DOI: https://doi.org/10.4038/sljd.v24i1.64

Case report

A case of recurrent *Mycoplasma* induced mucositis, a recently described entity

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Sri Lanka Journal of Dermatology, 2024-2025, **24**: 63-65

Abstract

Mycoplasma pneumoniae-induced rash and mucositis (MIRM) is a recently described rare entity. It has various clinical presentations with varying severity in the same individual. The involvement of mucosal surfaces appears to be the hallmark associated with this disease. The oral cavity was involved in 94% of patients with symptoms ranging from erosions and ulcers to denuded tissue. Ocular involvement was the second most common extrapulmonary symptom occurring in 82% of patients. The recurrence rate of MIRM has been reported as 8%.

Here we report a case of 32-year-old male with recurrent *Mycoplasma* induced mucositis associated long term ocular complications including loss of eye lashes and xerophthalmia requiring long term follow up. He showed marked response to macrolides as well as to a short course of oral steroids.

Introduction

Mycoplasma-induced rash and mucositis is a recently described extra-pulmonary manifestation of *Mycoplasma pneumoniae* infections[1]. The involvement of mucosal surfaces appears to be the hallmark associated with this disease[1]. The oral cavity was involved in 94% of patients with symptoms ranging from erosions and ulcers to denuded tissue [1]. Ocular involvement was the second most common extra-pulmonary symptom occurring in 82% of patients. Patients presented with purulent bilateral conjunctivitis, photophobia, pseudo membrane formation, ulceration, and eyelid edema. The recurrence rate of MIRM has been reported as 8%, while the mortality rate has been noted as 3%[1].

Orbital complications are noted in approximately 9% of patients and include conjunctival shrinkage, corneal ulceration, blindness, ocular synechiae, lash loss, and xerophthalmia (i.e., dry eyes)[1]. Although specific treatment guidelines are not tailored for MIRM, patients diagnosed with the condition often exhibit evidence of atypical pneumonia and may, therefore, benefit from antibiotic treatment[2].

Case report

32-year-old male presented to Dermatology clinic with a past medical history of erythema multiforme major with associated mycoplasma pneumonia occurred 10 years back. During that episode he presented with prodrome of fever, cough and sore throat for 7 days. During the 4th day in to the onset of fever, he noticed bilateral red eyes with seropurulent discharge and painful oral ulcers. Along with the progression of mucosal ulceration he had targetoid lesions with associated central blister formation which first appeared in palms and soles which eventually spread to involve trunk. He had minimal lung signs with normal pulse oximeter saturations. FBC showed neutrophil leukocytosis. He had mild transaminitis and rising titers of Mycoplasma IgM antibodies. He had chest X Ray evidence of right-side lower lobe pneumonia. Skin biopsy showed evidence of erythema multiforme. He was treated with IV Clarithromycin and tailing off dose of prednisolone. Following this episode, he had loss of eye lashes and xerophthalmia. He had been regularly followed up at ophthalmology clinic, as he had several episodes of exposure keratitis.

During current episode he presented to us with moist cough and low-grade fever for 1 week duration. On 6th day of onset of fever, he had painful oral and nasal ulcers with bilateral red eyes with tearing and discharge (Figure 1 & 2). However, his vision was intact. He did not have difficulty in breathing. He had bilateral lower zone occasional crepitations. However, his pulse oximeter saturations were normal.

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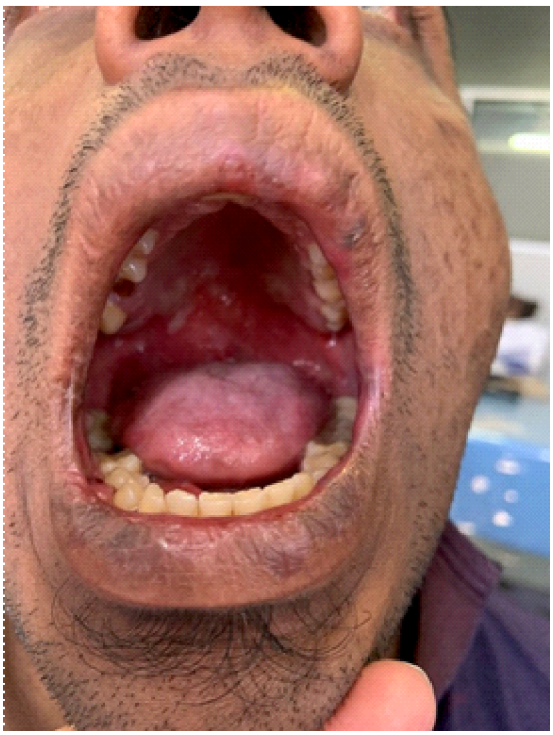
The Full Blood Count showed neutrophil leukocytosis with reactive blood picture. HSV type 1 and 2 PCR was negative. Ulcer scrapping for KOH smear microscopy did not show Candida. Mycoplasma IgM antibodies were positive in high titers 1: 5120. The titer was rising and convincing for an acute infection. His serum creatinine, blood urea, serum electrolytes were normal. ALT>AST was elevated. Chest X ray showed linear reticular shadow in right side lung base most probably indicating the residual scarring resulted by previous episode of *Mycoplasma pneumonia*.

Patient was managed as for *Mycoplasma pneumonia* and was under care of respiratory physician and microbiologist. With the strong clinical and biochemical evidence, we managed the patient's mucosal ulcers as *Mycoplasma* induced mucositis. The patient was managed symptomatically with analgesics, IV fluids, mouth washes and liquidised high protein diet. Patient was diagnosed to have bilateral conjunctivitis with the ophthalmology opinion. They advised on starting antibiotic eye drops. We started him on IV Clarithromycin 500mg bd given for 5 days and converted in to oral clarithromycin given for 14 days. Along with that, we initiated 0.5 mg/kg prednisolone tapered over 4 weeks. With all the above measures, he showed marked improvement of his mucosal ulcers.

Discussion

Proposed diagnostic criteria for *Mycoplasma pneumoniae*-induced rash and mucositis (MIRM) include skin detachment <10% of the body surface area, involvement of at least two mucosal sites, few vesiculobullous or scattered atypical targetoid lesions, and evidence of *Mycoplasma pneumoniae* infection[1]. These criteria help differentiate MIRM from other mucocutaneous conditions like Erythema Multiforme or Stevens-Johnson Syndrome[1].

During the current episode our patient had *Mycoplasma* induced mucositis without skin involvement; MIRM sine rash, which is rare. Furthermore, our patient experienced extensive erythema multiforme major like generalised bullous eruption with two mucosal surfaces involvement during the first episode of MIRM; typical MIRM. He had residual eyelash loss and xerophthalmia as complications of first episode of MIRM. Though we treated the acute



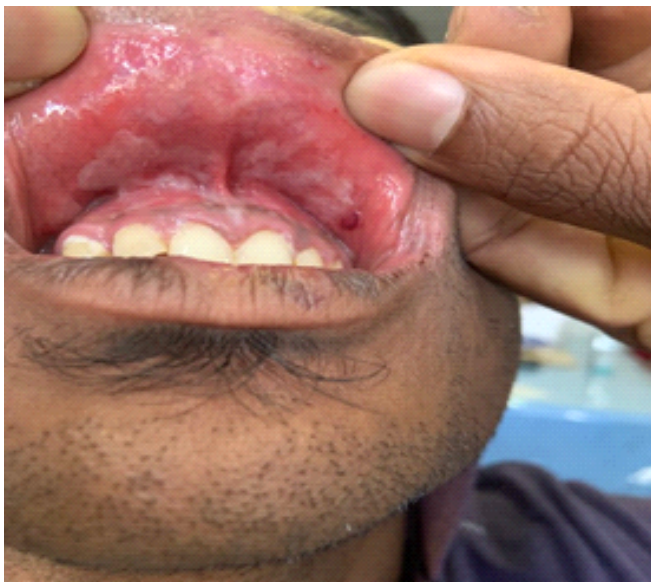


Figure 1 and Figure 2.

episode, MIRM can be associated with several residual complications which may need prolonged treatment and follow-up as highlighted in our case. In an individual, MIRM can present in varying severity with various mucocutaneous morphological presentations. So, it is important to be vigilant in diagnosing *Mycoplasma* induced mucocutaneous manifestations to prevent significant morbidities and mortalities and to initiate empirical treatments to have better outcomes.

References

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