SUB-CORNEAL PUSTULAR DERMATOSIS

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Summary

A case of sub corneal pustular dermatosis of 16 years duration in a 23 year old male patient is reported. The patient also had latent syphillis. He has responded well to Dapsone therapy.

Sub-corneal Pustular Dermatosis is a condition which is rarely encountered in our country and this is our reason for publishing this case report. It was described for the first time by Sneddon and Wilkinson in the year 1956[1]. Even till today its aetiology remains obscure.

Clinical features of this condition are pustules which are flaccid, turbid and of the oval rather than circular shape. These may show a transparent upper layer and a purulent milky lower layer "similar to hypopyon[2]". The pustules tend to occur in groups. The lesions heal with post inflammatory melanosis. Pustules tend to recur in previously affected areas. The eruptions occur mainly on the groins axillae sub-mammary areas and the flexor aspects of the limbs. Rarely it affects the face but never the mucous membrane. The period of remission varies from several days to several weeks and may be followed by sudden and fairly generalised exacerbation within a day or two[3]. Lesions may also occur on the soles[4]. The onset of the disease is almost invariably in middle age[1]. Rarely it has been reported in childhood[3]. It is remarkable that the general health of the patient is not affected in such a widespread condition.

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Case Report

26 year old male mechanic attended the out patient department at the J. J. Hospital in February 1976 complaining of widespread recurrent pruritic eruptions of sixteen years' duration.

Physical examination revealed a well developed fairly nourished young male who appeared to be in excellent general health. There was no complaint of any discomfort or distress. His skin showed flaccid pustules arranged in groups and in some areas there was scaling and crusting. Distribution was predominantly on the trunk and upper limbs with a few lesions coming on the scalp and face during a severe attack. Some of the pustules showed a fluid level. The eruption was asymptomatic. His other systems were normal. (Fig. 1 Page No. 48).

His Haemogram and Urineanalysis were within normal limits. Blood VDRL was reactive in a titre of 1 : 128. X-Ray of the chest did not reveal any abnormality. Bacteriological culture produced no growth. Biopsies of the lesions showed the following changes : The stratum corneum is raised from the granular layer. The resultant space is filled with polymorphonuclear leucocytes and blister fluid. (Fig. 2 Page No. 48)

In view of reactive VDRL test, injection benzathine penicillin 2.4 mega units

was administered on two occasions at an interval of one week. However the patient did not show any response nor did he experience a Herx-Heimer reaction. In the meantime the histopathological studies revealed findings typical of Sub-corneal Pustular Dermatosis. Hence this patient was put on Dapsone therapy in a dosage of 100 mg. b. i. d. The response was very good and the rash had virtually disappeared in only three weeks' time. However occasional pustules continued to appear despite therapy even after two months.

Discussion

An unusual feature of this case is the history given by the patient of exacerbation produced by exposure to sunlight. The lesions predominantly involved the trunk and the upper limbs with involvement of dorsa of the hands, face and scalp during a severe attack. Initially our clinical impression was that the patient had pustular syphillides despite the history of sixteen years' duration which we considered unreliable. Our suspicion seemed to be confirmed by the strongly reactive serological test for syphillis and a H/o illicit sex contacts. The failure of the eruptions to involute with adequate penicillin therapy ruled out a syphillitic rash. The reactive serology can be explained as a manifestation of latent syphillis. Other conditions which should be considered in the differential diagnosis are Impetigo, Pemphigus foliaceous, Pustular psoriasis and Impetigo herpetiformis. Impetigo is ruled out by bacteriological studies. The absence of acantholysis ruled out the diagnosis of Pemphigus foliaceous. Pustular psoriasis and Impetigo herpetiformis are ruled out by the absence of erythema and constitutional symptoms. In sub-corneal pustular dermatosis the lesions are uniformly sub-corneal on histopathological examination. This is not the case with other entities discussed.

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