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Pediatric psoriasis: A case series of unusual presentation

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ABSTRACT

Psoriasis is a chronic, immune-mediated skin disease affecting 0.5–2% of the global population, with a substantial proportion of cases manifesting in childhood. While plaque psoriasis predominates, pediatric presentations may include rare or atypical variants, often creating diagnostic and therapeutic challenges. **Aim and Objective:** To highlight the clinical spectrum and management of unusual pediatric psoriasis variants through a case series of infantile pustular psoriasis, genital psoriasis, and post-varicella guttate psoriasis.

Key words: Psoriasis; Infantile; Guttate; Genital psoriasis

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INTRODUCTION

Psoriasis is a chronic, autoimmune skin disorder that affects both adults and children, with a reported prevalence ranging from 0.5% to 2% worldwide.[1] The disease is clinically heterogeneous, and its presentation in children may differ from that in adults. Although plaque psoriasis remains the most common subtype in childhood, occasionally unusual variants are encountered that create diagnostic and therapeutic challenges.[2]

Here we report a series of three cases, one each of infantile pustular psoriasis, genital psoriasis, and post-varicella guttate psoriasis.

CASE PRESENTATION

Case 1

A 10-month-old male baby presented with pustules with a background of erythema involving the trunk, flexures, and feet for 10 days (Figure 1). There was no history of fever, drug intake, or any family history of similar rash. Gram stain from the pustules showed aggregation of neutrophils and ruled out any bacterial or fungal infection. Skin biopsy was not performed as the clinical presentation and dermoscopy suggested the diagnosis of pustular psoriasis. Patient was started on oral acitretin at a dose of 0.5 mg/kg/day (1/3 of a frozen 10 mg tablet of acitretin) with topical paraffin emolliation. Pustules started to clear from day 6, and the patient was discharged with oral methotrexate at a weekly

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Figure 1: Infantile pustular psoriasis

Figure 2: Genital psoriasis

dose of 2.5 mg along with twice-weekly acitretin. Regular monitoring of complete blood count, liver function test, kidney function test, and lipid profile was done. There was no change in lipid profile pre- and post-treatment with acitretin. There was complete clearance of the lesion after 1 month from the start of therapy. Acitretin was stopped, and the patient was continued on methotrexate for 3 more months. Patient was followed up after 6 months with no recurrence till 2 years.

Case 2

A 14-year-old female presented with an itchy lesion on the genitalia for the past 3 weeks. On clinical examination, erythematous plaques with semi-adherent silvery white scales were present on the labia majora and in the suprapubic region. Clinical examination was suggestive of genital psoriasis. The patient was advised to use a topical steroid and salicylic acid combination. Patient responded in 2 weeks (Figure 2).

Case 3

A 13-year-old female presented with a rash on her body for 2 weeks. The patient had a history of varicella 2 weeks before the development of these lesions (Figure 3). On clinical examination, erythematous scaly discrete papules were present on the trunk with silvery white scales on the scalp. Dermoscopy findings suggested psoriasis. The patient was started on a topical combination of clobetasol propionate and 3% salicylic acid ointment and an antihistamine. Lesions resolved in 2 weeks (Table 1).

Figure 3: Post-varicella guttate psoriasis

Table 1: Dermoscopic findings in infantile pustular psoriasis, genital psoriasis, and guttate psoriasis

Dermoscopic Findings	Infantile pustular psoriasis (Case 1)	Genital psoriasis (Case 2)	Guttate psoriasis (Case 3)
Red dots	++	+	++
White scales	Sparse	+	++
Erythematous background	++	+	++
Yellow globules	+	-	-

DISCUSSION

Pediatric psoriasis encompasses a wide spectrum of clinical phenotypes influenced by genetic susceptibility and environmental triggers. Like in adults, chronic plaque psoriasis is the most common type of psoriasis in the pediatric population. In children, the plaques are thinner, with less scaling and less erythema in comparison to adults. First-line treatment in such cases is topical steroids with keratolytic agents. Other commonly used topical therapies include Vitamin D analogs, calcineurin inhibitors, coal tar, and dithranol.

The three cases presented illustrate diverse manifestations of psoriasis and the importance of early diagnosis and appropriate intervention.

Infantile pustular psoriasis is among the most challenging variants due to its severity and early onset. Topical corticosteroids, though first-line, often fail in extensive disease. Our experience supports the use of systemic agents – acitretin, a retinoid that normalizes keratinocyte proliferation, and methotrexate, an immunosuppressive agent – both of which have been reported to induce remission in severe pediatric cases when used with close monitoring.[3,4] Their judicious use can prevent complications and improve long-term outcomes.

Genital psoriasis, though uncommon in children, is clinically significant. Misdiagnosis as candidiasis, irritant dermatitis, or lichen sclerosus often delays appropriate treatment. Early recognition allows the safe use of low-potency corticosteroids or calcineurin inhibitors, minimizing both local symptoms and psychosocial distress. Our case emphasizes the need for heightened clinical suspicion when genital erythema and scaling are persistent.[5]

Post-varicella guttate psoriasis highlights the role of infections as triggers in genetically predisposed children. While streptococcal infections are well-established precipitants, varicella has also been implicated in disease onset. Dermoscopy proved valuable in our case, demonstrating typical psoriatic features such as regularly distributed dotted vessels on a light erythematous background with diffuse scaling. This non-invasive tool can obviate the need for biopsy, especially in children, and supports accurate diagnosis.[6,7]

CONCLUSION

Collectively, these cases underscore that pediatric psoriasis is not a uniform disease but a spectrum requiring individualized approaches. Systemic therapies may be life-changing in severe cases such as infantile pustular psoriasis when monitored appropriately. Genital involvement requires vigilance to avoid misdiagnosis, and dermoscopy serves as an invaluable diagnostic aid in infection-triggered guttate disease. Improved awareness of these diverse patterns can aid timely intervention, reduce morbidity, and improve long-term outcomes for affected children.

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