

SUBUNGUAL MALIGNANT MELANOMA CLINICALLY RESEMBLING GRANULOMA PYOGENICUM

Sanjay Rathi, Devraj Dogra, Neena Khanna

A 37-year-old labourer developed longitudinally split dystrophic nail with blackish discoloration in the centre 5 months following blunt trauma to the right thumb nail. Six months later, a well defined exudative erythematous to violaceous nodule developed and this recurred inspite of repeated surgical interventions. Patient had large, firm to hard epitrochlear and axillary lymphadenopathy. Histopathological examination confirmed the diagnosis of malignant melanoma.

Key Words : Acral lentiginous melanoma, Malignant melanoma, Granuloma pyogenicum

Introduction

Acral lentiginous melanoma was described as a separate clinico-pathological group by Reed in 1975.¹ It is characterised by a large, macular, lentiginous pigmented area around and invasive raised tumor.² This form of malignant melanoma occurs on the palms, soles, fingers, toes, nail beds and mucous membranes.³

Case Report

A 37-year-old labourer sustained blunt trauma 3 years back on right thumb resulting in loss of nail plate. The nail which regrew was dystrophic, and longitudinally split with blackish discoloration at the centre. Evulsion of nail plate was done but 6 months later an exudative, erythematous growth appeared on the medial aspect of the nail. Surgical excision of the growth was attempted twice but the growth reappeared at the same site. The tumour had enlarged rapidly during the 2 months prior to presentation. There was no history of any discoloration or pigmented band in the nail plate prior to the trauma.

Cutaneous examination revealed a non-tender, 2x2cm, erythematous to violaceous growth on the right thumb (Fig. 1) involving

From the Department of Dermatology & Venereology, All India Institute of Medical Sciences, New Delhi, India.

Address correspondence to : Dr Neena Khanna



Fig. 1. Nodular rounded growth on thumb with a peripheral macular, hyperpigmented halo.

the nail bed and proximal nail fold. The lesion was well marginated, raised with exuberant and crusted surface. There was complete shedding of the nail plate. Violaceous macular pigmentation was evident beyond the margin of the growth. The patient also had large, firm to hard right supratrochlear and axillary lymph nodes. There was no hepatosplenomegaly and ophthalmological examination revealed no abnormality. Rest of the systemic examination was within normal limits.

Complete haemogram, blood chemistry, urine examination, liver and kidney function tests were within normal limits. An X-ray of the chest and ultrasonographic examination of abdomen revealed no abnormality. A complete skeletal survey and computed tomography of brain were normal. Histopathological

examination revealed a predominance of anaplastic, spindle shaped cells infiltrating the whole dermis in irregular branching formations. A moderate number of epitheloid cells with minimal amount of inflammatory cell infiltrate was present intermingled with tumor cells. A fair number of tumour cells were melanised with pigment incontinence. Overlying epidermis was acanthotic. A fine needle aspiration cytology of the supratrochlear lymph node showed malignant melanoma.

Comments

Acral lentiginous melanomas account for less than 10% of primary cutaneous melanomas.^{2,3} However, it represents the most common form of melanoma among the blacks and the other pigmented populations.^{3,5} Subungual malignant melanoma, is an uncommon form of acral lentiginous melanoma.^{2,5} Such a tumor presents a diagnostic difficulty as it can be mistaken for a subungual haematoma or a brown longitudinal band in the nail due to pigmented nevus of the nail matrix.² Granuloma pyogenicum of the nail bed and chronic paronychia due to ingrowing nail may add to already existing

diagnostic dilemma. The frequent delay in correct diagnosis of such lesions often results in frankly invasive tumours, sometimes with distant metastasis before they are correctly managed. A valuable diagnostic clue in the form of Hutchinson's sign has been described.^{2,3} Here, varying degrees of pigmentation is seen around the nail and particularly on nail fold distal to the nail plate.

Reference

1. Reed RJ, Ichinose H, Clark WH Jr. Common and uncommon melanocytic naevi and borderline melanomas. *Semin Oncol* 1975; 2: 119-47.
2. Mackie RM. Melanocytic naevi and malignant melanoma. In: *Text-book of Dermatology* (Champion RH, Burton JL, Ebling FJG, eds) 5th edn. Oxford: Blackwell Scientific Publications, 1992; 1525-60.
3. Koh HK, Bhawan J. Tumors of the skin. In: *Dermatology* (Moschella SL, Hurley HJ, eds) 3rd edn. Philadelphia: WB Saunders Company, 1992; 1721-802.
4. Coleman WP, Loria PR, Reed RJ, Kremenz ET. Acral lentiginous melanoma. *Arch Dermatol* 1980; 116: 773-6.
5. Black WC, Goldhahn RT, Wiggins C. Melanoma within a Southwestern Hispanic population. *Arch Dermatol* 1987; 123: 1331-4.