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HERPES ASSOCIATED ERYTHEMA MULTIFORME

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ABSTRACT

Erythema multiforme is an acute and self-limiting mucocutaneous hypersensitivity reaction triggered by infections and medications. The most common predisposing factors for erythema multiforme is infection with herpes simplex virus. Herpes associated erythema multiforme is an acute exudative dermatic and mucosal disease caused by the infecting herpes simplex virus. We report a case of recurrent herpes associated erythema multiforme in a 27 year old male patient, with multiple ulcers encrusted and blood tinged and covered with slough on upper and lower lips.And managed with prophylactic acyclovir.

INTRODUCTION

Erythema multiforme (EM) is an acute mucocutaneous hypersensitivity reaction with a variety of etiologies. It is characterized by skin eruption with or without oral or other mucous membrane lesions. It can be induced by drug intake or several infections, immune conditions and food additives.[1] Erythema multiforme usually affects healthy adults and several reports suggests that males are affected more than females. The peak age at presentation is between 20 and 40 years although 20% of cases occur in children. The disease is often recurrent and is preceding herpes infection in up to 70% of cases (Carrozzo et al.1999).[2]

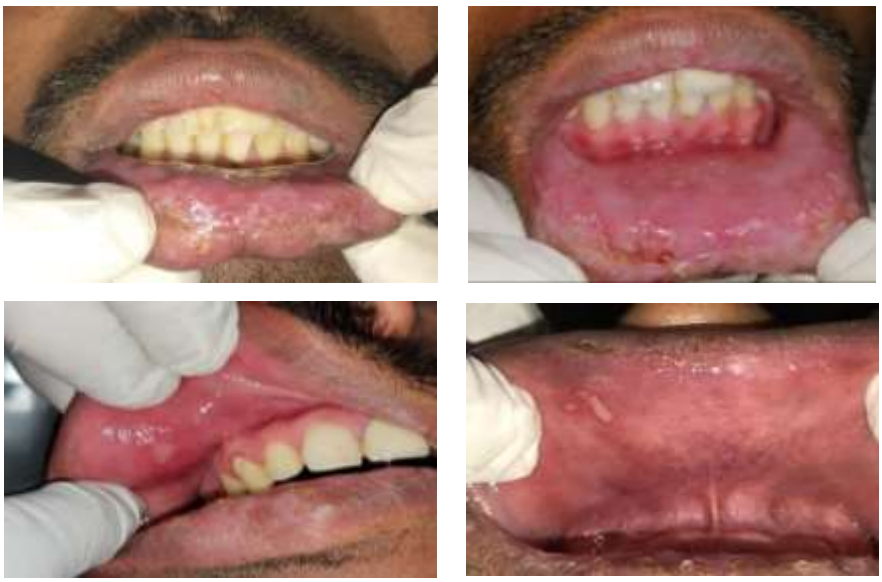
Recently, erythema multiforme has been classified as minor, major, steven-johnson syndrome or toxic epidermal necrolysis, where erythema multiforme minor is the mildest type of lesion and toxic epidermal necrolysis the most severe.[3] Recurrent episodes of erythema multiforme

are usually related to HSV infection.[3] Here we present a case of herpes associated with erythema multiforme.

CASE REPORT

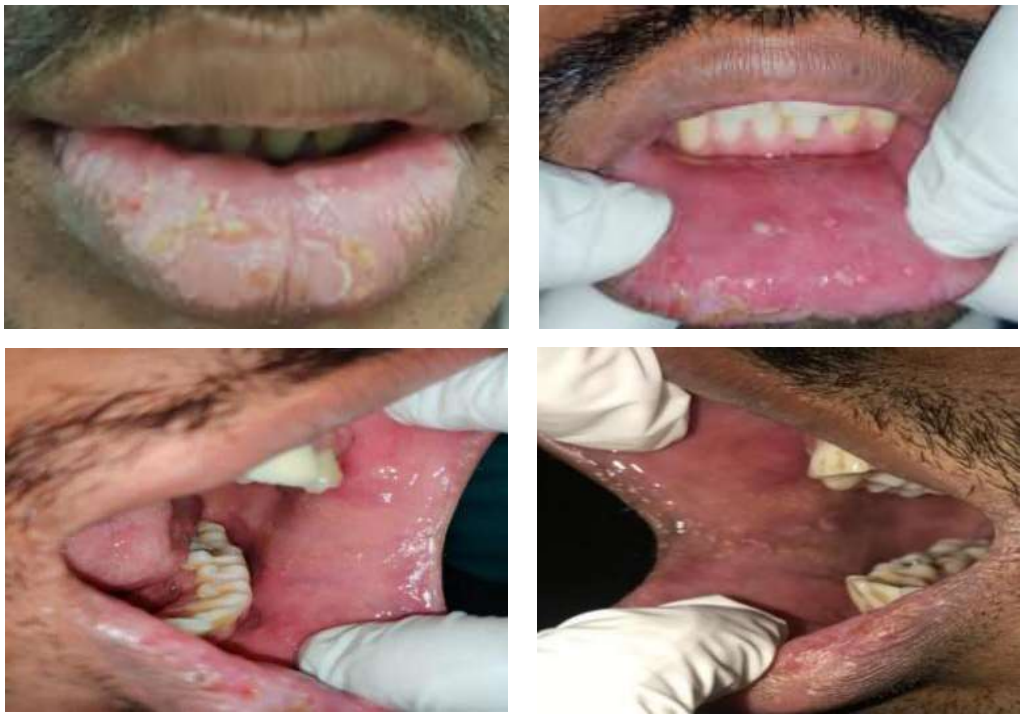
A 27 years old male patient reported to our department with chief complaint of ulcer in upper and lower lip region since 6 months. Patient gave an history of ulcer and burning sensation since 6months on having food. The ulcer was associated with fever, which was relieved on taking medication. On general physical examination the patient was moderately built and nourished with normal gait and no abnormality detected.

On examination the ulcers were multiple in number, with irregular borders and encrusted. On intraoral examination multiple irregular ulcers were noted on upper and lower labial mucosa, which was blood tinted and covered with slough, with erythematous surrounding. It was tender on palpation. Based on the history and examination of the lesion we arrived at a diagnosis of Herpes associated with Erythema Multiforme.

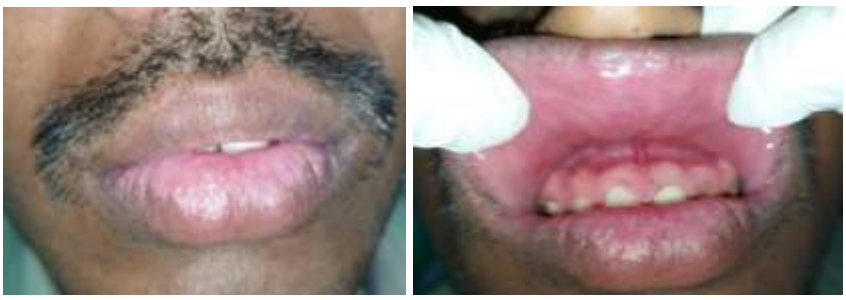


The patient was prescribed Tab Acyclovir 200mg, twice daily for 10days, Tab Prednisone 10mg, 4times for 10days (swiss and spit). Cream Acivir 5 % was asked to apply for 4times a day for 10days. After 10 days the ulceration reduced in size and number. Patient was advised to continue the same medication for one month with tapering dose of Prednisone 10mg. After one month the size and number of ulcers reduced with reduction in burning sensation. Patient was adviced to hydrate the lip with balm.

After 15 days again patient revisited our department with multiple irregular ulcers in lips, buccal mucosa and labial mucosa assosiated with burning sensation. Patient was advised to take Tab Acyclovir 200mg, once daily and to apply Oral cream Triamcelone acetonate 0.1%(CAZIQ) but the lesion did not heal completely. Hence advised TabAcivir 200mg twice daily for 1month. The ulceration were completely healed with no burning sensation. Hence we advised patient to continue with Acivir 200mg twice daily as maintenance dose for two months.



After 2 months with acivir 200mg twice daily the ulceration was completely healed with no burning sensation. Hence we advised patient to continue with acivir 200mg twice daily as maintenance dose for another month.



DISCUSSION

Erythema multiforme is an acute sometimes recurrent, mucocutaneous condition of uncertain

etiopathogenesis. It usually follows the administration of drugs or infection. Infection with HSV is the most common predisposing feature in the development of EM minor.[1] The best documented association is between HSV infection and EM minor/major and has been designated herpes associated erythema multiforme ('HAEM'). Evidence that EM may be triggered by HSV has come from a number of sources. In single episode and recurrent EM many patients give a history of a preceding herpes infection two weeks or less before onset of the disease.[2] Several studies have demonstrated that the pathogenesis of HAEM is consistent with a delayed hypersensitivity reaction. The disease begins with the transport of HSV DNA fragments by circulating peripheral blood mononuclear CD34+ cells (Langerhans cell precursors) to keratinocytes, which leads to the recruitment of HSV- specific CD4+ TH1 cells. The inflammatory cascade is initiated by interferon - gamma (IFN-), which is released from the CD4+ cells in response to viral antigens and immunomediated epidermal damage subsequently begins.[1] Both HSV types 1 and 2 have been shown to precipitate HAEM, and health history, clinical observations and prospective studies indicate that most cases of erythema multiforme are preceded by infection with HSV, although it is important to emphasize that HSV infection may be clinically silent.[3]

Within the clinical spectrum of EM, two subgroups have been recently identified: recurrent EM and persistent EM. In recurrent EM, multiple relapses occur every year. Mucosal involvement is present in only a minority of patients. Each attack lasts approximately 14 days, as in classic EM. Continuous or persistent EM is characterized by the uninterrupted occurrence of both typical and typical target lesions. Lesions are often papulonecrotic or bullous and are widespread. These cases are exceedingly rare.[4] Recurrent herpes associated EM (HAEM) can be precipitated by sun exposure. Similarly in our case the patient was exposed to sun due to his profession as a traffic police. HSV -specific T -cell response to the viral antigens is most likely invovled in HAEM pathogenesis.[5] In herpes associated EM it is most likely that HSV-DNA fragments in the skin or mucosa precipitate the disease. CD34+ cells transport fragments of HSV to the epithelium, and T cells accumulate in response to HSV antigen and damage cells. In contrast drug-associated EM seems to involve CD8+ T cell attack and expression of tumor necrosis factor alpha (TNF-Alpha) in lesional skin in the absence of HSV-DNA.[4]

A diagnosis of EM can be difficult to readily establish, and there can be a need to differentiate from viral stomatitides, pemphigus, TEN and the sub-epithelial immune

blistering disorders (pemphigoid and others). There are no specific diagnostic tests for EM and the diagnosis is mainly clinical supported if necessary by biopsy. Biopsy of perilesional tissue, with histological and immunostaining examination are essential if a specific diagnosis is required.[2] A characteristic histopathological finding of EM is necrosis of some keratinocytes and epidermal damage in the form of basal cells. This is particularly notable in the center of the target lesions of EM. In more severe bullous cases, necrosis of the whole dermis is noted. Direct immunofluorescence is performed to confirm the diagnosis as well as to rule out other diseases with diagnostic immunofluorescence findings such as autoimmune mucocutaneous diseases, in particular pemphigus vulgaris and paraneoplastic pemphigus, mucosal bullous pemphigoid, and linear IgA dermatosis.[6]

HAEM is often effectively managed with acyclovir (200 mg, 5 times a day for 5 days), but only if the therapeutic scheme is started in the first few days. If EM keeps recurring, a continuous low dose of oral acyclovir is necessary. Oral acyclovir has been shown to be effective in preventing recurrent HAEM, and the protocols may include 200-800mg/day for 26 weeks. If acyclovir treatment fails, valcyclovir can also be prescribed (500mg twice a day).[1] Recurrent EM is the most difficult type of EM to treat due to its refractory nature. In both HSV- associated EM and idiopathic EM, the first line treatment is antiviral prophlaxis. Current recommendations include acyclovir, 400mg, twice daily, valcyclovir, 500mg, twice daily,or famciclovir, 250mg, twice daily. These medications can be administered orally in either a continuous or intermittent fashion. A randomized controlled trial from 1995 outlined that the most effective approach to treatment was continuous oral antiviral therapy for a period of greater than six months. The greatest efficacy of antiviral therapy is observed in patients whose disease has a clear association with HSV infection. The goal of treatment is to reduce the number of recurrences and to induce remission, which is difficult to maintain. Recurrence is frequent once antiviral therapy is stopped. Patients with recurrent EM that are unresponsive to antiviral therapy can try other antiviral drugs or double the dosage of the current drug.[7]

CONCLUSION

In the case reported here, erythema multiforme triggered by HSV infection was diagnosed, and the disease was controlled with continuous oral acyclovir therapy to prevent recurrences. Patients should be informed about the condition and the importance of preventing recurrences. Continuous antiviral therapy is still a first-line therapy for recurrent EM,

especially in HSV-induced EM. Erythema multiforme triggered by HSV infection was clinically recognised and diagnosed. And the patient was managed with systemic acyclovir and topical corticosteroids.

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