Coalescing skin-colored papules

The rash's distinct clinical appearance and the patient's age pointed to an uncommon diagnosis.

Peggy Cyr, MD, MA; Haya Raef, MD
Department of Family Medicine, Maine Medical Center, Portland (Dr. Cyr); Tufts University School of Medicine, Boston, MA (Drs. Cyr and Raef)

peggy.cyr@mainehealth.org

DEPARTMENT EDITOR
Richard P. Usatine, MD
University of Texas Health, San Antonio

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AN 8-YEAR-OLD BOY was evaluated by his family physician for a widespread rash that had first appeared on his arms 4 months earlier. Physical examination revealed 1- to 2-mm hypopigmented, smooth, and dome-shaped papules in clusters and linear arrays on the child's back, shoulders, and extensor surfaces of both arms (**FIGURE**). There was no tenderness to palpation of the affected areas, but the patient complained of pruritus. Otherwise, he was in good health.

- WHAT IS YOUR DIAGNOSIS?
- HOW WOULD YOU TREAT THIS PATIENT?

FIGURE
Multiple hypopigmented micropapules on arm

IMAGE COURTESY OF RICHARD P. USATINE, MD

This photo (of a different patient with the same condition) demonstrates the linear appearance of micropapules that is an important clue to the diagnosis.

Diagnosis: Lichen nitidus

This clinical manifestation of multiple, hypopigmented, pinhead-sized papules is most consistent with the diagnosis of lichen nitidus. The linear appearance of the micropapules at sites of trauma or skin pressure (known as the *Koebner phenomenon*) is a valuable clue in the diagnosis of this skin disorder. In this case, it was most likely the result of the child scratching his skin.

A rare and chronic inflammatory skin condition, lichen nitidus is characterized by numerous small, skin-colored papules that are often arranged in clusters on the upper extremities, the genitalia, and the anterior trunk.[1] The papules are less likely to occur on the face, lower extremities, palms, and soles. Oral mucosal and nail involvement are rare. The condition is usually asymptomatic but can sometimes be associated with pruritus.

Lichen nitidus occurs more frequently in children or young adults and has a female predominance.[1] It does not exhibit a predilection of any race.[2] The etiology and pathogenesis of lichen nitidus remain unclear. Genetic factors have been proposed as a potential cause; it has also been reported to be associated with Down syndrome.[3]

Most patients experience spontaneous resolution of lesions within several years; treatment is primarily for symptomatic or cosmetic purposes.

Making the Dx with dermoscopy, skin biopsy

Dermoscopy is a useful technique for diagnosing lichen nitidus. Dermoscopic features of lichen nitidus include white, well-demarcated circular areas with a brown shadow.[4] Skin biopsy provides a definitive diagnosis. Lichen nitidus has a distinct histopathologic "ball and claw" appearance of rete ridges clutching a lymphohistiocytic infiltrate.[1]

Consider these common conditions in the differential

The differential diagnosis includes lichen spinulosus, papular eczema, lichen planus, keratosis pilaris, and verruca plana (flat warts).

Lichen spinulosus lesions are similar in appearance to lichen nitidus but are grouped in patches on the neck, arms, abdomen, and buttocks.[1] The Koebner phenomenon is not typically present. Lichen spinulosus lesions consist of follicular papules that may exhibit a central keratotic plug.

Papular eczema lesions lack the uniform and discrete appearance observed in lichen nitidus. Pruritus is also more likely to be present in papular eczema.

Lichen planus lesions are typically violaceous, flat, and larger in size than lichen nitidus (measuring 1 mm to 1 cm), and have characteristic Wickham striae. Oral involvement is also more suggestive of lichen planus.

Keratosis pilaris is distinguished by its much more common occurrence and perifollicular erythema.

Verruca plana, in contrast to lichen nitidus, are typically pink, flat-topped lesions. They are also larger in size (2 mm to 5 mm).

Topical treatment can help manage the condition

Most patients experience spontaneous resolution of lesions within several years; treatment is primarily for symptomatic or cosmetic purposes. When pruritus is present, topical corticosteroids and oral antihistamines may help (eg, hydrocortisone 2.5% cream and oral hydroxyzine). Topical calcineurin inhibitors, such as pimecrolimus cream, have also been reported as an effective therapy in children with lichen nitidus.[1] In patients with generalized lichen nitidus who have not responded to topical corticosteroids, phototherapy can be used.[5] There are no randomized controlled trials to assess the effectiveness of different types of treatments.

In this case, the patient was advised to start using an over-the-counter topical steroid, such as 1% hydrocortisone cream, to help control pruritus. He was scheduled for a follow-up appointment in 3 months. JFP

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