CLINICAL PRACTICE

Clinical Images

Got Zinc? An Exfoliative Rash in a Parenteral Nutrition-Dependent Patient

Surbhi Sidana, MD, Yazan Madanat, MD, and James Pile, MD

Medicine Institute, Cleveland Clinic Foundation, Cleveland, OH, USA.

J Gen Intern Med 30(4):529–30

DOI: 10.1007/s11606-014-3099-z

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A 77-year-old woman with dysphagia presented with a two-week history of rash characterized by brown plaques with erythematous borders and overlying thick scales involving the face and a prior percutaneous endoscopic gastrostomy (PEG) tube site (Fig. 1a, c). No oral or conjunc-

tival involvement was present. She had been receiving parenteral nutrition for two months following removal of the PEG tube due to infection.

Although the differential diagnosis included drug hypersensitivity, autoimmune disorders and nutritional deficiency, the rash appearance was most consistent with acrodermatitis enteropathica-like eruption secondary to zinc deficiency. Her serum zinc level was 12 mcg/dL (normal, 55–150 mcg/dL), and the rash resolved within one week of parenteral zinc supplementation (Fig. 1b, d). Zinc is essential for protein synthesis and wound healing. Acrodermatitis enteropathica presents in infancy as a periorificial desquamative dermatitis, resulting

Figure 1. a, b: Facial rash before and after zinc repletion. c, d: Rash at former PEG tube site before and after zinc repletion.

Received June 27, 2014

Revised April 24, 2014

Accepted October 14, 2014

Published online November 20, 2014

from an autosomal recessive mutation that impairs zinc absorption.^{1,2} A similar syndrome may occur due to nutritional zinc deficiency,^{1,2} and has been reported in the setting of parenteral nutrition that fails to include zinc supplementation;³ a prompt response to supplementation helps to confirm the diagnosis. A recent national shortage of parenteral zinc in the United States likely contributed to this patient's presentation.⁴

Conflict of Interest: The authors declare that they do not have a conflict of interest.

Corresponding Author: Surbhi Sidana, MD; Medicine Institute/Cleveland Clinic Foundation, Cleveland, OH, USA (e-mail: sidanas@ccf.org).

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