MULTIPLE KERATOACANTHOMA

(A Case Report)

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Summary

A rare case of multiple keratoacanthoma involving the right lower limb is reported along with brief review of literature.

KEY WORDS: Keratoacanthoma, Tumour Skin.

Introduction

Keratoacanthoma is a tumour of the skin bearing pilosebaceous folli-They occur rarely on the mucus membranes as an extension of the lesion from contiguous skin bearing hair follicles or sebaceous elements. The lesions may present as multiple "self healing" epitheliomas of the skin or as eruptive keratoacanthoma. Both variants are rare as compared to solitary keratoacanthoma. Tar, mineral oil and actinic exposure are considered to be etiological agents1. A viral etiology, though postulated, has not been proved². Keratoacanthoma is the commonest single precursor of squamous carcinoma in the exposed

skin of the elderly. Therefore, an accurate diagnosis is important.

Case Report

A 22 years old male farmer was admitted for multiple, slow growing, painful, nodular and warty growths on the outer aspect of the right lower limb of four years duration. Initially he had noticed papules, which grew in size, but they involuted and reappeared as warty nodules. There was no family history of similar problem and no history of ingestion of drugs before the appearance of the lesions.

Dermatological examination showed multiple, shiny, hemispherical nodules of 1.0 to 1.5 cms in diameter with erythematous base and central yellowish, hard, horn-like projections with single and multiple branches 3 to 4 cms in length (Fig 1). Lesions were present only on the extensor aspect of right thigh. Inguinal lymphnodes on both sides were enlarged, firm, discrete and mobile.

Blood count, urine analysis, blood urea and fasting blood sugar were normal. Serological test for syphilis was negative.

Biopsy from the lesion showed a large, keratin-filled crater. The epidermis extended like a lip over the

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Received for publication on 10-10-'83

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Fig. 1 Shows multiple, shiny horn-like projections on the extensor aspect of right thigh.

sides of the crater. In the base of the crater, epidermal proliferations were seen extending both upward into the crater and downward into the dermis (Fig 2). High degree of keratinisation as shown by the eosinophilic glassy appearance of many of the cells was a prominent feature. Dermis showed round cells, plasma cells and eosinophilic infiltrates. Central horn filled crater, high degree of keratinisation and absence of atypicality of cells suggested a diagnosis of keratoacanthoma. Inguinal lymph node showed reactive hyperplasia only.

All the lesions were surgically excised. The wound healed well. There was no recurrence upto 6 months after which patient was lost to follow-up.

Discussion

Most of the case reports are on solitary keratoacanthomas or on eruptive type as compared to the multiple self-healing epitheliomas of the skin under report. These lesions are commonly found on any part of the skin including palms and soles and especially on the face and extremities. Our patient had shown tendency to self-healing initially but later the lesions showed excessive growth. As compared to this, in the eruptive type, thousands of lesions of follicular papules 2 to 3 mm in diameter appear. The oral mucosa and layrnx may be involved³,⁴.

Average age of onset of the disease is 50 years with maximum incidence between 50 and 70 years of age. Our patient was a young adult. There was no history of exposure to agents known to produce the disease^{1,5,6} or family history of similar diseases to postulate genetic factors responsible for multiplicity of the lesions⁷.

Keratoacanthoma is the commonest single precursor of squamous cell carcinoma. A carcinomatous transformation is to be expected if there



Fig. 2 Shows large keratin filled crater with epidermis like a lip over the side of the crater,

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is true invasion associated with failure of involution and dysplasia of epidermal cells². Though our case showed multiple lesions, there was no evidence of malignant change in the lesion.

Our patient had no recurrence for six months after excision of the growth. Curettage and coagulation of the base or excision and suture is the best treatment. Excision is desirable if the diagnosis is in doubt as curetted specimens yield material which is difficult to orientate and may be wrongly interpreted as carcinomatous. Radiotherapy shortens the course and improves the scar and is recommended if patients refuse surgery. The application of 5-fluorouracil ointment reduces the bulk of tissue needing natural resolution and this diminishes scar formation. Methotrexate orally gives dramatic results. When in doubt, the patient should be followed up after excision and radiotherapy.

References

- Ghadially FN, Barton BW and Ferridge DF: The etiology of Keratoacanthoma, Cancer, 1963; 16: 603-611.
- Rook A and Whimster I: Keratoacanthoma - a thirty year retrospect, Br J Dermatol, 1979; 100: 41-47.
- Rossaman RE, Freeman RG and Kne JM: Multiple keratoacanthoma - a case study of the eruptive type with observations on pathogenesis, Arch Dermatol, 1964; 89: 374-381.
- 4. Winkelmann RK and Brown J: Generalised eruptive keratoacanthoma, Arch Dermatol, 1968; 97:615-623.
- 5. Binkley GW: Keratoacanthoma (Molluscum Sebaceum), AMA Arch Dermatol and Syphilol, 1955; 71: 66-72.
- 6. Smith PAJ: Multiple keratoacanthoma, Proc Roy Soc Med, 1956; 49: 428-429.
- Rook A and Moffatt JL: Multiple selfhealing epithelioma of Ferguson Smith type - report of a case of unilateral distribution, Arch Dermatol, 1956; 74: 525-532.