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Case Report
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Psoriatic Diaper Rash in a 6 Month Old West African Infant

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Abstract

Observation: Psoriasis is a chronic inflammatory papulosquamous disorder which typically follows a relapsing and remitting course. The condition is rare among West Africans compared with other Africans and the world. Although psoriasis is most frequently diagnosed between the ages of 15 and 25, it can appear at any time and, can affect children of all ages, including infants. The clinical manifestations of psoriasis in a child are generally similar to those in an adult. Here we report a case of a 6 month West African child with plaque type psoriasis with lesions predominantly in the diaper area.

Introduction

Psoriasis is a chronic relapsing and remitting papulosquamous inflammatory dermatosis that affects nearly 1.5 to 3% of the world's population [1]. The condition is, however, rare among West Africans, where its prevalence ranged from 0.05-0.3% [2]. From a clinic record analysis of 5250 skin patients in Nigeria over 8 years from 1977 – 1984, the prevalence of psoriasis was 0.8% [3]. Although psoriasis can appear at any time and can affect children of all ages, it is most frequently diagnosed between the ages of 15 and 25. Approximately 15% of all patients with psoriasis had the disease onset before the age of 10. [4] The clinical manifestations of psoriasis in a child are generally similar to those in an adult. However, the condition often takes on atypical forms in children which can lead to diagnostic problems. We, here, reported a West African infant with plaque type infantile psoriasis whose disease responded favorably to a combination of topical steroid and calcipotriene.

Case Report

A 6-month-old Nigerian girl, product of a full term uneventful pregnancy delivered by normal spontaneous vaginal delivery presented at our skin clinic with erythematous plaques covered with scales over scalp (scalp hair was normal), the nappy area, soles and the palms for about 2 months (**Figures 1, 2, 3 and 4**). There were no mucosa involvements or nail changes. No history of similar lesions in other family members was present. The baby was well nourished with normal motor and mental milestones comparable to his siblings. The baby was being exclusively breast fed and her immunization was up to date. Routine laboratory studies were all normal.

Skin biopsy showed parakeratosis with psoriasiform hyperplasia of epidermal lining in one area of the upper epidermal layer, subcorneal neutrophilic pustules of varying sizes, and lymphohistiocytic perivascular infiltrate in the superficial dermis. The patient was put on topical methylprednisolone in rotation with calcipotriene for a period of 4-6 weeks. By six weeks of treatment, remarkable improvement was seen. This was evidenced by the clearance of scales and decrease of erythema.

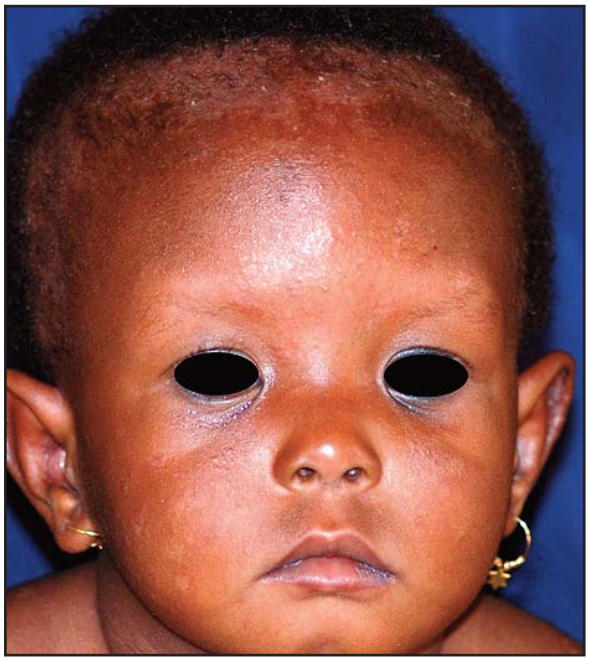

Figure 1. Erythematous plaques covered with scales over scalp

Figure 3. Erythematosquamous plaques on gluteal area

Discussion

Infantile psoriasis is rare. It accounts for about 1-2% of pediatric psoriasis and, only two cases of the congenital variety have been reported [4]. Lesions in children tend to be more pruritic, thinner, softer, and less scaly relative to those in adults [5]. Chronic plaque-type psoriasis is the most common form, consisting of large, well- demarcated, symmetrical, erythematous lesions with thick micaceous scale [6]. The most commonly affected sites are the extremities, scalp and trunk [7]. Guttate psoriasis in children accounts for between 13.7 and 28.9 % of paediatric psoriasis [8]. It is frequently associated with recent pharyngitis caused by Streptococcus infection [9]. It presents as multiple small (up to 0.5 cm), eruptive round lesions, erythematous to salmon in colour, mainly on the trunk, limbs, and face [8]. Our patient had psoriatic diaper rash with dissemination, this is the most common type of psoriasis among infants under 2 years of age. This type of psoriasis may precede later plaque type or other forms of psoriasis in children [8]. It is characterized by bright- to dull-red, smooth or minimally scaly erythema [8]. Psoriasis in infancy can mimic many infantile skin rashes such as diaper rash, atopic eczema and seborrheic dermatitis, thus making diagnosis difficult.

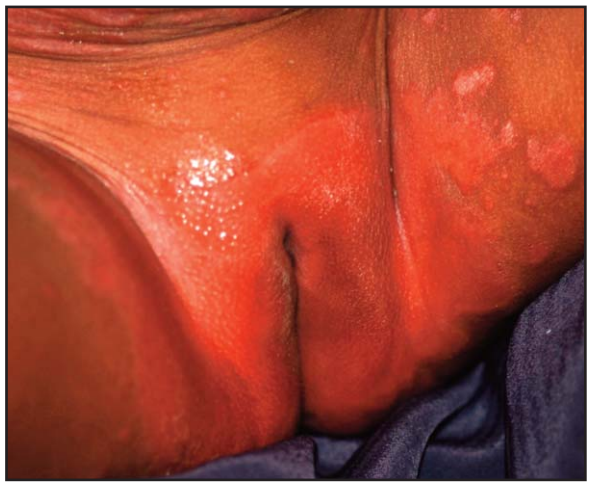

Figure 2. Erythematous plaques in the groins

Figure 4. Desquamative plaques on the soles

The treatment of children with psoriasis is also similar, to some extent, to those in adults. The choice of treatment in children, as in adults, is determined by disease severity, morphology, distribution, severity and the presence of comorbidities. Current options for the treatment include topical therapy,

phototherapy, and, for moderate to severe cases, non-biologic systemic therapy, biologic systemic therapy, or a combination of the aforementioned treatments [**10**]. However, UVB light therapy and biological therapy are most commonly prescribed for psoriasis patients over the age of 5 years [**10,11**].

Conclusion

Psoriasis is relatively rare in Africans, more so infantile diaper psoriasis, which can be a diagnostic challenge.

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