

Subungual Squamous Cell Carcinoma: A Case Report

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Abstract

Subungual squamous cell carcinoma is an uncommon condition frequently leading to misdiagnosis because of similarities with a lot of common presentations. Differential diagnosis of subungual SCC should always be

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kept in mind while dealing with non healing ulcers of the nail bed so that early and appropriate intervention can be carried out in these patients.

Introduction

Subungual squamous cell carcinoma is often thought to be an uncommon condition, which frequently leads to delay in diagnosis or misdiagnosis due to similarities in its presentation to other conditions, including pyogenic granuloma, paronychia, onychomycosis, keratoacanthoma, other tumors, warts, or trauma-related injuries (1,2). We are reporting a case of subungual SCC presenting as chronic non healing ulcer.

Case report

A 57-year-old male presented with a non-healing ulcer over the dorsum of the distal phalanx of the left middle finger for 1 year. Patient was painter by occupation. He consulted a local practitioner for the same complaint and underwent nail excision twice within 6 months with a course of oral antibiotics, antifungals and anti-inflammatory drugs but it still recurred. 6 months back patient developed a persistent painful ulcerative lesion over the fingernail involving the dorsum of distal phalanx along with the nail and did not show any improvement with medications. There were no similar lesions elsewhere on the body. The patient did not give a history of diabetes mellitus or hypertension or tuberculosis. Cutaneous examination revealed an extremely tender ulcer of 1.0cm × 0.7cm size over the left middle finger nail bed. (Figure 1) (near here). The floor of the ulcer had ulcerative tissue. There was no evidence of regional lymphadenopathy. Differential diagnosis of SCC, pyoderma gangrenosum and amelanotic melanoma were considered. X-ray of the right middle finger revealed osteophyte at the distal interphalangeal joint with no periosteal reaction or osteomyelitis. Biopsy from the edge and center of the ulcer was suggestive of SCC. The patient was subjected to disarticulation of the distal interphalangeal joint and amputation was done up to the upper part of middle phalanx. Figure 2 shows the postoperative image (near here). The excised tissue revealed microfoci of squamous cell carcinoma on histopathological examination. The patient was followed up for 6 months and there are no signs of recurrence or regional lymphadenopathy.

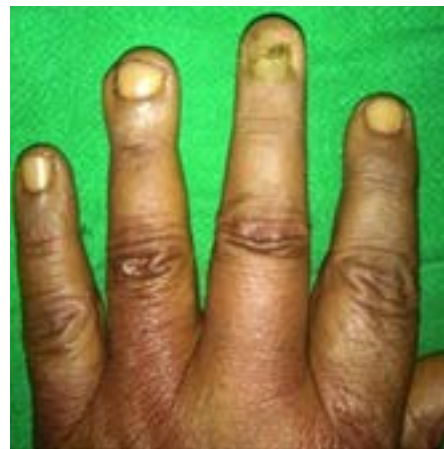


Figure 1 Image showing SCC nail bed.

Figure 2 Post operative image.



typically in the fifth through seventh decades of life. Digits of the hand are involved more often than those of the feet. Typically, one digit is involved; however, some studies have reported on simultaneous involvement of multiple digits (4). The thumb, particularly the distal phalanx, tends to be the most commonly affected digit (5).

Diagnostic confusion emerges because of its uncommon nature and many chronic lesions of the nail bed may be clinically similar to SCC (6). Only about 150 cases of similar condition have been reported in the literature (7). Trauma, chronic paronychia, chronic solar irradiation, X-irradiation, burn scars, arsenic exposure, actinic damage, polycyclic aromatic hydrocarbons, genodermatoses,

Discussion

Subungual SCC runs a slow progression course and may present with minimal symptoms (3). Affected individuals are

immunosuppression and human papillomavirus infection are considered to be the risk factors for the development of SCC (8).

Although SCC of the nail bed is considered a low-grade malignancy, bone invasion and metastasis to the regional lymph nodes may occur but are rare due to lesser lymphatic drainage of these embryologically vestigial organs. Fatal dissemination is only very occasionally reported (9).

Rapidly growing ulcerative lesions should be considered as potential malignancy. Pathological confirmation is necessary for early diagnosis and treatment effectiveness. The presence of pain indicates bone invasion by the tumor, and x-ray is mandatory in these patients to investigate the bone involvement. Given the rarity of the condition, there is no consensus on the optimal treatment. No standardized therapeutic approach is described in SCC, and the choice is selected on the basis of the extension of the tumor and the involvement of the underlying structures. Microscopic surgery and local removal are advised in superficial lesions for the lower recurrence rate, while large excision until amputation are recommended for patients with bone infiltration. The tendency of recurrence is higher in the nail unit than in another part of the body, likely due to residual HPV in the surrounding area or an incomplete excision of the tumor, and for this reason a strict and long follow-up is recommended for SCC.

Conclusion

Subungual SCC resembles a variety of diseases. Physicians need to maintain heightened awareness, and chronic non-healing lesions of the digits should be viewed with suspicion. The prognosis of subungual SCC is very good if it is recognized at an early stage, highlighting the need for early biopsy and appropriate management.

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