

CASE IMAGE

Chronic recurrent annular neutrophilic dermatosis: A rare entity

Linda Manaa¹  | Mouna Korbi¹  | Manel Njima² | Hayet Akkari¹ | Yosra Soua¹ | Hichem Belhadjali¹ | Jameleddine Zili¹

¹Dermatology Department, Fattouma Bourguiba University Hospital, University of Monastir, Monastir, Tunisia

²Anatomopathology Department, Fattouma Bourguiba University Hospital, University of Monastir, Monastir, Tunisia

Correspondence

Linda Manaa, Dermatology Department, Fattouma Bourguiba University Hospital, University of Monastir, 5000 Monastir, Tunisia.
Email: Linda.manaa6@gmail.com

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Abstract

We report a new case of chronic recurrent annular neutrophilic dermatosis in a woman. Through our observation, we aim to make the clinician aware of this rare entity, in order to consider it among the diagnostic hypotheses of annular dermatosis, with centrifugal, recurrent, and chronic evolution.

KEYWORDS

annular dermatosis, dermatology, neutrophilic dermatosis, sweet's syndrome

1 | CASE PRESENTATION

A 50-year-old woman presented with recurrent annular plaques on the forearms, evolving for 2 years. On dermatological examination, we found erythematous-edematous painful and infiltrated plaques with centrifugal extension and fine central scales on the forearms (Figure 1). The patient had no fever. The rest of physical examination was normal. The blood tests were within normal levels. The skin biopsy confirmed the diagnosis of Sweet syndrome, showing edema in the superficial dermis and dense inflammatory infiltrate of neutrophils without associated vasculitis (Figure 2). The patient was treated with high-level topical corticosteroids resulting in progressive regression of the lesions, within one week. During 8 years of follow-up, the patient continued to have one recurrence, each year, of the same skin lesions (Figure 3), located



FIGURE 1 Infiltrated erythematous-edematous plaque on the forearm with centrifugal extension

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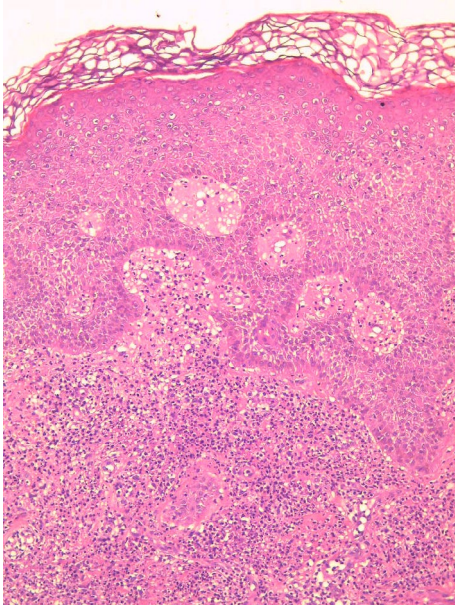


FIGURE 2 Papillary dermal edema with dense neutrophilic infiltrate without vasculitis (Hematoxylin–eosin stain $\times 100$)



FIGURE 3 Recurrence of the annular skin lesions on the forearms

on the forearms, which improved with the same topical treatment.

Our patient had never met the Von Den Driesch criteria defining Sweet syndrome. She had never fever, nor extracutaneous signs nor biological abnormalities. Our case is compatible with an exceptional entity, which is chronic recurrent annular neutrophilic dermatosis. Only ten cases have been reported for more than thirty years, since its first description by Christensen et al.¹ This neutrophilic dermatosis is characterized by the recurrence of annular skin lesions without systemic signs, lack of biological

inflammatory syndrome, histological features of Sweet syndrome, and absence of any underlying pathology.²

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The patient in this manuscript has given written informed consent to the publication of the case details.

CONFLICT OF INTEREST

None.

AUTHOR CONTRIBUTIONS

The authors fulfill the ICMJE Criteria for Authorship and contributed equally. Dr Manaa Linda is the guarantor of the content of the manuscript, including the data and analysis. Dr Korbi Mouna contributed to interpretation of data and revision of the manuscript. Dr Njima Manel contributed to data collection. Dr Akkari Hayet and Dr Soua Yosra contributed to analysis and interpretation of data. Dr Zili Jamaledine and Dr Belhadjali Hichem contributed to final approval of the version of the manuscript to be submitted. Authorship: All authors had access to the data and a role in writing this manuscript.

CONSENT

The patient in this manuscript has given written informed consent to the publication of the case details.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ORCID

Linda Manaa  <https://orcid.org/0000-0002-7645-7774>

Mouna Korbi  <https://orcid.org/0000-0002-9642-3344>

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