CASE REPORT

Acute Herpetic Stomatitis - Case Report

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Abstract

Introduction: Among viral diseases, herpes occupies a prominent position, currently considered to be the most prevalent infection in humans. It manifests in various clinical forms, affecting the skin, mucous membranes, eyes, nervous system and internal organs. The wide range of clinical manifestations warrants its recognition as a crucial medical and social issue.

Case presentation: An adult patient presented with a case of acute herpetic stomatitis, localized in the oral cavity and facial area. The patient underwent comprehensive treatment in collaboration with an infectious disease specialist. After 8 days of effective treatment, the lesions were absent. Upon subsequent visits after 6, 12, and 18 months, no signs or manifestations of the disease in the oral cavity and face were observed.

Conclusion: This clinical case substantiates the efficacy of a comprehensive treatment approach for acute herpetic stomatitis, involving collaboration with an infectious disease specialist, and underscores its paramount significance in attaining optimal patient outcomes.

Keywords: herpetic stomatitis, herpes simplex virus, gingivostomatitis, treatment

Introduction

Currently, diseases caused by the herpes simplex virus are extremely common, which can be attributed not only to the wide prevalence of the virus but also to the characteristics of the immune system's development in the body. One-third of the world's population is affected by herpes infection, and more than half of these individuals experience multiple infection outbreaks per year, often manifesting in the oral cavity. Determining the true prevalence of herpes infection in Russia remains challenging as the registration of diseases caused by the herpes simplex virusis not mandatory.[1] Over 100 variants of herpes viruses are known today, but only 8 of them are capable of causing diseases in humans. The herpes virus family includes herpes simplex virus types 1 and 2 (HSV-1, HSV-2), varicella-zoster virus (VZV), Epstein-Barr virus (EBV), cytomegalovirus (CMV), and human herpesviruses types 6, 7, and 8 (HHV-6, HHV-7, HHV-8). According to the World Health Organization, 90 to 100% of adults and children are infected with one or more herpes viruses. Herpes viruses can cause damage to various organs and systems.[2] The widespread use of immunobiological methods in recent years has increased the likelihood of detecting the herpes virus. Interference of HSV in apoptosis process through virus-induced modulation determines its future cytotoxicity, intensity, and low effectiveness of immune responses. Consequently, this manifests clinicallyas an infectious process.[3] It is believed that herpes viruses are responsible for a significant portion of human infectious diseases. This is due to both the wide variety of transmission routes of these pathogens and their ability to damage virtually all organs and systems in the human body by replicating in all types of cells: epithelial and nerve cells, endothelial cells, macrophages, fibroblasts, monocytes, leukocytes.[4,5] Often, the initial manifestations of acute herpes infection occur on the mucous membrane of the oral cavity.[6] A characteristic element of this type of infection is the appearance of an ulcer, which occurs against the backdrop of catarrhal inflammation.[7] The manifestations of acute herpetic stomatitis and gingivostomatitis typically involvemucous membrane. This form of the disease can present as vesicular-erosive gingivitis, ulcerative stomatitis, or ulcerative-necrotic stomatitis. Therefore, the primary diagnosis for this condition is usually provided by a dentist.[8,9]

The number of affected areas and the severity of the disease necessitate concurrent consultation with an infectious disease specialist.[10]

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How to cite the article: Magomedalievna BP, SultanovichMF, AkvirdievnaMU, SuleimanovnaIM, Nabgouri Younes. Acute Herpetic stomatitis. Case report. Oral Maxillofac Pathol J2024; 16(2). Page number 142-144.

Source of Support: Nil

Conflict of interest: None

Case Report

The patient, born in 1987, presented with complaints of severe pain while eating, drinking, talking, and swallowing. The onset of the disease was associated with general malaise, a sudden increase in body temperature (38-38.5°C), headache, pale skin, and joint pain. The mucous membrane of the oral cavity was hyperemic, with multiple lesions in the form of ulcers (Fig. 1), localized on the inner surface of the lips, tongue, cheeks, and tonsils.

Lesions on the skin were found in the chin area (Figure 2). Enlargement of submandibular and cervical lymph nodes (lymphadenopathy) was noted. Based on the patient's complaints, medical history, and objective findings from extraoral and intraoral examinations, a provisional diagnosis of moderate acute herpetic stomatitis was established.

The patient was prescribed application of 10% lidocaine solution on the ulcers before meals to reduce pain. It was recommended that the patient spray the solution in to a gauze swab and use it to apply on ulcers. Rinsing with "Givalex" solution 3-4 times a day for 7 days, followed by the application of "Stomatophyt-A" to the affected areas after meals, was also advised. The skin in the affected areas was treated with prednisolone ointment. Additionally, the patient was referred to an infectious disease specialist at the Republican Infectious Clinical Hospital for confirmation of the established diagnosis, and establishment of an appropriate treatment regimen. The patient was hospitalized with a diagnosis of herpetic infection, gingivostomatitis, and asthenovegetative syndrome. Inpatient treatment included the administration of medications such as "Cefoperazone," "Fluconazole," "Vitaxon," "Prednisolone," and "Trittico," as well as detoxification therapy, diet, and vitamin therapy. The patient was discharged on the 8th day after improvement in overall condition. No lesions were found during follow-up visits after hospitalization. No disease recurrences were observed during subsequent visits at 6, 12, and 18 months (Figure 3).

Discussion

In our article, we have described a case of acute herpetic gingivostomatitis in an adult patient. A clinical diagnosis of HSV should always be confirmed by laboratory testing.[11] It is crucial to differentiate this condition from other disorders like, coxsackie virus infection, streptococcal pharyngitis, erythema multiforme, necrotizing ulcerative gingivitis, and aphthous stomatitis.[12] It is worth noting that primary infections can occur without symptoms or be accompanied by symptoms. The severity of the disease will depend on the degree of viral replication, the body's response to the pathogen, and the speed of latency development.[13] In our case, after 8 days of treatment, an improvement in the condition of the lesions was observed. Dentists play a crucial role in diagnosing primary acute herpetic gingivostomatitis, as they are often the first specialists consulted due to the high propensity for oral cavity involvement.[14] Therefore, it is important for dentists to be able to recognize this condition and provide the best interventions for the patient's recovery. Additionally, acute forms of herpes simplex virus infections are highly contagious.[15] This makes it essential for dentists to always use proper precautions, such as protective goggles, face masks, gloves, caps, and specialized clothing; especially when there are cases of concealed manifestations that may go unnoticed. Patients need to be informed about the possibility of viral transmission and the need to avoid close contact during active lesions to prevent infection in other parts of the body.[16]

Conclusion

1. The course of severe acute herpetic stomatitis, in addition to local dental treatment, requires collaboration with infectious disease specialists to provide adequate general treatment for the disease.

2. The use of preventive antiviral therapy helps to prevent the recurrence of herpetic infection.

3. Herpes viral infections have become a major medical and

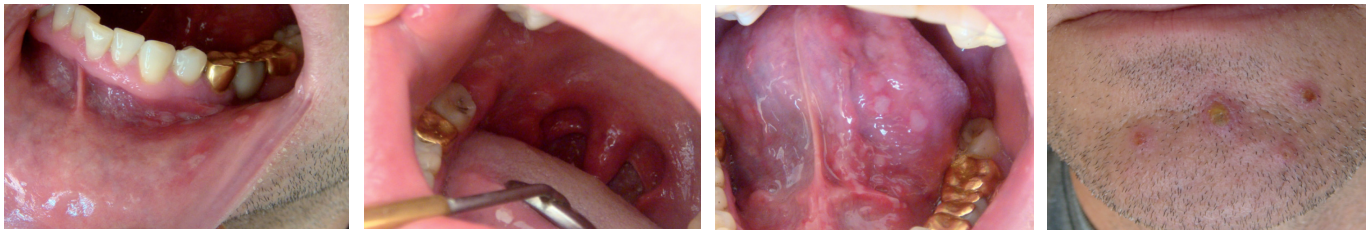

Fig. 1: Multiple ulcers on the oral mucosa

Fig. 2: Lesions on the skin of patient's face

Fig. 3: Patient's condition 18 months after treatment

social problem in economically developed countries over the past twenty years and have acquired national importance in Russia. Therefore, there is an increasing responsibility on dentists for early detection, diagnosis, and administration of timely and rational treatment for manifestations of herpes on oral mucosa and skin of the maxillofacial area.

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