A Case of Mycoplasma Induced Rash and Mucositis (MIRM) Complicated by HSV-1 superinfection, Staph Epidermidis Bacteremia and Group A Streptococcus Pharyngitis.

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Introduction

Pathologic Mycoplasma pneumonia (M. pneumoniae) is traditionally associated with a Community Acquired Pneumonia (CAP) with symptoms of headache, cough, fever, dyspnea, and fatigue. While symptoms can be mild and self-limited, some patients may develop extrapulmonary manifestations ranging from hemolysis and mucosal involvement to splenomegaly and heart failure. We present a case of M. pneumoniae complicated by mucocutaneous disease and concomitant superinfection with Group A streptococcus pharyngitis & latent ocular and oral HSV-1 reactivation.

Case Report

A 9-year-old previously well child was admitted with 2 days of cough, congestion, oral lesions, decreased appetite, and injected conjunctivae. Chest XRAY revealed findings consistent with a right lower lobe pneumonia. Respiratory infectious PCR panel positive for M. pneumoniae. Patient presented with a small sore on his lower lip that progressed rapidly overnight and became confluent across upper and lower lips and bilateral buccal mucosa. Patient was positive with Mycoplasma pneumoniae with resultant mucositis and positive Group A streptococcus throat culture. Severe mucositis resulted in severely reduced oral intake requiring course of peripheral parenteral nutrition. The prolonged 34 day hospital stay was complicated by Staph epidermidis bacteremia and HSV keratitis.

Discussion

While Mycoplasma pneumoniae is predominantly associated with the respiratory tract, it can also present with various dermatologic manifestations. One of which is a Stevens-Johnsons-like syndrome known as M. pneumoniae-induced rash and mucositis (MIRM). Classic MIRM is characterized by prominent mucositis with variable cutaneous involvement. Cough, malaise, and fever are common prodromes of the mucocutaneous symptoms. To be classified as MIRM, two different mucosal sites must be affected. The most common site affected is the oral mucosa. Patients may present with vesiculobuluous lesions and hemorrhagic crusting of the lips. Ocular and urogenital involvement is also typical, with the former characterized by a purulent bilateral conjunctivitis. Previous cases of MIRM were referred to as Stevens-Johnsons Syndrome (SJS), atypical SJS, Fuchs syndrome, erythema multiforme (EM), or Mycoplasma pneumoniae-associated mucositis. Compared to other differentials, MIRM usually is found in a younger patient demographic and has a higher prevalence of mucosal involvement and broader range of cutaneous involvement. Because mucocutaneous eruptions associated with MIRM are morphologically diverse, it can be difficult to diagnose based on lesions alone. MIRM rarely presents with the classic target lesions seen in EM or the extensive epidermal detachment seen in SJS/Toxic Epidermal Necrolysis (TEN). MIRM also has a milder disease course; 4% of patient with MIRM receive intensive care unit treatment compared to 20% of patients with drug induced SJS. MIRM has a favorable prognosis and is rarely associated with hepatic or renal dysfunction. The initial supportive care management of MIRM is similar to that for patients with suspected SJS/TEN. For MIRM specifically, antibiotic therapy for M. pneumoniae is recommended, with optional immunosuppressive agents for suplemental treatments. Our patient was prescribed different antibiotics for the variety of superinfections he had including Staph epidermidis bacteremia and HSV keratitis and oral mucositis, which targeted the M. pneumoniae as well.

Mycoplasma pneumoniae