

Herpetic geometric glossitis: Acyclovir resistant case in a patient with acute myelogenous leukemia

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ABSTRACT

Herpes simplex virus (HSV) infections in an immunocompromised host may be atypical in location and morphology. Lesions are more extensive and aggressive, slow healing or nonhealing and extremely painful. Intraoral lesions are ulcerative and may involve any intraoral, oropharyngeal, or esophageal site. Herpetic geometric glossitis is a recently described form of lingual HSV infection in an immunocompromised patient. It was described as ulcer on the dorsum of the tongue sensitive for acyclovir therapy. A patient is presented with acute myelogenous leukemia that developed herpetic geometric glossitis which was acyclovir resistant.

KEY WORDS: Herpes simplex virus, leukemia, viral infection

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with multinucleated epithelial cells, eosinophilic intranuclear inclusion bodies and inflammatory cells [figure 2]. The herpes simplex infection was confirmed and the patient received the famciclovir 500mg (twice a day for five days). The disease showed a favorable course with marked improvement in two weeks [figure 3]. The patient did not present any episode of recurrence six months after the famciclovir therapy and remained under clinical control in the dentistry section for two months. Unfortunately, the patient died two months later due to respiratory insufficiency.

INTRODUCTION

Viral muco-cutaneous infections occur in up to 25% of adults with leukemia.^[1] Herpes simplex virus (HSV) infections in the immuno--compromised host are atypical in location, appearance and behavior. The classic evolution from erythematous papules to vesicles and ulcer is rare.^[2] Herpetic geometric glossitis is a recently described form of lingual HSV infection. It has previously been described in six HIV-infected patients and one cardiac transplant patient who was receiving immunosuppressant therapy.^[3] Acyclovir-resistant forms of herpetic geometric glossitis have not been observed.^[3,4] We describe the case of an immuno-compromised patient with acute myelogenous leukemia who developed acyclovir resistant herpetic geometric glossitis.

CASE REPORT

A 49-year-old man with two-year history of myelodysplastic syndrome (refractory anemia with excess blasts) with transformation for acute myelogenous leukemia was referred to the dentistry section of the hematology center with a complaint of multiple painful ulcers in tongue and palate. The individual was receiving chemotherapy in two phases: aracytim, daunoblatine and 6-tioguanine, on the first phase and aracytim, etoposide and mitoxantrone on the last phase. Over the past four months, the patient presented ulcers on the tongue and palate [figure 1]. Exfoliative cytology was done which led to the diagnosis of herpes simplex infection. The patient received aciclovir 325mg (three times a day for 17 days) but without improvement of signals and symptoms.

An incisional biopsy was conducted on the dorsum of the tongue and after the microscopic examination it showed ballooning degeneration of the epithelial cells associated

DISCUSSION

Oral HSV lesions in the immunocompromised host involve all intraoral and oropharyngeal sites; not only the attached tissue of the keratinized gum and hard palate,^[2,4] but also the tongue, buccal mucosa, floor of the mouth and soft palate may be affected. When tongue is involved, the lateral surface is usually affected.^[5] HSV infection on the dorsum of the tongue is atypical and clinically unexpected.

Treatment for these patients is limited because immunocompromised hosts often develop severe herpes disease refractory to antiviral drug therapy.^[6] One of the most widely used explanations is the occurrence of acyclovir resistance in a severely immunocompromised host. The loss of acyclovir sensitivity is frequently associated with an impairment of viral thymidine kinase and successful treatment of acyclovir-resistant HSV infection may

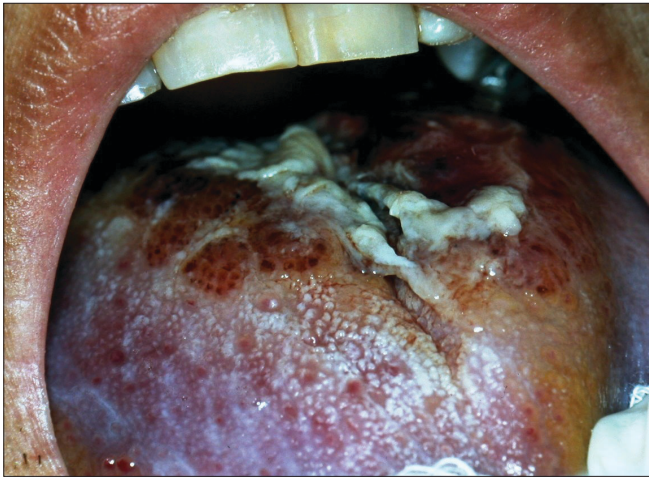


Figure 1: Necrotic ulcer on the dorsum of the tongue

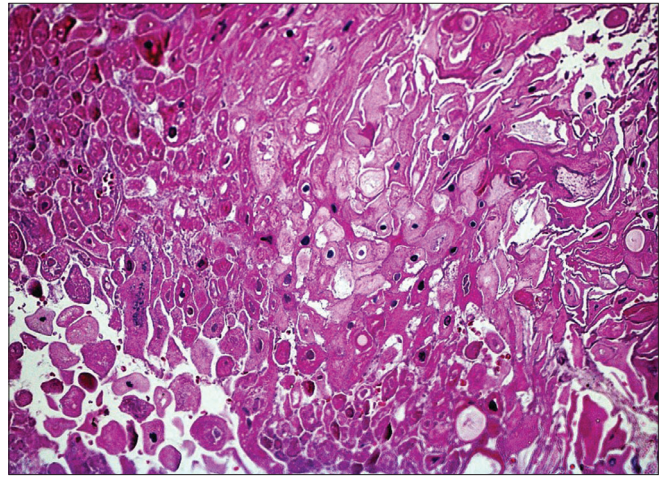


Figure 2: Microscopic examination demonstrated ballooning degeneration of epithelial cells associated with eosinophilic intranuclear inclusion bodies and inflammatory cells (H & E, ×400)



Figure 3: Marked improvement observed after two weeks of therapy

be conducted with alternative agents such as foscarnet, first used in patients with AIDS.^[7,8] Typically, the response to oral acyclovir (1000 mg/day divided in five doses) is rapid: symptoms abate in one to two days and fissures resolve within three to 12 days.^[3,4] We presented an atypical HSV infection on the palate, dorsum and lateral of the tongue in an immunosuppressed patient. However, in this patient his herpetic geometric glossitis showed no response to acyclovir therapy but was promptly resolved after receiving famciclovir.

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