

EROSION OF PHALANX BY SUBUNGUAL WART

Report of 2 cases

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Summary

Two cases of periungual wart proved histologically are reported in otherwise healthy persons. These lesions caused erosion of the terminal phalanx. Such destruction of the underlying bone by common wart is extremely rare. We could come across only one report of such case in literature.

Irregular erosion of terminal phalanx is not uncommon and observed in many conditions like leprosy, scleroderma, Raynaud's disease, soringomyelia, diabetic gangrene, psoriasis, thrombo-angiitis obliterans and haemato-porphyrinuria. It is also a known fact that benign tumours by their pressure may cause resorption of bone. Glomangioma, the subungual tumours of the tuberous sclerosis and giant cell tumour of the tendon sheath have been reported to cause erosion of the terminal phalanx of the fingers¹.

Erosion of the terminal phalanx of the finger is also reported in subungual keratoacanthoma and epidermoid carcinoma in 10 and 6 cases respectively^{2,6}. However, the erosion of terminal phalanx by subungual and periungual

wart is extremely rare⁷. We could come across only one case of a destruction of terminal phalanx due to histologically proved periungual wart reported by Gardner and Acker⁷. The purpose of this paper is to document two similar cases with bone destruction.

Case Reports

Case 1

A 20 year-old, Hindu male attended dermatology out patient department of M. P. Shah Medical College and Irwin Group of Hospitals, Jamnagar, for slowly growing painful, warty growth on the right thumb for 2½ years. Past, personal and family history were non-contributory. Physical examination revealed 1½ c.m. sized hard, tender, verrucous lesion on the right side of the thumb (Fig. 1 Page No. 194). General and systemic examination were normal. Routine laboratory investigations were within normal limits. X-ray of the right thumb showed erosion of the terminal phalanx (Fig. 2 Page No. 194). Histopathological examination of the biopsy from the lesion revealed hyperkeratosis, parakeratosis, and papillomatosis and acanthosis with elongation of rete ridges. There were vacuolated

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cells in the upper stratum malpighii and granular layer. On these findings diagnosis of *varruca vulgaris* was made.

Case 2

A 25 year-old Hindu female presented with painful, rough, keratotic, skin lesion on the tip of the left middle finger for 4 months. There was no history of Raynaud's phenomenon. Physical examination revealed a tender, 0.5 c.m. hard, scaly verrucous growth on the tip of the left middle finger. There was no other lesion anywhere on the body. General and systemic examination were normal. Results of routine laboratory studies were negative except for mild hypochromic anaemia. X-ray examination of the finger revealed destruction of the terminal phalanx (Fig. 3 Page No. 194). Radiograph of the other hand did not reveal any abnormality. Histopathological examination of the excision biopsy showed hyperkeratosis, with interspersed areas of parakeratosis. There was acanthosis with elongation of rete ridges. The basal cell layer was intact. Scattered groups of large vacuolated cells in the malpighian and granular layer were without intercellular bridges of keratohyline granules. On these findings patient was diagnosed to have *verruca vulgaris*.

Discussion

Epidermoid carcinoma and keratoacanthoma have been reported previously to produce erosion of the terminal phalanx. Keratoacanthoma, epidermoid carcinoma and *verruca vulgaris* are many times indistinguishable clinically and some of these reported cases were thought to be produced by warts and one such case was even reported as 'erosion of phalanges by 'subungual wart' which ultimately turned

out to be keratoacanthoma⁸. The diagnosis in the present two cases is confirmed histopathologically. Gardner and Acker⁷ reported a case of periungual wart which caused pain and roentgenological evidence of bone destruction in a 40 year old man. Interestingly they reported disappearance of wart and remineralisation of bone after radiation therapy. Both our cases had erosion of the terminal phalanx probably due to extrinsic pressure effect of the benign tumour.

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