



Drug induced erythema multiforme-oral variant: A case report

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ABSTRACT

Erythema multiforme (EM) is a muco-cutaneous disorders characterized by blisters and subsequent ulcerations with varying degrees of severity. Although the exact etio-pathogenesis of erythema multiforme is not known, it is considered to be an immune-mediated disorder which may develop following infections or drug exposure. We report a case of erythema multiforme following administration of Ceftriaxone in an adult male. The patient developed mucosal bullae and extensive ulcerations in the oral cavity and crusted lesions on the lips. Management involved topical analgesics, antimicrobials, and oral steroids. Complete healing of oral and lip lesions was achieved within two weeks.

1. Introduction

Erythema multiforme is a well-recognized acute mucocutaneous disease that involves the skin and sometimes the mucosa. The exact etio-pathogenesis of EM is not known but it is considered to be an immune-mediated disorder [1]. Although a significant proportion of EM cases remain idiopathic, it may follow infections, (such as herpes simplex virus and Mycoplasma pneumoniae); exposure to medications (such as antibiotics); vaccination and autoimmune diseases have also been associated with EM [2]. Clinical manifestations of EM involve activation of cytotoxic T lymphocytes in epithelium that induce apoptosis in keratinocytes, which leads to satellite cell necrosis.

Classically EM commences with symmetric involvement of the extremities with the appearance of “target” lesions which tend to spread centripetally on the trunk [3]. Skin lesions of EM tend to remain fixed for at least seven days, a feature which is helpful to differentiate it from cutaneous manifestations of other immune mediated disorders such as urticarial and allergic rashes.

The first line management of EM is primarily aimed at providing symptomatic relief with topical and systemic steroids and avoiding any known triggers such as drugs [4]. Mucosal lesions may require topical analgesics and antiseptics. Prophylactic antiviral therapy is warranted for recurrent EM associated with herpes simplex virus infection. Second-line therapies are generally reserved for refractory cases and include alternative immunosuppressive agents and antimicrobial medications. We report a case of EM following administration of Ceftriaxone in an adult male.

2. Case report

A 40-year-old male patient presented to the outpatient department of our institute with complaints of painful oral ulceration. History revealed that his complaints started with redness in the mouth and on the lips within 24 hours following a surgical procedure. The patient was operated for surgical repair of an anal fissure as a day case and was received intravenous Ceftriaxone 1g post-operatively. The patient's symptoms developed the next morning following discharge from the hospital and involved development of

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Fig. 1. Intra oral ulcerations.



Fig. 2. Haemorrhagic lip ulcerations.

blood-filled blisters which subsequently burst to leave multiple ulcers involving all areas of the oral cavity including keratinized and lining mucosae bilaterally. (Fig. 1). The ulcers involving the tongue dorsum, oral floor and ventral surface of the tongue showed a tendency to bleed. Intra-oral ulcerations were accompanied by hemorrhagic crusting of the lips (Fig. 2) The ulcers were extremely painful and interfered with eating and drinking. However, there was no history of fever or other systemic symptoms, and his vital signs were normal. Pharyngeal and laryngeal examination were also unremarkable and there was no evidence of regional lymphadenopathy.

A provisional diagnosis of erythema multiforme was made and the patient was prescribed oral prednisolone tablets was started at the dose of 15mg per day. Topical Triamcinolone acetonide 1mg (0.1%) in Orabase (Adcortyl®) was also prescribed at the dose of four times daily. Other measures included topical lignocaine 2% gel for pain relief; and oral rinses with doxycycline (100mg in 10mL of water) for 3 minutes twice a day. Diagnostic investigations including a full blood count, cytological smears for possible involvement of herpes simplex virus and liver function tests were unremarkable apart from slightly raised liver transaminases. The medications were continued and prednisolone was tapered off over the next 14 days until complete resolution of mucosal and lip ulcerations was achieved (Figs. 3–5).

3. Discussion

EM may simulate several conditions including Steven Johnson syndrome, fixed drug eruptions, bullous pemphigoid, paraneoplastic pemphigoid Sweet's syndrome, Rowell's syndrome, polymorphous light eruption, and cutaneous small-vessel vasculitis [3]. Correlating histopathological examination with clinical findings and other laboratory investigations may help clinicians to establish a definitive diagnosis. Infection with herpes simplex virus and drug exposure are amongst the two most common causes of EM in adults. However, in children EM is mostly triggered by infectious agents [5].

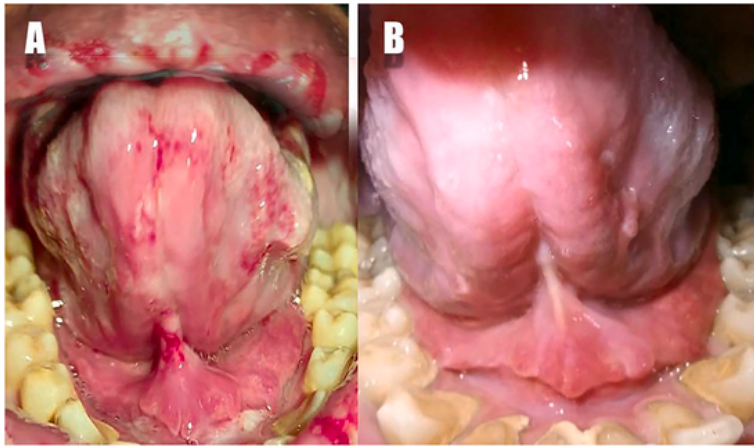


Fig. 3. A, lesions on ventral surface of tongue at the time of presentation. B, After 14 days of treatment, showing all lesions have healed.



Fig. 4. A, Photograph of patient showing haemorrhagic bullae with ulcers on the dorsum of tongue and crusted lip lesions. B, Post-treatment healing of mucosal tongue ulcers.

Severe mucosal erythema multiforme can require hospitalization for intravenous fluids and repletion of electrolytes.¹ Although this patient presented with extensive oral ulcerations, their blood pressure was within the normal range, and he did not require fluid support. Perhaps lack of cutaneous involvement in the extremities or the trunk prevented dehydration and consequent depletion of fluid levels. EM with significant oral involvement like the present case may present to dentists and they should be familiar with its presentation for immediate management and specialist referral for appropriate management.

Author contribution

A Nazir was responsible for data collection and original draft. K Ali was responsible for conceptualization, review and editing of the manuscript.



Fig. 5. Image showing healing of intra oral and lip lesions.

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