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Research Article

A SAVOURY CASE REPORT OF DRUG INDUCED ERYTHEMA MULTIFORME: A RARE FORM

Dr. Rakhi Chandak[1], Dr. Runal Bansod[2], Dr. Ramhari Sathawane[3], Dr. Ashish Lanjekar[4], Dr. Gunjan Moon[5]

[1]Reader of Department of Oral Medicine & Radiology, SDKS Dental College and Hospital, Hingna, Nagpur, Maharashtra 441110, India.
[2]Post Graduate student of Department of Oral Medicine & Radiology, SDKS Dental College and Hospital, Hingna, Nagpur, Maharashtra 441110, India.
[3]Professor & Head of the Department of Oral Medicine & Radiology, SDKS Dental College and Hospital, Hingna, Nagpur, Maharashtra 441110, India.
[4]Reader of Department of Oral Medicine & Radiology, SDKS Dental College and Hospital, Hingna, Nagpur, Maharashtra 441110, India.
[5]Post Graduate student of Department of Oral Medicine & Radiology, SDKS Dental College and Hospital, Hingna, Nagpur, Maharashtra 441110, India.

ABSTRACT

Erythema multiforme (EM), is an acute, mucocutaneous disorder, characterized by varying degrees of blistering and ulceration. It's a self-limited syndrome with distinctive skin lesions with or without mucosal lesions. The use of terminology "EM minor" and "EM major" is a reasonable approach to separating the classical mild cutaneous syndrome, as described by Hebra (EM minor), from the usually more severe syndrome, with marked mucosal damage, as described by Stevens and Johnson (EM major). The etiology of erythema multiforme is very complex. Its most likely a skin mediated immune reaction which occurs following exposure to a trigger in certain 'predisposed' individuals. The most common trigger factors are infection, in around 90% of cases, and medications in less than 10% of cases.[2] The most commonly associated infection is herpes simplex virus (the cold sore virus). Drugs which have been identified as causative agents for EM include non-steroidal anti-inflammatory drugs (given for joint and muscle pain), antibiotics and anticonvulsants (used to treat epilepsy).This case report presents a case of a 27 years old male patient who developed erythema multiforme from ofloxacin and ornidazole and its successful management.

Key words:- Drug induced, Erythema multiforme, Steven-johnson syndrome.

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INTRODUCTION

Erythema multiforme (EM) is a hypersensitivity reaction which has a tendency to develop abruptly. Mostly, it vanishes on its own, but sometimes the symptoms need to be treated. The eruption is polymorphous (many forms), hence the 'multiforme' in the name. Erythema multiforme (EM) is the name applied to a group of hypersensitivity disorders, and typically

Corresponding Author

Runal P. Bansod
Email: - runalbansod@gmail.com

affects teenagers and young adults (20–40 years), but the onset may be as late as 50 years of age or more [1].

The disease is more common in males than females in a ratio of 3:2. Erythema multiforme is characterised by symmetric red, patchy lesions, primarily on the arms and legs and the sudden development of few to hundreds of red papules (spots).

The papules usually begin over the back of the feet and hands, and spread upwards towards the trunk. The face is often involved. Over time these papules evolve to plaques (raised patches) and then typical target shaped lesions.[2] These target lesions have a dusky red centre, a paler area around this, and then a dark red ring round the edge. Sometimes the centre of the target can be crusted or blistered. Lesions may appear as irregular red macules, papules and vesicles that collapse and gradually enlarge to form plaques on the skin. Moreover, crusting and blistering sometimes occur in the centre of the skin lesions, resulting in concentric rings resembling a "bull's eye" (target lesion). On the other hand, oral lesions are usually erythematous macules on the lips and buccal mucosa, followed by epithelial necrosis, bullae and ulcerations with an irregular outline and a strong inflammatory halo. Bloody encrustations can also be seen on the lips [3-6].

The targets can be different shapes and sizes, hence the latin name: erythema (redness) multi (many), forme (shapes). Erythema multiforme is usually mild - 'erythema multiforme minor' – with only skin involvement, causing little trouble and clearing quickly. There is also a rare but more severe type, 'erythema multiforme major', which has similar skin features to EM minor, but additionally there is involvement of one or more mucosal membrane (e.g. the lips, the inside of the mouth, the windpipe, the gullet, the anus or genital area, and the eyes) and usually some associated symptoms, such as fever or joint pain. Fever, lymphadenopathy, malaise, headache, cough, sore throat and polyarthralgia may be noticed as much as 1 week before the onset of surface erythema or blisters. In this report, we discuss the case of a 27 year year-old male who was clinically diagnosed with drug induced erythema multiforme.

CASE REPORT

A 27 year old male patient reported to the Department of Oral Medicine & Radiology at Swargiya Dadasaheb Kalmegh Smruti Dental College & Hospital, Nagpur with the chief complaint of spacing in his upper anterior teeth since 2 years and crustations on his lips since 3 days.

Patient had undergone orthodontic treatment for spacing with 11, 12 which was due to midline diastema. He gave history of loosemotions 1 week before visiting the dental opd for which he took mediations (Tab. Ofloxacin and Tab. Ornidazole) and tab. Sporolac which caused him allergy.

He also complained of burning sensation. On extra oral examination, multiple bloody crustations were seen on the vermillion border of the upper and lower lip. (Figure 1). He had no skin lesions. An intraoral examination revealed raised erythematous ulcerative lesions involving the palate area covered with yellowish slough. (Figure 2). Our case showed extensive irregular erythematous ulcerations in the palate along with bloody encrusted lip ulcerations. Biopsies are advised only in early vesicular lesions of erythema multiforme not in ulcerated ones since histopathologic appearances are nonspecific and nondiagnostic [7]. The clinical features suggested erythema multiforme minor. Our patient reported to us with advanced ulcerated lesions and hence the diagnosis had to be established based on the positive drug history, clinical appearance, and distribution of the lesion and exclusion of other ulcerative lesions. Since our case was evidently triggered by drug intake and they had typical lesions of EM in the oral mucosa and lips with no skin involvement we came to a diagnosis of oral EM.

He was treated with a course of Cetrizine 10mg OD for 5 days and ointment Kenacort for 2-3 times a day for 5 days along with complete cessation of the drug intake (Tab. Ofloxacin and Tab. Ornidazole) which caused allergy and was followed up after the treatment course. In the second visit i.e after 10 days, the crustations healed (Figure 3) completely and the palatal ulcerations also reduced significantly. (Figure 4).

In our case, the triggering drugs that caused oral EM were Ofloxacin & Ornidazole. Hence we instructed the patient to completely cease there consumption and the lesions healed completely. The disease was controlled by the prophylactic use of antihistaminic and a synthetic corticosteroid to cover the hypersensitivity reaction and the case was treated successfully with a regular follow up. Patient was followed up for 10 days and there was no recurrence of the lesion.

DISCUSSION

Erythema multiforme is an acute, mucocutaneous condition of uncertain etiopathogenesis that can follow the administration of drugs or infections and is sometimes recurrent in nature. Erythema multiforme can happen at any age. The incidence of EM is unknown, though it is estimated to be far less than 1 percent.[15] The third category of EM, described by many investigators as oral EM has the lesions confined to the oral mucosa and lips with no skin involvement.[11] EM minor is more common within the age group of 20 and 40 years, though more than 20% of the cases affect children after 3 years of age and adolescents.[16,17] In almost 37% of the cases recurrences are seen with clinical severity in the spring and autumn season. According to Farthing *et al.,*[18]EM minor may be recurrent and usually the oral cavity is affected. The prevalence of oral EM minor varies from 35% to 65% among patients with skin lesions. However, in patients diagnosed of EM minor by their oral lesions, the incidence of skin lesions ranged within 25% to 33%.[20]

FIGURE 1- showing ulcers and haemorrhagic crusts on the upper and lower lip leading to bleeding.

FIGURE 2– showing raised erythematous ulcerative lesions of size approx. 2 *4cms involving the palate area covered with yellowish slough.

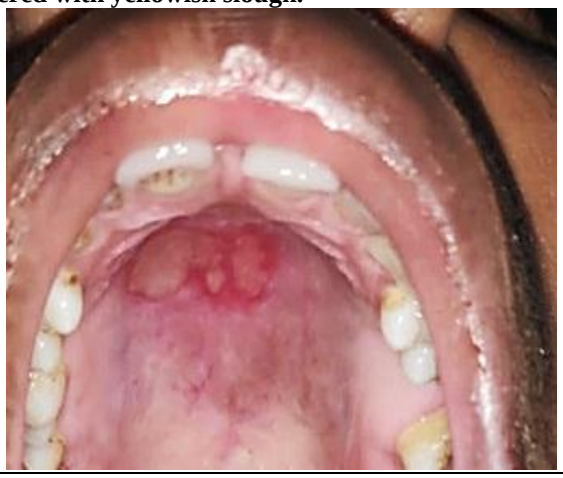
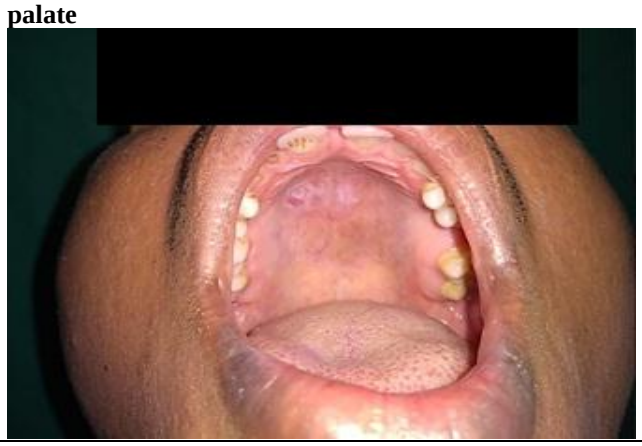


FIGURE 3 showing completely healed crustations on the upper and lower lip

FIGURE 4 showing healed ulcerative lesions of the palate



A study reported that 70% of cutaneous recurrent EM minor patients had an oral involvement, mainly comprising of large, multiple, shallow, extremely painful, and debilitating ulcers, affecting the entire oral mucosa. The most common drugs that trigger EM lesions are long acting sulfa drugs especially sulphonamides, co-trimoxazole, phenytoin, carbamazepine and nonsteroidal anti-inflammatory drugs such as diclofenac, ibuprofen, and salicylates [9-13].

The oral lesions mainly have a predilection for the vermilion border of the lips and the buccal mucosa, mostly sparing the gingiva. Other commonest sites involved are lips, cheeks, and tongue. Kenneth in 1968, described EM as an inflammatory oral disorder with oral lesions typical of EM but without any skin involvement. According to von Hebra in 1866 [14], the patients with erythema multiforme should have acrally distributed typical target lesions or raised edematous skin papules with or without mucosal involvement [7-9].

When lips are involved the typical blood encrusted lesions can be seen. In this case, crustations leading to bleeding were seen involving the lips. Many investigators have suggested this as a third category of EM known as oral EM that is characterized by typical oral lesions of EM but no target skin lesions. Oral EM though is distinct but is less well-recognized variant of EM and the diagnosis has to be reached out by excluding all the other prevalent oral inflammatory and vesciculobullous lesions [10,11]. Our cases showed extensive irregular erythematous ulcerations in the palate along with bloody encrusted lip ulcerations. We were capable to establish a temporal relationship between the drug intake and occurrence of the oral mucosal lesions. The oral ulcerations in our case started within a few days of the drug intake, similar with the findings of the case reported by Joseph et al[7].

Management of oral EM involves identification of the triggering agent. Usually lesions of oral EM can be treated with analgesics for oral pain, viscous lidocaine rinses, soothening mouth rinses, bland soft diet, avoidance of acidic and spicy food, systemic and topical antibiotics to prevent secondary infection. Lesions of EM usually

respond to topical steroids, for more severe cases systemic corticosteroids are recommended [12-19].

CONCLUSION

Drug induced Oral Erythema multiforme is an uncommon and less described variant of Erythema Multiformae. EM is often triggered by HSV (herpes simplex virus) infections and rarely by adverse drug reactions. Even though primary attack of drug induced EM is confined to the oral mucosa the subsequent attack can produce more severe forms of EM (EM minor, EM major) involving their skin. It is important for oral diagnosticians and general dentists to differentiate other vesicullobullous lesions from drug induced EM for prompt management and proper follow-up.

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