

A rare case of squamous cell carcinoma of the index finger's tip with an unusual presentation

Abstract

We present a case of a 69 year old male with a rare Squamous Cell Carcinoma arising in the volar aspect of the distal phalanx of his left index finger, with a bizarre, never reported before, presentation. The patient was a smoker but has denied suffering any thermal burns to his finger tip. His involved finger's intraphalangeal, and metacarpal phalangeal joints were frozen in full extension. His physical exam, serologic, and diagnostic tests failed to demonstrate any metastasis or the presence of HPV.

A ray amputation was done and the surgical site healed uneventfully. Pathology showed moderate poorly differentiated squamous cell carcinoma. No bony involvement was noted.

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Edmond B Cabbabe

Adjunct Professor of Surgery, St Louis University School of Medicine, USA

Correspondence: Edmond B Cabbabe, Adjunct Professor of Surgery, St Louis University School of Medicine, Executive Board Member, the St. Louis Zoo Association, Tel (314)878-5362, Office (314) 842-5885, Email EBCS@aol.com

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Case report

A 69-year-old Caucasian male presented with bizarre looking keratinous formations arising on the volar distal phalanx of his stiff left index finger (Figure 1- Figure 4). The patient also had several other neoplastic lesions of the face, scalp, and trunk.



Figure 1 View of affected index finger.



Figure 2 Another view of the affected finger.

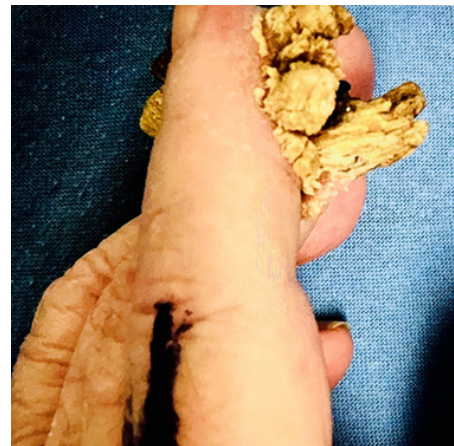


Figure 3 A third view from a different angle.

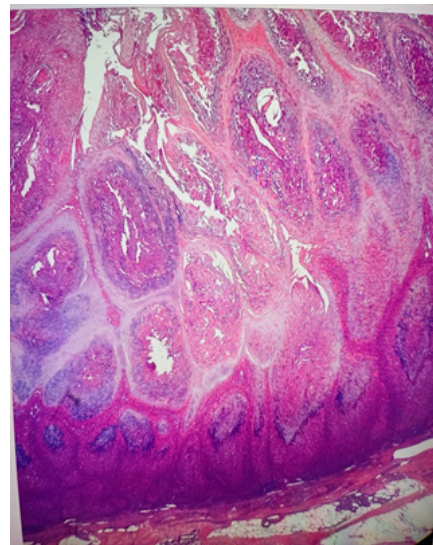


Figure 4 Microscopic view of the tumor

The patient admitted having had the lesion of the finger for several years. Because of the size and shape of the growths, he avoided

using the finger, including flexing its interphalangeal and metacarpal phalangeal joints for a long time, while he continued to use it to hold his cigarettes. The patient was a diabetic type II, and moderately obese. He reported no history of trauma, burn, or chemical injuries to the affected finger. He noted that the growth started as a small non-healing ulcer that grew larger, forming the current giant horns.

His physical exam revealed a smelly lesion with multi giant horns covering the volar distal phalanx. The index interphalangeal joints were severely stiffened. There was no regional lymphadenopathy. Radiologic diagnostic tests showed no evidence of metastatic disease. Following treatment, the gross pathologic exam revealed a 6.7x4.2x2.2 cm tan to brown fungating lesion. The microscopic exam showed a moderate poorly differentiated squamous cell carcinoma with marked hyperkeratosis at the surface. Cords extended down to the superficial dermis. There was no involvement of the underlying phalangeal bone. The surgical margins were free of tumor (Figure 5).

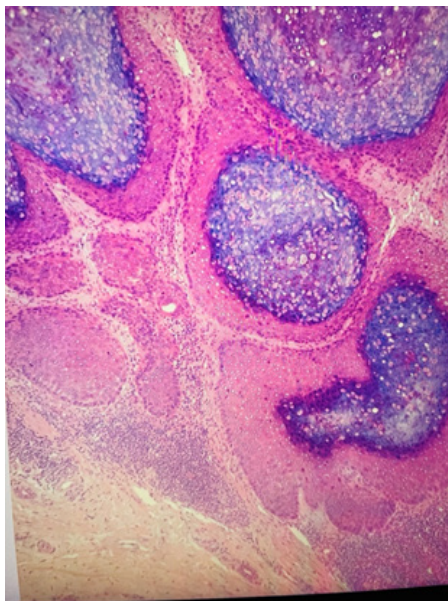


Figure 5 Close up microscopic view showing the skin horns.

Treatment

Given the size and shape of the lesion, a biopsy was not performed. Furthermore, because the digit's joints were stiff, due to non-use, we decided to perform a ray amputation of the left index finger under Regional anesthesia. Healing of the surgical site was un-eventful. Sutures were removed 2 weeks post amputation.

The patient died of complications of cardiopulmonary diseases 18 months later. He had no evidence of recurrence of his tumor locally or distantly at the time of his death.

Discussion

Squamous cell carcinoma (SCC) is the second most common skin malignancy after basal cell carcinoma. It arises when the ultraviolet

radiation and other elements damage the DNA causing abnormal changes in the squamous cells of the skin. The SCC appears in multiple shape and forms in mostly sun exposed areas. If detected early, its destruction and/or excision usually results in no recurrence. The lesions, if left untreated can invade adjacent tissues or spread into regional lymph nodes and distant organs. Patients on immune suppressant drugs and those with fair skin, or exposed to excessive sun light, or use tanning beds are more prone to develop SCCs.

The occurrence of SCC in the hand is rare, and it is even more rarely encountered in the digits of humans.^{1,2,3,4,5,6,7,8} However, it is more prevalent in domestic animals such as dogs and cats' digits.⁹ This case is, by far, the most dramatic and advanced presentation in this rare anatomical location for a SCC.

Acknowledgments

None.

Conflicts of interest

Author declares there is no conflict of interest.

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