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## IMMUNOLOGICAL INDICATORS OF VIRAL INFECTION IN PATIENTS WITH LICHEN PLANUS OF THE ORAL MUCOSA

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#### ABOUT ARTICLE

**Key words:** Activation and persistence of herpesviruses, regardless of the focus of inflammation, contribute to the deterioration of immunocompromised conditions, including the oral mucosa.

**Received:** 17.02.2024 **Accepted:** 22.02.2024 **Published:** 27.02.2024 Abstract: Herpesviruses (cytomegalovirus (CMV), Epstein-Barr virus (EBV) and herpes simplex virus (HSV)) after primary infection in childhood, they persist in the body throughout life and are reactivated under the influence of various exogenous and endogenous triggers. Persistent herpesvirus infection causes pronounced clinical and immunological changes in many somatic and dental diseases. However, few and contradictory studies have studied the effect of herpesvirus infection on the development and clinical course of lichenoid lesions of the oral mucosa (LSO), especially in relation to various types of herpes simplex virus (HSV), Epstein-Barr virus (EB) and cytomegalovirus (CMV).

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### **INTRODUCTION**

The purpose of this study was: to identify immunological indicators of herpesvirus infection in patients with lichen planus of the oral mucosa.

Materials and Methods: The study involved 107 patients with lichen planus of the oral mucosa. The control group consisted of 79 practically healthy individuals, comparable in gender and age with the patients of the study group. The study was conducted by enzyme immunoassay (ELISA) to determine antibodies of class Ig M and G to HPV and CMV in the blood serum of patients. Latent herpesvirus infection was detected in more than two thirds of patients with CPL, and 2.3 times more often in the group of severe patients. Activation and persistence of herpesviruses, regardless of the focus of

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inflammation, contribute to the deterioration of immunocompromised conditions, including the oral mucosa; The WHO expert analysis shows that the health of the world's population is characterized by a decrease in immune reactivity. As a result, the incidence of diseases caused by opportunistic bacteria and opportunistic microflora is increasing. Opportunistic bacteria and opportunistic microflora remain in the body for a long time or forever, often causing various pathologies, including chronic inflammatory processes, allergic diseases, autoimmune diseases and tumor diseases [5]. Persistent infections include a variety of infectious agents that differ in nature (viral, bacterial, protozoa), method of penetration (transplacental, intrauterine, sexually transmitted, respiratory, etc.), pathogenicity (absolute or conditional pathogenicity) and the nature of the host's immune response. It is known that herpes viruses (cytomegalovirus (CMV), Epstein-Barr virus (EBV) and herpes simplex virus (HSV)) after primary infection in childhood, they persist in the body throughout life and are reactivated under the influence of various exogenous and endogenous triggers. Persistent infection with herpesviruses causes pronounced clinical and immunological changes in a number of somatic diseases [2, 5]. In dental practice, many authors note the etiological significance of herpesviruses in the pathogenesis of inflammatory periodontal diseases, erythema multiforme exudative and chronic recurrent aphthous stomatitis [1, 7]. Lichen of the oral mucosa (LSOPR) is a multifactorial disease, the pathogenesis of which is influenced by a number of factors, including disorders of the immune system due to medication, prolonged inflammatory processes, recurrent bacterial infections, virus persistence, and many others [4, 9]. Epstein-Barr and various types of cytomegalovirus are few and contradictory [6, 8, 10]. The purpose of this study was to identify immunological indicators of herpesvirus infection in patients with lichen planus of the oral mucosa. MATERIALS AND METHODS The study was conducted on 107 patients with COP lichenoid erythroplasia aged 24-70 years with various forms of the disease, who were consulted in dental clinics of the Samarkand medical university, the following criteria were taken into account when determining the severity of the pathological process of COP. : the prevalence of the inflammatory process, the duration and frequency of exacerbations, the duration of remission, the severity of subjective sensations, changes in the general condition and the effectiveness of treatment. In the group of examined patients with CRPS, the typical form of CRPS, according to the classification of A.L. Mashkillayson, was of mild severity, exudative-hyperemic - moderate and erosiveulcerative - severe. The control group consisted of 79 practically healthy individuals, similar in gender and age to the patients of the study group. Enzyme immunoassay (ELISA) was performed to determine specific antibodies of class Ig M and G to HPV and specific antibodies of class Ig M and G to CMV in the blood serum of the studied patients. The obtained results were subjected to statistical processing.

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Results and discussion: Examination of patients with CPL showed that specific Ig class M against HPV types 1 and 2 in seriously ill patients were five times more common than in those with mild illness (p>0.05). This indicator also did not significantly differ from the control group (p>0.05). A high titer of Ig G against HPV was present in the blood serum of seriously ill patients ( $\geq$ 1:3200-100%) with CPL COP and was significantly higher in patients with mild ( $\geq$ 1:800 - 85%), the average ( $\geq$ 1:800 - 97%) and control groups ( $\geq$ 1:800 - 85) were significantly higher than in the group of patients with CPL examined for CMV infection, where Ig M was present in 2% of those examined with moderate severity, which did not significantly differ (p>0.05) from the proportion in all other groups, where 100% of those examined were seronegative for Ig M. The titer of CMV-specific Ig class G (= 1: This difference was also significant in the control group. In addition, in CRPS with severe clinical course (extensive foci with impaired epithelial integrity, frequency of exacerbations, short periods of remission and resistance to treatment), a low level of Ig G, characterizing viral persistence, was observed in 85% of cases and in 32% of cases with a moderate course of the disease. High levels of Ig G were detected in 98% of cases with mild severity of the disease.

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#### CONCLUSION

Thus, CRPS SOR is associated with the reactivation of herpes infection. Viral persistence was detected in more than two thirds of all patients with CRPS and 2.3 times more often in the group of severe patients. Considering that the activation and persistence of herpes viruses contributes to the deterioration of immunocompromised conditions, including the oral mucosa, regardless of the place of inflammation caused by them, autoimmune mechanisms are likely involved in the prolonged or chronic nature of inflammation in CRPS. It follows from this that in order to increase the therapeutic effectiveness of CRPS COP, especially in severe cases, it is necessary to identify specific antibodies to herpesviruses and, if detected, include drugs with immunocompensatory and specific antiviral activity at the systemic level in combined treatment. It can be concluded that.

#### REFERENCES

- 1. Asrorovna X. N., Valojon O'g'li D. S., Kizi T. K. F. Evaluation Of The Effectiveness Of The Use Of Optical Systems In The Restoration Of Defects In The Hard Tissues Of The Tooth //The American Journal of Medical Sciences and Pharmaceutical Research. − 2021. − T. 3. − № 05. − C. 65-67.
- 2. Asrorovna X. N., Ugli J. O. M., Ugli K. S. F. THE MAIN CLINICAL FEATURES OF THE ORAL CAVITY OF PREGNANT WOMEN SUFFERING FROM GINGIVITIS //European International Journal of Multidisciplinary Research and Management Studies. − 2023. − T. 3. − №. 10. − C. 258-262.

### EUROPEAN INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH AND MANAGEMENT STUDIES

**3.** Asrorovna X. N., Qizi T. K. F. Clinical And Morphological Assessment Of The Effectiveness Of Application Of Anti-Inflammatory Toothpasts In The Complex Treatment Of Periodontal Diseases In Patients With Glucose Exchange //The American Journal of Medical Sciences and Pharmaceutical Research. – 2020. – T. 2. – №. 12. – C. 74-77.

ISSN: 2750-8587

- **4.** Asrorovna X. N. et al. Anatomy And Topography of The Tooth //Texas Journal of Medical Science. 2022. T. 4. C. 1-3.
- **5.** Шукурова M. MODERN LINGUISTICS AND SOME PROBLEMS RELATED TO TERMINOLOGY //ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz). 2023. Т. 42. №. 42.
- **6.** Холбоева Н. А., Хайдарова Д. М. МЕХАНИЧЕСКАЯ ОБРАБОТКА И РАСШИРЕНИЕ КОРНЕВЫХ КАНАЛОВ ХИМИЧЕСКИМИ ПРЕПАРАТАМИ (ЭНДОЛУБРИКАНТЫ) //Вестник науки и образования. 2022. №. 4-1 (124). С. 88-92.
- 7. Холбоева Н. А., кизи Усмонова М. И., угли Бахтиёров М. А. ILDIZ KANALLARINI KIMYOVIY MODDALAR BILAN MEXANIK ISHLOV BERISH VA KENGAYTIRISH //Евразийский журнал медицинских и естественных наук. 2022. Т. 2. № 5. С. 186-188.
- **8.** Asrorovna H. N., Badriddinovich T. A., Kizi T. K. F. Evaluation of the effectiveness of non-invasive methods of treatment of periodontal tissues in violation of glucose hemostasis. 2021.
- 9. Asrorovna K. N. Changes in the Mucous Membrane of the Oral Cavity in Leukemia //EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE. 2024. T. 4. № 2. C. 316-319.
- **10.** Asrorovna H. N., Muhriddin B., Shohruh L. Change of Oral Mucus in Patients with Diabetes //Eurasian Medical Research Periodical. 2022. T. 15. C. 51-55.