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COEXISTANCE OF SUBCORNEAL PUSTULAR DERMATOSIS AND LEPROMATOUS LEPROSY

R A Bumb, R Khullar and N K Mathur

A case of lepromatous leprosy having lesions of subcorneal pustular dermatosis is reported. This association supports the hypothesis that immunological factors are involved in the pathogenesis of SCPD.

Key words : Lepromatous leprosy, Subcorneal pustular dermatosis, Pathogenesis.

Coexistence of two diseases may either be just a chance occurrence or they may have some common feature related to etiopathogenesis. We are reporting a case of lepromatous leprosy who developed subcorneal pustular dermatosis (SCPD). To our knowledge no such association has been reported till date.

Case Report

A 25-year-old male attended our hospital with a five-year history of recurrent crops of grouped pustular eruptions over the axillary folds and groins. These episodes were never accompanied by any constitutional symptoms and used to heal in a few weeks time. He had had 10-12 such crops at 3-6 month intervals. History also revealed that his face and body had become increasingly red and shiny. There was no history suggestive of erythema nodosum leprosum. Treatment had consisted of various antibiotics and corticosteroids.

Examination showed diffuse infiltration of the face, ear-lobules, limbs and trunk, and loss of lateral one third of the eye-brows. There was partial anaesthesia of glove and stocking distribution. Nerves were not thickened. Numerous oval, flaccid pustules were observed on his axillary folds, groins and thighs, arranged in annular groups.

From the Department of Dermatology, STD and Leprosy, S.M.S. Medical College and Hospital, Jaipur, India.

Address correspondence to : Dr. N. K. Mathur, C-24, Peeyush Path, Bapu Nagar, Jaipur-302 015, India.

Investigations revealed a normal complete blood count; haemoglobin, 10.5 gm/dl; erythrocyte sedimentation rate, 100 mm; a normal urine analysis; serum proteins, total : 6.4, albumin : 3.4, globulin : 3.0. Slit skin smear revealed presence of acid fast bacilli; bacteriological index was 5+. Skin biopsy taken from an indurated area on the back showed features typical of lepromatous leprosy. No organisms were seen in smear from the pustule and the culture was sterile. Biopsy of a pustule showed subcorneal bulla containing polymorphonuclear leucocytes and perivascular mononuclear cell infiltrate in the dermis (Fig.1). Scraping from the base of the blistert did not show acantholytic cells.

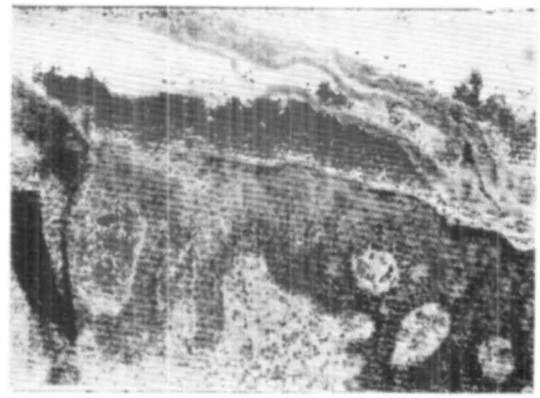

Fig. 1. A subcorneal pustule containing neutrophils.

The patient was put on dapsone, 100 mg twice daily. Pustular lesions cleared in fifteen

days leaving pigmented macules. The dose was then reduced to 100 mg/day. During one year follow up, there was no reccurrence of SCPD.

Comments

Subcorneal pustular dermatosis (SCPD) is a chronic, benign, relapsing eruption of oval, flaccid pustules in annular or serpiginous groups, involving mainly the axillae, the submammary areas, the groins and the flexures of limbs; face is never affected, nor are the mucous membranes.[1]

Although first described in 1956 by Sneddon and Wilkinson,[2] the etiopathogenesis of SCPD is still unknown. Krogh and Tonder[3] reported that the damage in vivo is immunologically mediated. Using immuno-adherence test, they could show the presence of antibody to stratum corneum and antigen-antibody complex in the roof of the pustules. Since incidence of various autoantibodies is known to be enhanced in lepromatous leprosy,[4] it is possible that auto-antibodies to stratum corneum developed in our patient and led to the development of sub-corneal pustules. Coexistence of SCPD with arthritis,[5] gammopathy,[6] morphoea and bullous pemphigoid[7] has also been reported and together with LL in our case, these associations, if not fortuitous, appear to support the hypothesis that immunological factors are involved in the pathogenesis of SCPD.

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