PSORIASIS IN IDENTICAL TWINS : SIMULTANEOUS OCCURRENCE ON SAME SITES

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A pair of 12-year-old identical male twins presented to us with dull erythematous plaques with coarse scaling and deep fissuring over soles of both feet starting simultaneously 18 months ago. The diagnosis of psoriasis was confirmed by histopathological examination of the biopsy specimen.

Key Words: Identical twins, Inheritance, Psoriasis

Introduction

Psoriasis is one of the commonest skin diseases which has been known for a long time. However, its aetiology and mode of inheritance are only partially elucidated and controversial. A strong case for the role of inheritance in psoriasis is made by the finding of high degree of concordance in affected twins, especially monozygotic, in various studies.^{1,2}

Here we report a pair of male identical twins who developed psoriasis simultaneously and at the same site.

Case Reports

A 12-year-old pair of identical male twins presented to us with mildly itchy and painful dull erythematous plaques with coarse scaling and deep fissuring over soles of both feet (Fig.1). As detailed by their father, the lesions developed within a day or two in both children 18 months ago. The lesions were worse in winter when the fissures became deeper, more painful and often bled.

The examination of other skin sites, nails, hair and mucous membranes did not reveal any abnormality. There were no systemic complaints and no family history of similar problem. The twins had undergone

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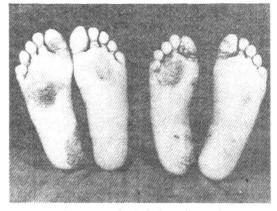


Fig. 1. Plantar psoriasis in identical twins.

various treatments, both topical and systemic, without much relief.

A sample of scraped material from the lesions was obtained and KOH mount did not reveal any fungal elements on microscopy. Culture for dermatophytes was also negative. Histopathology of the biopsy specimen from one of the patients confirmed the diagnosis of psoriasis.

The twin were then put on topical once a day clobetasol propionate cream and short contact anthralin therapy.

Discussion

Though studies on twins confirm the role of inheritance beyond doubt in psoriasis, most such studies have been done outside India. A 73% concordance in monozygotic twins and 20% in dizygotic twins was found

in one study. The absence of 100% concordance amongst monozygotic twins highlights the role of environment and the multifactorial aetiology of psoriasis. The problem was further compounded when Iselius and Williams stressed that the results of analysis of one population may not hold true for another. 4

In the present report, a pair of identical male twins developed psoriasis at the same age and sites. This is relevant because it validates the role of inheritance in the aetiology of psoriasis in Indian population also. It would be interesting to observe the course of psoriasis in these children.

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