# **Clinical Case Reports**

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CLINICAL IMAGE

# Mycoplasma pneumoniae-induced mucositis without rash in an 11-year-old boy

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### **Key Clinical Message**

Mycoplasma pneumoniae is a frequent cause of childhood pneumonia, and extrapulmonary manifestations may be noted at the time of infection. While M. pneumoniae has long been associated with Stevens–Johnson syndrome, a separate diagnostic entity, Mycoplasma pneumoniae-induced rash and mucositis (MIRM), has recently been proposed to better characterize the rash and severe mucositis that some patients exhibit. A subset of patients with MIRM will have mucositis without skin rash. Physicians should recognize this clinical entity and be familiar with treatment options for MIRM.

#### **Keywords**

Mucositis, Mycoplasma pneumoniae, Mycoplasma pneumoniae-induced rash and mucositis.

## **Clinical Case**

An 11-year-old boy presented with low-grade fever and cough; clinical examination suggested atypical pneumonia, and he started a 5-day course of azithromycin. On day 4 of antibiotics, painful oral lesions developed; because of concern for herpetic gingivostomatitis, acyclovir was prescribed. He was subsequently referred for hospital admission following onset of conjunctivitis and refusal to drink. On admission, he was afebrile. There was diffuse bulbar injection of both eyes, sparing the limbus, with scant discharge (Fig. 1). He had hemorrhagic crusts of the nasal mucosa. His lips were swollen, cracked, and tender to palpation with diffuse denudement of the buccal mucosa (Fig. 2). His lungs were clear to auscultation. His genital examination showed a lesion covering 30% of the glans. Notably, there was no skin rash. He was initially diagnosed with Stevens-Johnson syndrome (SJS); acyclovir was discontinued, and he received intravenous steroids, pain medications, and parenteral fluids. M. pneumoniae serum titers returned with an elevated IgM 4183 U/mL. His diagnosis was subsequently revised to Mycoplasma pneumoniae-induced rash and mucositis (MIRM).

Mycoplasma pneumoniae-induced rash and mucositis is a newly characterized entity clinically distinct from SJS as there is significant mucosal involvement with minimal, if any, skin lesions. In a 2015 article by Canavan et al., the mean age of diagnosis was 11.9 years and two-thirds of



**Figure 1.** 11-year-old boy with conjunctivitis due to MIRM. MIRM, *Mycoplasma pneumoniae*-induced rash and mucositis.

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**Figure 2.** 11-year-old boy with severe mucositis due to MIRM. MIRM, *Mycoplasma pneumoniae*-induced rash and mucositis.

patients were male. Cough and fever almost always preceded mucocutaneous signs by an average of 8 days. In contrast to SJS, 34% of patients with MIRM had no skin rash and an additional 47% had only scant skin involvement. The most commonly involved mucosal sites for patients without rash, such as with the patient we present, were oral (100%), ocular (92%), and urogenital (78%) [1].

Treatment may involve *M. pneumoniae*-directed antibiotics, systemic corticosteroids, and supportive care (pain control, mucosal care, and hydration). The role of IVIG remains debated. In contrast to SJS, MIRM has a milder clinical course, with only 4% of patients in the Canavan series requiring ICU admission. The risk of recurrence is low (<10%) [1], and complete recovery is typical.

## **Authorship**

MB, TS, and SG: contributed to the writing and approval of the final manuscript.

### **Conflict of Interest**

None declared.

#### References

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