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Research

Hypertrophic lichen planus misinterpreted as squamous cell carcinoma

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INTRODUCTION

Hypertrophic lichen planus and squamous cell carcinoma can share similar clinical and histopathological features. For this reason, it can be challenging to differentiate these two entities. Herein, we present a case of hypertrophic lichen planus that was misinterpreted for squamous cell carcinoma for which surgical excision was recommended.

CASE PRESENTATION

A 61-year-old-male with a history of oral lichen planus presented to an outside dermatologist with a one-month history of a hyperkeratotic plaque on his left thumb (Figure 1a). He had no history of skin cancer or excess sun exposure. A shave biopsy was read as squamous cell carcinoma in situ. Before excision was performed, the patient developed several pruritic lesions and came to our clinic for a second opinion. Examination revealed scattered hyperkeratotic papules and plaques on the hands, arms, back, and dorsal feet (Figure 1b-d). A punch biopsy revealed a band-like lymphoid infiltrate at the dermal-epidermal junction, hyperkeratosis, hypergranulosis, and sawtoothing of the rete ridges with destruction of the basal layer (Figure 2). The original biopsy was re-reviewed and was found to be consistent with hypertrophic lichen planus. The patient was diagnosed with hypertrophic lichen planus. High-potency topical steroids were initiated with improvement in appearance of all lesions.

DISCUSSION

In the literature, at least 5 cases have been reported of hypertrophic lichen planus mistaken for squamous cell carcinoma. Hypertrophic lichen planus should be considered for any hyperkeratotic, scaly, pruritic plaque on the distal extremities, especially if multiple lesions develop rapidly and there is no history of excess sun exposure or risk factors for squamous cell carcinomas. A deep biopsy should be performed because a superficial biopsy may exclude a sufficient portion of the dermis to differentiate malignancy from pseudoepitheliomatous hyperplasia associated with inflammation. Moreover, it is important to avoid unnecessary cutaneous surgery in a patient with hypertrophic lichen planus given the susceptibility for koebnerization within surgical scars.

DISCUSSION (continued)

Hypertrophic lichen planus may rarely undergo malignant transformation. Patients with squamous cell carcinoma arising in hypertrophic lichen planus tend to present in longstanding nonhealing ulcers and hypertrophic lichen planus of long duration. The average time reported between the diagnosis of hypertrophic lichen planus and development of squamous cell carcinoma is 11 to 12 years.

CONCLUSION

This case highlights the role of the dermatologist in integrating the clinical and pathologic findings to promote appropriate and prompt treatment for patients. In a patient with multiple, simultaneous, biopsy-proven squamous neoplasms, a possible underlying diagnosis should be reviewed before any definitive treatment is performed.

Figure 1: Hyperkeratotic plaques on hands and feet

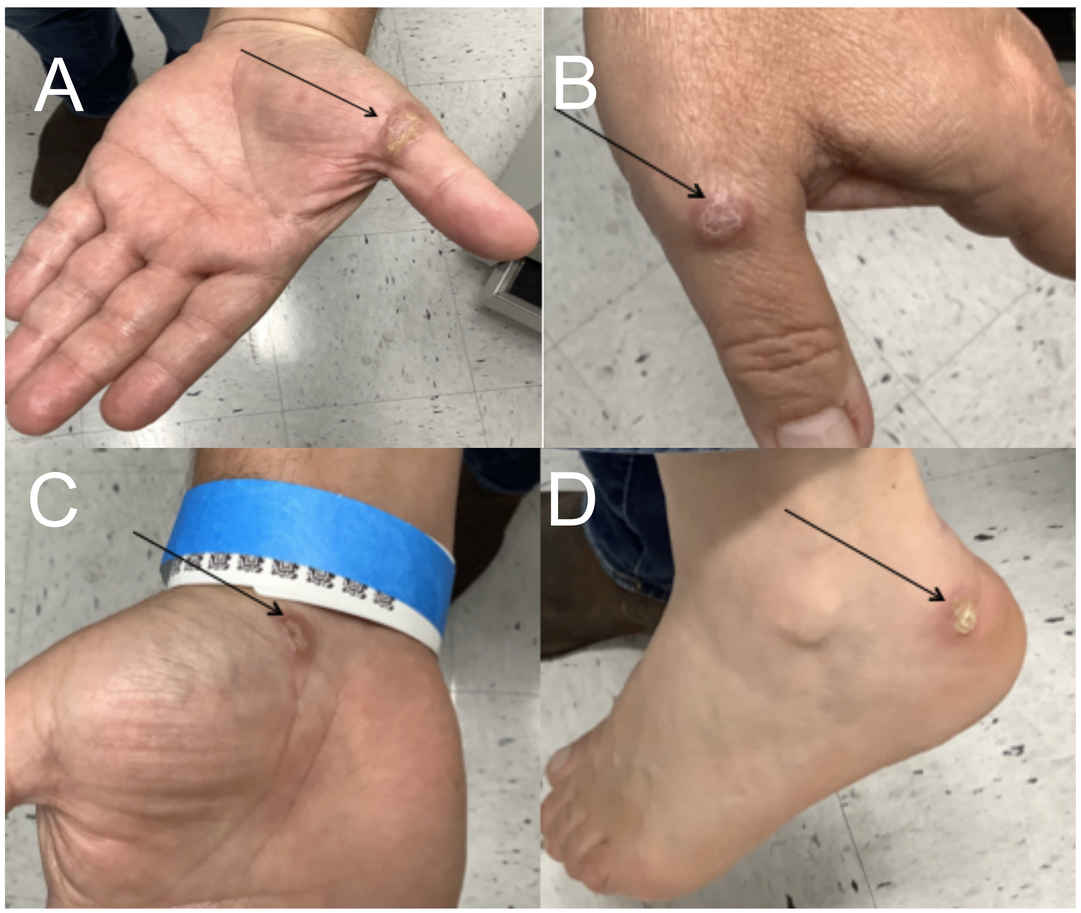

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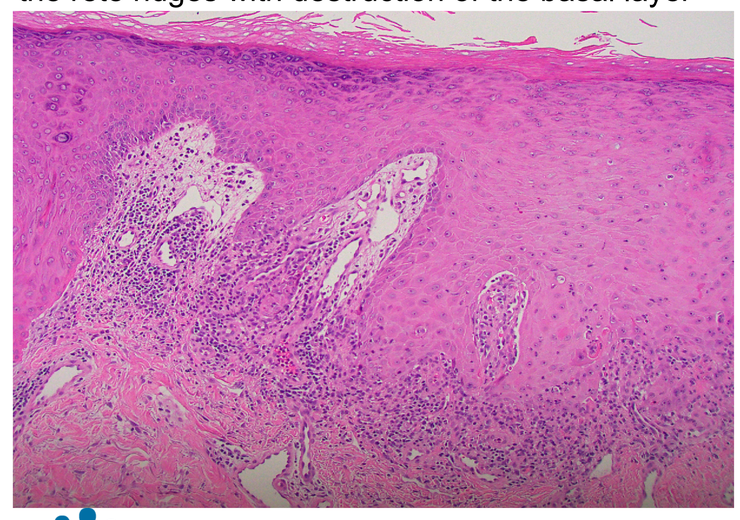
Figure 2: Punch biopsy reveals a band-like lymphoid infiltrate at the dermal-epidermal junction, hyperkeratosis, hypergranulosis, and sawtoothing of the rete ridges with destruction of the basal layer



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