Enhanced Care for Pediatric Patients With Generalized Lichen Planus: Diagnosis and Treatment Tips

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The rarity of generalized lichen planus (LP) in children often leads to misdiagnosis or delayed treatment, impacting the patient's quality of life. We describe the utility of a punch biopsy to confirm the diagnosis of LP in a 7-year-old girl. The inclusion of an intramuscular corticosteroid injection in the treatment plan offered prompt symptom relief.

Practice Gap

Lichen planus (LP) is an inflammatory cutaneous disorder. Although it often is characterized by the 6 Ps—pruritic, polygonal, planar, purple, papules, and plaques with a predilection for the wrists and ankles—the presentation can vary in morphology and distribution.[1-5] With an incidence of approximately 1% in the general population, LP is undoubtedly uncommon.[1] Its prevalence in the pediatric population is especially low, with only 2% to 3% of cases manifesting in individuals younger than 20 years.[2]

Generalized LP (also referred to as eruptive or exanthematous LP) is a rarely reported clinical subtype in which lesions are disseminated or spread rapidly.[5] The rarity of generalized LP in children often leads to misdiagnosis or delayed treatment, impacting the patient's quality of life. Thus, there is a need for heightened awareness among clinicians on the variable presentation of LP in the pediatric population. Incorporating a punch biopsy for the diagnosis of LP when lesions manifest as widespread, erythematous to violaceous, flat-topped papules or plaques, along with the addition of an intramuscular (IM) injection in the treatment plan, improves overall patient outcomes.

Tools and Techniques

A detailed physical examination followed by a punch biopsy was critical for the diagnosis of generalized LP in a 7-year-old Black girl. The examination revealed a widespread distribution of dark, violaceous, polygonal, shiny, flat-topped, firm papules coalescing into plaques across the entire body, with a greater predilection for the legs and overlying joints (Figure, A). Some lesions exhibited fine, silver-white, reticular patterns consistent with Wickham striae. Notably, there was no involvement of the scalp, nails, or mucosal surfaces.

The patient had no relevant medical or family history of skin disease and no recent history of illness. She previously was treated by a pediatrician with triamcinolone cream 0.1%, a course of oral cephalexin, and oral cetirizine 10 mg once daily without relief of symptoms.

Although the clinical presentation was consistent with LP, the differential diagnosis included lichen simplex chronicus, atopic dermatitis, psoriasis, and generalized granuloma annulare. To address the need for early recognition of LP in pediatric patients, a punch biopsy of a lesion on the left anterior thigh was performed and showed lichenoid interface dermatitis—a pivotal finding in distinguishing LP from other conditions in the differential.

Given the patient's age and severity of the LP, a combination of topical and systemic therapies was prescribed—clobetasol cream 0.025% twice daily and 1 injection of 0.5 cc of IM triamcinolone acetonide 40 mg/mL. This regimen was guided by the efficacy of IM injections in providing prompt symptomatic relief, particularly for patients with extensive disease or for those whose condition is refractory to topical treatments.[6] Our patient achieved remarkable improvement at 2-week follow-up (Figure, B), without any observed adverse effects. At that time, the patient's mother refused further

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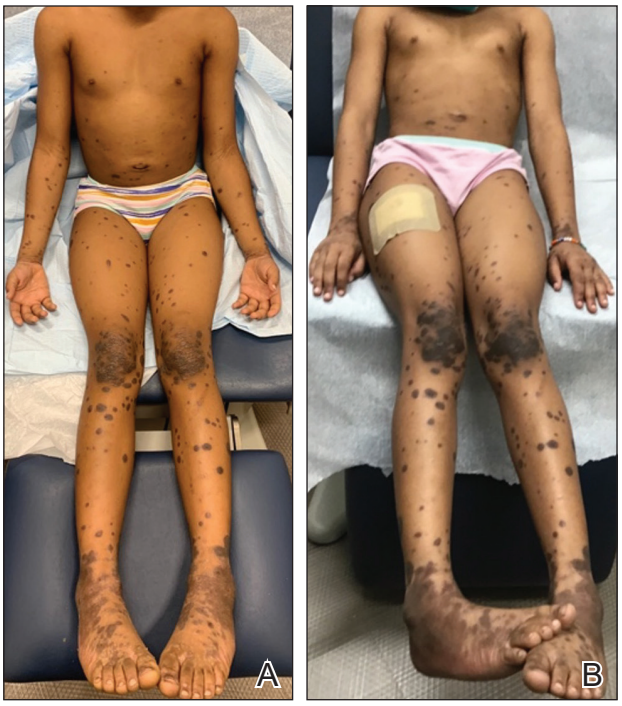

A, Diffuse, dark, violaceous, polygonal, shiny, flat-topped, firm papules coalescing into plaques on the legs and overlying the joints in a 7-year-old girl with generalized lichen planus. B, Combination therapy with clobetasol cream 0.025% and 0.5 cc of intramuscular triamcinolone 40 mg/mL resulted in improvement of lesions and residual hyperpigmentation at 2-week follow-up.

systemic treatment and opted for only the topical therapy as well as natural light therapy.

Practice Implications

Timely and accurate diagnosis of LP in pediatric patients, especially those with skin of color, is crucial. Early intervention is especially important in mitigating the risk for chronic symptoms and preventing potential scarring, which tends to be more pronounced and challenging to treat in individuals with darker skin tones.[7] Although not present in our patient, it is important to note that LP can affect the face (including the eyelids) as well as the palms and soles in pediatric patients with skin of color.

The most common approach to management of pediatric LP involves the use of a topical corticosteroid and an oral antihistamine, but the recalcitrant and generalized distribution of lesions warrants the administration of a systemic corticosteroid regardless of the patient's age.[6] In our patient, prompt administration of low-dose IM triamcinolone was both crucial and beneficial. Although an underutilized approach, IM triamcinolone helps to prevent the progression of lesions to the scalp, nails, and mucosa while also reducing inflammation and pruritus in glabrous skin.[8]

Triamcinolone acetonide injections—administered at concentrations of 5 to 40 mg/mL—directly into the lesion (0.5–1 cc per 2 cm^2) are highly effective in managing recalcitrant thickened lesions such as those seen in hypertrophic LP and palmoplantar LP.[6] This treatment is particularly beneficial when lesions are unresponsive to topical therapies. Administered every 3 to 6 weeks, these injections provide rapid symptom relief, typically within 72 hours,[6] while also contributing to the reduction of lesion size and thickness over time. The concentration of triamcinolone acetonide should be selected based on the lesion's severity, with higher concentrations reserved for thicker, more resistant lesions. More frequent injections may be warranted in cases in which rapid lesion reduction is necessary, while less frequent sessions may suffice for maintenance therapy. It is important to follow patients closely for adverse effects, such as signs of local skin atrophy or hypopigmentation, and to adjust the dose or frequency accordingly. To mitigate these risks, consider using the lowest effective concentration and rotating injection sites if treating multiple lesions. Additionally, combining intralesional corticosteroids with topical therapies can enhance outcomes, particularly in cases in which monotherapy is insufficient.

Patients should be monitored vigilantly for complications of LP. The risk for postinflammatory hyperpigmentation is a particular concern for patients with skin of color. Other complications of untreated LP include nail deformities and scarring alopecia.[9] Regular and thorough follow-ups every few months to monitor scalp, mucosal, and genital involvement are essential to manage this risk effectively.

Furthermore, patient education is key. Informing patients and their caregivers about the nature of LP, the available treatment options, and the importance of ongoing follow-up can help to enhance treatment adherence and improve overall outcomes.

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