

PHALANGEAL EROSION WITH SUBUNGUAL WARTS

BHUSHAN KUMAR * SUBHASAH CHANDER SHARMA † SURRINDER KAUR ‡

Summary

Two cases of terminal phalangeal erosion by subungual warts are described. Demineralisation of bone has been reported previously due to many other pressure producing lesions but rarely due to viral warts. Remineralisation did not occur upto six months following treatment.

Destruction and erosion of the terminal phalanges is not uncommon and observed in conditions like leprosy, diabetic neuropathy, Raynaud's disease, syringomyelia, psoriasis¹, thromboangiitis obliterans, erythropoetic porphyrias, rheumatoid arthritis², chondro-calcinosis³, acro-osteolysis⁴ and in vinyl chloride workers⁵.

However, localised resorption of the terminal phalanges is quite uncommon. Benign and malignant tumours in subungual or periungual position by their pressure may cause localised resorption of the phalanges⁶. The erosion of terminal phalanx by subungual and periungual warts is extremely uncommon and has been reported rarely in literature^{6,7}. We add two more cases of terminal phalangeal erosion caused by subungual warts.

Case Reports :

Case 1

Forty nine years old female patient presented with asymptomatic verrucous

lesions in the periungual and subungual region of the right thumb for 6 years.

Local examination revealed firm, hyperpigmented, hyperkeratotic verrucous lesions. There was slight destruction of the nail plate as the lesion had grown subungually also. The fleshy portion of the terminal phalanx looked thin in compared to that of the other phalanges.

Case 2

Eighteen years old male patient presented with asymptomatic lesion on the left thumb similar to that of Case 1 of one year's duration. The nail plate was only slightly lifted at the anterior end by the subungual portion of the growth.

Except for these minor lesions both the patients were perfectly healthy and general physical examination did not reveal any abnormality. Routine laboratory investigations showed normal results. Biopsy specimens from both the patients confirmed the diagnosis of verruca vulgaris. X-ray of the affected thumbs showed penciling of the terminal phalanx in one (Fig. 1), and localised erosion of the bone in the other (Fig. 2). X-ray of the other phalanges did not show any bone erosion.

The lesions resolved after two months of weekly cauterisation with trichloroacetic-acid. X-ray of one patient after

* Lecturer

† Senior Resident

‡ Assistant Professor

Department of Dermatology, STD and Leprology, Post-graduate Institute of Medical Education and Research, Chandigarh.

Received for publication on 26—2—1979

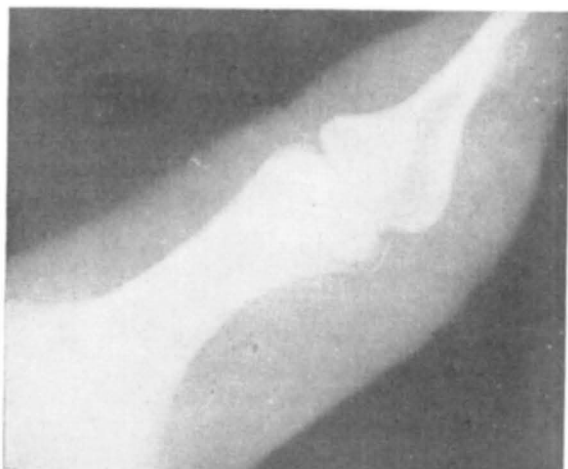


Fig. 1 Lateral view of the Rt thumb showing pencil-ing of terminal phalanx.



Fig. 2 Left thumb skiagram showing localised erosion of bone.

three months did not show any evidence of remineralisation. The other patient was lost to follow up.

Discussion :

Number of local conditions are known to cause destruction and resorption of bone by pressure. Erosion of the phalanx is seen in villo-nodular synovitis⁸, metastatic malignancies¹, glomangioma, subungual verrucous lesions of tuberous sclerosis and giant cell tumours of

tendon sheaths⁹. Gouty tophi can also lead to erosion and ultimately complete destruction of phalanx if big in size¹⁰. Erosion of the terminal phalanx of the finger has also been reported in subungual kerato-acanthomas and epidermoid carcinoma^{11,13}.

Skin infection with papova virus producing lesions of verruca vulgaris is quite common. Early lesions of epidermoid carcinoma and kerato-acanthoma at times may be indistinguishable from viral warty lesion clinically. The reported cases of bone erosion by verruca lesions have been mostly reported on clinical diagnosis¹¹. Biopsy confirmation of diagnosis is essential before attributing the erosion as due to verruca vulgaris only.

Complete remineralisation of the bone has been reported after the pressure causing verruca lesions was removed⁶. One of our patients observed over a period of three months after the lesions had been treated by scraping and cauterisation did not show any evidence of bone regeneration.

References (Warts)

1. Csakany G, Bozsoy S, Bakos L and Korossy S: Joint changes in psoriasis, *Acta Radiol*, 57 : 121, 1962.
2. Norgaard F: Earliest roentgen changes in polyarthritis of rheumatoid type, *Radiology*, 92 : 299, 1969.
3. Mc Carty DJ Jr and Haskin ME: The roentgenographic aspects of pseudogout (articular chondro calcinosis) and analysis of 20

- cases. Am J Roentgenol Radium Therap Nucl Med, 90 : 1248, 1963.
4. Papavasiliou CG, Gargano FP and Walls, WL. Idiopathic non-familial acro-osteolysis associated with other bone abnormalities, Amer J Roentgen, 83 : 687, 1960.
 5. Markowitz SS, Mc Donald CJ, Fethiere W and Kerzner MS : Occupational Acro-osteolysis, Arch Dermatol, 106 : 219, 1972.
 6. Gardner LW and Acker DW : Bone destruction of a distal phalanx caused by peringual warts. Arch Dermatol, 107 : .75, 1973
 7. Shah SS, Kothari UR, Dhoshi HV, Bhat AC and Bhalodia GC : Erosion of phalanx by subungual wart, Report of 2 cases Indain J Derm Vener Lepr 42 : 185, 1976.
 8. Smith JH and Pugh DG: Roentgenographic aspects of articular pigmented villonodular synovitis. Am J Roentgenol Radium Therap Nucl Med 87 : 1146, 1962
 9. Brailsford JF : The radiology of bones and joints. JA Churchill Ltd. London, 1963, pp 58.
 10. Pugh DG: The Roent-genologic Diagnosis of the Diseases of Bone. The Williams and Willkins Co. Baltimore, 1952 and 1954.
 11. Shapiro L, Flushing NY and Stoller NM : Erosion of the phalanges by subungual warts. Report of a case. JAMA, 176 : 379 1961.
 12. Kopf AW : Multiple kerato acanthoma, Arch Dermatol 103 : 543, 1971.
 13. Scrimenti RS, Korkos GS: Subungual kera-toacanthoma. Report of a case with multiple digital lesions Wis Med J, 70 : 83, 1971.
-