BRIEF REPORT

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FUCHS SYNDROME ASSOCIATED WITH *MYCOPLASMA PNEUMONIAE* (STEVENS–JOHNSON SYNDROME WITHOUT SKIN LESIONS)

Abstract: **Stevens–Johnson syndrome is a severe mucocutaneous disease following drugs or infections. We present a 7-year-old boy with mucous membrane lesions (stomatitis, conjunctivitis, and urethritis) but without skin lesions. The diagnosis of acute *Mycoplasma pneumoniae* infection strongly suggests a concomitant Fuchs syndrome.**

Stevens–Johnson syndrome (SJS) is a severe mucocutaneous disease. We would like to draw attention to a rare and distinct atypical variant of this syndrome, Fuchs syndrome, with mucocutaneous involvement without skin lesions.

CASE REPORT

A 7-year-old boy was admitted with fever and a nonproductive cough since 10 days. On physical examination, conjunctivae were hyperemic without purulent discharge and buccal mucosa showed ulcerative lesions (Fig. 1). Skin and genital mucosa were unremarkable. Apart from acetaminophen, he had taken no medications. Chest radiograph showed bilateral hilar infiltrates. The peripheral white blood cell count (15.4×10^9/L, reference value $< 10.0 \times 10^9$/L) and CRP-level (68.2 mg/L, reference value < 10.0 mg/L) were elevated. Amoxicillin-clavulanic acid was started for pneumonia. Bacterial cultures were all negative. On day 3 of admission painful ulcerative lesions covered with yellowish serofibrinous exudates appeared on his lips (Fig. 2). Herpes simplex virus PCR from mucous membrane lesions of the mouth was negative. Detection of *Mycoplasma pneumoniae* from throat swab by PCR was positive. Four days later he showed personality and behavioral changes with aggressiveness and depressive mood. He was evaluated for encephalitis with lumbar puncture which was sterile, without pleocytosis, and PCR for Herpes simplex virus and *M. pneumoniae* were negative. Serology revealed positive complement-fixation antibody titer for *M. pneumoniae* with 1:640 (reference value < 15). On day 10 erosive lesions on the glans penis and urethritis appeared. Fourteen days after admission the patient recovered almost completely after azithromycin therapy and was discharged. At a 4-week follow-up assessment, a complete resolution of mucosal erosions and pseudomembranes was documented and antibody titer declined to 1:320. A 2-month follow-up was uneventful.

DISCUSSION

The combination of stomatitis, conjunctivitis, and urethritis was suggestive for SJS; however, skin lesions were absent (1). Based upon these findings and evidence of

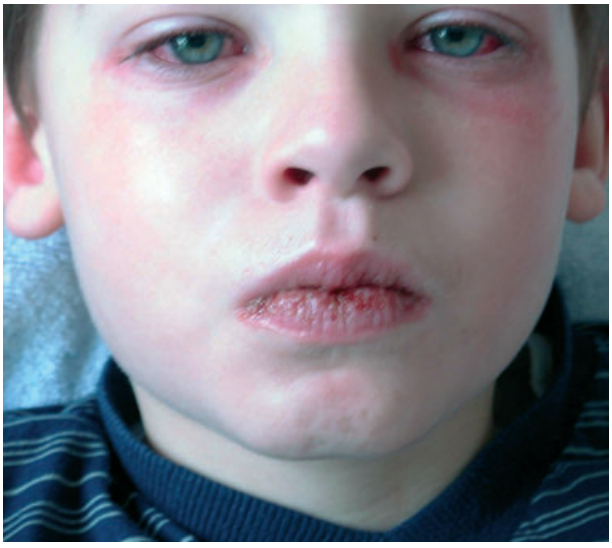

Figure 1. Pseudomembranous lesions on the lips and nonpurulent conjunctivitis.

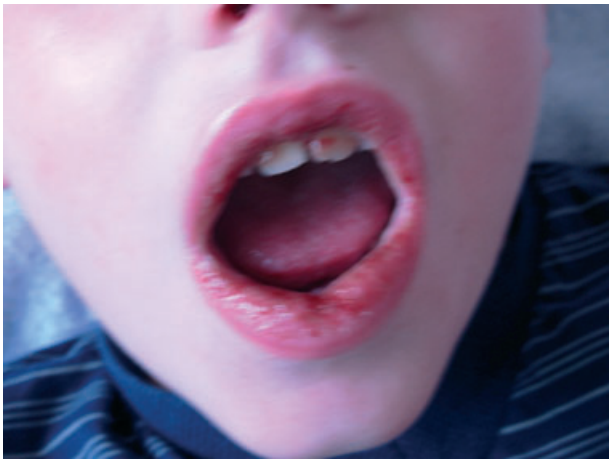

Figure 2. Ulcerative lesions covered with yellowish serofibrinous exudates on the lips and in the mouth.

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M. pneumoniae infection, we diagnosed the patient as having Fuchs syndrome—which we view as a form of SJS with prominent mucocutaneous involvement without skin lesions. This condition was first reported as 'herpes oris conjunctivae' by Fuchs (2). *M. pneumoniae* seems to be the most frequent infectious cause in children (1,3). Oral lesions are present in all cases with SJS associated with *M. pneumoniae* infection, ocular lesions only in two-thirds and genital lesions in three-fourths of all cases (1). That SJS in association with *M. pneumoniae* infection is predominantly mucosal is reflected by few reports of SJS presenting without skin lesions (4,5). Even when skin lesions are present, mucocutaneous lesions predominate (1). In addition, our case highlights the potential for SJS associated with *M. pneumoniae* to occur without rash. In conclusion, in childhood, *M. pneumoniae* is a common cause of respiratory tract infections, but it also affects other organ systems. However, dermatologic symptoms may be seen as complications. Even in absence of typical cutaneous signs of erythema multiforme and SJS, and only with oral, ocular or genital involvement, the rare Fuchs syndrome should be considered. Appropriate microbiologic diagnostic methods in these patients should include *M. pneumoniae* serology and PCR to ensue subsequent antimicrobial therapy.

REFERENCES

1. Tay Y-K, Huff JC, Weston WL. Mycoplasma pneumoniae infection is associated with Stevens–Johnson syndrome, not erythema multiforme (Von Hebra). J Am Acad Dermatol 1996;35:757–760.
2. Fuchs E. Herpes oris conjunctivae. Klin Monatsbl Augenheilkd 1876;14:333–351.
3. Léauté-Labrèze C, Lamireau T, Chawki D et al. Diagnosis, classification, and management of erythema multiforme and Stevens-Johnson syndrome. Arch Dis Child 2000;83:347–352.
4. Schalock PC, Dinulos JG. Mycoplasma pneumoniae-induced Stevens-Johnson syndrome without skin lesions: fact or fiction? J Am Acad Dermatol 2005;52:312–315.
5. Ravin KA, Rappaport LD, Zuckerbraun NS et al. Mycoplasma pneumoniae and atypical Stevens-Johnson syndrome: a case series. Pediatrics 2007;119:e1002–e1005.

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