Community-acquired Pneumonia Associated with Ulcerative Stomatitis and Vesiculobullous Lesions

Toplum Kaynaklı Pnömoniye Eşlik Eden Ülseratif Stomatit ve Vezikülobüllöz Lezyonlar

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What is Your Diagnosis?

A previously healthy 7-year-old girl was consulted to our hospital with fever and very painful bullous on her skin, target lesions and oral mucosal ulcerations. According to the story of the patient, it was learned that she consulted a different hospital due to fever and sore throat 10 days ago and she was prescribed amoxicillin-clavulanate initially, but after four days her fever continued, she started to cough, vesicular lesions around his mouth and ulceration in the oral mucosa were observed. At her admission to our hospital, body temperature was 38.2°C; respiratory rate was 32/min; pulse rate was 136/min; and blood pressure was 100/60 mmHg. Physical examination revealed red and swollen lips, ulcerative lesions in the mouth, painful bullous and target lesions on the skin and unilateral crepitale rales on the left side of the lung (Figure 1). According to the complete blood count from laboratory findings, haemoglobin was 11.8 g/dL, leukocyte count was 10.100/mm³ (54% neutrophils, 30% lymphocytes, 16% monocytes) and platelet count was 387,000/mm³. Liver function tests, renal function tests and complete urinalysis were normal. Sedimentation rate was 51 mm/h, C-reactive protein (CRP) was 7 mg/dL (normal: 0-0.8 mg/dL). Chest radiography revealed diffuse interstitial infiltrates in the left lung on chest radiograph (Figure 2). The patient was diagnosed with pneumonia and intravenous ceftriaxone (100 mg/kg/day 2x) was started to patient. On the 4th day of treatment, the patient’s ceftriaxone treatment was stopped due to worsening of the oral mucosal ulcers and new erythematous and target lesions on the face, upper body and extremities. Also Mycoplasma pneumoniae IgM was 6.8 RU/mL (0.1-1.1) and IgG was negative, and therefore, oral clarithromycin (15 mg/kg/day 2x) was started.

What is your diagnosis?

Evaluating the patient’s current clinic, she was diagnosed with Stevens-Johnson syndrome (SJS) secondary to M. pneumoniae infection and she received intravenous immunoglobulin...
(400 mg/kg/dose/day) treatment during 3 days for SJS. In addition, supportive care was applied for oral and skin lesions. The patient’s fever decreased 1 day after IVIG treatment. After eight days of treatment, the patient’s mucocutaneous lesions and pneumonia findings improved and the patient was discharged. 

*M. pneumoniae* IgM was 3.81 RU/mL (0-1.1) and IgG was > 200 RU/mL, tested 3 weeks after the discharge.

*M. pneumoniae* is one of the reasons for community-acquired pneumonia in children. The most common symptoms and findings include sore throat, hoarseness, fever, cough, headache, tremors, runny nose, myalgia, general weakness, cervical adenopathy and myringitis. Also in some *M. pneumoniae* infections, dermatological, neurological, renal, cardiac, haematological and hepatic or pancreatic complications can be seen. Dermatological complications include erythematous, maculopapular, vesicular rash and SJS with conjunctivitis, ulcerative stomatitis, and atypical target lesions. In addition, *M. pneumoniae* is the most common infectious cause of SJS in children. SJS is characterized with severe inflammation, particularly accompanied by acute fever, and necrosis of two or more mucous membranes and systemic symptoms. SJS was first described by Stevens and Johnson in 1922. SJS and toxic epidermal necrolysis (TEN) are serious different forms of the same disease. The incidence of SJS is estimated to be between 1.1 and 7.1/1.000.000 cases per year. The disease is accompanied by skin detachment and mucositis. SJS is mostly associated with drug reactions and less frequently infections. Among infections, *M. pneumoniae* is the most common pathogen responsible for SJS with various skin lesions. These lesions may be maculopapular and some-times vesiculobullous lesions, and target-like lesions are present in approximately 50% of patients. Laboratory findings are not diagnostic for SJS. Increase may be observed in Leucocytosis, ESH and transaminases. Treatment options are available for SJS, including corticosteroid therapy, intravenous immunoglobulin (IVIG), cyclosporine and cyclophosphamide. The use of corticosteroids in the treatment of SJS is controversial. There are super-infections and complications risks in corticosteroid treatment. IVIG is another treatment option for SJS. It has been reported that hospitalization is shorter in SJS patients treated with IVIG. IVIG appears to be a useful and safe treatment for children with SJS, and its doses of 0.5-1.0 g/kg IVIG for 3 days have been reported to be more effective.

In children with *M. pneumoniae* infection, if there are atypical skin lesions accompanied by mucosal and bullous and target lesions, SJS should be considered among the diagnoses.

**References**