TWENTY NAIL DYSTROPHY WITH PTERYGIUM UNGUIS

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A 15-year-old female developed twenty nail dystrophy at the age of 7 years, with formation of pterygium. There was no associated skin, mucous membrane, hair or other ectodermal abnormality. It is considered that lichen planus may be responsible for this condition.

Key words : Twenty nail dystrophy, Pterygium unguis.

Twenty nail dystrophy is an idiopathic, acquired distinct clinical entity[1] in which all the twenty nails are uniformly and simultaneously affected with excess longitudinal ridging and loss of lustre. The skin, hair, teeth and mucous membrane are otherwise normal. The condition has been seen in association with alopecia areata[2] and also proposed as a variant of lichen planus.[3] The disease is first observed between 18 months to 12 years of age and tends to resolve slowly with time.

Case Report

A 15-year-old female student presented for abnormalities of all the twenty nails. The changes started occurring at the age of 7 years, and were first noted in the finger nails, followed 6 months later, by similar changes in the toe nails. There was no other symptom apart from the unsightly appearance of the nails. There was no personal or family history of any other nail, skin or mucous membrane disease or other ectodermal defect. Examination showed all the twenty nails to be thin, fragile and frayed at the distal edges. Numerous linear longitudinal striations ran the length of the nail plates which were dull and lustreless. Pterygium was seen over some nails. The skin of the nail folds, fingers and palms and soles was normal and showed no evidence of eczema or paronychia. Potassium hydroxide scrapings and cultures were consistently negative for fungi and yeast. The haematoxylin-eosin stained histopatholo-

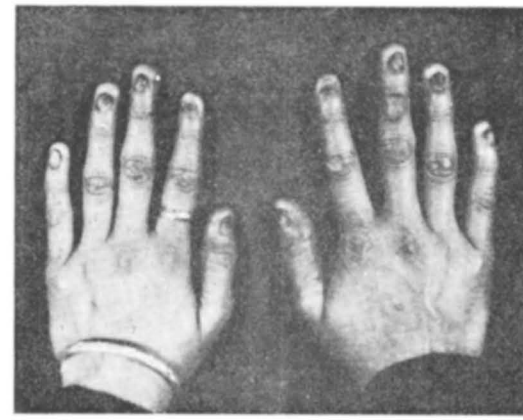

Fig. 1. Dystrophic finger nails with pterygium unguis.

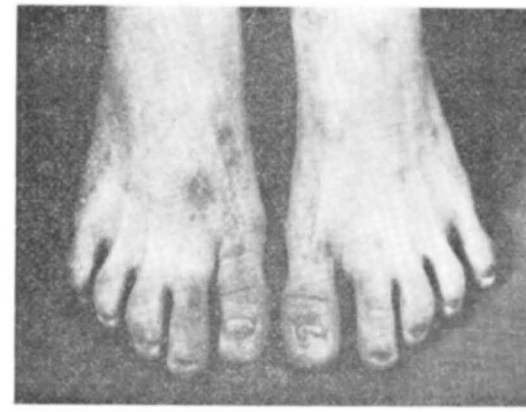

Fig. 2. Dystrophic toe nails.

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gical examination of nail matrix revealed non-specific changes of chronic eczematous dermatitis. Staining with PAS failed to demonstrate any fungal elements.

Comments

Twenty nail dystrophy has been described as an idiopathic, distinct clinical entity by Hazelrigg et al.[1] However, nail biopsies were not studied by these authors. Pterygium formation does not occur, and skin and mucous membranes show no sign of lichen planus in twenty nail dystrophy.[4] Scher et al,[3] however proposed this entity to be a variant of lichen planus and demonstrated the histopathological nail changes of lichen planus in one of their patients. Wilkinson et al[5] observed histopathological changes of predominantly eczematous nature in twenty nail dystrophy. It is known that nail involvement alone may occur in lichen planus.[6] Furthermore, pterygia are late manifestations and not always seen in patients with lichen planus. Although the histopathological findings in the present case were those of chronic eczematous nature but pterygium formation, which is a distinctive feature of lichen planus, in this case, suggests this entity to be more closely related to lichen planus.

References

1. Hazelrigg DE, Duncan WC and Jarret M : Twenty-nail dystrophy of childhood, Arch Dermatol, 1977; 113 : 73-75.
2. Robert T, Horn MAJ and Odom RB : Twenty-nail dystrophy of alopecia areata, Arch Dermatol, 1980; 116 : 573-574.
3. Scher RK, Fischbein R and Ackerman AB : Twenty-nail dystrophy, Arch Dermatol, 1978; 114 : 612-613.
4. Zaias N : The nails in lichen planus, Arch Dermatol, 1970; 101 : 264-271.
5. Wilkinson JD, Dawber RPR, Bowers RP et al : Twenty-nail dystrophy of childhood,Brit J Dermatol, 1979; 100 : 217-221.
6. Burgoon CF and Kostrzewa RM : Lichen planus limited to the nails, Arch Dermatol, 1969; 100 : 371.