Squamous Cell Carcinoma of the Nail Bed: The Great Mimicker

Dear Editor,

Squamous cell carcinoma (SCC) of the nail bed is a rare malignant subungual tumour. It can be often misdiagnosed as a chronic paronychia, onychomycosis, pyogenic granuloma, subungual wart, glomus tumour, ingrown nail, subungual exostosis, chronic osteomyelitis, traumatic dyschromia, keratoacanthoma and melanotic nevus.

Trauma, chronic paronychia, chronic solar irradiation, X-irradiation, burn scars, arsenic exposure, actinic damage, polycyclic aromatic hydrocarbons, immunosuppression and human papillomavirus infection are considered to be the risk factors for the development of SCC.\(^1\)

A 78-year-old male presented with a non-healing ulcer over the right ring finger since 2 years. He gave a history of few raw lesions on the lateral aspect of the right ring finger 2 years ago following a trauma to the right hand. He consulted a local practitioner for the same complaints and was treated with oral antibiotics, antifungals and anti-inflammatory drugs with topical antibacterial cream, with improvement over a period of 3 months.

Two 2 years back, the patient developed a persistent ulcerative lesion over the right fingernail which gradually involved the left lateral aspect of the nail and did not show any improvement with medications. Since the last 7 months, there was complete destruction of the nail plate.

There were no similar lesions elsewhere on the body. The patient did not give a history of diabetes mellitus or hypertension. There was no history of tuberculosis or tuberculosis contact.

Cutaneous examination revealed an extremely tender ulcer of 1.5 cm × 0.7 cm size over the right ring finger nail bed with destruction of overlying nail plate [Figure 1a]. The ulcer extended onto both lateral and proximal nail folds. Floor of the ulcer showed granulation tissue. There was no evidence of regional lymphadenopathy. Differential diagnosis of SCC, pyoderma gangrenosum and amelanotic melanoma was considered.

X-ray of the right ring finger revealed osteophyte at the distal interphalangeal joint with widening of the trabeculae with no periosteal reaction or osteomyelitis [Figure 1b]. Biopsy from the edge and centre of the ulcer revealed epidermal proliferation with crowding of keratinocytes with altered nuclear-cytoplasmic ratio with increased mitotic figures above the basal layer with the formation of horn pearls with completely keratinising centres. The dermis showed moderately dense lymphoplasmocytic infiltrate. These features were suggestive of moderate to poorly differentiated SCC [Figure 1c and d].

The patient was subjected to complete excision of the tumour with disarticulation of the distal interphalangeal joint and amputation done up to the upper part of middle phalanx [Figure 2]. The excised tissue revealed dysplastic epidermis overlying the invasive SCC extending into the dermis and superficial subcutaneous tissue with clear margins.

The patient showed excellent result postoperatively with no recurrence even after 4 years of follow-up.

Cancers of the perionychium are relatively rare occurrences and are often related to chronic inflammation associated with trauma, infection, exposure to ultraviolet radiation, or other carcinogens. SCC is the most common tumour reported of the nail bed.
Correspondence

Swagata Arvind Tambe, Priyanka Deelip Patil, Dattatray Govind Saple¹, Ulhas Yashwant Kulkarni²
Department of Dermatology, Topiwala National Medical College and BYL Nair Hospital, La’Mer Clinic, Mahalaxmi Clinic, Mumbai, Maharashtra, India

Address for correspondence: Dr. Swagata Arvind Tambe, Department of Dermatology, Topiwala National Medical College and BYL Nair Hospital, Mumbai, Maharashtra, India.
E-mail: swagatatambe@gmail.com

REFERENCES

1. Frankel DH. Squamous cell carcinoma of the skin. Hosp Pract (Off Ed) 1992;27:99‑102, 105‑6.
2. Lai CS, Lin SD, Tsai CW, Chou CK. Squamous cell carcinoma of the nail bed. Cutis 1996;57:341‑5.
3. Attiyeh FF, Shah J, Booher RJ, Knapper WH. Subungual squamous cell carcinoma. JAMA 1979;241:262‑3.
4. Abner S, Redstone J, Chowdhry S, Kasdan ML, Wilhelmi BJ. Synchronous squamous cell carcinoma in multiple digits. Eplasty 2011;11:e9.
5. Zaiac MN, Weiss E. Mohs micrographic surgery of the nail unit and squamous cell carcinoma. Dermatol Surg 2001;27:246‑51.
6. Sommer NZ, Brown RE. The perionychium. In: Green DP, editor. Green’s Operative Hand Surg. 5th ed. Philadelphia, Pennsylvania: Elsevier Churchill Livingstone; 2005. p. 389‑416.

Successful Management of Dowling-Degos Disease with Combination of Q-switched Nd: YAG and Fractional Carbon Dioxide Laser

Dear Editor,

Dowling-Degos disease (DDD) is a rare, inherited disorder characterised by numerous, asymptomatic, small, round-pigmented macules over axillae and groins, face, neck, arms and trunk, scattered comedo-like lesions (dark dot follicles) and pitted acneiform scars. Various treatment modalities have been tried without much benefit. We report a case of 19-year-old female with DDD successfully treated with a combination of Q-switched Nd: YAG and fractional carbon dioxide (CO₂) laser.

How to cite this article: Tambe SA, Patil PD, Saple DG, Kulkarni UY. Squamous cell carcinoma of the nail bed: The great mimicker. J Cutan Aesthet Surg 2017;10:59‑60.
© 2017 Journal of Cutaneous and Aesthetic Surgery | Published by Wolters Kluwer - Medknow