ONLINE EXCLUSIVE

Linear rash from shoulder to wrist

This patient's rash wasn't pruritic, painful, or tender, but it formed a unique pattern.

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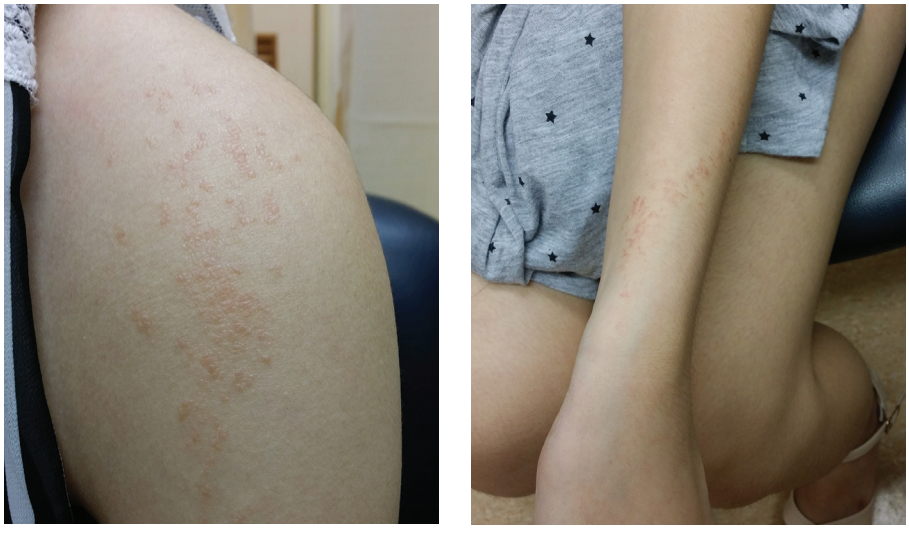
A 19-YEAR-OLD WOMAN came to our outpatient clinic with a rash on her upper left arm that she'd had for a month. Small pink and flesh-colored spots that first appeared over her left shoulder had spread down her arm and forearm to her wrist. The rash was initially scattered, but within a few weeks it had joined together to form a linear band. It was not itchy or painful.

Our patient had no changes to her fingernails, no contact with potential allergens, and no history of skin disease, atopy, or drug allergies. She was not taking any medication, but had received the second of 3 doses of the human papillomavirus (HPV) vaccine 2 months before she'd developed the rash. She had tried to treat the rash with an over-the-counter steroid cream, but it had not been effective.

On physical examination, we noted flat-topped, slightly scaly, pinkish papules that were about 3 mm in diameter and formed an interrupted linear pattern that extended down the patient's left shoulder and arm, cubital fossa, and forearm to her wrist (**FIGURE**). There were no vesicles, pustules, erosions, ulcers, or excoriation. The rash was non-tender and Koebner's phenomenon was absent.

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

FIGURE
Interrupted linear pattern of scaly papules down length of patient's arm



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Lichen striatus typically presents as papulovesicular lesions in bands that follow Blaschko's lines.

Diagnosis: Lichen striatus

Based on the appearance and distribution of our patient's lesions, we made a clinical diagnosis of lichen striatus, an uncommon condition that typically affects children younger than age 15.[1]

Lichen striatus usually presents as papulovesicular lesions in bands that follow Blaschko's lines. (Blaschko's lines are patterns of lines on the skin that represent the developmental growth pattern of the skin during epidermal cell migration; these lines usually aren't visible but can be seen in patients with certain skin diseases.[2]) Lichen striatus most frequently affects the neck, trunk, and limbs; nail involvement is rare.[1] Patients with lichen striatus are usually asymptomatic, but they occasionally have various degrees of pruritus.

The etiology of lichen striatus is unknown, but it has been reported to occur after flu-like illnesses, tonsillitis, the application of retinoic acid lotions, sunburn, hepatitis B virus infection, and bacille Calmette-Guerin vaccination.[3] There is no documented relationship between lichen striatus and the HPV vaccine. Atopy may be a predisposing factor for lichen striatus, but does not trigger the disease.[1]

The diagnosis is typically made based on the appearance and distribution of the rash. Skin biopsy is rarely needed to establish the diagnosis.[3]

Distinguishing lichen striatus from other linear skin disorders

Other lesions that could follow Blaschko's lines include linear psoriasis, linear lichen planus, inflammatory linear verrucous epidermal nevus, and linear Darier's disease (keratosis follicularis).[3]

Linear psoriasis usually presents as late-onset, mildly pruritic linear scaly plaques with a positive Auspitz sign. This form of psoriasis responds well to topical or systemic psoriatic treatment, such as topical steroids, coal tar preparation, or vitamin D derivatives.[4]

Linear lichen planus involves pruritic, hyperpigmented, well-demarcated, flat-topped papules and small, thin plaques without scale. Linear lichen planus can be the result of scratching or injuring the skin.[5]

Inflammatory linear verrucous epidermal nevus usually presents as erythematous and verrucous papules with a psoriasiform appearance. It is accompanied by intense pruritus. Girls are more commonly affected than boys and the condition is refractory to psoriatic therapy.[6]

Darier's disease (keratosis follicularis) is an autosomal dominant inherited disease that usually presents as an eruption of keratotic papules. Nails may be affected, with longitudinal nail striations and subungual hyperkeratosis.[7]

Lichen striatus typically resolves without treatment

The role of topical steroids, nonsteroidal anti-inflammatory agents, or tacrolimus for treating lichen striatus is unclear.[8] Observation is thought to be the best approach.[8] Lichen striatus usually resolves spontaneously in 6 to 9 months, although relapses have been reported.[3]

We advised our patient that no treatment was required and asked that she return for a follow-up appointment in 2 weeks. When she came in for her follow-up appointment, her rash had stopped spreading. Approximately 6 months after onset, the rash was less pink. JFP

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