary diagnosis.

- A. Cutaneous horn
- B. Limited hyperkeratosis of the lips
- C. Bowen's disease
- D. Cancer
- E. Warty precancer

VI. References**6.1 Main literature**

1. Stomatology: textbook: in 2 books. Book I / M.M. Rozhko, Z.B. Popovych, V.D. Kuroiedova et al. : edited by M.M. Rozhko. – Kyiv: AUS Medicine Publishing, 2020. – 792 p.: color edition
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6.2. Additional literature

1. Oral Pathology: Clinical Pathologic Correlations 7th Edition by James Skubba, Joseph A. Regesi, Richard K. K. Jordan.: edited by Elsevier, 2016. – 496 p.
2. Diseases of the Oral Mucosa: Study Guide and Review 1st ed. 2022 Edition by Enno Schmidt. Publisher: Springer; 1st edition, 2021. – 563 p.
3. Atlas of Oral Diseases: A Guide for Daily Practice 1st ed. 2016 Edition by Isaïc van der Waal. Publisher: Springer; 1st edition, 2016. – 198 p.
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Lesson № 42

TOPIC: DENTOGENIC CHRONIC INTOXICATION. ETIOLOGY. PATHOGENESIS. CLINIC, DIAGNOSIS, TREATMENT AND PREVENTION OF DENTOGENIC CHRONIC INTOXICATION.

I. Relevance of the topic: Dental chronic intoxication is a chronic disease of the body that occurs as a result of prolonged and permanent exposure to the metabolic products of microorganisms and the breakdown of cells of the lesion localized in the oral cavity. Odontogenic focal infection can lead to the development of such general somatic diseases as endocarditis, septic infarctions, diffuse inflammatory processes in parenchymal organs, arthritis, and diabetes mellitus. Knowledge of the etiology, pathogenesis and clinical manifestations of dental intoxication helps to prevent the occurrence of this pathology.

II. Educational objective:

2.1. The student should know:

- know the definition of the concept of dentogenic chronic intoxication;
- etiology of dentogenic chronic intoxication;
- pathogenesis of dental chronic intoxication;
- clinical manifestations of dental chronic intoxication;
- methods of examination;
- principles of differential diagnosis of dental chronic intoxication;
- methods of treatment of dental chronic intoxication;
- methods of prevention of dentogenic chronic intoxication.

2.2. Be able to:

- to examine a patient with manifestations of dentogenic chronic intoxication;
- diagnose dentogenic chronic intoxication;
- to conduct a differential diagnosis of dentogenic chronic intoxication;
- to make a plan of treatment and prevention of dental patients with dental chronic intoxication.

III. Contents of the topic.

An infection site is an accumulation of microbes, their waste products, decay elements and cells that constantly irritate nerve receptors in a reflexive manner. In response to such irritation, a special type of reaction can occur - sepsis.

The duration of the septic reaction can vary from several hours (lightning form), days (acute sepsis) to several months and even years (chronic sepsis).

Depending on the localization of the primary focus of infection, sepsis can be classified as odontogenic, otogenic, tonsillogenic, etc.

The primary focus that caused the septic condition, as well as the entry gates of infection and the relationship between the local focus and the overall body reactivity remain the main problem in the diagnosis and treatment of chronioseptic conditions.

Various terms have been proposed to define the focus of chronic sepsis: "focus of chronic inflammation", "chronic focus of infection", "focus of dormant infection", "odontogenic focus", "dental focus". This emphasized its localization and connection with dental diseases.

The term dentogenic focal infection refers to a state of the body when a disease of any body system or organ is pathogenetically associated with a chronic, sluggish, sometimes latent inflammatory process in the maxillofacial area.

A stomatogenic focus of infection is a localized chronic inflammatory disease of organs or tissues of the maxillofacial region, which may have been exposed to medication, but is capable of causing stomatogenic chronic intoxication.

Anatomical and pathophysiological substantiation of the occurrence of foci of pathological irritation in the maxillofacial region. It is no coincidence that the maxillofacial area attracts close attention of researchers and doctors in the study of focal infection, since

the oral cavity is the beginning of the digestive tract and partially the respiratory tract and therefore represents a gateway through which a large number of different microorganisms constantly enter the body. The number of bacteria in the oral fluid ranges from 50 million to 5 billion. The prerequisite for the richness of the microflora is the anatomical and physiological specificity of the organs and tissues of the oral cavity.

A small amount of bacteria is found on the gingival margin of a hygienically maintained oral cavity. Neglect of hygiene leads to the accumulation of microflora on the teeth: after four hours, 10-10 bacteria are counted per 1 mm of the tooth surface, among which *Streptococcus* and *Actinomyces* predominate, as well as gram-negative, facultative anaerobic bacilli - *Haemophilus*, *Eikenella*, *Actinobacillus actinomycetemcomitans*.

Nonspecific antibacterial defense factors that affect only certain types of microorganisms include immunoglobulins, which are protective proteins in blood or secretions that have the function of antibodies and belong to the globulin fraction. In the oral cavity, Ig A, Ig G, and Ig M are most abundant. The most important role in preventing the body from being sensitized to dental infection is played by the periodontal barrier function, which is provided by the following factors

- the ability of the gingival epithelium to keratinize;
- a large number and peculiarities of the direction of collagen fiber bundles;
- gingival turgor;
- the state of glycosaminoglycans of periodontal connective tissue formations;
- features of the structure and function of the gingival sulcus;
- the presence of mast and plasma cells;
- gingival fluid with a high content of bactericidal substances and immunoglobulins.

Development of chroniosepsis

Clinical manifestations. Focal diseases are characterized by a discrepancy between subjective symptoms and objective disorders. Their clinical manifestations are diverse.

Provoking moments in the development of focal diseases are hypothermia, overwork, trauma, emotional stress, etc. I.G. Lukomsky (1933) divided focal diseases into 3 groups depending on the impact of the focus on the body.

The 1st group includes diseases whose occurrence is directly related to the dentogenic focus;

Group 2 - diseases in which the focus accompanied and complicated them;

Group 3 - diseases that did not have a clear connection with the focus.

This systematization is not specific, so it is not used in the practice of doctors.

G.D. Ovrutsky (1993) proposed a systematization based on the peculiarities of the state of sensitization of the body, which is still common today. According to this systematization, there are 4 groups of diseases associated with dental caries:

- 1) infectious and allergic diseases of streptococcal nature;
- 2) autoallergic diseases;
- 3) diseases caused by drug sensitization;
- 4) diseases associated with the suppression of nonspecific resistance of the body due to the prolonged existence of the focus.

Infectious and allergic diseases of streptococcal nature, along with chroniosepsis, include subacute septic endocarditis, nonspecific myocarditis, vasculitis, nephritis, conjunctivitis, etc.

If these diseases are caused by a dental focus, they develop very slowly. Among the autoallergic diseases associated with the focus, one should keep in mind true rheumatism, disseminated lupus erythematosus, scleroderma, rheumatoid arthritis, and polyarteritis nodosa. The peculiarities of such diseases are that over time, the autoimmune reaction can

become independent and the focus that was the direct cause of the disease largely loses its role.

Allergic reactions associated, as a rule, with the treatment of a dentogenic focus are manifested by vasculitis, erythema, capillaryitis, phlebitis, thrombophlebitis. Conjunctivitis, rhinitis, dermatitis, bronchitis, bronchial asthma, arthralgia, and changes in the blood system (hemorrhage, anemia, leukocytosis, etc.) may be observed.

IV. Control questions to the topic of the lesson:

1. Define the concept of dentogenic chronic intoxication.
2. Name the existing theories of dentogenic chronic intoxication
3. Etiological factors of dentogenic chronic intoxication.
4. Mechanisms of development of dentogenic chronic intoxication.
5. What are the features of treatment and prevention of dentogenic chronic intoxication?

V. Control test tasks and/or case studies:

1. In patients with stomatogenic chronic intoxication are subject to mandatory removal:
 - A. Destroyed roots and teeth with the third degree of mobility
 - B. Teeth covered with crowns
 - C. Implants
 - D. Teeth after hemisection
 - E. All depulped teeth
2. The microbiological theory of dental chronoinfection attributes its development to:
 - A. Decrease in the body's resistance
 - B. Chronic fibrous periodontitis
 - C. Chronic granulomatous periodontitis
 - D. Activation of microflora and its tropism to target organs
 - E. Sensitization of the body
3. The main purpose of root canal filling (obturation):
 - A. Effective protection of the canal system from reinfection.
 - B. Restoration of tooth function.
 - C. Restoration of the anatomical shape of the tooth.
 - D. Stimulation of reparative osteogenesis.
 - E. Prevention of microflora from entering the body through the channel system.
4. Clinic of dentogenic chronic intoxication:
 - A. Diverse
 - B. Specific
 - C. Nonspecific
 - D. Absent
 - E. Weakly expressed, nonspecific, with a predominance of vegetative neurotic syndromes
5. Reliable prevention of dentogenic chronic intoxication is:
 - A. In the prevention of caries and periodontal disease
 - B. High-quality root canal filling
 - C. The use of strong antiseptics
 - D. The use of modern antibiotics
 - E. Minimal tissue trauma
6. Patient M., 38 years old, who often suffers from sore throat, was referred to a dentist for consultation. The examination revealed: the crown of the 27th tooth is destroyed by 1/3, the CPV index = 13, GI = 2.1. The dentist suggested that the patient has dentogenic chronic intoxication. Which modern theory of pathogenesis of dentogenic chronic intoxication corresponds to this clinical picture?
 - A. The infectious-allergic theory of T.D. Ovrutsky
 - B. Neuro-toxic concept of I.G. Lukomsky

C. Microbiological theory of E. Rosenau

D. Neurotrophic theory of D.A. Entin

E. Allergic theory of G.A. Vasiliev

7. Patient K., 35 years old, often feels weak, suffers from colds. Anamnesis: rheumatoid arthritis, maxillofacial trauma. On examination: teeth 31 and 41 are discolored, percussion is painless, targeted radiograph reveals a focus of bone destruction in the area of the apices of the roots of teeth 41 and 31 with clear boundaries, rounded, up to 0.8 cm in diameter. What group of diseases does this patient's condition belong to?

A. Focal-caused diseases

B. Autoimmune diseases

C. Hereditary diseases

D. Autoinfectious diseases

E. Hormonal dysfunctions

8. Patient Z., 24 years old, complains of weakness, fatigue, headache, drowsiness, pain in the lower legs during movement and at rest. She was examined by a general practitioner, but no pathology of the internal organs was detected. Oral examination: 16 teeth have a deep carious cavity communicating with the tooth cavity, tooth percussion is sensitive, the tooth does not react to thermal stimuli. Other teeth are intact. Preliminary diagnosis: stomatogenic chronic intoxication, chronic apical

periodontitis of the 16th tooth. Which theory of oral sepsis most fully explains the pathogenesis of dentogenic chronic intoxication?

A. Bacterial theory

B. Infectious and allergic theory

C. The concept of vegetative-septic syndrome

D. Neurotrophic theory

E. Neurotoxic theory.

9. Patient D., 28 years old, consulted a general practitioner with complaints of headache, dizziness, dull pain in the heart, sweating. Inpatient treatment was ineffective. After discharge, due to the destruction of an artificial crown on the 26th tooth, the patient went to the dentist. What are the primary actions of the dentist:

A. Fixation of the artificial crown

B. X-ray diagnostics of the 26th tooth

C. Direct restoration of the 26th tooth

D. Sanitation of the oral cavity

E. Thorough dental examination.

10. Patient K., 33 years old, complains of headache, palpitations, dizziness. He does not regularly visit the dentist. Examination of the oral cavity revealed several decayed teeth with asymptomatic clinical manifestations. What additional examination methods should be performed in this case?

A. Examination by a general practitioner, orthopantomography, odontodiagnostics

B. X-ray diagnostics, electrocardiography, allergy tests in vivo

C. Odontodiagnostics, examination by a neurologist, electrocardiography

D. Examination by a therapist, laboratory diagnostics

E. Orthopantomography, laboratory diagnostics, allergy tests in vivo

VI. References

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