Subungual pigmented squamous cell carcinoma presenting as a grey longitudinal melanonychia in a young patient

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DESCRIPTION

A 20-year-old man was assessed for a genital ulcer that developed after an episode of orchiepididymitis. On the initial physical examination, a grey longitudinal melanonychia was found on the left index finger, measuring 4.5 mm in diameter, with mild subungual hyperkeratosis (figure 1A, B). A longitudinal nail biopsy was performed (figure 2A) and the histological analysis revealed a pigmented squamous cell carcinoma (SCC) (figure 2B). Total nail apparatus excision with placement of a full-thickness graft harvested from the retroauricular area was performed with no recurrence after 1-year follow-up.

Pigmented SCC of the nail unit is an uncommon tumour. A <10% of these tumours present as longitudinal melanonychia. It occurs more commonly after the fifth decade of life,¹ and only a few reports on young patients have been previously reported. Men are affected up to twofold more than women are.²

Several risk factors have been associated with the development of subungual SCC: ultraviolet radiation exposure, repeated trauma, pesticides or arsenic exposure and human papilloma virus infection.²

Lack of awareness of this tumour leads to a delay in its diagnosis. Prompt nail biopsies of new onset or persistent melanonychias should be encouraged to exclude malignant tumours such as melanoma or pigmented SCC.²

Given the rarity of this tumour, treatment guidelines have not been established. Wide surgical excision is the preferred treatment, with a relapse rate of <5%. Mohs micrographic surgery is advised for limited lateral tumours and once the tumour has

Figure 2 (A) Longitudinal nail biopsy was performed. (B) Histopathological sections show full-thickness atypia of the nail bed.

invaded bone tissue, amputation should be performed.^{1 2}

Learning points

- ▶ Ten per cent of squamous cell carcinoma (SCC) of the nail apparatus cases present as longitudinal melanonychia.
- ▶ The differential diagnosis of a longitudinal melanonychia should include benign and malignant lesions: nevi, onychomycosis, traumatic melanonychia, verruca vulgaris, melanoma and SCC.
- ▶ An early diagnosis of subungual SCC leads to more conservative surgeries, with a better functional and cosmetic outcome.

Figure 1 (A) Clinical photograph showing a longitudinal grey melanonychia of 4.5 mm diameter. (B) Dermoscopic view of the tumour. A curved grey melanonychia with small darker globules can be observed.

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