

Letters to the Editor

Case Report: Four-Month-Old With Failure to Thrive and a Rash

To the Editor: Rashes in young children are common. The underlying diagnoses are often straightforward, but unusual cases or rashes that do not respond to conventional treatment should prompt scrutiny. We report a case of a four-month-old with a persistent scalp rash and a milk protein allergy who was admitted to the hospital for failure to thrive and suspected pneumonia.

The patient had 10 discrete, skin-colored papules on the scalp, several of which were erythematous, hemorrhagic, or had yellow crust (*Figure 1*). Macerated skin and several ulcerative lesions were noted in the neck folds and submental skin. The anterior chest had seven skin-colored, umbilicated papules. There were no lesions in the diaper area or on the extremities.

A biopsy confirmed a diagnosis of Langerhans cell histiocytosis, which is a rare, inflammatory, neoplastic disorder of myeloid dendritic cells that results in the infiltration of organs of the body. Bone is affected most frequently (80%), and the skull is the most commonly involved bone in all ages.¹ Other systemic manifestations include fever, lymphadenopathy, hepatomegaly, splenomegaly, and pulmonary lesions.¹ The oncogenic mutation *BRAF* V600E is found in approximately 64% of these cases.² The cells responsible for this condition are from the myeloid progenitor cells of the bone marrow, not from the Langerhans cells of the skin.

Cutaneous disease is the most common manifestation of Langerhans cell histiocytosis in patients younger than two years; however, Langerhans cell histiocytosis is rarely limited to the skin. Systemic involvement occurs in 87% to 93% of patients with cutaneous findings, and children younger than three years typically have acute

disseminated multisystem disease.¹ Involvement of the liver, bone marrow, or spleen signals a worse prognosis, with five-year survival rates of less than 77%.¹ Children older than two years are more likely to have disease involving a single organ, with survival rates nearing 100%.¹

In children, especially infants, Langerhans cell histiocytosis classically presents with scaly, red-brown, seborrheic dermatitis-like papules or an eczematous, erythematous, scaly eruption on the scalp and flexural folds. Erosions in the flexural folds are common. Langerhans cell histiocytosis has many potential cutaneous morphologies, and petechiae, purpura, or hemorrhagic crusts should raise suspicion. Langerhans cell histiocytosis affects four to five children per 1 million.³ Despite the rarity, it should be considered in children presenting with atypical rashes or those who are recalcitrant to treatment.³ A high clinical suspicion for systemic disease is essential in children younger

FIGURE 1



Scattered skin-colored to erythematous papules, several with hemorrhagic or yellow crust, on the forehead and left frontal scalp.

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This series is coordinated by Kenny Lin, MD, MPH, deputy editor.

LETTERS TO THE EDITOR

than three years to prevent a delay in diagnosis and appropriate management.

David A. Shafique, MD

Shaw Air Force Base, S.C.

Email: david.a.shafique.mil@mail.mil

Shannan McCann, MD, FAAD

Lackland Air Force Base, Tex.

Kate Kimes, DO, FAAD

Fort Wainwright, Alaska

Author disclosure: No relevant financial affiliations.

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References

1. Krooks J, Minkov M, Weatherall AG. Langerhans cell histiocytosis in children: history, classification, pathobiology, clinical manifestations, and prognosis. *J Am Acad Dermatol*. 2018;78(6):1035-1044.
2. Berres ML, Lim KPH, Peters T, et al. BRAF-V600E expression in precursor versus differentiated dendritic cells defines clinically distinct LCH risk groups [published correction in *J Exp Med*. 2015;212(2):281]. *J Exp Med*. 2014; 211(4):669-683.
3. Thompson JL, Russell TB, Koberlein GC, et al. Recalcitrant rash in a 7-month-old Infant. *Pediatr Rev*. 2021;42(2): e5-e8.

Correction

Clarification of clinical quality measure. In the article, "Home Blood Pressure Monitoring," (September 2021, p. 237) the third paragraph of the Best Practices for Home Blood Pressure

Monitoring section on page 241 discussed the clinical quality measures related to home blood pressure monitoring. It erroneously stated that a validated home blood pressure cuff reading could satisfy measures from the National Quality Forum in 2020. This paragraph has been clarified to address the limitations based on measure year and interpretation. The sentences now read: "Using a validated home blood pressure cuff for home blood pressure monitoring counts toward some hypertension quality measures depending on the measure year and interpretation."^{27,28} The electronic clinical quality measure for 2022 from the Centers for Medicare and Medicaid Services allows readings taken by a remote device and conveyed by the patient.²⁹ The following supporting references were added to the article:

28. eCQI Resource Center. Controlling high blood pressure. eCQMs for 2021 performance period. Accessed October 12, 2021. https://ecqi.healthit.gov/ecqm/ep/2021/cms165v9?qt-tabs_measure=0
29. eCQI Resource Center. Controlling high blood pressure. eCQMs for 2022 performance period. Accessed October 12, 2021. <https://ecqi.healthit.gov/ecqm/ep/2022/cms165v10>

The online version of this article has been corrected. ■