

CASE REPORT

Infectious Eccrine Hidradenitis: A Report of 3 Cases and a Review of the Literature

J. Bassas-Vila^{a,*}, M.T. Fernández-Figueras^b, J. Romaní^c, C. Ferrándiz^a

^a Department of Dermatology, Hospital Universitari Germans Trias i Pujol, Badalona, Autonomous University of Barcelona, Spain

^b Department of Pathology, Hospital Universitari Germans Trias i Pujol, Badalona, Autonomous University of Barcelona, Spain

^c Department of Dermatology, Consorci Sanitari Parc Tauli, Sabadell, Autonomous University of Barcelona, Spain

KEYWORDS	Abstract Neutrophilic eccrine hidradenitis (NEH) is a nonspecific clinicopathological reaction pattern, classified as a neutrophilic dermatosis, that usually develops in patients receiving chemotherapy for a hematologic malignancy. More rarely, it has been reported in association with infectious agents such as <i>Serratia</i> and <i>Enterobacter</i> species, <i>Staphylococcus aureus</i> , and human immunodeficiency virus.
Infectious;	We describe 3 cases of infectious eccrine hidradenitis secondary to infection with <i>Nocardia</i> species, <i>Mycobacterium chelonae</i> , and <i>S aureus</i> .
Eccrine hidradenitis;	Histological findings revealed a dense infiltrate with perivascular and periductal neutrophils in the dermis. In the eccrine glands, there was vacuolar degeneration and necrosis of the epithelial cells.
Sweat gland	Our cases support the assertion that NEH is a characteristic cutaneous response to nonspecific stimuli. Clinical and histopathological findings of infectious and noninfectious association must be investigated by skin tissue culture. In this article we also discuss differential diagnoses and review the literature.
PALABRAS CLAVE Infeccioso; Hidradenitis ecrina; Glándula sudorípara	 Hidradenitis ecrina infecciosa: Descripción de 3 casos y revisión de la literatura Resumen La hidradenitis ecrina neutrofílica (HEN) es un patrón de reacción clínico-patológico inespecífico, que se ha clasificado como una dermatosis neutrofílica. Normalemente se ha descrito asociada a una enfermedad hematológica maligna. En algunas ocasiones se ha publicado la hidradenitis ecrina neutrofílica asociada a un microorganismo como Serratia, Enterobacter, Staphylococcus y VIH. Nosotros describimos 3 casos de hidradenitis ecrina infecciosa secundarias a infecciones por Nocardia, Mycobacterium chelonae y Staphylococcus aureus. Las biopsias mostraron un denso infiltrado perivascular y periductal de neutrófilos en la dermis. En las glándulas ecrinas se apreciaba degeneración vacuolar y necrosis de las células epiteliales, predominantemente en la porción secretora.

* Corresponding author.

E-mail address: julibassas@gmail.com (J. Bassas-Vila).

 $0001\mathchar`{10}\$ - see front matter @ 2012 Elsevier España, S.L. and AEDV. All rights reserved. http://dx.doi.org/10.1016/j.ad.2013.04.016



Nuestros casos apoyan que la HEN es una respuesta cutánea característica a un estímulo inespecífico. Los hallazgos clínicos e histopatológicos de la HEN infecciosa o no infecciosa son generalmente indistinguibles. Cuando se considera un caso de HEN se debería investigar la posibilidad de una causa infecciosa y realizar un cultivo.

En este artículo hemos revisado los diagnósticos diferenciales clínicos e histopatológicos y la literatura publicada de esta entidad.

© 2012 Elsevier España, S.L. and AEDV. Todos los derechos reservados.

Introduction

Neutrophilic eccrine hidradenitis (NEH) is a rare but distinctive condition, first described by Harrist et al.¹ in 1982. It typically occurs in patients undergoing chemotherapy for malignant disease. It is an inflammatory dermatosis characterized by a neutrophilic infiltrate around and within the eccrine glands. There have also been very rare reports of NEH caused by infection, a condition that has been called infectious eccrine hidradenitis (IEH). Only 6 reports documenting the presence of an infectious pathogen at the site of the skin eruption have been reported in NEH,²⁻⁷ and there has also been a report of a case associated with streptococcal infectious endocarditis.⁸

This article describes the clinical and histopathological findings of 3 cases of IEH that add strength to the hypothesis that NEH is a clinicopathological reaction pattern caused by different factors.

Three cases of histologically confirmed NEH with an infectious origin were retrieved from our files. Clinical information was obtained from hospital records or clinicians, or via laboratory request forms. The following data were recorded for each patient when available: age, sex, clinical appearance and location of the lesions, clinical diagnosis, associated diseases, and follow-up. The biopsy samples had been routinely processed (fixed in 4% or 10% neutral buffered formalin) and paraffin-embedded material had been cut into $5-\mu$ m-thick sections and examined with hematoxylin–eosin, Ziehl-Neelsen, and Gram stains.

Case Descriptions

Patient 1, an 82-year-old man with disseminated nocardiosis involving the skin and the central nervous system, developed papular and nodular erythematous lesions on his arms, thighs, and ankles. Some of the lesions oozed a purulent exudate. The histopathological features were consistent with NEH and *Nocardia* species was isolated following culture of exudate. After diagnosis, despite specific antibiotic treatment, the patient's condition worsened, with progressive central nervous system impairment, and he died.

Patient 2 was a 37-year-old man with human immunodeficiency virus (HIV) infection, type 2 diabetes mellitus, and Burkitt lymphoma in complete remission (nonrecent chemotherapy). He had multiple crops of papules on the legs and soles of the feet (Fig. 1), histopathological findings consistent with NEH, and a positive lesion culture for *Mycobacterium chelonae*. The recurrent skin lesions



Figure 1 Case 2. Detail of erythematous papules.

disappeared after 12 months of treatment with clarithromycin, ciprofloxacin, and cotrimoxazole. There have been no known recurrences.

Patient 3 was a previously healthy 57-year-old man with concomitant endocarditis and meningitis. He developed papules on the abdominal skin and had histopathologic findings of NEH and a lesion culture that was positive for *Staphylococcus aureus*. He died of septic complications.

Table 1 summarizes the clinical data of the 3 patients and the cases described in the literature.

Histopathological Findings

Punch biopsies and microscopic examination revealed similar features in the 3 cases. The epidermis was essentially normal. There was a dense perivascular and periductal infiltrate of neutrophils in the dermis with duct infiltration. In the eccrine glands, there was vacuolar degeneration and necrosis of the epithelial cells, predominantly in the secretory portion. Microabscess formation was also seen in this portion (Figs. 2 and 3). Vascular damage adjacent to neutrophilic abscesses was identified in patients 1 and 2. Ziehl-Neelsen and Gram staining revealed branching, beaded, filamentous, gram-positive bacteria with morphologic features of Nocardia species in patient 1 and gram-positive cocci in the lumen of the eccrine sweat gland coil in patient 3. In addition, tissue culture confirmed the presence of Nocardia species in patient 1, M. chelonae in patient 2, and S. aureus in patient 3.

Download English Version:

https://daneshyari.com/en/article/3179938

Download Persian Version:

https://daneshyari.com/article/3179938

Daneshyari.com