

**Brian Lin, MD**  
**Matthew Strehlow, MD**

From the Stanford-Kaiser Emergency Medicine Residency Program, Stanford University School of Medicine, Palo Alto, CA.

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**Figure.** Widespread rash on initial presentation to the ED. Used with permission of Matthew C. Strehlow, MD, Division of Emergency Medicine, Stanford University Medical Center, Stanford, CA.

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A 14-month-old boy was brought to the emergency department (ED) with a severe rash. One week previously, the child was diagnosed with sinusitis and began receiving amoxicillin and clavulanate. Six days later, he developed an urticarial-like rash. The antibiotic was discontinued, and he began receiving diphenhydramine. The next day, he presented to the ED with a worsening, “dusky” rash. Review of systems was significant for recent refusal to walk, which resolved with ibuprofen.

Physical examination revealed a nontoxic, mildly uncomfortable child. Temperature of 102.2°F (39°C), shotty lymphadenopathy, and edema of the hands and feet were noted. Urinalysis result was negative. His rash is pictured in the [Figure](#).

*For the diagnosis and teaching points, see page 359.  
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## IMAGES IN EMERGENCY MEDICINE

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### DIAGNOSIS:

*Serum sickness–like reaction to amoxicillin.* The diagnosis of serum sickness–like reaction to amoxicillin was confirmed by dermatology consultation in the ED. The patient was subsequently discharged from the ED, with close follow-up in the dermatology clinic. Serum sickness–like reactions develop 1 to 2 weeks after exposure to the offending agent. The clinical features include fever, rash, polyarthralgias, and polymyalgias, often manifesting in children as a refusal to walk. Lymphadenopathy, malaise, proteinuria, edema, and abdominal pain are occasionally present.

Serum sickness–like reactions occur most commonly with administration of cefaclor but have also been observed with numerous other antibiotics and drugs.<sup>1</sup> The mechanism is unknown. In contrast to true serum sickness, circulating antigen-antibody complexes are not present.

The differential diagnosis includes life-threatening disease processes, such as erythema multiforme, Kawasaki's disease, and disseminated gonococcal or meningococcal infections. Serum sickness–like illness is differentiated by the history and nontoxic appearance of the patient.

Serum sickness–like illness is self-limited and has a favorable prognosis. In a case series of 8 patients, only half were hospitalized and all had benign outcomes.<sup>2</sup> Treatment involves discontinuing the causative drug. Antihistamines and nonsteroidal antiinflammatory drugs may be used to alleviate the pruritus and pain. For severe presentations, a short course of corticosteroids can be prescribed. Future avoidance of the offending drug and related agents is recommended.

### REFERENCES

1. Stricker BH, Tijssen JG. Serum sickness-like reactions to cefaclor. *J Clin Epidemiol.* 1992;45:1177-1184.
2. Vial T, Pont J, Pham E, et al. Cefaclor-associated serum sickness-like disease: eight cases and review of the literature. *Ann Pharmacother.* 1992;26:910.