

Simulation of Solar Lentigo by Spreading Pigmented Actinic Keratosis

Sir,

Premalignant spreading pigmented actinic keratosis (SPAK) was first described in 1978 by James et al. (1), who delineated 10 cases. It was termed "spreading" because of its tendency to grow centrifugally. Difficulties in the macroscopic differential diagnosis of it from benign solar lentigo as well as from seborrhoeic keratosis and lentigo maligna were indicated. In the present study, observations concerning 25 cases of SPAK are reported. They were encountered over a period of 2 years at a unit oriented to the diagnosis of pigmented lesions. During this period, approximately 3,500 new patients, including some 500 cases of actinic keratoses of the ordinary type, were seen.

Of the 25 patients, 23 were over 60 years of age and only 2 younger than 50. The female predominance was obvious, 23/25.

Eighteen of them reported a duration of lesions of a year or more. For the patients generally, the pigmented area showed a tendency to expand peripherally, but its superficial structure remained basically unchanged. The diameter of the area involved exceeded 2 cm in 13 of the cases and 5 cm in 5. The sharp border of the area was maintained during the entire duration of the lesion. The latter had a rounded, nummular form. Its surface had a peculiar "dull" appearance and a uniformly light brown colour (Fig. 1). Only in exceptional cases was a certain speckled appearance with darker tones and more prominent hyperkeratosis observed. All the lesions were localized to the face, mostly to the cheeks and temples. In 3 of the patients the lesions were multiple. Slight irritation or itching was often the reason for the patient's seeking medical care. Only 3 of the



Fig. 1. A slowly spreading pigmented actinic keratosis on the cheek, with the typical sharp border and somewhat dull surface.

patients were treated for coexisting actinic keratoses of the ordinary type.

A uniform histopathological picture with slight hyperkeratosis was observed in all of the cases. Atypical keratinocytes and moderate melanin hyperpigmentation at the basal level of the epidermis were often seen, as were elastosis of the dermis, varying degrees of lymphocyte aggregation, and the occurrence of numerous melanophages. In no cases were there any signs of infiltration (Fig. 2).

Most of the patients received cryotherapy with liquid nitrogen. Good results have been obtained following the same routine as in the treatment of ordinary actinic keratoses. A few of the patients were treated successfully with fluorouracil cream.

COMMENTS

The importance of correctly diagnosing SPAK is related mainly to that of distinguishing it from benign hyperpigmentations. In earlier literature, the risk of developing squamous cell carcinoma

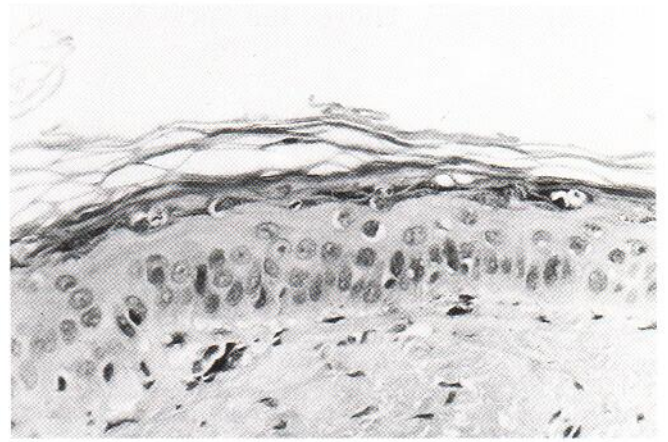


Fig. 2. Spreading pigmented actinic keratosis showing slight hyperkeratosis and somewhat atypical keratinocytes, moderate hyperpigmentation at the basal level of the epithelium and melanophages in the dermis.

noma was emphasized. Rates of occurrence have been reported of 2/10 (1), 1/4 (2) and 0/4 (3). In the present set of 25 cases, no squamous cell carcinoma was observed. One reason for this may be that since we found that genuine and suspected cases of SPAK could be readily identified, the sample presumably included many early cases. One interesting observation was that most of the patients lacked actinic keratoses of the ordinary type.

SPAK may closely mimic benign solar lentigo of the face, the pigmentation of which is generally uniform and light in colour. Similarly, it can be confused with benign lentigo involving an acute inflammatory reaction, probably immunologic in character, as shown in particular by the fact that several of the patients reported local irritation in the patch. Care may also be called for in differentiating SPAK diagnostically from flat seborrhoeic keratoses, and occasionally lentigo maligna.

With some clinical experience, SPAK can usually be identified macroscopically on the basis of its "dull" surface structure. Microscopic confirmation is desirable, however.

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M. Klinker¹ and N. Jonsson², Departments of ¹Dermatology and ²Pathology, University Hospital, Lund, Sweden.