ATROPHODERMA OF PASINI - PIERINI

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A case of atrophoderma of Pasini-Pierini is described and its classical clinical and pathological features highlighted. Its distinguishing features from morphoea and other atrophic dermatoses are discussed.

Key Word : Atrophoderma

Introduction

Though the disorder was first described by Pasini in 1923;[1] it was Luis Pierini who persued its study among 50 Argentenean cases and definitively defined its clinical and histological features.[1]

Canizares in 1957 introduced the disorder to American literature and also named it after its two pioneers.[2] Atrophoderma of Pasini-Pierini (ADPP) is characterized by idiopathic, asymptomatic, primarily atrophic, sharply defined, slightly depressed oval areas of skin, mainly located on the back.

Case Report

A 35-year-old man presented with a 8 years history of hyperpigmented, atrophic lesions limited to his back, which had been insidious but progressive in size and number (Fig. 1).

Examination revealed several large (5 to 15 cm) palm-sized lesions, which were slate grey in colour. The lesions were uniformly depressed; and led to the surrounding normal skin by well defined sharply bevelled borders. The "cliff drop" shelving was appreciable on palpation. There was no sclerosis or induration, even in older lesions. There was no history of antecedent inflammation at the site of lesions. The patient was otherwise healthy. Total and differential WBC count, ESR, renal function tests, liver function tests, X-ray chest, L E cell test, and A N A test were within normal limits.

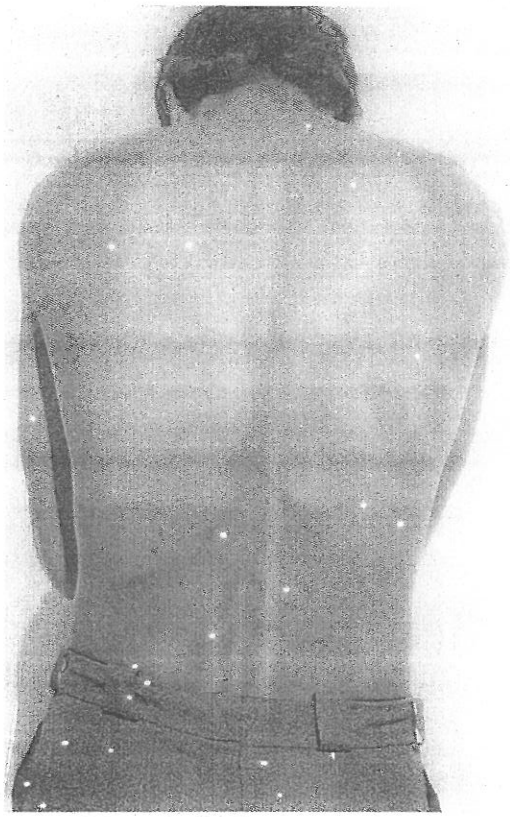

Fig. 1. Several depressed patches on the back with "cliff drop" borders

A biopsy showed a normal epidermis, slight decrease in the thickness with minimal hyalinization of collagen of the reticular dermis, normal subcutaneous

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tissue and normal skin appendages. There was a mild perivascular lymphocytic infiltrate (Fig. 2).

Fig. 2. Normal epidermis with minimal hyalinization of upper dermal collagen, cutaneous appendeges and subcutaneous tissue normal

A section stained with Vernoff-Von-Gieson stain revealed normal unfragmented elastic fibres.

Comments

Confusion and disagreement prevails about the precise classification and nosology of ADPP. Several authors believe it to be a varient of localized scleroderma or morphoea. This concept has been propagated on grounds of certain clinical and histological similarities. These are (a) sclerosis and induration were found in some lesions of ADPP,[3] (b) morphoea and ADPP have been observed in the same patient,[3] (c) its late atrophic stage lesions of morphoea resemble ADPP, and (c) homogenization of collagen and perivascular lymphocytic infiltrate are common histological features encountered in morphoea and ADPP.[3]

None of the above mentioned similarities to morphoea were present in our case. On the contrary we found (a) induration and sclerosis to be absent even in older lesions, (b) all lesions in our patient began with atrophy and ended atrophic whereas morphoea begins with oedematous lesions, which turn centrally sclerotic and lastly atrophic, and (c) the skin over the lesions was normal, unlike the wrinkled epidermis of morphoea.

Hyalinization of collagen in the reticular dermis and reduction in the dermal thickness were observed from early evolving lesions of our patient. In contrast, atrophy is usually an "end-stage" and a sequel to initial oedema and sclerosis in lesions of morphoea.[5] This suggests that atrophy could be a primary pathogenetic event in ADPP rather than a sequel. Morphoea in its late atrophic stage, exhibits a thinning of epidermis, dermis and subcutaneous tissue, with loss of appendages.[5] We found minimal epidermal atrophy, only upper dermal collaginization and normal skin appendages. Thus the pathology of morphoea seems pansclerotic involving all layers of the corium, whereas ADPP seems to have an exclusive involvement of dermal collagen only.

These distinctive clinical and histological findings of our patient helped exclude other atrophic dermatoses too.

Thus the large extent of lesions; their slate grey colour and the absence of follicular plugging excluded non-genital lichen sclerosus, while the absence of inflammation eliminated the possibilities of poikiloderma or resolving panniculitis.

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