LINEAR NAEVUS VERRUCOSUS - LIKE LESIONS
(A Case Report Occurring on Sites of Trauma)

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Summary

The case of a 14 year old girl in whom trauma to the face at the age of 2 years was soon followed by naevus verrucosus-like lesions on sites of trauma is being reported. Trauma probably served to stimulate pluripotential cells which were lying dormant. Further studies are indicated on possible precipitating factors such as trauma in the aetiology of naevus verrucosus.

Naevus verrucosus, also known as naevus lateris, is a congenital, non-hereditary disorder of epidermal hyperplasia. It presents as linear or zosteriform warty papules. Histologically, many of these cases show a variable proportion of hyperplasia of the epidermal appendages also. Thus the all-inclusive term of epidermal naevus proposed for this condition by Solomon and Esterly[1] seems appropriate. Furthermore, these authors have pointed to the frequent association of this condition with various systemic disorders including skeletal, neurological and vascular abnormalities. In order to draw attention to these frequent systemic associations, the term "Epidermal Naevus Syndrome" was coined[2]. Other authors have even reported tumours in association with lesions of epidermal naevus[3],[4].

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The aetiology of epidermal naevus is unknown. In most cases there is no suggestion of any genetic transmission. Mehregan and Pinkus[5] have postulated that epidermal naevus arises from the pluripotential germinative buds situated in the basal layer of the embryo's epidermis. In considering the pathogenesis of epidermal naevus, it is important to remember that the dermis is in some way intimately associated with it. This inference is drawn from the observation that in a surgical excision of epidermal naevus, unless the underlying dermis is also removed with it, the naevus is likely to regrow[1].

We are reporting a case which resembled verrucous epidermal (naevus unis lateris) and in which the onset was subsequent to trauma.

Case Report

A 14 year old girl presented to the dermatology clinic of our hospital on 31st May 1977. She complained of asymptomatic, linear verrucous lesions on the left side of the face for 12 years. At the age of 2 years the patient fell face downward onto a large iron grill which was on the roof-top. The grill consisted of parallel rods, each of which

was 1.3 cm ($\frac{1}{2}$") in diameter and situated 5 cm (2") apart. In addition, there were also transverse rods 0.7 cm ($\frac{1}{4}$") in diameter and these were situated at wider intervals of approximately 60 cm (2 feet). Patient developed linear abrasions, with minimal haemorrhage and scab formation corresponding to the sites of trauma due to two parallel rods 5 cm apart. The abrasion on the forehead was the most prominent one and it was approximately 0.7 cm ($\frac{1}{4}$") in width. The lower part of the same abrasion which was situated on the left side of the nose was very narrow. The abrasion caused by the second rod was smaller and was situated laterally on the left cheek. In addition to these abrasions, there was a small abrasion on the left lower eyelid and also on the right side of the nose. These were caused by impact with a transverse rod of the grill. These lesions were followed by linear bluish bruise-like discoloration on the same sites. Five days after the fall patient's father noticed papular lesions developing over all the linear bruised areas except over the bruise on the right side of the nose where only a hyperpigmented macule developed. The papular lesions gradually increased in size proportionate to the growth of the patient. Her father opined that the lesions with which the patient presented were part of the original abrasions which have never healed.

There was no history of appearance of similar lesions anywhere else on the body.

The patient was aware of an asymptomatic hypopigmented macule on the abdomen which was present as long as she could remember. She did not have any associated systemic complaints. She had not received any treatment for her skin lesions. There was no family history of any similar disorder.

General physical examination and systemic examination did not reveal any abnormality.

Cutaneous examination revealed 2 distinct linear verrucous plaques almost parallel to one another and mainly situated on the left side of the face (Fig. 1) The plaques were hyperpigmented and had a granular surface. Of these, one plaque was more prominent and was situated on the middle of the forehead where it formed a band 2.5 cm wide. It narrowed down to a streak in its course down the side of the nose, a little to the left of the midline. In its upper part, this plaque did not extend into the scalp. The second plaque was 1.5 cm at its widest part and was situated on the left cheek at a distance of 8.5 cm from the first plaque. In addition to these, there was a small lesion in between these 2 plaques which consisted of warty papules on the left lower eye lid. This lesion corresponded to the site of impact with the transverse rod of the grill. The site of impact of the same transverse rod on the right side of the nose was represented only by a linear hyperpigmented macule. There were no verrucous lesions at that site.

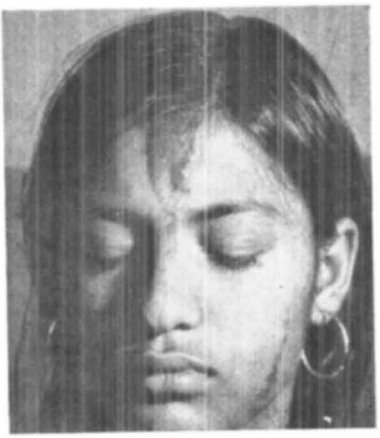

Fig. 1

Two verrucous, hyperpigmented linear lesions are clearly seen. The surface has a granular appearance. The third verrucous lesion is smaller and is situated on the left lower eyelid.

There was no other skin lesion except for an ill-defined, irregular, hypopigmented macule 4 cm × 1 cm in size which was situated on the abdomen just above the umbilicus and a little to the right of the midline. There was no loss of sensation on the macule. A linear erythematous wheal developed on stroking the macule with a blunt object.

Palms, soles, nails, hair and oral and genital mucosa were normal.

A provisional diagnosis of verrucous epidermal naevus (naevus unius lateris) was made and a biopsy was taken from the verrucous plaque on the forehead.

Histopathology showed features consistent with a diagnosis of verrucous epidermal naevus (Fig. 2). The hair follicles and sebaceous glands were normal in size and number and there was no inflammatory infiltrate in the dermis.

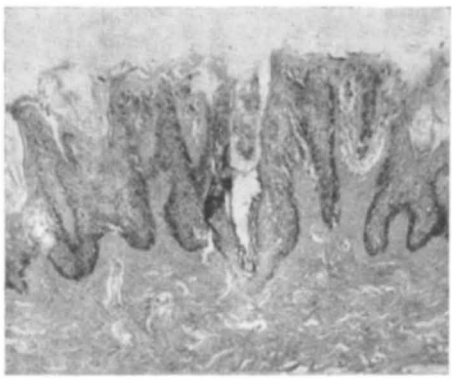

Fig. 2 *Biopsy from forehead* There is hyperkeratosis and follicular plugging. There is marked acanthosis and papillomatosis. (H & E × 100)

Discussion

Our case presented clinical and histological features suggestive of linear verrucous epidermal naevus (naevus unius lateris). There was no hyperplasia of the hair follicles or sebaceous glands. It is open to question whether the condition we have reported was identical with verrucous epidermal naevus or whether it represented a tissue reaction to trauma, which resembled verrucous epidermal naevus. To our knowledge, no case of similar lesions following trauma has yet been reported.

It would appear that in our case trauma played a definite role in the genesis of the linear verrucous plaques. These lesions appeared within 5 days and were limited to sites of trauma. It may be that our patient had a predisposition to developing epidermal naevus, and that trauma only served to precipitate the condition In this regard it is interesting to note that the patient had an associated naevus achromicus-like lesion. Naevus achromicus is a naevoid condition of the deficiency of melanocytes in the affected area of skin. Another feature of interest was that even though the verrucous plaque on the forehead did extend beyond the midline, the lower narrower part of the same lesion did not cross the midline. It has been stated in this regard that linear epidermal naevi never cross the midline[1]. It is particularly noteworthy that the trauma caused by the transverse rod elicited the formation of verrucous lesions only at the site of contact on the left side of the face. At the area of contact on the right side of the nose the same rod did not elicit verrucous lesions but only left a hyperpigmented macule. Also, in our patient, the lesions have only gradually increased in size proportionate to the growth of the patient as is expected in the case of naevoid conditions.

Clinically, there was no evidence of any systemic abnormality in our patient. Many cases of epidermal naevus have associated systemic abnormalities[2].

It is possible that the case we have reported is one of true naevus verrucosus. In that case it would be worthwhile to consider the possible mechanism by which trauma initiated the

development of the naevus verrucosus. It may be that in our case, trauma at the age of 2 years stimulated pluri-potential cells which were lying dormant[5]. It is evident from this report that further studies are indicated on factors such as trauma in precipitating this condition. Such an approach may shed more light on the aetiology of some cases of epidermal naevus.

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ABSTRACTS

Levamisole and Griseofulvin in warts : R. K. Bhargava, Uma Vacchaney and Pushpendra Garg (Dept Dermatol - STD, SMC Med Col Hosp, Jaipur) JIMA, 74 : 13-15, 1980.

Levamisole hydrochoride with griseofulvin was used with good results in the treatment of warts in this study. Battery of drugs and other modalities are available for the treatment of warts without any substantial beneficial effect whatsoever. This simple remedial measure has shown a ray of hope for the treatment of this intractable condition.

Dermatitis Artefacts due to raw Cashew nut : R K. Dutta (Dermatologist, Command Hospital, Air Force, Bangalore) The Clinical Reporter, IV : 23-25, 1980.

Two cases of dermatitis artefacta observed in army recruits undergoing basic military training are reported. Skin lesions were caused artificially by applying juice from raw cashew nut in an attempt to go out of military service. Cashew nut belongs to "Anacardinum Accidenlale" group and the juice from the outer shell of the fruit contains a mixture of catechol derivatives which are highly irritant to the skin.

No psychiatric abnormalities could be detected in the two patients.

DEPIGMENTING ERYTHEMA MULTIFORME
(A Clinical and Histopathological Study)

TILAK R. BEDI

Summary

Two patients with a peculiar variant of erythema multiforme are described. The classical iris lesions appearing seasonally in response to as yet unidentifiable agents resolved leaving behind persistent depigmentation. Although, the EM lesions aborted on corticosteroid therapy, the latter seemed to have no effect on the depigmented spots. The histopathological features were characteristic of EM. The depigmentation perhaps is the result of a permanent damage to the melanocytes. This variant of EM may be tentatively designated as depigmenting erythema multiforme-DEM.

Erythema multiforme-EM is a distinct clinicopathological reaction which can be precipitated by a variety of agents. The clinical manifestations are variable and different morphological forms of lesions are known to display a distinct tissue reaction[1]. The most characteristic lesion that draws attention is identifiable as "target" or "iris" lesion composed of a clear red area at the periphery that surrounds a pale pink zone and a central livid area[2]. The lesions usually fade within a few weeks leaving behind faintly hyperpigmented or brownish stains which may persist longer. In rare instances, however, the lesions have resulted in depigmentation[3,4] which disappear following treatment with oral prednisolone[4]. The present report pertains to 2 cases of erythema multiforme manifesting with classical iris lesions resulting on healing in persistent spots of depigmentation.

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Case Report

Case 1: A 24 years old lady complained of recurrent urticarial papular and target lesions on the extremities and trunk of 9 years' duration. She started in March 1969 with sudden wheals and target lesions on the back of the trunk and the dorsal aspects of the hands and the feet. The lesions were mildly itchy, persisted for a month and disappeared after some treatment leaving faintly hypopigmented areas. Over the next 4 years she had similar lesions at the onset of summer (March-April) every year. In April 1973 she was first seen by the author when she was put on 20 mg of prednisolone daily for 2 weeks. The lesions aborted but depigmented areas persisted. She had since been experiencing successive crops of new lesions during the same season and when last seen in March 1978, admitted that for the last 2 years she had started having lesions even at the time of onset of winter (Oct-Nov). The lesions showed a tendency to disappear on their