

## Steroid Cream Associated with Serious Complications

Eczema is a term used to describe different types of skin swelling. It is often caused by allergies. Usually, eczema is not dangerous, but it causes red, swollen and itchy skin. The condition cannot be cured, but flare-ups can often be prevented by avoiding substances and situations that irritate the skin. This includes avoiding foods to which one is allergic, because there is a link between food allergies and eczema. Drugs can help manage eczema, and steroid creams or ointments are used most often.

Usually, we think of steroid creams as safe; however, improper use of these products can allow substantial amounts of the drugs to be absorbed into our bodies. This can damage the integrity of the skin, leading to stretch marks and the risk of more serious effects. Recently, an 11-month-old child with difficult-to-control eczema had to be hospitalized because of complications from steroid creams applied by his parents.



This child had experienced severe eczema his entire life owing to numerous food allergies (wheat, beans, avocados, cow protein, eggs, milk, soy, corn, green beans, and beef). Since 6 weeks of age, his parents had been applying steroid creams, ointments, and lotions to affected areas of the child's skin, which meant that 30% of his body was covered with steroid medications. Despite this, his eczema remained poorly controlled, in part because his diet had not been changed to avoid foods to which he was allergic.

When the child was admitted to the hospital with open and infected sores from his eczema, it was discovered that he had high blood pressure and had stopped growing normally about 5 months earlier (he was below normal values for both height and weight). His bone density levels

### FOR MORE INFORMATION

American Academy of Dermatology  
[www.skincarephysicians.com/eczemanet/FAQ.html](http://www.skincarephysicians.com/eczemanet/FAQ.html)

American Academy of Family Physicians  
<http://familydoctor.org/online/famdocen/home/common/skin/disorders/176.printerview.html>  
<http://familydoctor.org/online/famdocen/home/common/skin/disorders/176.html>

Nemours Foundation  
[http://kidshealth.org/kid/health\\_problems/skin/eczema.html](http://kidshealth.org/kid/health_problems/skin/eczema.html)

Based on "Cushing's Syndrome Induced by Misuse of Moderate-to-High Potency Topical Corticosteroids" by Bénédicte Coureau, Jean-François Bussi eres, and St ephanie Tremblay, *The Annals of Pharmacotherapy*, December 2008, <http://dx.doi.org/10.1345/aph.1L067>. For Our Patients is provided by *The Annals* to help explain the latest research and information relating to your medications. These summaries are for informational purposes only and are not a substitute for professional advice from your personal medical provider. If you have questions about this material, you should discuss it with your physician or pharmacist. This summary may be reproduced without permission for not-for-profit educational purposes only. Any other use must be approved by the publisher.   Copyright 2008, Harvey Whitney Books Company, [www.hwbooks.com](http://www.hwbooks.com). FOPE25 DOI 10.1345/fop.1L067

were also below normal, putting him at risk of bone diseases. All of the complications this child experienced are well-known side effects of excessive steroid use. Fortunately, the problem was identified, the patient was treated successfully, and additional complications were avoided.

Nonetheless, this is a good reminder that even creams can cause unwanted effects. Applying a medicated cream too often or applying it to a large area of the body increases the likelihood that the drug that will be absorbed into the body. When steroid creams are applied, their effects are intended only for the skin, not throughout the body, and absorption of large amounts of steroids into the blood can cause severe and even life-threatening complications. Additionally, putting steroid creams under a child's diaper (as was the situation with this child) greatly increases the amount of drug that is absorbed because the warm environment increases drug absorption into the bloodstream.

This case also serves as a good reminder that avoidance of triggers can prevent eczema flare-ups. This child's eczema triggers were numerous foods, and avoiding those particular foods should be part of his treatment plan.

Since there is a clear relationship between food allergies and eczema, if you or your child has been diagnosed with eczema it is a good idea to be tested for allergies to different foods. By identifying foods to which your immune system reacts inappropriately, those foods can be avoided, and this will often reduce the number of eczema flare-ups. Additionally, if you need to apply steroid creams for long periods of time over large areas of your body, consider talking to your doctor about checking blood cortisol levels periodically to be certain that you are not at risk for developing complications.