EPITHELIOMA CUNICULATUM PALMARE (VERRUCOUS CARCINOMA) WITH PALMO-PLANTAR KERATODERMA

A S Kumar, E George and R K Pandhi

A case of rare variant of squamous cell carcinoma which merits the name of epithelioma cuniculatum occurring on the palm is being reported. Association of hereditary palmo-plantar keratoderma is highlighted.

Key words : Palmo-plantar keratoderma, Squamous carcinoma, Verrucous carcinoma, Epithelioma cuniculatum, Palmar malignancy, Low grade cancer.

The term epithelioma cuniculatum was used by Aird et al[1] in describing a special morphological variant of squamous cell carcinoma on the foot. Their patients had a slow-growing, well differentiated low grade squamous cell carcinoma with marked hyperkeratosis and sinuses and crypts filled with keratotic material. Hence the term cuniculatum which means rabbit warren. Later, it was interpreted as a form of verrucous carcinoma occurring on the skin.[2] Herein we report a case of verrucous carcinoma occurring on the plam of a patient with palmo-plantar keratoderma which fits the description of epithelioma cuniculatum palmare.

Case Report

A 53-year-old man had a warty ulcerative growth on the left palm of 3 years duration. He had also been suffering since childhood from redness and thickening of both palms and soles with itching and fissuring particularly in dry seasons. Three years ago, he noticed a fissure on the left palm which gradually started to grow into a brownish, hard nodule. He cut it off by himself thinking it to be a wart, 6 times over the course of 2 years. The nodule regrew each time and the base of the lesion extended towards the left thumb and the index finger and resulted in difficulty in extending these fingers at the metacarpo-phalangeal joints. His three brothers also suffered from thickening and fissuring of the palms and soles. His parents and 3 sisters were not affected. There was no family history of atopy. Examination revealed markedly thickened and erythematous palms and soles with fissures (Fig. 1). The left palm showed a verrucous and ulcerated dark brownish growth extending from the middle of the palm, to the base of the thumb and the index finger, measuring 5×4 cm in size (Fig. 2). There was a foul

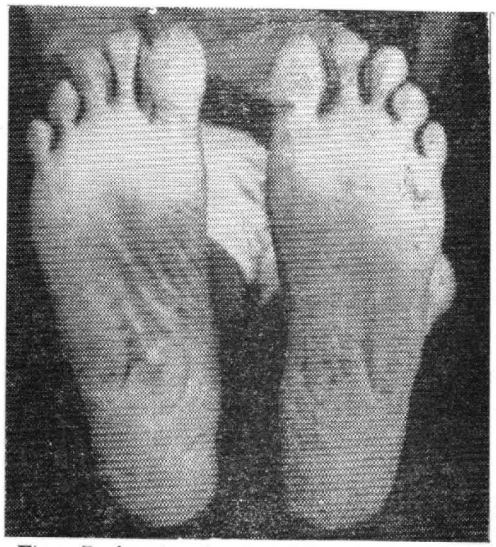

Fig. 1. Both soles showing diffuse keratoderma.

From the Department of Dermatology and Venereology, All India Institute of Medical Sciences, New Delhi-110 029, India.
Address correspondence to : Dr. A. S. Kumar.

smelling discharge from the pits and bleeding on touch.

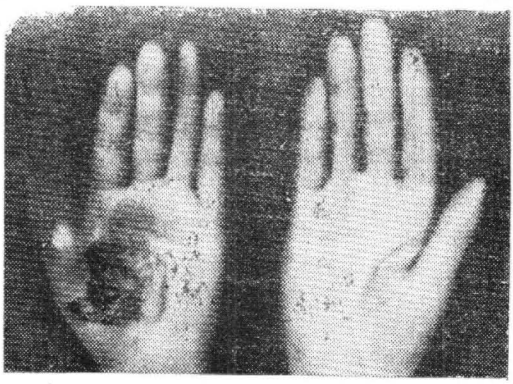

Fig. 2. Palmar keratoderma with verrucous and ulcerative growth in the left palm.

There was no significant lymphadenopathy and systemic examination was non-contributory. The routine investigations like blood cell counts, ESR, urinalysis and the skiagram of chest did not reveal any abnormality. The skin biopsy showed a well differentiated squamous cell carcinoma with marked hyperkeratosis and keratotic debris in the crypts.

Comments

Ackerman[3] originated the term verrucous carcinoma to describe tumours that were warty, often extensive and had well differentiated but invasive histologic picture. All the 31 patients in his series had the lesions in the oral cavity. Later, Kraus and Mesa[4] reported 105 cases of verrucous carcinoma involving the oral cavity, the larynx and the genitalia. Similar tumours occurring in the sole of foot went under the designation of epithelioma cuniculatum.[1,5] These tumours were a variant of squamous cell carcinoma on the foot with a tendency to form more keratin than usual, and are driven into deeper tissues due to mechanical pressure just as with plantar warts and corns. This being a low grade, highly keratinising lesion, keratinous cysts are formed which break down by pressure and coalesce to form sinuses discharging into the surface. The marked hyperkeratosis and crypts filled with such material fit the above description. The palm being subjected to some amount of pressure and friction, and the hereditary palmo-plantar keratoderma might have contributed to the keratotic nature of the tumour. The tumour is slow growing, it rarely metastasizes and is said to be successfully treated by surgical excision.[5,6] The slow growth of the tumour in our patient in spite of repeated parings and attempted excision and apparently uninvolved lymph nodes over 3 years is similar to other's observations.

All the earlier reports mention epithelioma cuniculatum occurring on the plantar surfaces, whereas our case occurred on the palm. Secondly, the association of palmo-plantar keratoderma, though might be incidental, has not been reported so far in the literature.

References

1. Aird I, Johnson HD, Lennox B et al : Epithelioma cuniculatum : A variety of squamous carcinoma peculiar to the foot, Brit J Surg, 1954; 42 : 245-250.
2. Brownstein MG and Shapiro L : Verrucous carcinoma of the skin—epithelioma cuniculatum plantare, Cancer, 1976; 38 : 1710-1716.
3. Ackerman LV : Verrucous carcinoma of the oral cavity, Surg, 1948; 23 : 670-678.
4. Kraus FT and Mesa CP : Verrucous carcinoma, Cancer, 1966; 19 : 26-38.
5. Thompson SG : Epithelioma cuniculatum. An unusual tumor of the foot, Brit J Plast Surg, 1965; 18 : 214-217.
6. Brown SM and Freeman RG : Epithelioma cuniculatum, Arch Dermatol, 1976; 112 : 1295-1296.