Neutrophilic dermatosis of the dorsal hands in a Mexican woman☆

Dear Editor,

A 46-year-old woman presented to our outpatient dermatology clinic with a one-month history of two spontaneous symmetric painful large plaques on the dorsal and palmar surfaces of her hands. On examination, we found two 5–8 cm wide plaques with an erythematous central surface, surrounded by a pale bullous halo and a purplish erythematous rim (Fig. 1). Past medical history was positive for chronic kidney disease treated with sodium bicarbonate and hydrochlorothiazide awaiting hemodialysis, and type 2 diabetes mellitus treated with pioglitazone. No previous trauma was informed, and no other treatments were previously applied. A biopsy of the lesion revealed an epidermal ulcer with leukocytoclastic vasculitis as well as a rich neutrophilic and lymphocyte infiltrate (Fig. 2).

Neutrophilic Dermatosis of the Dorsal Hands (NDDH) is a rare variant of a neutrophilic dermatosis such as pyoderma gangrenosum and Sweet Syndrome.[1] Few cases have been reported in the literature so far, and cutaneous involvement of the palms is seldomly described despite the radial dorsal surface of the hands as the most affected location, especially in the area between the thumb and index finger.[2,3] NDDH is characterized by erythematous plaques, bullae, pustules, and nodules that might present necrosis and ulceration, with progressive growth in a small period.[4]

A recent review of 123 cases of NDDH, showed a female predominance in 58% with a unilateral distribution in 78% and a mean age of 62 years. Due to its inflammatory pattern, serological studies may present leukocytosis (56.5%) and neutrophilia (83%) and mimic a soft skin tissue infection. Besides the latter, the differential diagnosis includes pyoderma gangrenosum, Sweet syndrome, and erythema elevatum diutinum.[3,4]

The histological presence of an intense neutrophil infiltrate through the dermis with associated edema is considered an indicator of neutrophilic dermatosis. Other findings such as leukocytoclastic vasculitis may be found in the early stages of the disease due to endothelial damage but should not be considered as a criterion for making the diagnosis.

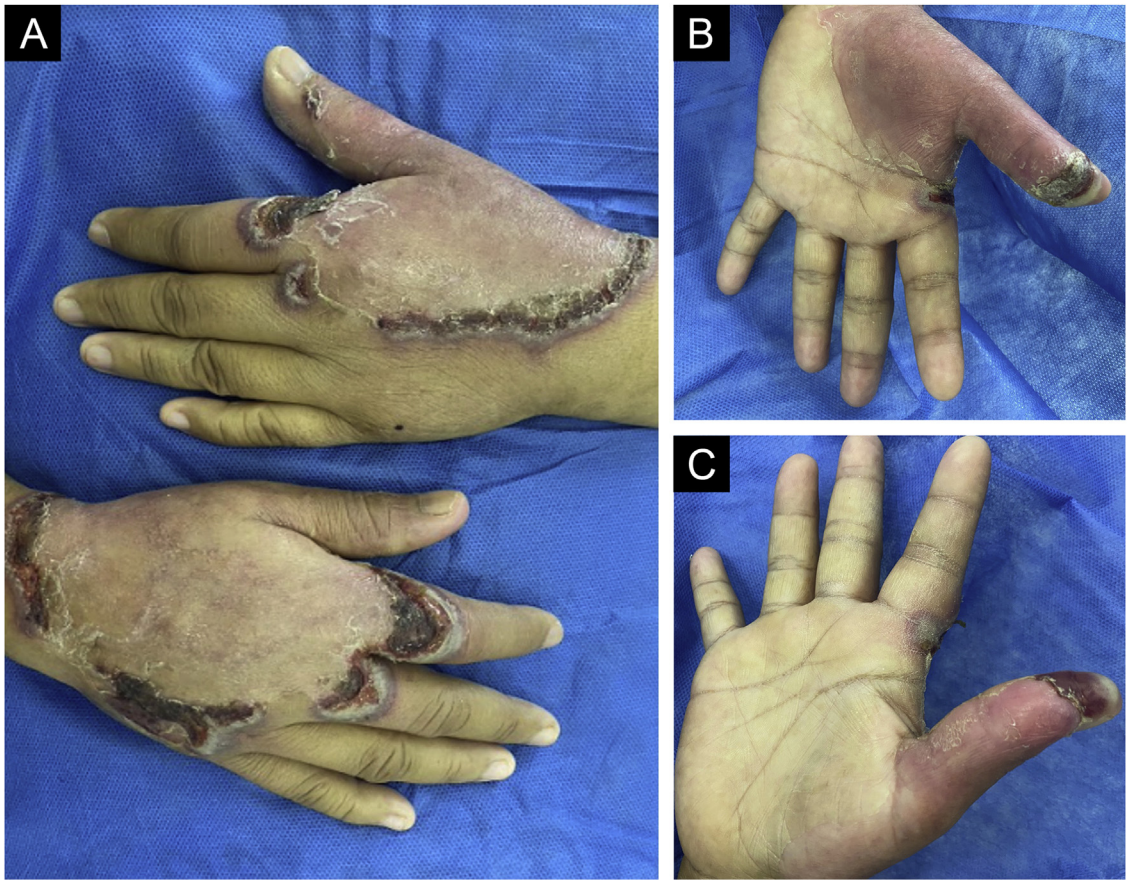

Fig. 1 (A) Bilateral symmetric plaques on the dorsal surface of the hands with peripheral bullous halo, crusts, and a purplish erythematous rim. (B–C) Palmar erythema with purplish bullous lesions on the thumbs.

☆ Study conducted at the The Dermatology Center of Yucatán, Mérida, Mexico.

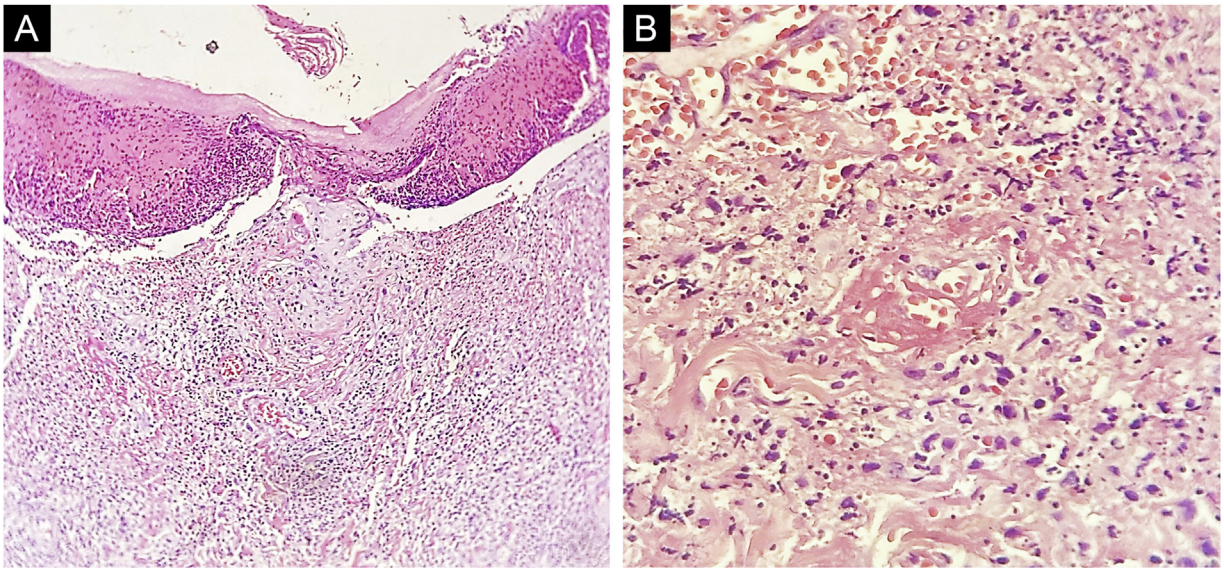

Fig. 2 (A) Ulceration with entire epidermal necrosis (Hematoxylin & eosin, ×100). (B) Close-up view of the intense inflammatory infiltrate of neutrophils and lymphocytes with vasculitis through the dermis (Hematoxylin & eosin, ×400).

The pathogenesis of NDDH is not completely understood. Some authors have suggested trauma as a potential trigger and as with other neutrophilic dermatoses, multiple systemic associations have been described. Specifically, in NDDH, correlation with hematological or solid malignancies, rheumatological conditions, inflammatory bowel disease, and co-morbidities such as diabetes and chronic renal disease as in our patient, among others, should be evaluated.[5]

Although self-resolution might occur, treatment options for NNDH include systemic and topical corticosteroids, oral dapsone, and colchicine.[4,5] Our patient was treated with occlusive clobetasol for two weeks with a complete response. The patient refused to continue an extensive work-up and subsequent follow-up.

Financial support

None declared.

Authors' contributions

Carlos Barrera-Ochoa: The study concept and design; data collection, or analysis and interpretation of data; writing of the manuscript or critical review of important intellectual content; data collection, analysis, and interpretation; effective participation in the research guidance; critical review of the literature; final approval of the final version of the manuscript.

Luis Enrique Cano-Aguilar: Writing of the manuscript or critical review of important intellectual content; data collection, analysis, and interpretation; effective participation in the research guidance; critical review of the literature.

Hector Cantú-Maltos: Writing of the manuscript or critical review of important intellectual content; data collection, analysis, and interpretation.

Héctor Proy-Trujillo: Effective participation in the research guidance; critical review of the literature; final approval of the final version of the manuscript.

Nixma Eljure-López: Effective participation in the research guidance; critical review of the literature; final approval of the final version of the manuscript.

María Elisa Vega-Memije: Critical review of the literature; final approval of the final version of the manuscript.

Conflicts of interest

None declared.

References

1. Fustà-Novell X, Bermejo S, Creus-Vila L. Neutrophilic dermatosis of the dorsal hands. Rev Clin Esp. 2020;S0014-2565, 30056-4.
2. Strutton G, Weedon D, Robertson I. Pustular vasculitis of the hands. J Am Acad Dermatol. 1995;32:192–8.
3. Cheng AMY, Cheng HS, Smith BJ, Stewart DA. Neutrophilic dermatosis of the hands: a review of 17 cases. J Hand Surg Am. 2018;43:185.e1–5.
4. Micallef D, Bonnici M, Pisani D, Boffa MJ. Neutrophilic dermatosis of the dorsal hands: a review of 123 cases. J Am Acad Dermatol. 2023;88:1338–44.
5. Lechien JR, Delplace D, Khalife M, Saussez S. Neutrophilic dermatosis of hands as oncological finding: importance of follow-up. ORL J Otorhinolaryngol Relat Spec. 2021;83:206–8.

Carlos Barrera-Ochoa [a,*], Luis Enrique Cano-Aguilar [a], Hector Cantú-Maltos [b], Hector Proy-Trujillo [c], Nixma Eljure-López [d], María Elisa Vega-Memije [a]

[a] *Department of Dermatology, General Hospital ''Dr Manuel Gea González'', Mexico City, Mexico*
[b] *Department of Dermatopathology, General Hospital ''Dr Manuel Gea González'', Mexico City, Mexico*
[c] *Department of Dermatologic Surgery, Dermatology Center of Yucatán, Mérida, Mexico*
[d] *Department of Dermatology, Dermatology Center of Yucatán, Mérida, Mexico*

* Corresponding author.
E-mail: cabaoch@gmail.com (C. Barrera-Ochoa).

Received 9 November 2022; accepted 23 December 2022
Available online 8 June 2024

https://doi.org/10.1016/j.abd.2022.12.015

Pigmented polypoid basal cell carcinoma: a rare clinicopathological variant*

Dear Editor,

Polypoid basal cell carcinoma (BCC) is a rare entity that is clinically distinct from other BCC subtypes, as it is pedunculated and connected by a stalk to the surface of the skin, and histopathology, exhibits tumor aggregates restricted to the exophytic polypoid area.[1]

A 69-year-old Caucasian man reported a rapidly growing pigmented lesion, about a year ago, on the lateral side of his right leg (Fig. 1), which he associated with local trauma. He denied excessive sun exposure. On dermatological examination, he had a tumor with an erythematous and shiny surface in the center, and pigmented on the periphery, measuring 40 mm in its largest diameter, pedunculated, translucinescent and of fibrous consistency (Fig. 2A). Dermoscopy showed large blue-gray ovoid nests on the periphery of the lesion and short white lines (chrysalises) across the entire surface, but without arboriform telangiectasias (Fig. 2B). There were no lymph node enlargements. Following excision, histopathology showed, in a panoramic view, a polypoid tumor consisting of basaloid neoplastic aggregations with peripheral palisading, varying in size, shape and pigment distribution, limites to the upper and middle part of the polyp (Fig. 3; Fig. 4A-B). The immunohistochemical markers Melan-A and HMB45 were negative. It was concluded that it was a nodular, cribriform, cystic, pigmented basal cell carcinoma with free surgical margins. The option for closure by secondary intention until diagnostic confirmation resulted in good evolution, with no signs of recurrence or metastasis up to three months of follow-up.

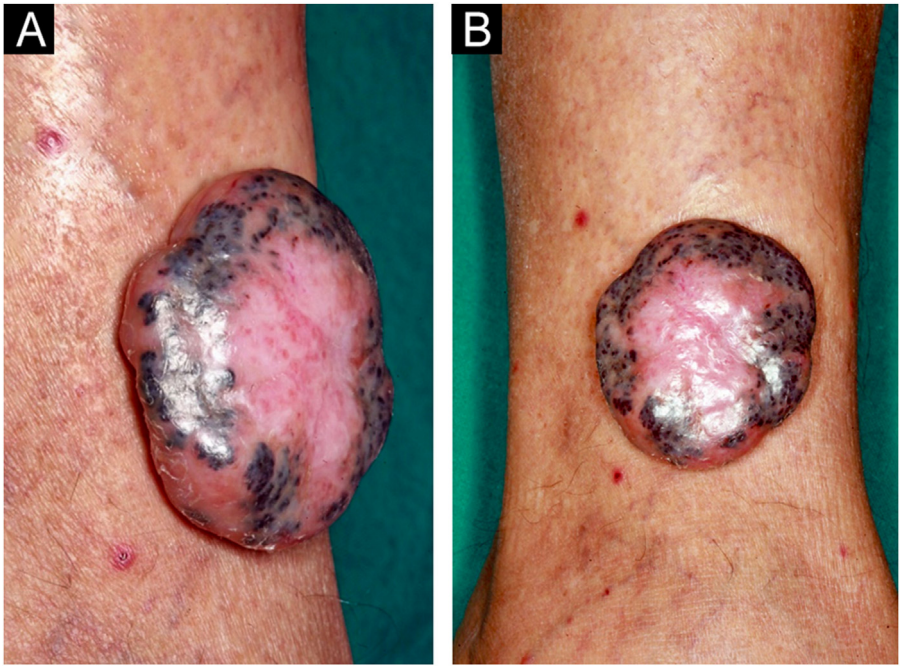

Figure 1 (A–B) Lateral and frontal view of the exophytic pedunculated tumor, 40-mm in its largest diameter, showing an erythematous, shiny, pearly surface, and pigmented areas on the periphery.

* Study conducted at the Hospital das Clínicas, Ribeirão Preto Faculty of Medicine, Universidade de São Paulo, Ribeirão Preto, SP, Brazil.