Neutrophilic Eccrine Hidradenitis in a Healthy Woman

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2 days duration. The patient had received no drugs and was in good health. Physical examination revealed painful edematous red plaques on the plantar areas, suggesting chilblains. The skin lesions resolved without sequelae within 3 weeks. The histologic examination revealed a superficial and deep inflammatory infiltrate in the dermis predominantly composed of neutrophils. The heavy infiltrate surrounded the eccrine coil and the dermal eccrine ducts and occasionally reached the acrosyringium (fig. 1). Necrosis and vacuolar degeneration of eccrine coil cells were also noted (fig. 2). Focal abscesslike accumulations of neutrophils were found both in the superficial and the deep parts of the dermis. Vessels were occasionally surrounded by neutrophils, but endothelial ne-

Fig. 1. NEH: an infiltrate predominantly of neutrophils is seen around the eccrine coil, the dermal eccrine ducts and reaching the acrosyringium.

Neutrophilic eccrine hidradenitis (NEH) has been described in patients receiving chemotherapy [1-4]. To the best of our knowledge, we report the second case of NEH in an otherwise healthy individual.

A 23-year-old Hispanic waitress was hospitalized for evaluation of slight tender skin lesions on the plantar regions of both feet of

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Fig. 2. Necrosis . - ,◆», **, and vacuolar , ^{3/8} , . .« ‘ changes of the eccrine coils.

crosis, fibrinoid deposition or leukocytoclasia were regularly absent. Special stains for fungi and bacteria were negative.

Physical and laboratory examination, including complete blood cell count, platelet count, urinalysis, test for HIV antibody and chest x-ray film, revealed no abnormalities. At a follow-up examination after 6 months, the patient was well without recurrent skin lesions or any systemic symptoms.

NEH is a rare but well-documented disorder whose nature and pathogenesis are unclear. The histologic picture is the most characteristic and distinctive feature of NEH. Although the pronounced tissue neutrophilia and the abscess-like accumulations of neutrophils may be suggestive of other neutrophilic disorders, the marked eccrine tropism

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and the presence of variable damage of eccrine epithelium rules them out. In addition, the absence of leukocytoclasia and signs of vasculitis will support the diagnosis.

In most patients the dermatitis was associated with different malignancies usually occurring under chemotherapy [4]. It was suggested that the disorder pertains to the spectrum of neutrophilic dermatoses observed in patients with malignancies or is a toxic reaction to chemotherapy. Interestingly, our patient, who remained standing for a long time, developed the lesions of NEH exclusively on the plantar surfaces. This finding can suggest that NEH could be attributable to a mechanical event on the eccrine gland. Moreover, the recent report of NEH observed in patients

without malignancy [5-7], the rarity of recurrence of the lesions and the heterogeneity of conditions in which the disease develops, suggest that NEH is probably underestimated and may represent an altered inflammatory response to nonspecific stimuli.

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