# MODERN APPROACHES TO THE TREATMENT AND PREVENTION OF HERPETIC STOMATITIS DURING PREGNANCY.

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#### Annotation

Based on data from the World Health Organization, herpes virus infection affects about 20% of the world's population, and, according to the results of a study by many authors, aphthous rashes occur in 20% of the population at one time or another period of life. About 95% of the world's population are direct carriers of herpes virus infection. The age category of patients with CHC is from 18 to 45 years. Among patients suffering from CHC, predominantly women. Herpetic stomatitis provokes the herpes virus, which is transmitted by airborne droplets.

The exact causes of herpetic stomatitis have not yet been investigated.

Keywords: herpes virus, oral mucosa, periodontal, stomatitis.

The choice of treatment tactics for CHC depends on the period of development of the disease and the severity. Treatment of herpetic stomatitis should be complex: etiotropic and pathogenetic, i.e., include antiviral chemotherapy and immunotherapy, be carried out both systemically and locally. The issue of improving the effectiveness of HS treatment remains relevant for a long time, so domestic and foreign authors pay great attention to it (Novikova S.V., Malinovskaya V.V., Bocharova I.I. 2015; Lutskaya I.K. 2016; Degtyarenko E. V. 2018 and others)

The general treatment of ACS includes the appointment of etiotropic and pathogenetic drugs. Among the etiotropic antiviral chemotherapy drugs, doctors most often choose acyclovir ("Virolex", "Zovirax", "Atsigerpin", "Gerpevir", "Geviran") [Inoyatov A.Zh., Kamalova M.K. 2018; Nazarova N.M., Pavlovich S.V., Nekrasov M.E. 2018; Kamilov Kh.P. 2020]. Acyclovir-containing drugs have sufficient antiviral activity, relatively low toxicity, and are available in various dosage forms. All this allows acyclovir to remain the standard of antiherpetic therapy today, despite the growing resistance to it.

Also, many authors consider promising antiherpetic chemotherapy drugs: valaciclovir, famciclovir and ganciclovir. Effective, but rather toxic, is the drug foscarnet (Mandra Yu. V., Sementsova E. A., Grigoriev S

Currently, algorithms for the systemic and local use of various drugs and treatment regimens are being actively developed. The scheme for effective complex treatment of chronic recurrent aphthous stomatitis in pregnant women was developed by scientists from the Tashkent Dental Institute (Shukurova U.A., Navruzova F.R., Toshpulatov B. (2022) age from 18 to 32. At the beginning of treatment, a sparing diet was prescribed with the refusal to use spicy rough food, smoking and drinking alcohol were forbidden. All patients took vitamin C, B1, B2 and B6. Ivanova R.A. et al. (2021) For the prevention of congenital herpes infection, it is recommended to address the issues of virological examination of all pregnant women with



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suspected genital herpes infection and their etiotropic treatment and suppressive therapy in the last weeks of pregnancy to reduce the duration of viral shedding.

An Italian study by Bardellini E, Amadori F. (2022) is devoted to the study of treatment methods prescribed to Italian adolescents with primary herpetic gingivostomatitis. The authors reviewed the medical records of 74 adolescents with gingivostomatitis. The history includes the following data: age, gender, day of onset, type of treatment, severity of lesions, pain score, ability to eat and drink. The survey was conducted at the first assessment (T0) and one week later (T1). All patients appeared at the first visit at least 48 hours after the onset of symptoms. None of the patients received antiviral therapy. Antibacterial therapy was prescribed to prevent secondary bacterial infections.

The range of drugs approved for use in the treatment of oral mucosa in pregnant women and children under 3 years of age is very limited due to their possible toxic and side effects [Sharakhova, E. V. 2017].

The authors Vellappally S, Mahmoud MH, Alageel SM. (2022) evaluate the effectiveness of antimicrobial photodynamic therapy compared with antiviral therapy in the treatment of herpetic gingivostomatitis in children. Three groups were organized depending on the prescribed treatment. Group A: topical antiviral therapy (TAT) (n = 14, mean age = 17.0 years) (b) Group B: antimicrobial photodynamic therapy (aPDT) (n = 15, mean age = 17.7 years) and (c) Group C: topical antiviral therapy + additional aPDT (n = 16, mean age = 18.0 years), respectively. Pain scores [Visual Analogue Scale (VAS) and McGill Pain Questionnaire (MPQ)] were assessed to quantify HSV-1. Enzyme-linked immunosorbent assay (ELISA) was used to calculate pro-inflammatory cytokine, including interleukin 6 (IL-6) and tumor necrosis factoralpha (TNF-α). Mean analysis and intergroup comparisons were assessed using the Mann-Whitney test..

Kolenko YG, Timokhina TO (2021) consider laser therapy to be an effective method in the complex treatment of herpetic stomatitis. The use of a laser in the complex treatment of herpetic stomatitis has a positive effect on the course and immunological state of patients with herpetic stomatitis. The manifestations of the disease healed faster, and the pain syndrome was less pronounced. The duration between illness and treatment decreased by 19.7% and 26%. It is advisable to include a method of treatment with a laser in the complex therapy of herpetic stomatitis. Positive dynamics was observed already 1-2 days after the start of the laser application and was more pronounced when used in the early stages of the disease.

School of Dentistry, Sichuan University, Chengdu, China Jiang YC, Feng H, Lin YC, (2016) propose new strategies to combat herpes simplex drug resistance. There are three classes of drugs approved for the treatment of HSV infections, all of which target viral DNA replication: acyclic guanosine analogs, acyclic nucleotide analogs, and pyrophosphate analogs. Typical drugs from these three categories include valaciclovir (VCV), cidofovir, and foscarnet. Apple cider vinegar (9-(2-hydroxyethoxymethyl) guanine) has become the gold standard for the prevention and treatment of HSV infections since its introduction in the 1980s.

Semenov V.M. et al. (2018) in order to prevent and to prevent infection of the newborn, all pregnant women should be interviewed for the presence of herpes virus infection of any localization, if necessary, examination and treatment should be carried out. If a woman in labor has signs of genital herpes, then delivery by caesarean section will significantly reduce

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the risk of infection of the newborn. Newborns from mothers with herpes infection are isolated for the entire period of incubation. They are carefully examined to identify signs of congenital infection and its treatment.

Xiao et al. reported that more than 80% of underserved pregnant women in the US have at least one untreated decayed tooth, with an average number of decayed teeth of 3.9.45. Similar evidence suggests that more than 70% of underserved pregnant women in Florida have unmet oral health needs. Routine dental care during pregnancy has been recommended as important and safe to perform by several medical and dental professional organizations.111,112.

Lee R, Nair M. (2017) review a clinical case. A woman at 21 weeks pregnant with a 72-hour history of a rash on her left arm. Initially isolated down to the forearm, it quickly spread, becoming multiple, itchy, fluid-filled blisters. Blood tests showed mild neutrophilia and elevated CRP. Skin swabs demonstrated the presence of herpes simplex virus type 1 (HSV1) DNA

E.V.Melekhina et al. (2021) believe that herpes simplex virus vaccine therapy is one of the most effective measures to prevent infection. Treatment of patients with recurrent herpetic infections is difficult due to the pathogenesis of the infection, the ability of the virus to evade the immune response. The use of etiotropic therapy can lead to the development of resistance. In this situation, an important issue in the treatment and prevention of recurrent herpetic infections is the use of specific vaccines. Antiherpetic therapy is the formation of an adequate immune response and a decrease in the frequency and severity of relapses, as well as blocking the reactivation of the virus in the persistence foci and reducing replication during an exacerbation of the disease. In this regard, a promising therapeutic direction is the development and use of antiherpetic vaccines. The authors note that in the case of HSV infection, a vaccine is being considered not only as a specific prevention of the development of infection in seronegative individuals, but also as a therapeutic effect in order to reduce the severity and frequency of recurrence of herpes infection in seropositive patients.

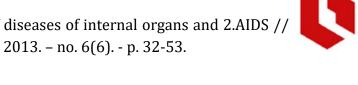
#### **CONCLUSIONS**

The remedies and methods of treatment of herpetic stomatitis proposed by the authors of the studies and recommended today contain a variety of, sometimes conflicting recommendations. Thus, despite the identified and diverse etiological factors in the development of CHC described by domestic and foreign authors in the presented research results, CHC is one of the important medical and social problems. The causes of HSV are still not fully understood. To date, there are a large number and methods for the study of herpetic stomatitis, but the complete algorithm for the complex of studies and maintenance therapy, especially for drugs for pregnant women, has not been developed due to the incomplete research etiology and study of the problem, which requires urgent research tasks.

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