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Case Report

Cutaneous Pseudolymphoma of B and T Cells: A Case Report

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Abstract

Cutaneous pseudolymphomasre present a benign reactive polyclonall ymphoproliferative process that simulates clinically and histologically cutaneous lymphomas. The objective of this study was to report the case of cutaneous pseudolymphoma to present its differential diagnosis with cutaneously mphomas, and other adnexal tumors. A 14-year-old male patientsought medical care for a historyof a nodule in the supralabial region for 3 months. Physical examination showed an erythematous nodule of 15 mm betweenthe supralabial region and the right nasal vestibule, without associated lymph node enlargement. The anatomo pathological showed a dense lymphohistiocytic in filtrate and intense vascular proliferation, with suppurative foci. The immunohistochemistry favored the diagnosis of cutaneous pseudolymphoma. The differential diagnosis of lymphomas and pseudolymphomasis difficult, both of which manifest as solitary nodules, papules or plaques resulting from lymphocytic infiltration and for this are indicated an atomopathological and immunohistochemical evaluation. The treatmentencompassessurgicalexcision, topical corticosteroid and intralesional cryo therapy, and in many cases there is spontaneous regression.

Introduction

Cutaneous Pseudolymphoma (CPL) is a benign reactive polyclonal lymphoproliferative process, predominantlycomposedof B or T cells [1]. It is a benign inflammatory response, linked to a stimulating antigen, such as bacterial infections, arthropod bite reactions, medications, among others, that mimic a lymphoma [2,3]. It affectsall age groups and clinically presents as a normochromic erythematous nodule, mainly in the face orthorax, although multiple or generalized lesions can also be seen [2]. Differentiating the CPL from lymphomas can be difficult, and it is fundamental to relate the clinical picture to the histopathological and immunohistochemical exams. Considering the importance of this differential diagnosis, the objective of the present study was to report the case of a young patient with cutaneous pseudolymphoma.

Case Report

A previously healthy male patient, 14 years old, complained of a nodule above the mouth 3 months ago. He reported on the appearance of an erythematous papule near the right nasal vestibule, without pruritus, secretory outflow or other associated symptoms. He says that the lesion had grown progressively, making it a painless lump. He was treated in other services during this period with antibiotics that he did not know to inform and attempt to drain, performed in emergency room, without improvement.

At dermatological examination, the patient had an erythematous nodule off ifteen millimeters in diameter between the supralabial region and the right nasal vestibule, with a small central crust (Figure 1). In addition, it had multiple open and closed comedones, papules and pustules, characterizing a grade II acne. He did not present lymph node enlargement.

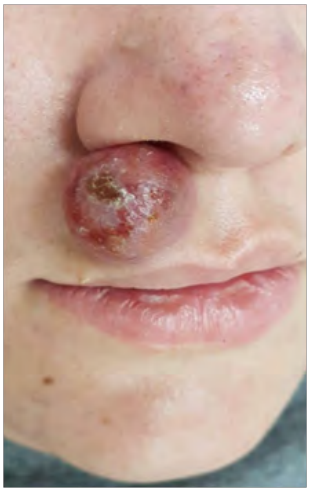

Figure 1: Erythematous nodule of fifteen millimeters in diameter between the supralabial region and the right nasal vestibule, with a small central crust.

In this initial evaluation, the main clinical suspicion of a pyogenic granuloma was raised, and local cryotherapy followed by cortico idinfiltration were instituted as treatment. After seven days, there was no significant improvement, and being pseudo lymphoma and cutaneous lymphomas likely to be differential diagnoses, it was decided to perform biopsy of the lesion.

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After local anesthesia, enucleation of the lesion was performed through a central spindle preserving the borders, with posterior suture for approach andthe material sent for analysis (Figure 2). He also started treatment for acne with soap and sunscreen, as well as adapalene and topical benzoyl peroxide.

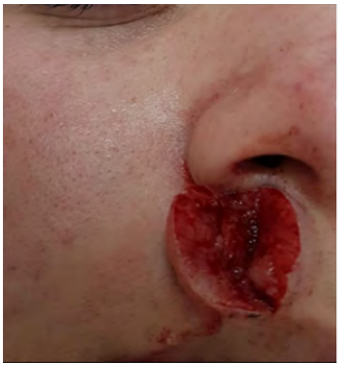

Figure 2: Intraoperative: enucleation of the lesion was performed through a central spindle preserving the borders.

The pathological anatomy showed a lesion with dense lymphohistiocytic infiltrate and intense vascular proliferation with suppurative foci. Immunohistochemistry was positive for CD20, CD3, PAX-5 and ki-67 (Figure 3), thus containing mixed T and B lymphoid infiltrate, favoring the diagnosis of cutaneousps eudolymphoma.

Anticorpos	Clone	Resultado	
• CD20 - antígeno de linfócitos B	L26	Positivo	linfócitos B
• CD3 - receptor de linfócitos T (cadeia epsilon)	SP7	Positivo	linfócitos T
• CD30 - antígeno Ki-1	Ber-H2	Negativo	
• CD15 - antígeno de granulócitos e células de Reed-Sternberg	Carb-3	Negativo	
• PAX5, fator de transcrição da família [paired box]	Polyclonal	Positivo	linfócitos B
• Oncoproteína LMP-1 do vírus de Epstein-Barr	CS1-4	Negativo	
• Ki-67 - Antígeno de proliferação celular	MIB1	Positivo	15%

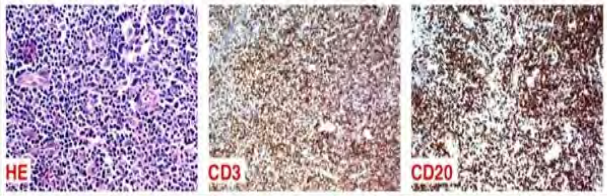

Figure 3: Hematoxilin-Eosin (HE): dense lymphohistiocytic infiltrate and intense vascular proliferation with suppurative foci; Imunohystochemistry: positive for CD20, CD3, PAX-5 and ki-67.

After the surgical procedure performed for biopsy, the patient returned for evaluation with totally regression of the initial lesion (Figure 4), in addition to the improvement of the acne, without presenting signs of recurrence of the lesion during follow-up.

Discussion

The term Cutaneous Pseudolymphoma (CPL) refers to a set of diseases in which benign lymphocytic proliferations occur that simulate cutaneous lymphomas from clinical and histopathological point of view [4,5]. It consists of a benign inflammatory response triggered by anantigen that estimates the lymphomatoid response, histologically called Reactive Lymphoid Hyperplasia [3]. Antigens involved include response to bacterial infections, contact dermatitis, pigmented lichenoid purpura, lichen sclerosus and atrophic dermatitis, stageofmorphea, lupus panniculitis, arthropodsbites, nodular sarna, medications (anticonvulsants, antidepressants, benzodiazepines, angiotens in converting enzyme inhibitors, beta-blockers, calcium-channelblockers, lipid-loweringagents, amongothers), spirochetes (Borreliaburgdorferi, Treponema pallidum) Virus, HIV andPoxvirus), mites (Sarcoptesscabei), vaccines, tattoo paints, piercing. However, most cases are considered idiopathic.2,3,4In the case reported, the only pathology associated was grade II acne, which had not been treated with medication. There is possibility of acne and, there fore, the local bacterial infection be related to the appearance of pseudolymphoma in the case described.

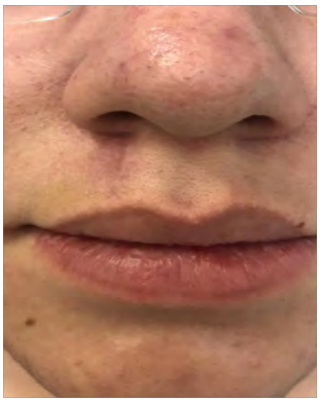

Figure 4: Totally regression of the initial lesion after procedures.

The pathogenesis of CPL is still studied and it is believed that there is participation of the Skin Associated Lymphoid Tissue (SALT) and its proliferation by antigenic stimulation. This theory corroborates the progression of CPL to lymphoma due to permanent antigenic exposure, as occurs with gastric lymphomas [5,6].

Clinically, it may present as a single nodule, as observed in the case described, ormultiple, papules, infiltrated plaques, persistent erythema or exfoliative erythroderma, and it is impossible to define the diagnosis only by clinical examination of the lesions. In view of the CPL hypothesis, the lesion should be biopsied [4].

Histological analysisis of paramount importance in the definition of the diagnosis. There is a lymphocytic-follicular proliferation of T cells, B or the mixture of the two with macrophages and dendritic cells [6]. The pattern of infiltration maybe nodular or epidermo tropic, and cell size is variable. Immunohistochemistry is imperative in distinguishing the infiltrate and its classification [4].

Therefore, the diagnosis of CPL is based on clinical history, physical examination, and adequate an atomopathological and immunohistochemical study. The search for causal agents, serological and contact tests are auxiliary [3].

As for the clinical course, it is usually variable. Some lesions regress after the biopsy, while others may persist for months to years. There may be recurrence in cases of new contact with the causative agente. Rareprogressionof CPL to cutaneous lymphoma can occur, butthe cause is not well understood. Clinical signs of alertness involve the presence of multiple lesions and lymphadenopathy [3].

Treatment should be considered conservative, sincemany cases regress spontaneously. Single lesions can be treated with surgical excision, topical cortico steroid and intralesional, cryotherapy. Disseminated cases can be treated with systemic cortico steroids, Interferon alfa, Hydroxychloroquine and even radiotherapy [2,4]. Removal of the causative agent, if identified, should be performed. In the case reported, the lesion regressed after partial surgical excision (biopsy) and acne treatment was instituted, aiming to control the possible triggering factor.

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