

Image challenge

Widespread eruption in a patient with atopic dermatitis

CLINICAL INTRODUCTION

A 36-year-old woman at 12 weeks of pregnancy with a personal history of severe atopic dermatitis presented to the ED with a widespread and painful skin eruption. On physical examination, there were clusters of monomorphic blisters and crusts (see [figures 1 and 2](#)).



Figure 1 Widespread and painful skin eruption.

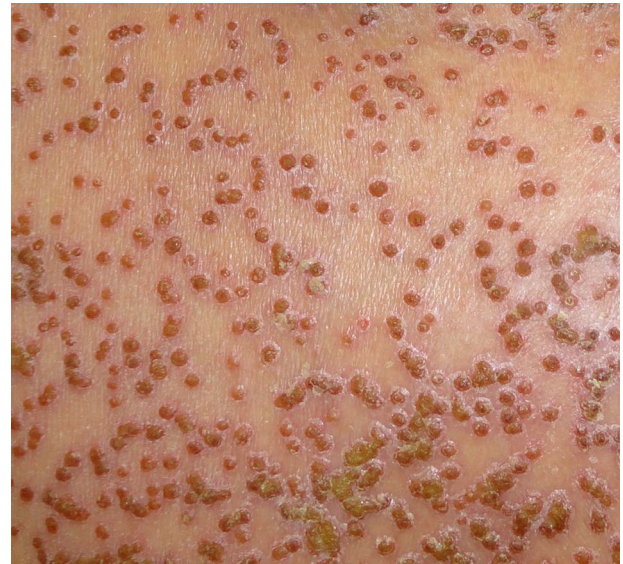


Figure 2 Clusters of monomorphic blisters and crusts.

QUESTION

Laboratory tests were within normal range. What is the most likely diagnosis?

- A. Disseminated herpes simplex virus (HSV) infection
- B. Disseminated varicella-zoster virus infection
- C. Severe atopic dermatitis flare-up
- D. Bullous impetigo

For the answer see page 314

ANSWER:A

Tzanck smear showed multinucleated giant cells, and PCR confirmed an HSV type 1 infection. *Staphylococcus aureus* grew in skin cultures. Eczema herpeticum with secondary bacterial infection was diagnosed, and both intravenous acyclovir (5 mg/kg/8 hours) and amoxicillin/clavulanate (875/125 mg/12 hours) were administered for 1 week with full recovery.

Eczema herpeticum, also known as Kaposi varicelliform eruption, is a potentially life-threatening herpetic disseminated infection mostly caused by HSV type 1 or 2. Kaposi described it in 1887¹ and thought that it resembled varicella, which is in fact considered its main differential diagnosis. Blisters in eczema herpeticum are monomorphic and typically appear all at once on skin previously affected by atopic dermatitis² or other skin diseases that break down the skin barrier such as thermal burns, pemphigus vulgaris or Darier disease. Typically, blisters become haemorrhagic, crusted and eroded in 24–48 hours. Secondary bacterial infection with staphylococci or streptococci may lead to impetigo and cellulitis.

Diagnosing eczema herpeticum can be challenging, and requires a heightened sense of awareness. Complications of eczema herpeticum vary from a mild outbreak to a fatal reaction. It must be considered a dermatological emergency³ and therapy with acyclovir or valacyclovir has to be administered without delay to avoid life-threatening complications. The US Food and Drug Administration considers acyclovir, valacyclovir and famciclovir category B drugs in pregnancy, and can be used during pregnancy if the potential benefit outweighs the potential risk to the fetus.³ Although both HSV 1 and 2 have no

teratogenic effects, viraemia in pregnancy may lead to fetal demise and miscarriage. Eczema herpeticum resolves within 7–10 days, although light scars can be formed due to skin damage.

Andrea Combalia, Juan Ferrando, José M Mascaró Jr

Dermatology department, Hospital Clínic de Barcelona, Barcelona, Spain

Correspondence to Dr Andrea Combalia, Dermatology department, Hospital Clínic de Barcelona, Villarroel 170, Barcelona 08036, Spain; andreacombalia@gmail.com

Contributors All authors have contributed equally.

Competing interests None declared.

Patient consent Obtained.

Provenance and peer review Not commissioned; internally peer reviewed.



CrossMark

To cite Combalia A, Ferrando J, Mascaró Jr JM. *Emerg Med J* 2017;**34**:314.

Accepted 5 August 2016

Published Online First 22 March 2017

Emerg Med J 2017;**34**:314. doi:10.1136/emered-2016-206194

REFERENCES

- 1 Kaposi M. *Pathologie und Therapie der Hautkrankheiten*. Wien and Leipzig, Urban & Schwarzenberg, 1887. p 483.
- 2 Wollenberg A, Wetzel S, Burgdorf WH, et al. Viral infections in atopic dermatitis: pathogenic aspects and clinical management. *J Allergy Clin Immunol* 2003;112:667–74.
- 3 Pasternak B, Hviid A. Use of acyclovir, valacyclovir, and famciclovir in the first trimester of pregnancy and the risk of birth defects. *JAMA* 2010;304:859–66.



Widespread eruption in a patient with atopic dermatitis

Andrea Combalia, Juan Ferrando and José M Mascaró, Jr

Emerg Med J 2017 34: 314

doi: 10.1136/emered-2016-206194

Updated information and services can be found at:
<http://emj.bmj.com/content/34/5/314>

These include:

References

This article cites 2 articles, 0 of which you can access for free at:
<http://emj.bmj.com/content/34/5/314#BIBL>

Email alerting service

Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Topic Collections

Articles on similar topics can be found in the following collections
[EMJ Image Challenge](#) (38)

Notes

To request permissions go to:
<http://group.bmj.com/group/rights-licensing/permissions>

To order reprints go to:
<http://journals.bmj.com/cgi/reprintform>

To subscribe to BMJ go to:
<http://group.bmj.com/subscribe/>