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Review Article

A Case Report on Erythema Multiforme (EM): Systemic and topical steroidal therapy, along with antibiotics

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ABSTRACT
Erythema Multiforme is an Acute Mucocutaneous disorder which is characterised by Ulceration, Erosions & bleeding then blistering of cutaneous lesions over the body. In this case study a 35 years old male patient had multiple erythematous papulus over the retroauricular regions which evolved into vesicles & coarse to form erythematous plaques over the upper limb, lower limb, Abdomen, chest, back & genitals and also vesicles developed over the lips which rupture to form crusts. This episode was mainly related to repeat drug intake of NSAIDs with different classes (Propionates & Arrylacetates) & doses for a chest pain as a daily regimen excisional biopsy of ruptured lesions was performed; the diagnosis was confirmed as Erythema Multiforme major. The patient was treated with Antibiotics & steroids in a tapering dose for more than 1 and half month to control & completely cure the disease.

Keywords: EM, Encrustations, Mucocutaneous, Plaques, Erosions

INTRODUCTION:

EM is an acute immunomediated, intense, self-limiting, recurrent mucocutaneous disorder which manifestates with a reaction pattern as a consequence of allergic host response to Antigenic challenge (1). It is a mild spread hypersensitivity reaction caused by Cytotoxic T lymphocytes in the epithelium that induces apoptosis in Keratinocytes, leading to Safellite cell necrosis (2) this EM is primarily triggered by the antigens which are induced by the exposure to certain medication. In this condition the patient had a multiple erythematous plaques on all over the body like chest, Abdomen, both upper & lower limbs, back, trunk, lips & glans penis. These lesions get ruptured to form crusts (on the surface of body region) due to ulcerations which are very painful. We reporting that EM was diagnosed clinically & Histopathologically & treatment was started as steroidal therapy along with Antibiotics & topical creams.

Case report:

A 35 years old male patient was brought to our institute with the chief complaints of multiple erythematous papules over the retroauricular region & arms which evolved into vesicles and Coarse to form erythematous plaques over upper limb, lower limb, chest, abdomen, back & genitals in duration of 3 days. Vesicles developed all over the lips which ruptured to form crust since 2 days with swelling & bleeding. Where this multiple target & targeted lesions with erythematous plaques over the body varying 0.5x0.5 cm & 2x5 cm size sparing palms & soles and erosions over chest, abdominal region, initially there was a Erythema in the oral cavity & over the lips due to which the patient experience burning & pain during mastication.

Vesicles ruptured to form encrustations over the lips with a history of itching & burning sensation associated with pain & febrile condition. There was a history of taking repeated intake of NSAIDS with different classes (Propionates & Arryacetates) and doses for the chest pain as a daily regimen. Suddenly there was an appearance of lesions over the hands, legs & abdomen region & widely spread over the body (on 2 months back). Patient went to private medical practitioner, got medicated and was referred to the (college for further needful). Tertiary case teaching hospital for further treatment.

On clinical examination the dark, brown & red coloured encrustations were present over the chest, abdomen, back & lip regions compromised to abdomen & chest region diffuse multiple ulcers & erosions present extending upto trunk & lips. Biopsy from the lesions on histopathological examination revealed intercellular edema, sub-basilar separation of the epithelium from underlying

connective tissue & when the chronic inflammatory cells surrounded by the fibroblasts, muscle fibers & blood vessels. The patient was treated with systemic corticosteroids (Dexamethasone, Acyclovir, Cefixime) was provided along with this Fusigen B cream (Dexamethasone valproate & Fusidic acid) was given to the patient. The patient was currently under the review & this was no recurrence of lesions during 3 months of the treatment of the patient & still under the follow up. Biopsy was adviced only in the early vesicular lesions & not in the ulcerated ones as histopathological appearance is a non-specific.

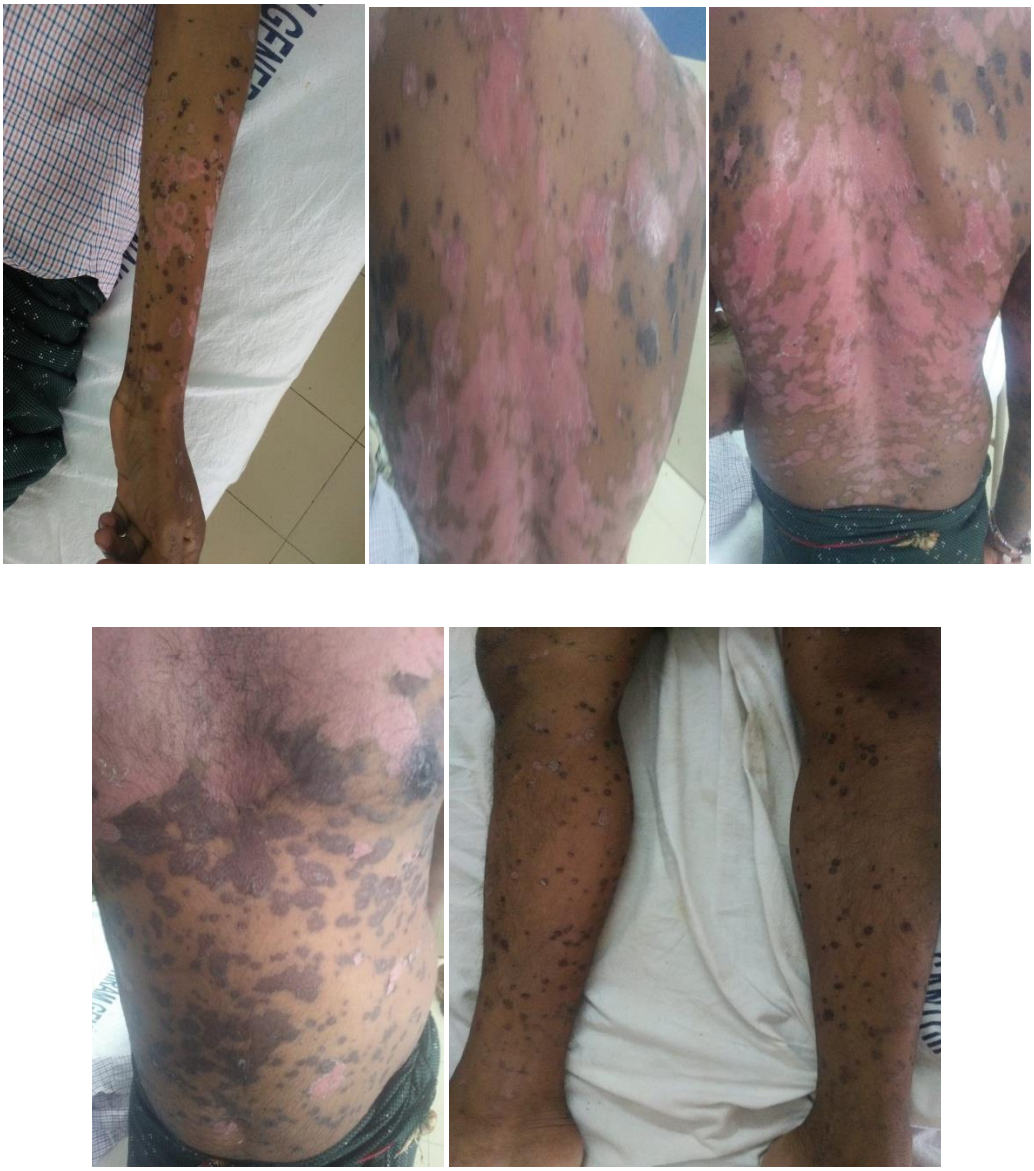

Fig.1: Before treatment

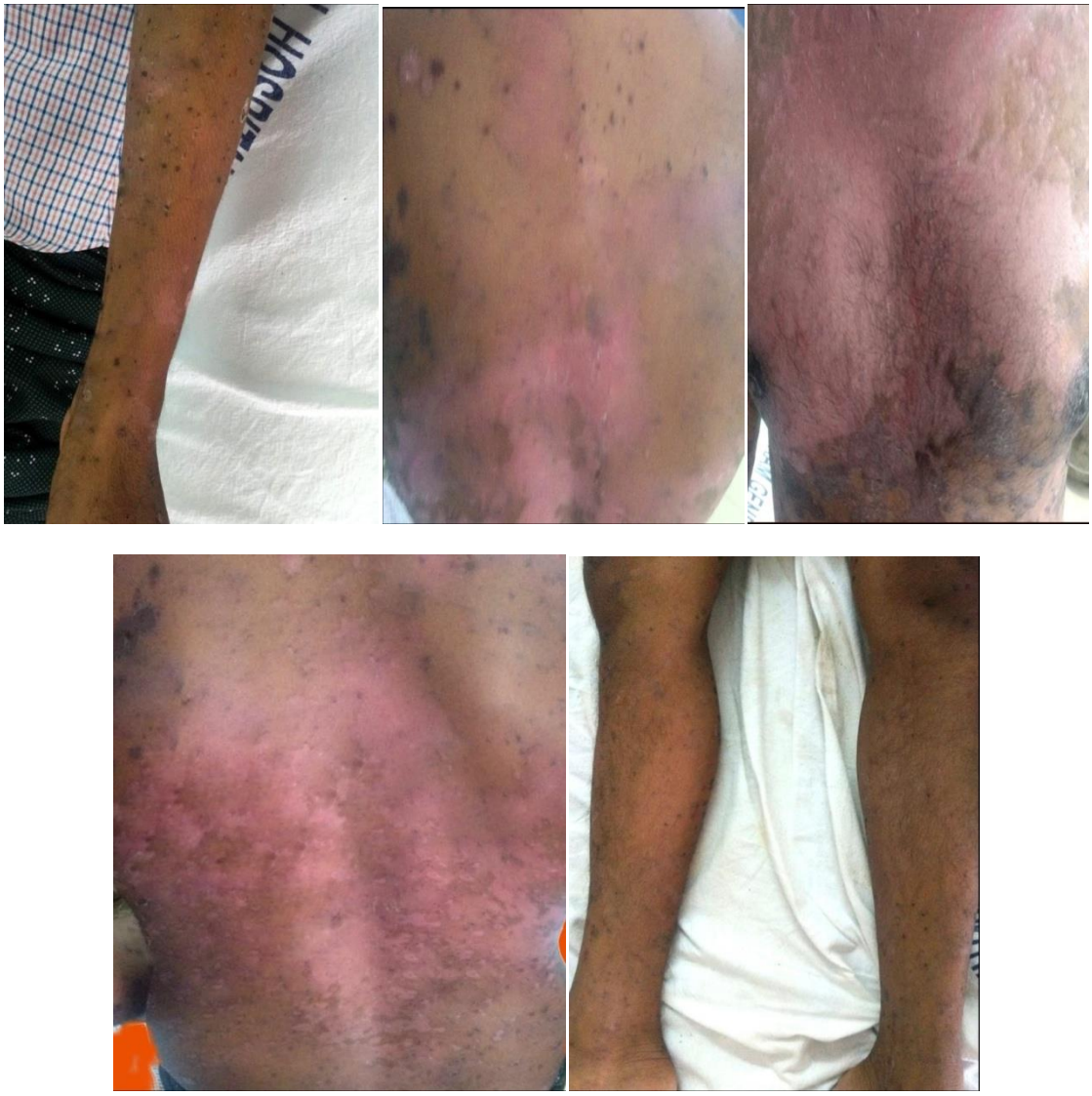

Fig.2: After treatment

Discussion

Erythema Multiforme is an intense self limiting, recurrent Mucocutaneous disorder blistering & ulcerative condition affecting the skin & mucous membrane including the oral cavity (3, 4, 5). Where the reaction pattern appears as an allergic host response to the antigen, in EM major symmetrical dermal target lesions and at least 2 mucosal sites are affected (6). On the contrary drug associated EM seems to involve $CD8^+$ T-cell attack and the expression of TNFα in the lesion (7). In this case the lesions got ruptured to form crusts due to ulcerations. Acute & Repeated ulceration can add to systemic upset & possibility a compromised life (8, 9, 10). EM is a disorder that reacts primary to antigens that are induced by the exposure to microbes or drugs (12). In approximately 905 of the cases, the precipitating events related to the infection i.e. HSV plays a predominant role (11) and other triggering factors like NSAIDS (13). The diagnosis of EM is chiefly based on the history & clinical presentation a histopathologic features & laboratory investigations are non-specific (4, 5).

In contrast, drug associated EM seems to involve $CD8^+$ T-Cell attack and expression of tumour necrosis factor alpha (TNFα) in lesional skin in the absence of HSV-DNA (14). TNF-α may be useful test to differentiate herpes associated EM from drug associated EM (15).

In this case study the patient consists of multiple erythematous erosions on all over the body region like chest, abdomen, both upper, lower limbs, trunk, back & lips. The lesions get ruptured due to ulceration and form a crust these erythematous lesions get treated with systemic and topical steroids along with this antibiotic some Antiviral drugs should be given to this patient.

Corticosteroids are the most commonly used drugs in the management of EM regardless a lack of evidence (2). The drugs like Dexamethasone 0.5 cc given systemically in intravenous form once a day, Prednisolone 5mg for oral 2 times a day, Betamethasone valproate with Fusidic acid (Fusigen-B0 cream topically given other drugs like Acyclovir shows good action against HSV virus & Cefixime 1 gm intravenously given once a day which is used to treat mycobacterium infections. Acyclovir was given first 4 days & then discontinued and Cefixime was continued upto 16 days from the day of starting the treatment during allergic conditions injection Avil 2 cc given once a day. The patient is currently under the review and there was no recurrence of any lesions on the skin with this therapy.

Conclusion

This exploratory clinical study proves the efficacy & safety of corticosteroid therapy. (Where this) corticosteroids are the most commonly used drugs in the management of EM regardless of lack of evidence we are reporting that lesions on the body get treated by this therapy and the patient condition was normalised the results need to be further confirmed in a large randomised controlled clinical trials which is an ongoing our tertiary care teaching hospitals.

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