

## E-CASE FOR DIAGNOSIS

### A Refractory Periungual Lesion<sup>☆</sup>



### Lesión periungual resistente a tratamiento

#### Case History

An 87-year-old man with no relevant medical history sought care for an asymptomatic 2-month-old lesion on the first toe of his right foot. Paronychia was first suspected and a topical antibiotic was prescribed. When the lesion did not respond, a biopsy was performed to rule out Bowen disease.

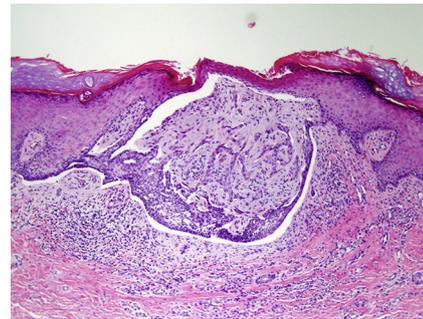


Figure 2 Hematoxylin-eosin, ×10.

#### Physical Examination

An erythematous, scaly plaque was found proximal to the nail fold of the first toe. There were small points of erosion and crusts on the surface (Fig. 1).

#### Histopathology

Histology demonstrated several points of proliferation of basaloid cells in the papillary dermis and a retracted stroma. The adjacent dermis contained an infiltrate of lymphocytes and histiocytes (Fig. 2).



Figure 1



Figure 3

What Is Your Diagnosis?

<sup>☆</sup> Please cite this article as: Boix-Vilanova J, Izquierdo-Herce N, del Pozo LJ. A Refractory Periungual Lesion. Actas Dermosifiliogr. 2019;110:e9–e10.

## Diagnosis

The definitive diagnosis was multifocal basal cell carcinoma (BCC).

## Clinical Course and Treatment

The BCC was excised by deferred Mohs surgery, and the defect was reconstructed using a partial skin graft (Fig. 3).

## Comment

BCCs, which are usually found on the head and trunk, are seen less often on the dorsal surface of the hands and even less often on the dorsal surface of the feet.<sup>1</sup> The pathogenesis of BCC is complex and many risk factors have been described, among them exposure to UV light.<sup>2</sup> One theory holds that the number of sebaceous glands per square millimeter of skin is relevant. This theory has been invoked to account for a higher incidence of BCC on areas of the face where more of these glands are located (beard, cheeks, nose, or forehead) and where UV light exposure is also high.<sup>3</sup> The incidence is much lower in areas where there are fewer sebaceous glands such as the dorsal surface of the foot.

Only 17 cases of BCC have been reported on the dorsum of the foot. Eleven of the 17 were on the toes and all 11 involved the nail or surrounding skin.<sup>2,4</sup> A possible explanation for this finding would be a common embryonic origin of the nail matrix and hair follicles, which would theoretically give rise to cells of the pilosebaceous units.<sup>5</sup>

BCCs involving the nail such as we saw in this case have sometimes been treated with micrographic Mohs surgery, which better preserves the tissue and function of the toe while also guaranteeing complete excision of the tumor.<sup>2,4,6</sup>

We wish to emphasize that BCCs are rare in acral locations, that refractory lesions should be biopsied, and that Mohs surgery is indicated when carcinoma affects the nail.

## Conflicts of Interest

The authors declare that they have no conflicts of interest.

## References

1. Scrivener Y, Grosshans E, Cribier B. Variations of basal cell carcinomas according to gender, age, location and histopathological subtype. *Br J Dermatol.* 2002;147:41–7.
2. Loh TY, Rubin AG, Jiang SI. Basal Cell Carcinoma of the Dorsal Foot: An Update and Comprehensive Review of the Literature. *Dermatol Surg.* 2017;43:32–9.
3. Graham PG, MCGavran MH. Basal-Cell Carcinomas and Sebaceous Glands. *Cancer.* 1964;17:803–6.
4. Loh TY, Rubin AG, Brian Jiang SI. Basal Cell Carcinoma of the Dorsal Hand: An Update and Comprehensive Review of the Literature. *Dermatol Surg.* 2016;42:464–70.
5. Verkouteren JA, Ramdas KH, Wakkee M, Nijsten T. Epidemiology of basal cell carcinoma: Scholarly review. *Br J Dermatol.* 2017;20:1–9.
6. Shimizu I, Cohen PR, Macfarlane DF. Surgical treatment of basal cell carcinoma of the nail unit. *Int J Dermatol.* 2013;52:996–8.

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28 May 2017 7 October 2017