www.djas.co.in
ISSN No-2321-1482

CASE REPORT

DJAS 2(III), 166-168, 2014

Dental JOURNAL
of Advance Studies

ERYTHEMA MULTIFORME- CASE REPORT WITH REVIEW

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ABSTRACT

Erythema Multiforme is a rare, acute, inflammatory mucocutaneous condition caused by a hypersensitivity reaction with the appearance of cytotoxic T lymphocytes in the epithelium that induce apoptosis in keratinocytes, which leads to satellite cell necrosis. Reactions to drugs are quite common and are generally mild, hence not reported. However, occasionally life threatening reactions including Erythema multiforme major (Steven Johnson's syndrome) and Toxic Epidermal Necrolysis may occur. A wide spectrum of drugs can sometimes give rise to Erythema Multiforme. We report a case of Erythema Multiforme following administration of Non Steroidal Anti-Inflammatory Drugs.

Key Words: Erythema Multiforme, Drug Reaction, Hypersensitivity Reaction.

INTRODUCTION

Erythema Multiforme (EM) has been classified into several variants, mainly minor, major and severe forms, as it may involve the mouth alone, or may present with a skin eruption, with or without lesions of oral or other mucous membranes. EM typically affects only one mucosa, and may be associated with symmetrical target skin lesions on the extremities. EM major typically involves two or more mucous membranes with more variable skin involvement termed Stevens- Johnson syndrome usually involve the skin extensively.[1,2] A severe variant of the disease is TEN (Toxic Epidermal Necrolysis, Lyell's disease). Herpes associated EM is common enough to be categorized by some authors as distinct form of the disease.[3]

CASE REPORT:

A 50 year old man reported with the chief complaint of pain, bleeding from the mouth and rashes all over the body since 2 days. The history of present illness revealed that, 4 days back he took medication for pain from a quack. After 2 days of the medication, he noticed rashes all over the body and continuous bleeding from the mouth. Severe, continuous pain in the lips, gums and palate was present since 2 days. The past medical and the dental history were non-contributory as well as the personal and the family history were non-significant. The General Physical Examination was unremarkable except temperature which was 99 degree F. On Extra-oral examination, multiple erythematous, macular lesions measuring about 0.5- 1 cm in diameter were present all over the face of the patient. Similar concentric, macular target lesions measuring were present on the chest, arms and thighs of the patient. On the vermillion border of the upper and lower lips there were diffuse bleeding areas covered by crustations (Figure 1 and Figure 2).

On Intra-oral examination, there was bleeding from the tongue as well as from the gingiva. Erosions were present on the palate (Figure 3). On the basis of history and clinical examination a diagnosis of Erythema Multiforme involving the oral mucosa and skin with the differential diagnosis of allergic stomatitis, Steven Johnsons Syndrome, Thrombocytopenic

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Received: 2nd Sept. 2014
Accepted:10th Dec. 2014
Online: 23rd Jan. 2015

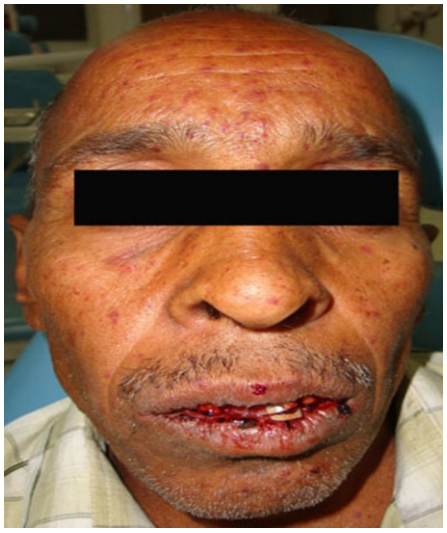

Figure 1 : Lesions on the face

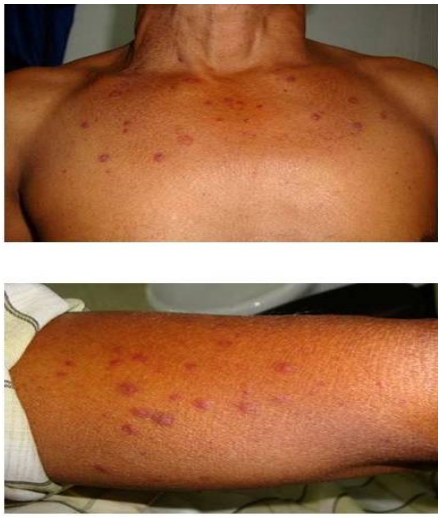

Figure 2: Lesions on chest and forearm

and Anaphylactic Purpura were included. A complete hemogram (B.T., C.T., Prothrombin time, Platelet count) reported absolutely normal and tourniquet test (capillary fragility test) was negative. Hence, a differential diagnosis of "Thrombocytopenic Purpura" was ruled out.

Management was done by giving 40 mg of prednisolone once daily for 5 days and subsequently the dose was reduced to 20 mg for the next 5 days, the 10 mg for next 5 days and then 5 mg for next 5 days. For the skin lesions dermatologist was consulted and topical application of ointment Clobetasol Propionate 0.05 % was given twice daily. After 20 days of medication, the extraoral and intra oral lesions had completely subsided (Figure 4).

DISCUSSION:

Erythema multiforme (EM) is a typically mild, self-limiting and recurring mucocutaneous reaction characterized by target or iris lesions of the skin ors mucous membranes which resolve within 1 to 6 weeks.[4] The best documented trigger factor for EM is drugs (as reported by our patient) and microorganisms in 80-90% of cases. The drugs most frequently associated with EM are sulfonamides, nonsteroidal anti-inflammatory agents, penicillins, trimethoprim, barbiturates and carbamazepine. Presumably, the cytotoxic T-cell response is against keratinocytes expressing drug antigens.[5]

Clinical Presentation: EM is characterized by multiple target or iris lesions. All lesions typically present within approximately 3 days of onset. The lesions have a symmetric distribution. They present as concentric array with target lesion. Initially the lesions

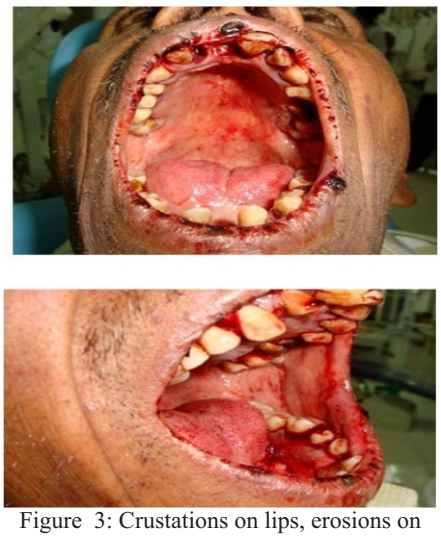

Figure 3: Crustations on lips, erosions on palate and intraoral bleeding

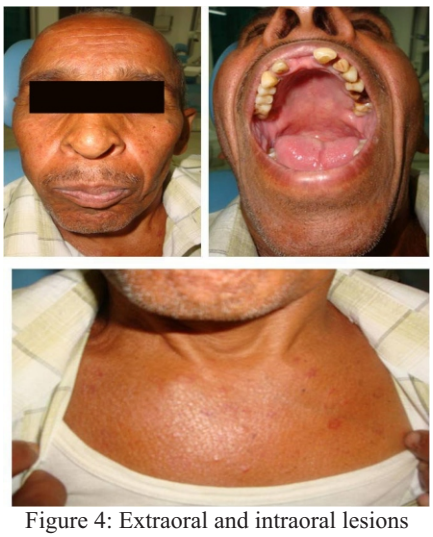

Figure 4: Extraoral and intraoral lesions regressed after medication

are seen on the extensor surfaces of hands, feet, elbows, and knees. The face may also be involved as seen in our case.[6] The lesions are usually asymptomatic, although burning of itching sensations have occasionally been reported in the cutaneous lesions. Complete recovery from an individual EM attack ranges from 1 to 4 weeks.[7]

Oral mucosal lesions occur in more than 70 % of cases of EM. Although less well recognized EM does present as oral mucosal ulcerations with few or no skin lesions. Preferred sites of involvement include the lips, alveolar mucosa, and palate. Lip involvement is almost universal as seen in our case. Although target or iris lesions may be seen, superficial ulcerations or crusted lesions are more common.[6]

The more severe vesiculobullous forms of the disease, Stevens-Johnson syndrome, and Toxic Epidermal Necrolysis (TEN) have a higher mortality rate. EM is classified as Stevens-Johnson when the generalized vesicles and bullae involve the skin, mouth, eyes and genitals.[8] The most severe form of the disease is TEN, which is usually secondary to a drug reaction, and results in sloughing of skin and mucosa in large sheets. Morbidity is high from secondary infection.[9]

Diagnostic Techniques: The diagnosis of EM is based on history and the clinical presentation. Laboratory investigations typically reveal no abnormalities of significance.[10]

Management: Mild cases of oral EM may be treated with supportive measures only, including topical anesthetic mouthwashes and a soft or liquid diet. Moderate to severe oral EM may be treated with a short course of systemic corticosteroids in patients without significant contraindications to their use.[4]

CONCLUSION

Ibuprofen is a widely used nonsteroidal anti-inflammatory drug (NSAID) and Erythema Multiforme is its rare adverse effect. The diagnosis of EM is solely based on history and the clinical examination of the patient. This article is therefore, to make the general practitioner aware of the side effects of the commonly prescribed NSAIDs.

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Source of Support: Nil, Conflict of Interest: None Declared