



Neutrophilic Dermatositis of the Palms in Association with Myelodysplastic Syndrome

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Dear Editor:

Neutrophilic dermatosis of the hands (NDH), a recently described condition, is a variant of Sweet's syndrome confined to the hands. NDH is characterized by erythematous, edematous plaques with a violaceous border that occur mostly on the hands¹. NDH is classified as neutrophilic dermatosis of the palms (NDP) and dorsal hands (NDDH). NDDH, but not NDP, is known to be strongly associated with malignant diseases. We report a case of NDP associated with myelodysplastic syndrome.

A 67-year-old woman with myelodysplastic syndrome presented to our clinic with an erythematous swollen patch on the right palm, which had persisted for 2 weeks. An initial solitary erythematous papule had progressed to the swollen patch with time. The patient experienced spontaneous pain and tenderness. She was undergoing cyclic chemotherapy with azacitidine for the myelodysplastic syndrome. Physical examination showed an erythematous swollen patch on the ulnar side of the right palm (Fig. 1A). Fever, arthralgia, or generalised malaise was not observed at presentation. Incision and drainage were performed under the clinical impression of a bacterial abscess, but no purulent discharge was observed. Histopathological findings showed an intraepithelial abscess and necrotic debris

infiltrated by inflammatory cells mainly composed of polymorphonuclear neutrophils (Fig. 2A, B).

The patient was diagnosed as NDP with myelodysplastic syndrome and treated with systemic steroids. The dosages

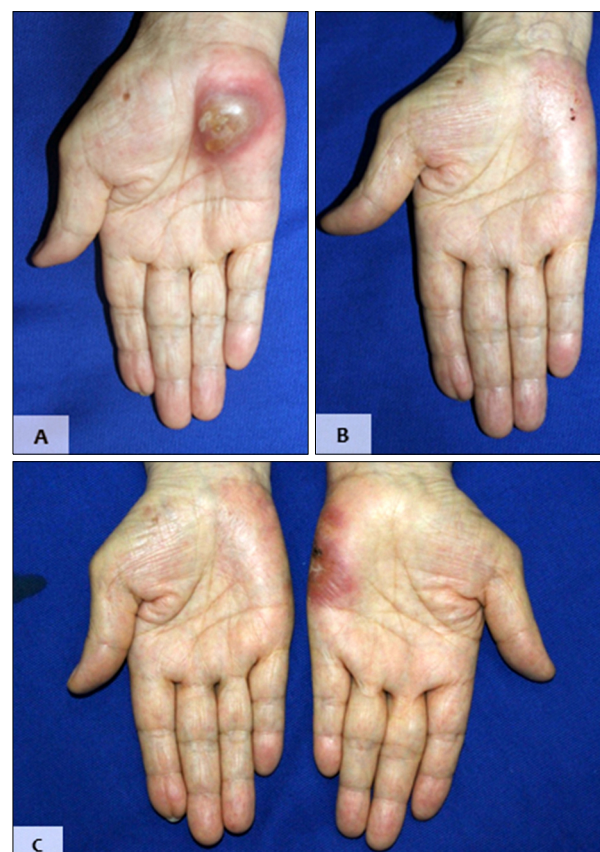


Fig. 1. Neutrophilic dermatosis of the palms (NDP). (A) Physical examination showed a erythematous swollen patch containing purulent content on the ulnar side of right palm. (B) Erythematous swollen patch on right palm was improved after use of systemic steroids. (C) The lesion recurred on the opposite left palm after 5 months of initial onset.

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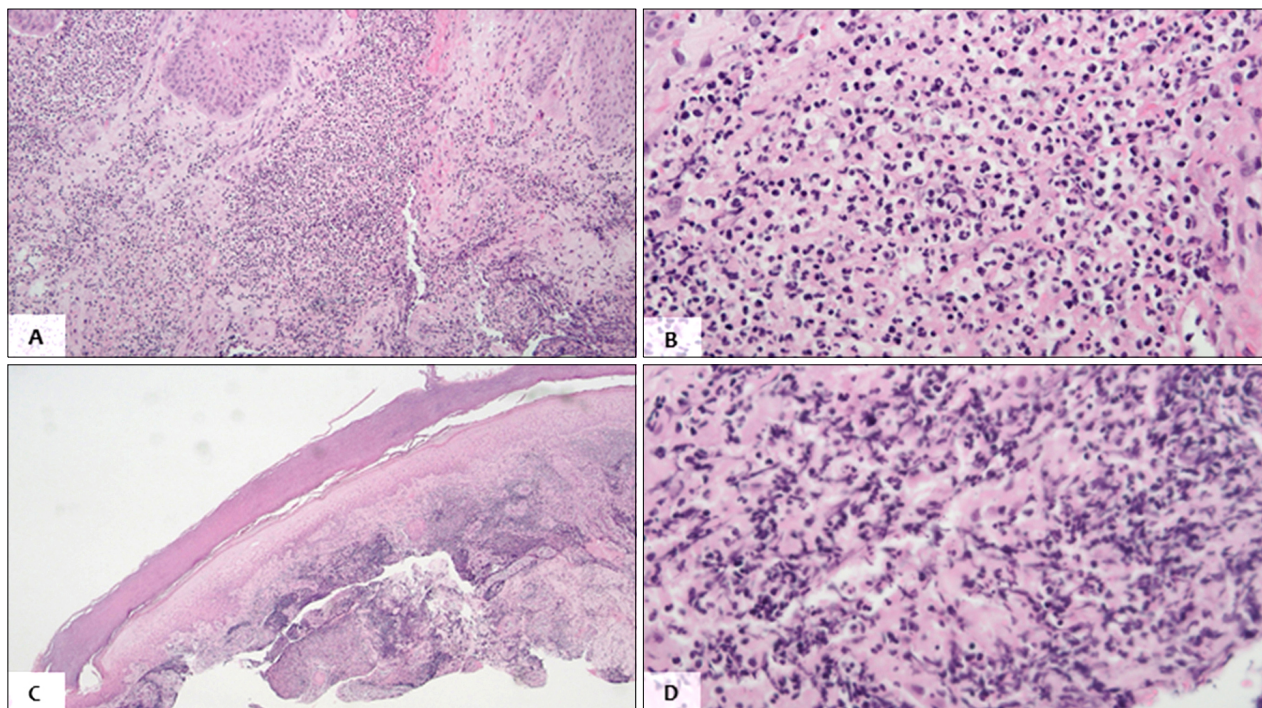


Fig. 2. Intraepithelial abscess and necrotic debris infiltrated by inflammatory cells mainly composed of polymorphonuclear neutrophils were observed in histopathologic finding. Initial visit (A, B). Recurred lesion after 5 months of initial onset (C, D).

used were dexamethasone 5 mg per day by intramuscular injection for 3 days, followed by per oral methylprednisolone 16 mg daily tapered to 4 mg over 2 months. The erythematous patch on the right palm improved over 2 months (Fig. 1B). A lesion occurred on the left palm 5 months after the initial onset (Fig. 1C). Biopsy of the newly formed erythematous patch showed evidence of NDP (Fig. 2C, D). The clinical course showed steroid-dependant pattern during the total follow-up period of 8 months.

NDP usually clinically manifests as an erythematous patch and rarely shows features of histopathological vasculitis. In contrast, NDDH clinically manifests as pustules and bullae. In a previous study, 3 patients with NDDH had pathologic findings of pustular vasculitis². Another study suggested that differences in vasculitic features such as swollen endothelial cells, dilated small blood vessels, and fragmented cell nuclei between patients with NDP and those with NDDH may be associated with differences in the pathogenesis of these conditions³. However, the detailed mechanisms are not yet clear.

NDDH, but not NDP, is known to be strongly associated with malignant diseases such as lung cancer, laryngeal cancer, and myelodysplastic syndrome⁴. However, no case of malignancy-associated NDP has yet been reported. Cytokines may play a role in the relationship between hematologic diseases, such as myelodysplastic syndrome

and acute myeloid leukemia, and Sweet's syndrome. Hematologic diseases cause increases in interleukin (IL)-1 levels, which affect granulocyte-colony stimulating factor (G-CSF) levels. G-CSF recruits main pathogenetic immune function cell of Sweet's syndrome, neutrophils, to the skin via IL-6⁵.

The patient described herein had involvement of both palms, which is concurrent with myelodysplastic syndrome. To our knowledge, this is the first case to show an association between NDP and myelodysplastic syndrome. Moreover, this case is unique in that the patient with NDP showed clinicopathological characteristics of NDDH, such as an erythematous swollen patch, pustular plaque (clinical finding), and vasculitic features (histopathological finding). As NDH has been reported rarely, further studies are still needed to determine the exact mechanism, clinical classification, and clinical prognosis or comorbidity of NDH.

CONFLICTS OF INTEREST

The authors have nothing to disclose.

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Fibro-Osseous Pseudotumor of the Digit Presenting as an Enlarging Erythematous Subungual Nodule

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Dear Editor:

A 27-year-old man presented with a tender nodule on the distal aspect of the right third toe, slowly growing in size over a 2-month period. He had a history of trauma in the right third toe during exercise two months prior to his visit. Initially, the nodule was soft in consistency but with time enlarged in size and became hard. An examination

revealed an erythematous, eroded, hard mobile nodule measuring 0.5×0.5 cm in size (Fig. 1). The initial clinical suspicion was that it was a viral wart; thus, a punch biopsy was done. Microscopic examination showed the lesion was multinodular with irregular margins in the dermis. The nodules consisted of a mixture of fibroblasts, mixoid matrix, and focal deposits of osteoid with irregularly distributed osteoblasts (Fig. 2A). The osseous trabeculae were

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Fig. 1. A solitary, tender, and reddish nodule on the right third toe.