

Federal State Autonomous Educational
higher education institution
"Kazan (Volga) Federal University"
Institute of Fundamental Medicine and Biology

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Head of the department Khafizov R.G.

**METHODOLOGICAL DEVELOPMENT № 2
PRACTICAL LESSON
ON THE DISCIPLINE "DENTISTRY"
SECTION "THERAPEUTIC DENTISTRY"
4 COURSE (8 SEMESTER)**

TOPIC : Traumatic lesions of the oral mucosa.

Purpose: - Learn to diagnose and treat traumatic (acute and chronic) lesions of the mucous membrane of the oral cavity and lips.

Educational objective: to study the tactics of the doctor at the observation by and and treatment of patients with diseases of the mucous membrane of the mouth.

Formed general cultural competencies:

- the ability and willingness to analyze socially significant problems and processes, to put into practice the methods of the humanities, natural sciences, biomedical and clinical sciences in various types of professional and social activities (OK-1);
- the ability and willingness to carry out their activities, taking into account the moral and legal standards adopted in society, to comply with the rules of medical ethics, laws and regulatory legal acts on working with confidential information, and to keep medical confidentiality (OK-8).

Formed professional competencies:

- the ability and willingness to conduct dental professional procedures (PK-18);
- the ability and willingness to make a diagnosis, taking into account the International Statistical Classification of Diseases and Health Problems (ICD) (PK-23);
- the ability and willingness to diagnose typical dental diseases of hard and soft tissues of the oral cavity, dentofacial anomalies in patients of all ages (PK-24);
- the ability and willingness to analyze the effect of drugs on the basis of their pharmacological properties in the treatment of various diseases, including dental (PK-28);
- the ability and willingness to treat diseases of hard tissues of teeth in patients of different ages (PK-30);
- the ability and willingness to conduct simple endodontic treatment of pulp and periodontal diseases in patients of different ages (PK-31).

LESSON DURATION: 4 academic hours.

MATERIAL PROVISION: sets of dental trays with tools for receiving patients and working on phantoms; dental filling materials; expendable materials; videos, tests, situational tasks; Presentations for multimedia projectors.

VENUE: Phantom room of the Department of Implantology and Dentistry.

LITERATURE:

Basic literature

1. Yanushevich O.O., Therapeutic dentistry [Electronic resource] / O.O. Yanushevich , Yu.M. Maksimovsky , L.N. Maksimovskaya , L.Yu. Orekhova - M.: GEOTAR-Media, 2016 .-- 760 p. - ISBN 978-5-9704-3767-4 - Access mode: <http://www.studmedlib.ru/book/ISBN9785970437674.html>
2. Barer G.M., Therapeutic dentistry. In 3 parts. Part 3. Diseases of the oral mucosa. [Electronic resource]: textbook / Ed. G.M. Barera - 2nd ed., Ext. and reslave . - M.: GEOTAR-Media, 2015 .-- 256 p. - ISBN 978-5-9704-3460-4 - Access mode: <http://www.studmedlib.ru/book/ISBN9785970434604.html>
3. Makeeva IM, Diseases of the teeth and oral cavity [Electronic resource]: textbook / Makeeva IM, Sokhov S.T., Alimova M.Ya. et al. - M.: GEOTAR-Media, 2012 .-- 248 p. - ISBN 978-5-9704-2168-0 - Access mode: <http://www.studmedlib.ru/book/ISBN9785970421680.html>

additional literature

1. Dentistry Recording and maintaining a medical history : manual / Ed. V.V. Afanasyev, O.O. Yanushevich . - 2 nd ed. Ispra . and add. - M.: GEOTAR-Media, 2013 .-- 160 p. [http://www.studmedlib.ru/en/book/ISBN: 5970431648 ISBN-13 \(EAN\): 9785970431641.html](http://www.studmedlib.ru/en/book/ISBN: 5970431648 ISBN-13 (EAN): 9785970431641.html)
2. Management plans for patients. Dentistry / O. Yu. Atkov [et al.]; under the editorship of O. Yu. Atkova , V. M. Kamenskikh, V. R. Besyakova . - 2 nd ed. Ispra . and add. - M.: GEOTAR-Media, 2015 .-- 248 p. <http://www.studmedlib.ru/en/book/ISBN: 978-5-9704-3400-0.html>
3. Dictionary of professional dental terms: textbook. allowance / E.S. Kalivrajiyan , E.A. Bragin, S.I. Abakarov et al. - M.: GEOTAR-Media, 2014 .-- 208 p. <http://www.studmedlib.ru/en/book/ISBN9785970428238.html>

QUESTIONS FOR IDENTIFYING THE INITIAL LEVEL OF KNOWLEDGE:

1. Pathoanatomy of coagulation necrosis, characteristic features.
2. Pathoanatomy of collicative necrosis, characteristic features.
3. Physiological processes that occur in the tissues of the body when exposed to a galvanic current of various intensities.

QUESTIONS ON THE TOPIC OF THE LESSON:

1. List under what conditions damage to the oral mucosa by various agents is possible.
2. What are the traumatic factors that cause damage of the oral mucosa. Name their classification.
3. List the main characteristics of the damaging agent, which in the aggregate of their action on the mucosa determine the characteristics of the clinical picture.
4. What are the features of the treatment of acid damage to the oral mucosa.
5. Indicate the diagnostic signs and treatment features of alkaline burns of the oral mucosa.
6. Galvanic syndrome. Pathogenesis, clinical features, diagnosis, treatment features of patients with galvanic syndrome. Differential diagnosis.
7. Leukoplakia of the oral mucosa. Etiology, pathogenesis. Clinic, diagnosis, differential diagnosis of leukoplakia.
8. Features of the treatment of various clinical forms of leukoplakia.
9. Prevention of the disease. Cancer Prevention
10. Prescribe the medications necessary for the treatment of the oral mucosa: a) in acute acid necrosis of OM; b) in case of damage to OM with a concentrated alkali solution.

Classification of diseases of the oral mucosa:

1. Traumatic lesions:

- a) mechanical, (traumatic erythema, erosion, ulcer, leukoplakia, nicotine leukkeratosis);
- b) chemical;
- c) physical (galvanosis , actinic cheilitis , radiation, etc.).

2. Infectious diseases:

- a) viral (herpetic stomatitis, herpes zoster, foot and mouth disease, viral warts, flu, HIV infection);
- b) Vincent's ulcerative necrotic stomatitis ;
- c) bacterial infections (streptococcal stomatitis, pyogenic granuloma, chanciform pyoderma, tuberculosis, etc.);
- d) sexually transmitted diseases (syphilis, gonorrheal stomatitis, etc.);
- e) mycoses (candidiasis, actinomycosis, etc.).

3. Allergic diseases:

- a) (Quincke's edema , allergic stomatitis, glossitis, cheilitis , multiforme exudative erythema, recurrent aphthous stomatitis, etc.).

4. Changes in the oral mucosa during exogenous intoxications.

5. Changes in the oral mucosa with some systemic diseases - niyah and diseases of an exchange:

- a) hypo - and vitamin deficiencies;
- b) diseases of the endocrine system, gastrointestinal tract, cardiovascular systems, blood systems, nervous system;
- c) rheumatic diseases or collagenoses.

6. Changes in the mucous membrane with dermatoses:

- a) pemphigus, herpetiform dermatitis of Dühring;
- b) lichen planus, lupus erythematosus.

7. Anomalies and independent diseases of the tongue:

- a) folded tongue, black "hairy" tongue;
- b) diamond-shaped, desquamative glossitis.

8. Independent cheilitis :

Actually cheilitis :

- a) exfoliative (dry form, transitional, exudative form);
- b) granular (primary simple, secondary simple, purulent granular cheilitis);
- c) contact (simple, allergic);
- d) meteorological;
- e) actinic.

Symptomatic cheilitis:

- a) atopic;
- b) eczematous (eczema of the lips, contact microbial);

- c) plasma cell;
- d) macrocheilitis with Mel Kerson-Rosenthal syndrome;
- e) lymphadenomatous macrocheylitis;
- e) Misher granulomatous cheilitis;
- g) cheilitis with ichthyosis;
- h) hypovitaminous cheilitis.

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9. Precancerous diseases:

On the oral mucosa:

- a) obligate forms (with a high frequency of malignancy); Bowen's disease ;
- b) optional forms (with a low incidence of malignancy):
 - leukoplakia (verrucous);
 - papillomatosis ;
 - erosion of ulcerative and hyperkeratotic forms of lupus erythematosus, as well as lichen planus;
 - post-radiation stomatitis.

On the red border of the lips:

- a) obligate forms:
 - warty precancer ;
 - limited hyperkeratosis;
 - abrasive precancerous cheilitis Manganotti .
- b) optional forms:
 - leukoplakia;
 - keratoacanthoma ;
 - skin horn;
 - papilloma with keratinization;
 - erosion of willow-ulcerative and hyperkeratotic forms of lupus erythematosus, as well as lichen planus;
 - post-radiation cheilitis .

Traumatic lesions:

Traumatic injuries of the oral mucosa, depending on the cause of their cause, are classified into: mechanical, chemical, physical injury and combined damage to the oral mucosa. Depending on the time of exposure of the damaging factor to the mucosa - acute and chronic.

SHARP:

- Dental instrument injury household, work-related injury, biting.
- Contact with the mucous membrane of chemicals, thermal, ionizing effects, as well as other physical factors in significant biological doses.

CHRONIC:

- Irritation of the mucous edges of the teeth, dentures.

- Inadequate prosthesis designs, galvanic current.
- Bad habits: smoking, biting the mucous membrane, hot and spicy food.
- Professional factors.

Features of the clinical course

- Hemorrhages (petechiae, hematomas) Injury of the mucosa in the form of linear damage to various depths, erosion and ulcers of various shapes covered with fibrinous plaque. Coagulation necrosis (acids, thermal effects, electric current). Collocation necrosis (alkali).
- Desquamation or dysplasia of the epithelium. Perhaps pathological keratinization (leukoplakia). Papillomatosis, decubital ulcers.

Factors determining the nature of pathological changes in the oral mucosa are:

- strength (concentration), chemical or physical properties of the damaging agent, exposure time, lesion area;
- protective properties of the mucosa and the state of nonspecific resistance of the body (age, concomitant general diseases);
- hygiene of the oral cavity, unorganized oral cavity, as well as various prostheses and fillings involved in sensitization of the mucosa or the occurrence of galvanic currents.

Chemical injury (acute)

Damage to the mucous membrane during dental procedures by a dentist, an arsenic paste, a formaldehyde resorcinol mixture, ether, alcohol, etc., or as a result of a household, more often accident, may be injured.

When damaged by acid, coagulation necrosis develops - the formation of a dense coagulation film tightly connected to the underlying tissues with inflammation and swelling of the surrounding mucosa. The clinical course is more favorable than with mucosal damage by alkali.

An alkali injury causes colliactive necrosis of the mucosa - damage, uneven in depth, tissue, gelatinous consistency, without a clear demarcation border with the underlying layers of the mucosa. Probably joining, secondary infection. Damage is accompanied by significant swelling and inflammation of the tissues, and sharp pain.

Features of treatment.

1. Rinsing with neutralizing solutions, or simply with water. With a burn of the mucous membrane with arsenic paste - applications of the mucosa with 5% solution of unitiol or penicillin. 2. Protection of the damaged area of the mucosa from secondary infection - treatment with a 1% aqueous solution of basic fuchsin or methylene blue. With colic necrosis, removal of necrotic tissue with solutions of proteolytic enzymes and rinsing with antiseptic solutions. Gargles with infusion of green tea, chamomile, sage are recommended.

3. At the epithelialization stage, agents are used that accelerate these processes: solcoseryl gel, lysozyme, sea buckthorn oil, rose hip, carotoline, etc.

Chronic exposure to acids and alkalis of low concentration is possible in chemical workers. Changes in the mucous membrane are diffuse. With acid irritation, the epithelium thickens, the mucous membrane is edematous, cyanotic. With irritation of the mucosa with alkalis - the mucous membrane is swollen, desquamation intensifies. On the smear prints, conglomerates of epithelial cells with clearly visible nuclei are visible.

Prevention: Carrying out measures to protect the health of workers; improvement of production technology and the mandatory use of www.spbgmu.ru personal protective equipment. Rinse the mouth with acidified or alkaline water.

GALVANIC SYNDROME - is formed as a result of chronic exposure to galvanic current of various strengths on the mucous membrane of the oral cavity. Typical symptoms are mucosal paresthesia, hyposalivation (hypersalivation is also possible), various common symptoms of autonomic nervous system dysfunction. A source of galvanic current is heterogeneous metal

inclusions of the oral cavity (metal prostheses, fillings, inlays). The intensity of the current depends on the position of the metals in the periodic table, the electrolytic properties of saliva. The clinical picture is determined, to a large extent, by the functional state of the patient's nervous system and the strength of the galvanic current.

Treatment. Mandatory removal of unlike metals from the oral cavity. Rational prosthetics. Psychotropic therapy.

Leukoplakia (white spot) - a chronic disease of the red border and the mucous membrane of the oral cavity, sometimes other organs of the mucous membranes (genitals, bladder, rectum). Leukoplakia is a mucosal condition associated with chronic inflammation and keratinization of the mucosa, is observed more often at the age of over 40 years.

Leukoplakia is considered as a reaction of the mucous membrane to exogenous irritation. The most common cause is smoking, as well as mechanical irritation with sharp and uneven edges of the teeth, poor-quality prostheses, galvanic current.

As a predisposing factor in the etiology of the disease, vitamin A deficiency, hormonal disorders, diseases of the gastrointestinal tract and an increase in blood cholesterol, occupational hazards can be highlighted.

The clinical picture of the disease is heterogeneous. There are several clinical forms: simple, erosive-ulcerative, hyperkeratotic and verrucous. All clinical forms are stages of the disease. The location of leukoplakia is determined by the site of exposure to the irritating exogenous factor. Most often on the mucous membrane of the cheeks, the lateral surface of the tongue, the mucous membrane of the palate, the alveolar process, the bottom of the oral cavity, as well as the red border. Horny plaques of irregular shape, resembling a mosaic or cobblestone pavement, form on the mucosa. In the future, the lesion focus can rise above the surrounding mucosa due to intensive keratinization and proliferation of the mucosa (hyperkeratotic form), or ulceration of the keratinized mucosa and tissue infiltration (erosive-ulcerative form). In some cases, papillomatous growths with intensely keratinized epithelium (verrucous form) form on the pathologically altered mucosa. When staining an altered area of the mucous membrane with Pisarev's solution: the plaques have a grayish-whitish color, the mucosa separating them is a brown color of various intensities, depending on the degree of its inflammation.

Leukoplakia is a clinical concept. The histological picture is characterized by hyperplasia of the epithelium by acanthosis, hyperkeratosis, papillomatosis, subepithelial cell infiltration. The boundary between the epithelium and private mucous clear. The cells of the basal layer are regular with a significant number of mitoses. There are various signs of epithelial atypia (anisocytosis, dysplasia, pathological mitosis). Based on these changes, leukoplakia is attributed to precancerous diseases with a different threat of malignancy, depending on the clinical form and the characteristics of histological changes. The disease should be differentiated with lichen planus, erythematosis, syphilitic papules, some forms of candidiasis.

Treatment. It is necessary to eliminate factors that irritate the mucous membrane. Conduct thorough rehabilitation and rational prosthetics. Exclude annoying food. To normalize the metabolic processes of the mucosa, applications are performed with Shostakovsky balm, carotoline. Dispensary treatment with a call of patients to the dentist, determined by the time of the clinical form of the disease.

SITUATIONAL TASKS

A 37-year-old man came to the dentist with complaints of severe pain in the oral cavity. During the interview, the doctor found out that the patient had used liquid from the bottle where the tooth elixir used to be, and which was probably filled with another, unknown liquid. Immediately after rinsing his mouth, he felt a burning pain and, after several hours, consulted a doctor. On examination, the oral mucosa is hyperemic, in the area of the mucous membrane of the cheek, respectively, the second molar on the right, erosion 2x2 cm in size, covered with a dense white film. The patient indicates that he repeatedly bit his cheek in this area. What are the causes of the described changes in the mucosa. Make a diagnosis.

Patient M., 25 years old, took a bottle of liquid from a hospital first-aid kit, suggesting that it was alcohol. Immediately after the liquid got into the oral cavity, I felt a burning sensation, which turned into intolerable pain. Urgently consulted a doctor. When viewed on the gum of the lower jaw and mucous membrane of the lower lip, extensive areas of necrosis of soft consistency, gelatinous appearance without clear boundaries. What group does the substance used by the patient belong to?