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Visual Case Discussion

A five-year-old girl with a life-threatening rash

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Visual Case Discussion

A five year-old girl came to the tourist ambulance because of the dysuria, sore throat and tingling of external genitalia. A local physician prescribed amoxicillin/clavulanic acid suspension. She took her first dose in the afternoon. During the night, parents noticed the rash and redness of the entire body. During the night, another dose of antibiotic was given, after which the rash and redness continued to spread rapidly. Immediately methylprednisolone and chloropyramine are administered intramuscularly. Upon arrival to the hospital, the girl was a normal state of consciousness with dyspnea, breathing frequency 25/min, SpO₂ 97%, dehydrated, febrile 38.1 °C, tachycardic (135/min) and normotensive (RR 103/66 mmHg). On the skin of the face and on the larger surface of the body (TBSA = 80%) were visible bullae and vesicles which ruptured and it came to skin peeling (Figs. 1 and 2). Due to

the progression of respiratory insufficiency, tracheotomy was performed. Also due to the increase in inflammatory parameters for the first ten days, ceftriaxone and amikacin were ordered, with all supportive therapy. On the second day of admission, cyclosporine is ordered. All the swabs were negative.

Lyell's syndrome, or toxic epidermal necrolysis, is a rare, potentially life-threatening mucocutaneous disease, usually provoked by the administration of a drug and characterized by acute necrosis of the epidermis.¹ The drugs most frequently incriminated are nonsteroidal anti-inflammatory drugs, chemotherapeutics, antibiotics, and anticonvulsants. Although the cases where amoxicillin/clavulanic acid suspension caused this condition were described,^{2,3} in our case, amoxicillin/clavulanic acid suspension was probably not the cause, given that the girl had been treated twice in the past with this drug without side effects.

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Fig. 1. Face of the patient with swollen lips and skin lesions.



Fig. 2. The back of the patient with skin lesions.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:[10.1016/j.visj.2018.11.007](https://doi.org/10.1016/j.visj.2018.11.007).

References

1. Baroni A, Ruocco E. Lyell's syndrome. *Skinmed*. 2005;4:221–225<https://doi.org/10.1111/j.1540-9740.2005.03593.x>.
2. Zaidi M, Zaidi SK, Bhutto M, Umer MY. Amoxicillin and clavulanic acid induced Stevens-Johnson syndrome: a case report. *EXCLI J*. 2017;16:748–751<http://dx.doi.org/10.17179/excli2017-345>.
3. Fathallah N, Hanen Z, Slim R, et al. Co-amoxiclav-induced Stevens Johnson syndrome in a child. *Pan Afr. Med. J*. 2013;14:38<http://dx.doi.org/10.11604/pamj.2013.14.38.1408>.

Questions

1. Which scoring system helps predict the outcomes of treatment for patient with toxic epidermal necrolysis?
 - a. Ranson
 - b. WOMAC
 - c. Krenning
 - d. SCORTEN
 - e. Eagle

2. What is the leading cause of the death of a patient with toxic epidermal necrolysis?
 - a. Stroke
 - b. Lower respiratory infections
 - c. Sepsis
 - d. Meningitis
 - e. Protein-energy malnutrition

Answers

1. SCORTEN. Explanation: The prognosis of individual patients can be rapidly evaluated on admission by applying a prognostic scoring system called SCORTEN. Reference: Bastuji-Garin S, Fouchard N, Bertocchi M, et al. SCORTEN: a severity-of-illness score for toxic epidermal necrolysis. *J Invest Dermatol* 2000;115(2):149-53.
2. Sepsis. Explanation: Patients with SJS/TEN are at high risk of infection, and sepsis remains a prominent cause of death. Reference: Letko E, Papaliadis DN, Papaliadis GN, et al. Stevens-Johnson syndrome and toxic epidermal necrolysis: a review of the literature. *Ann Allergy Asthma Immunol* 2005;94(4):419-36.