Condiments Costing High. . . ! A Case Report of Erythema Multiforme

Dentistry Section

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ABSTRACT

Adverse drug associated mucocutaneous reactions having a preponderance to occur above 1% include urticaria, angioedema, photosensitivity, fixed drug eruptions and Erythema Multiforme (EM). EM is an acute inflammatory disease of the skin and mucous membranes that causes a variety of skin lesions-hence named 'multiforme'. The aetiological spectrum of EM is wide and is attributed to infectious agents, drugs and food additives. EM is diagnosed based on stringent clinical findings which are pathognomic as microscopic evaluation carries least significance. We report a case of a 38-year-old male who presented with a complaint of severe oral & cutaneous lesions making him difficult to eat & drink. History revealed the usage of clove to get rid of tooth pain following which he developed ulcers in the mouth which made him to visit a general physician where he was administered gentamycin. Later on oral lesions worsened along with the emergence of dermal lesions. In the present case, based on the patient history, clove was found to be a probable aetiological agent and the condition was further precipitated owing to the administration of gentamycin. The patient was successfully treated with corticosteroids adhering to systemic corticosteroid administrative protocols and no remissions and exacerbations were noticed in a year follow up.

Keywords: Antiviral agents, Clove, Corticosteroids, Gentamycin, Mucocutaneous reaction

CASE REPORT

A 38-year-old male reported to the Department of Oral Medicine and Radiology, with a complaint of painful mouth due to ulcers since 20 days. Patient was apparently normal 20 days ago following which he developed tooth pain in his upper left back tooth region for which he chewed cloves to overcome pain. After three days he noticed ulcers in his mouth making him difficult in taking solid and liquid foods due to pain which made him to visit a private practitioner where he was administered gentamycin. The oral condition worsened furthermore with the emergence of dermal lesions. General physical examination revealed a history of fever, malaise and headache since two days.

Extra oral examination revealed multiple concentric target or iris lesions on upper & lower extremities. Haemorrhagic crustations with clinically evident bleeding were seen on the lower lip with bilateral submandibular lymphadenopathy. Intraorally multiple encrustations were noticed on the upper and lower labial mucosa which were irregular, tender & associated with bleeding. Diffuse erosions and ulcerations with erythematous borders were present on the upper and lower labial mucosa, bilateral buccal mucosa, dorso-ventral surfaces of the tongue and soft palate which were associated with bleeding on palpation and were tender. The dorsum of the tongue is covered with a white patch which is scrappable mimicking coated tongue and is tender [Table/Fig-1]. Considering the history, Haemorrhagic crustations involving the vermilion border of upper & lower lip along with generalized involvement of oral mucosa and symmetric acral distribution of target/iris/bull eye shaped dermal lesions [Table/Fig-2] (typical pathognomic feature) in an acute phase a diagnosis of erythema multiforme is made. As mentioned in the review of literature even the histopathological examination remained unremarkable [Table/Fig-3]

The patient was commenced on systemic corticosteroids (Wysolone) 10mg t.i.d. along with benzydamine hydrochloride (tantum) oral rinse for a week. As the lesions were regressing clinically with gradually decreasing discomfort after 15 days [Table/Fig-4,5], systemic steroids were tapered by 10mg for every seven days till a maintenance dose of 5mg. The patient was subjected to quadrant scaling and oral hygiene instructions were given. Total resolution of



[Table/Fig-1]: Series of pictures depicting multiple encrustations, ulcerations, with clinically evident bleeding



[Table/Fig-2]: Intra oral pictures revealing coated tongue, multiple encrustations, ulcerations with target or iris lesions on extremities



[Table/Fig-3]: Photomicrograph revealing chronic inflammatory infiltrate suggestive of chronic non specific inflammation (10x)









[Table/Fig-4]: Clinical session unveiling partial regressions of the lesions after 15 days follow up



 $\ensuremath{\left[\text{Table/Fig-5} \right]}\xspace$ Regression of the intensity of oral and dermal lesions after 15 days follow up

the oral and dermal lesions was attained after one month [Table/Fig-6,7]. The patient is currently under review with no remissions and exacerbations were noticed in a year follow up.

DISCUSSION

Erythema multiforme (EM) is an acute recurring, usually self limiting, mucocutaneous hypersensitivity disorder that affects skin or mucosa or both [1]. Allergic host response to antigen with T-cell mediated immune reaction leads to a cytotoxic immunological attack on keratinocytes [2]. Classification of EM is according to the







[Table/Fig-6]: Complete regressions of the lesions with absolutely normal mucosal counterparts in a 1 month follow up



[Table/Fig-7]: Healed up oral & dermal lesions after 1 month

extent of mucosal involvement & presence of dermatologic lesions. The most common form is EM minor that affects only one mucosa and may be associated with acrally distributed symmetrical target or iris lesions. Symmetrically distributed target lesions and at least two mucosal sites are affected in EM major [1].

Erythema multiforme (EM) is an acute mucocutaneous hypersensitivity disease that affects skin or mucosa or both & is characterized by varying degrees of blistering and ulceration. EM is most often a recurring condition with great variability of weeks to years in the interval between episodes [3]. Von Hebra was the first person to describe this disease in 1866 and presence of acrally distributed typical target lesions or raised edematous skin papules with or without mucosal involvement is the characteristic feature [4]. Primary lesion will evolve into different forms, hence the term multiforme [5].

The aetiological spectrum of erythema multiforme include drugs, infectious agents & food additives [6]. Herpes simplex virus (HSV) is the infectious agent in 70% to 80% of cases [3]. Drugs attributing erythema multiforme include nonsteroidal anti-inflammatory drugs, antibiotics (sulphonamides) and anti epileptic drugs (phenytoin, carbamazepine) [4].

The exact pathogenesis of EM is still unknown and it has been postulated that EM results from T-cell-mediated immune reaction to the precipitating aetiological agent leading to a cytotoxic immunological attack on keratinocytes that express non-self antigens causing vesicles, blisters and erosions [6].

EM has inclination for teens & young adults with a male preponderance [1,5,7]. EM may present a wide spectrum of severity, from mild limited

disease to a severe, wide-spread and life-threatening illness [1]. The lesions in EM minor presents as bulls eye lesions on the dermal counterparts along with mucosal ulcerations. Presence of necrotic tissue tags is the hallmark of mucosal ulceration. Ulcerations on the lip are blood encrusted. EM major is an aggressive form with involvement of multiple mucosa and typical target skin lesions [4]. Oral lesions are usually widespread and severe [8].

No specific diagnostic criterion exists for EM and the diagnosis is purely based on clinical presentation [1]. Diagnostic features which suggests EM are the acute onset (or recurrent nature), oral erosions typically located on the lip and anteriorly in the mouth and presence of typical and atypical target iris or bull's eye skin lesions. Microscopic evaluation is of diagnostic value in early vesicular lesions whereas it stands insignificant in ulcerative lesions [2].

For the management of EM, precipitants which are responsible for occurrence of EM should be removed. Causal drugs should be stopped and relevant infections treated. Management of EM also depends on many factors like, disease severity, presence of mucosal disease and recurrence [8]. Administration of antiviral agents is of therapeutic value in herpes associated EM. Symptomatic treatment is achieved with topical analgesics and mouth rinses in addition to the intake of soft bland diet. Corticosteroids are the most commonly used drugs in the management of EM. Topical corticosteroids can be given in EM minor. Systemic corticosteroids are indicated in severe cases. In the present case, the lesions regressed after corticosteroid therapy [2].

CONCLUSION

Erythema multiforme being a reactive ulcerative lesion is multifactorial in origin and simulates other ulcerative lesions. Recognition and withdrawal or prevention of contact with the aetiological agent is an important step in the management of EM. In the present case clove was found to be a probable aetiological agent and the condition was further precipitated owing to the administration of gentamycin. In the light of literature review there is no case published with condiment as an aetiological agent to the best of our knowledge, henceforth the present case will take its place owing to the dearth. Early diagnosis of disease remains essential to promptly initiate appropriate management and proper follow up. Oral and maxillofacial physicians play a pivotal role in hindering the recurrence by patient counseling and motivation.

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FINANCIAL OR OTHER COMPETING INTERESTS: None.

Date of Submission: Nov 12, 2014 Date of Peer Review: Feb 01, 2015 Date of Acceptance: May 29, 2015 Date of Publishing: Jul 01, 2015