

Concurrence of Non-Oral HSV Infection with Erythema Multiforme Minor

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ABSTRACT

Background: Etiologically most commonly erythema multiforme has been associated with use of drugs, infection etc, but still the precise cause remains unclear. It presents as skin lesions which may or may not be followed by oral lesions. Here we report a case of 42 year old female patient reporting with complaint of extra-oral vesicles and intra – oral ulcer, which was diagnosed as having HSV infection, associated with Erythema multiforme the pre-disposing factor being drug or HSV. This case also highlights the non – oral lesion of HSV infection with EM lesion present only intra – orally.

Keywords: Antiviral agents, clinical feature, erythema multiforme, herpes simplex infection, oral.

INTRODUCTION

As the name suggest erythema multiforme (EM) is a clinical condition with a vast variety of lesions having different presentation at the same time. It presents as skin or oral lesion or both, which is chiefly desquamation. The desquamation present is less than 10% of body surface. Atypically EM can appear following HSV infection both cutaneous or recurrent infection.^{1,2}

CASE REPORT

A 42 year old female patient reported to Department of Oral Medicine and Radiology with a complaint of ulcers on the left side of the face since 3 – 4 days. History revealed that ulcers initially started to appear on the lower lip and within due course of time they involved the left cheek and left ears. Prior to presentation of ulcers patient gave history of fever around 7 days back for which she took antipyretic drugs from a chemist without proper medical advice. On verifying the medication it was found that the chemist had prescribed Ibuprofen 400mg. Patient also gives history of burning sensation in the inner side of left cheek

which aggravated on taking hot and spicy food which started 2 days back.

On extra oral examination the left submandibular lymph node was palpable, soft in consistency and tender. Further multiple vesicles (Figure 1) were seen in 3 clusters involving the left lower and middle face, preauricular and auricular area. The first set of clusters were seen involving the lower lip extending from the midline up to the left angle of the mouth, moving diagonally downwards up to 2 cm. The second set of clusters was seen scattered in left middle face completely involving the left cheek. The area over which the vesicles were spread was observed to be completely erythematous. The third set of clusters was seen involving the left per-auricular and auricular areas extending anteriorly 1 cm in-front of the tragus and posteriorly involving the concha of ear. On palpation these vesicles were soft and tender and with purulent discharge oozing out near the midline on pressure application.

On intraoral examination (Figure 2) multiple and solitary ulcers were seen involving 3 different locations in the over cavity. First, multiple ulcers

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Fig 1: oral vesicles a) On the middle face; b) On the lower face; c) In pre-auricular and auricular area.



Fig 2: Intra-oral Ulcers a) On the left labial vestibule extending up to buccal mucosal; b) On the soft palate; c) On the dorsum of tongue.



Fig 3: On week follow-up a) Complete resolution of lesion in middle face but unhealed vesicles seen in the pre-auricular and auricular area; b, c, d) Complete resolution of lesion on the lower face and intra-oral ulcers.

were seen extending from the left labial mucosa up to the left buccal mucosa roughly covering an area of 7 cm with individual ulcers measuring around 7 x 7 mm in size in their greatest diameter. The ulcers are having diffuse margins and a flat and yellowish base suggestive of necrotic tissue. Second, a solitary ulcer was seen on the left side of soft palate involving the facial pillars measuring around 6 mm in diameter. The surrounding area is erythematous. Third, a solitary round well-defined ulcer was seen on the dorsum surface of tongue near the left lateral border measuring around 8 mm in diameter with area involving the ulcer being depapillated. On palpation these ulcers were soft in consistency, tender and non-scrappable. Also bleeding was observed from the left corner of the mouth. The condition was diagnosed as non-oral HSV infection along erythema multiforme.

Laboratory investigations revealed normal blood picture. Serological test confirmed the diagnosis of HSV with a fourfold rise in antibody titer. The patient was administered systemic acyclovir (1000mg/day). On first week follow-up (Figure 3) the intraoral ulcer and vesicles on the middle and lower face healed significantly but the third cluster of vesicles healed completely by the second week. The extra-oral vesicles healed with hyperpigmentation (Figure 4).

DISCUSSION

EM is an acute mucocutaneous hypersensitivity reaction characterized by skin lesions with or without oral lesion. The etiology including different drugs; several infections; immune conditions; or food additives. Typically seen between 20 – 40 years of age, more commonly in males than females. Usually oral lesions are erythematous macules on the lips buccal mucosa followed by necrosis of the epithelial tissue, bullae or ulcerations having ill-defined shape and inflammatory halo. Although the most common infection pre-disposing in development of EM is HSV, mostly having skin lesions but very few cases have been reported in literature with only oral lesions.²⁻⁴

The diagnosis of EM is clinical and is easier when there is presence of target lesions with a preceding or coexisting HSV infection. It has been reported the among 60% of patients diagnosed with EM have presence of HSV out of which HSV – 1 is present in

66.7% cases and HSV – 2 is present in 27.8%. This is mostly detected by using polymerase chain reaction (PCR).⁵⁻⁷

In the present case it can be estimated that there may be 2 pre-disposing factors for the occurrence of EM i.e. first being the drug that was taken to treat fever (as it has been reported in literature that Ibuprofen is a potent cause of EM) and second HSV itself. Also, in the present case only oral lesions of EM were seen as multiple ill-defined ulcers with necrotic tissues and bleeding point more concentrated on the labial mucosa but also involving the buccal mucosa, soft palate and tongue. The diagnosis in the present case was confirmed using serological tests. HSV infection was only concentrated in the non – oral areas as mentioned in the case report.

CONCLUSION

For treating EM it is important to recognize the potent causative agent. In the present case there may be multiple pre – disposing factors, but HSV infection seems to be the main cause of EM. The condition was controlled and treated with acyclovir therapy and the patient was informed about its recurrence.

CONFLICTS OF INTEREST

The authors declare they have no potential conflict of interests regarding this article.

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