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RED LICHEN PLANUS OF THE ORAL MUCOSA AND ITS CLINICAL ANALYSIS OF A PATIENT WITH, ASSOCIATED WITH THE EPSTEIN—BARR VIRUS

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ABOUT ARTICLE

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Abstract: Lichen planus (LP) is a chronic inflammatory disease of the skin and mucous membranes, infrequently affecting nails and hair, typical elements of which are papules. The incidence of CRPS in the Russian Federation among people aged 18 years and older is on average 12.7 cases per year per 100,000 of the corresponding population.

INTRODUCTION

In the structure of the disease localized on the mucous membrane of the oral cavity, chronic lichen accounts for up to 35-40% . According to domestic data, the infection and morbidity of (LP) has been increasing in recent years, acquiring not only medical, but also social, psychological and cosmetic significance (LP) is most common in people aged 30 to 60 years . 60-75 % patients with (LP) c The lesion of the oral mucosa is in women, and about 50% have skin lesions . (LP) of the oral mucosa is considered a potentially precancerous condition that can lead to the development of squamous cell carcinoma. Cases of erosive and ulcerative foci of oral mucosal (LP), chronic hyperkeratotic foci of esophageal (LP) and hypertrophic (LP) in the anogenital region have been reported . Spontaneous remission of (LP) of the oral mucosa occurs in 2.8-6.5% of patients, which is much less common than with skin lesions the average duration of rashes on the oral mucosa with (LP) is about 5 years, although spontaneous remission is less likely with erosive form. In the typical form, in which the skin rash is located in the form of a mesh pattern on the oral mucosa, the prognosis is good, since spontaneous

remission occurs in 40% of cases. The etiology of the disease is unknown; it is believed that KPL is an autoimmune disease in which the expression of unidentified antigens by protective cells of the body leads to activation and migration of T lymphocytes into the skin/mucous membrane with the formation of an immune and inflammatory response. In dental practice, many authors point to the etiological significance of herpesviruses. Cytomegalovirus (CMV), Epstein-Barr virus (EBV), herpes simplex virus (HSV) and type 7 herpesvirus are known to be highly targeted against epithelial cells of the mucous membrane, persist in the body for a long time, reactivate in immunodeficiency and compromise the immune system. However, in recent years, the etiological role of the Epstein-Barr virus in the pathogenesis of diseases of the oral mucosa has increased, which has become the subject of consideration in this work. The aim of the study was to determine the features of the clinical course of Epstein-Barr-associated erythematosquamous rashes of the oral mucosa.

Clinical case: 59-year-old patient G. went to the dentist complaining of pain and burning in the mucous membrane of the oral cavity, which worsened when eating, cold food and acidic irritants. Current medical history: unpleasant sensations in the oral cavity first appeared on the tongue two months ago, burning sensation during meals, which was associated with hypothermia and stress; during the month, oral pain increased during meals, white reticular visual changes appeared on the cheeks; a week ago, bubbles appeared on the mucosa of the buccal region, which was associated with hypothermia and stress; the patient had a history of cold or acid irritation that was not treated at the dentist. Previous diseases: acute respiratory viral infection, chickenpox. Objective data: multiple gray-white painless small papules with a diameter of 3 mm, located on the edematous, hyperemic base of the mucosa of the buccal region and the alveolar process. Papules merge into a mesh pattern in the cervical region and on the right and left front sides of the bottom of the oral cavity. The dorsal surface of the tongue is covered with a large amount of white-yellow plaque, which cannot be scraped off with a spatula, and enlarged filamentous, mushroom-shaped, furrowed and lobed papillae of the tongue. The sensitivity of the oral mucosa is reduced, saliva is viscous, foamy and in small amounts. Palpation of the parotid and submandibular glands is painless, the glands are not fused with surrounding tissues, there is no pathology in the ducts. Saliva is released during palpation, and the submandibular glands secrete a small amount of clear liquid. On the skin of the extensor surface of the forearm there is a single, flat, pinkish-red papule with a diameter of 2-5 mm, polygonal in shape, with a central depression. Local lymph nodes of normal elasticity are painless and not soldered to the underlying tissues. Autofluorescence stomatoscopy using the AFS device was performed for the purpose of early diagnosis of precancerous and early cancer. The normal mucous membrane of the buccal region, soft and hard palate, when irradiated with the AFS-400 LED device, emitted a green color. The mucous membrane of

the tongue was luminescent dark green, but there were foci of red fluorescence of varying intensity on the surface of the tongue (due to foci of endogenous porphyrins secreted by the microflora in the presence of bacterial plaque). The lesions of the (LP) (papules) on the mucous membrane of the oral cavity had a whitish-yellow glow with a reddish-brown inflammatory corolla around them. This feature of visualization is due to the presence of edema and inflammation in this type of lichen erythematosus. At the time of the examination, oral hygiene was good: the Greene-Wermillione oral hygiene index was 1.3, the Silness and Loe plaque index was 1, the PMA gingivitis index was 35%, the bleeding index was 1 degree. Allergic history: there were no exacerbations. There are no diseases of the skin and mucous membrane of the oral cavity in close relatives. The general condition is good, the consciousness is clear. The patient's position at the time of treatment is active. Normosthenic physique: height - 1m70 cm, weight - 75 kg, temperature - 36.6 ° C, pulse - 85 beats / min, rhythmic, blood pressure - 135/85 mmHg. the skin is clean, pale pink. Tension and elasticity are preserved. The humidity is moderate. The shape of the distal phalanx of the fingers has not been changed. Subcutaneous fat is moderately developed. The lymph nodes are not enlarged. The skull is of normal shape and size, the vascular pattern of the head is moderate. There is no softening or deformation of the bones. There is no pain during percussion and palpation. Chronic somatic diseases include hypertension, which has been monitored daily with complex medications for 10 years. Clinical diagnosis and its justification Based on complaints and a typical clinical picture, the patient was diagnosed with erythema erythematosus erythematosus, exudative hyperemic type. Glossitis caused by Epstein-Barr virus (according to patent for invention No. 2612120 dated 03/02/2017 "Method for diagnosing glossitis caused by Epstein-Barr virus infection"). Clinical examination The main sites of localization of the Epstein-Barr virus are the oral cavity, in particular T- and B-lymphocytes of its lymphoepithelial layer and epithelial cells of the salivary glands. To diagnose the viral load with established lichen, herpes DNA viruses of types 1, 2, 4, 5 and 6 were recorded by polymerase chain reaction (PCR) of saliva and blood, as well as specific antibodies of class Ig M and G against HPV by enzyme immunoassay (ELISA) and specific antibodies of class Ig M and G. PCR-tests showed that DNA herpesviruses of types 1, 2, 5 and 6 were not detected in saliva and blood. Herpesvirus type 4 (Epstein-Barr) was detected in saliva in the amount of 220,000 copies/ml and in blood in the amount of 0.5 Ig copies/105 cells. Ig G EBNA, Ig G VCA and Ig G EA were detected in the blood, indicating chronic infection with Epstein-Barr virus. Treatment Due to the pronounced immunotropism of the Epstein-Barr virus and its ability to suppress predominantly local immunity, the treatment regimen for lichenoid erythroplasia is modified in such a way as to predominantly affect the cellular immunity of the oral mucosa: -Dietary treatment with the exception of acute, sour and sweet foods for the entire period of treatment. - Analgesic symptomatic therapy of Choline salicylate +

cetarkonium chloride, dental gel (D) for adults, 1 cm, squeeze onto a clean finger and rub into the affected area of the oral mucosa with light massage movements 2-3 times a day, before or after meals and before bedtime; - Vitamin therapy of xanthinol nicotinate 0.15 1 tablet 3 times a day after meals for 21 days; - wound healing therapy liniment aloe arboreal (leaves) applied to the lesion 2 times a day; - oil solution of vitamin A applied to the lesion; - antiseptic therapy: myristine solution, gargle 15 ml 3 times a day, after meals, for 7 days; - to dilute saliva and enhance antiviral action, 1 tablet of licorice 3 times a day, 30 minutes before meals to suck, for 10 days; - specific antiviral therapy: one tablet of Inosine Planovex three times a day for 21 days; - immunomodulatory therapy with Cycloferon 5% liniment 1: sodium delinate, diluted with olive oil topically, 5 ml intramuscularly, five injections every two days. After completing the course of treatment and the disappearance of complaints, it was decided to conduct oral hygiene. Repeat visit 3 days after the start of treatment: the patient visited the dentist, who noted a noticeable improvement in well-being, the disappearance of pain in the oral mucosa and the absence of a feeling of tightness in the cheeks during eating and talking. Objective data: the disappearance of edema and the preservation of hyperemia of the oral mucosa, the preservation of multiple painless grayish-white small papules with a diameter of 3 mm. The fusion of papules along the line of the left and right dental arches remains, forming a 12 mm long mesh pattern. Plaques and hypertrophy of the lingual papillae persist. The tendency of the oral mucosa is reduced, saliva is viscous, foamy, in small amounts. Palpation of the parotid and submandibular salivary glands is painless, the glands are not fused with surrounding tissues, there is no pathology in the ducts. With palpatory irritation, saliva is released in the form of a transparent liquid, the submandibular glands secrete a small amount. There is one painless papule on the skin of the extensor surface of the forearm. Local lymph nodes are of normal elasticity, painless and do not adhere to tissues. The patient reported that the complaints that arose on the 13th day of treatment had passed. The patient continues treatment with non-hormonal ointments from a dermatologist. Objective data: multiple painless gray-white small papules with a diameter of 3 mm. They form a grid pattern along the left and right dental arches, the papules fuse well. There is no swelling and hyperemia of the oral mucosa around the papules. The plaques on the dorsal surface of the tongue were white-yellow in color and moderately pronounced. The filamentous and grooved papillae of the tongue were enlarged, the lymphoid tissue of the root of the tongue was preserved, there were no signs of thickening. The mucous membrane of the oral cavity was moderately moist, soreness was normal, saliva was clear and liquid. Palpation of the parotid and submandibular glands is painless, the glands are not fused with surrounding tissues, there is no pathology in the ducts. During palpation, saliva is released in the form of a transparent liquid, the submandibular glands secrete it in moderate amounts. There is a single painless papule on the skin of

the extensor surface of the forearm, chest and neck. The local lymph nodes are of normal elasticity, painless and do not adhere to the underlying tissues. At the same time, the preservation of hypertrophy of the grooved papillae of the tongue and the visually reduced volume of saliva secreted are due to the lifelong persistence of the Epstein-Barr virus and the peculiarities of the hyperplastic process induced by the virus during its activation; papules with CPRS and reactivation of the Epstein-Barr virus, the average duration of existence of thickened elements of the oral mucosa in the case of reactivation is about 5 years. Therefore, in the absence of complaints from the oral cavity, the preserved hyperplastic formations require regular dental monitoring every six months for five years. A control polymerase chain reaction of saliva and blood and analysis of specific antibodies to HPV class Ig M and G by enzyme immunoassay (ELISA) showed that herpesvirus type 4 (Epstein-Barr) was detected in saliva at a concentration of 12,000 copies/ml and in blood at a concentration of 12,000 copies/ml. It was not detected in the blood. These results confirm the pathogenetic significance of EBV during the studied (LP) and its favorable dynamics against the background of antiviral therapy. The Ig G EBNA, Ig G VCA and Ig G EA detected in the blood indicate the presence of chronic Epstein-Barr virus infection, which persists from 6 months to 3 years after infection with EBV. Conclusion Epstein-Barr virus may be involved in long-term and chronic inflammation in the oral mucosa in CPRS, since its activation persists throughout life in the lymphoepithelial formations of the oral cavity, contributing to the aggravation of the immunocompromised state in the lymphoepithelial formations of the oral cavity. The appointment of systemic and local antiviral therapy can shorten the duration of treatment for oral mucosal CRPS, eliminating the need to rely on local hormone therapy. From this, it can be concluded that in order to increase the therapeutic effectiveness of CRPS, studies are needed to identify DNA specific not only for the Epstein-Barr virus, but also for all herpesviruses due to their immunoaffinity and persistence, mainly in the cells of the oral mucosa.

CONCLUSION

To conclude: If they are detected, it is necessary to include immunocorrective and specific antiviral drugs of systemic and local action in the combined therapy of lichen planus of the oral mucosa in order to optimize treatment regimens and prolong the relapse-free period.

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