

Cutaneus Pseudolymphoma: A Case Report

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Abstract. *The authors report on a case of pseudolymphoma cutis in a 48-year-old man. The clinical and histopathological characteristics of this benign skin disorder, especially regarding the differential diagnosis with cutaneous B or T cell lymphomas, are reviewed. Finally, the use of hydroxychloroquine sulfate is suggested for the therapy of pseudolymphoma cutis, especially when the causal factor is unknown.*

Pseudolymphoma cutis is the term used to indicate a group of skin disorders defined as benign lymphoproliferative reactions that may simulate cutaneous malignant lymphomas clinically and/or histologically (1-3). Clinically, they manifest as solitary livid nodules or plaques, usually on the face of women. They probably represent a response to trauma, insect bites and other undetermined stimuli. Depending on the cause, this lymphocytic infiltrate may consist predominantly of B cells or T cells (4). We report on a case of pseudolymphoma cutis in a 48-year-old man.

Materials and Methods

A 48-year-old man presented in our Department with a 1-year history of livid nodules on the anterior aspect of the neck (Figure 1). Clinically the lesion was symptomatic. There was no sign of cervical adenopathy. Moreover, there was no history of a previous trauma at this site. The diagnosis of benign lymphoproliferative reaction was proposed, based also on the lack of any systemic disease (data not shown). Incisional biopsy was performed to confirm the nature of the lesion.

The incisional biopsy specimen was fixed in 10% buffered-formalin and paraffin-embedded. Sections of 5- μ were stained with haematoxylin-eosin, haematoxylin-van Gieson and PAS-haematoxylin. Other sections were stained with immuno-

histochemical procedure, using avidin-biotin peroxidase complex (ABC) and antibodies specific for CD5, CD10, CD20, CD43, CD45, kappa and lambda light chain (all the reagents were from Dako, Carpinteria, CA, USA).

The patient was treated with hydroxychloroquine sulfate (400 mg/die) for three months and is disease-free at one year of follow-up.

Results

Light microscopic examination revealed a heavy infiltrate in the dermis, separated from the epidermis by a narrow zone of normal collagen. The infiltrate consisted of mature lymphocytes and histiocytes, sometimes disposed in a follicular arrangement; a few mitotic figures were present, as well as an admixture of plasma cells and some eosinophils (Figure 2A). The immunohistochemical analysis revealed that all of the neoplastic cells were positive for CD45, while different groups of neoplastic cells were positive either for CD20 or CD5 and CD43 (Figure 2B and 2C). Finally, most of the cells were alternatively positive for kappa and lambda light chain. The light microscopy and immunohistochemical findings were diagnostic for a pseudolymphoma cutis.

Discussion

We describe here a case of pseudolymphoma cutis on the neck in an adult male (48 years old). The spectrum of cutaneous lymphocytic infiltrates includes a wide variety of clinicopathological entities either of benign or malignant nature, sharing in common the infiltration of the dermis and/or epidermis as the main histopathological feature (1-4). Differentiation between benign lesions, such as pseudolymphoma cutis and malignant lesions such as cutaneous T cell lymphomas or cutaneous B cell lymphomas, may be extremely difficult and should always be based on a combination of clinical and histological data, further facilitated by the use of immunohistochemistry and molecular biology techniques (5). In our case, it was based

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Figure 1. Gross appearance of the lymphocytic infiltrate on the anterior aspect of the neck.

on the pathological examination of the tissue sample guided by immunohistological methods and on the clinical history of the patient.

In fact, the lesion was a solitary asymptomatic nodule and the patient did not present any systemic disease. The morphological and immunoarchitectural features of the lesion were similar to those of reactive lymph nodes, including multiplicity of cell types, formation of lymphoid follicles, vascular proliferation, predominantly perivascular or periadnexal distribution of the infiltrate and epidermal hyperplasia. In particular, the variable positivity of the cells for CD20, CD5 and CD43 suggested the recognition of a follicular arrangement in the presented case.

The therapy of these lesions is based principally on targeting the causal factor, such as withdrawal of the causative drug or administering antiparasitic medication in the case of persistent insect bites. In the case presented, a definite cause was not found and therapy with hydroxychloroquine sulfate was performed (400 mg/die for three months). The use of this drug was based on the fact that it has immunosuppressive activity and has successfully

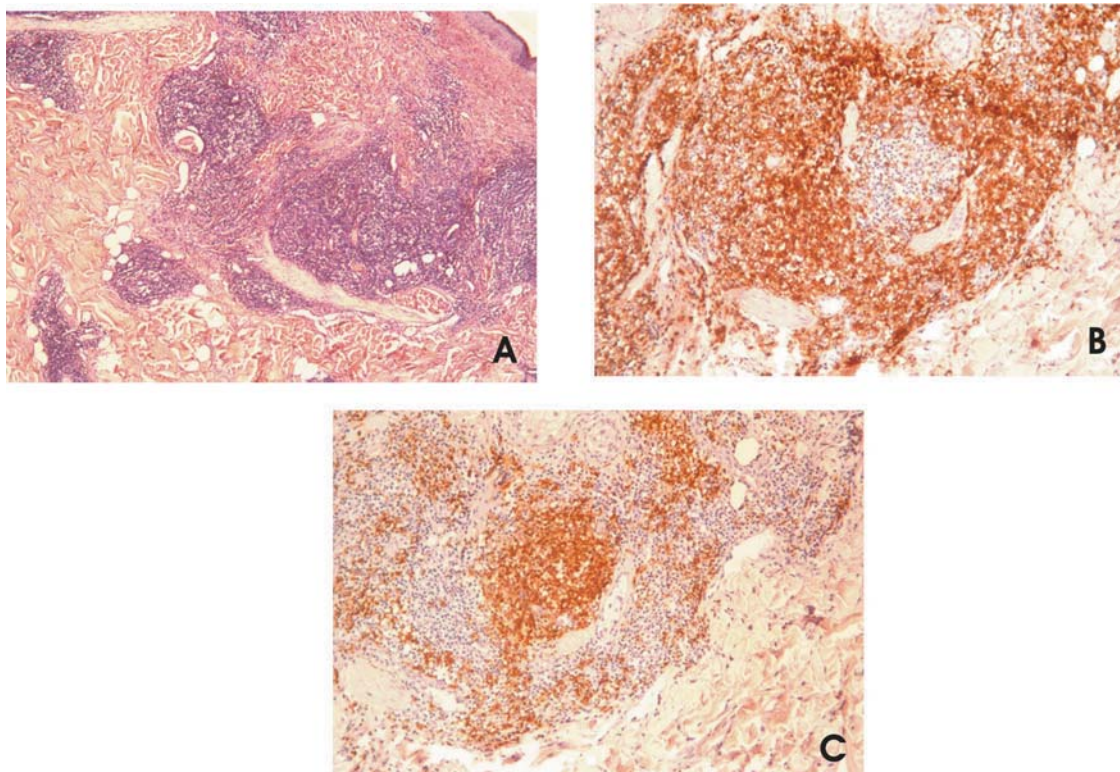


Figure 2. A) Section through the tumour showing that the infiltrate was present in the dermis and separated from the epidermis by a narrow zone of normal collagen. The infiltrate consisted of mature lymphocytes and histiocytes, sometimes in a follicular arrangement. An admixture of plasma cells and eosinophils was also present (HE X 40).

B) Representative immunohistochemical staining for CD20 (ACB X40).

C) Representative immunohistochemical staining for CD5 (ACB X40).

been used for the treatment of lupus erythematosus (6). After one year of follow-up the patient is disease-free. To the best of our knowledge, this is the first report describing a complete resolution of a pseudolymphoma cutis following a therapy based on hydroxychloroquine sulfate.

In conclusion, pseudolymphoma cutis is a benign, lymphocytic infiltrate typically occurring in the sub-cutis of the neck and face, that can resemble a variety of malignant lymphoid tissue tumors. Therefore, careful examination of the clinical setting, as well as of the histopathological characteristics of this kind of lesion, is essential for a correct diagnosis and to avoid unnecessary and often disfiguring surgery. Finally, the use of hydroxychloroquine sulfate is suggested for the therapy of pseudolymphoma cutis, especially when the causal factor is unknown.

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