CASES FOR DIAGNOSIS

A Midfacial Nodule of Recent Onset

Nódulo centrofacial de reciente aparición

Case Description

Medical History

A 44-year-old woman with no relevant medical history consulted for a lesion on the right ala of the nose of 15 days’ duration. She reported that it was slightly painful and had grown rapidly. She did not recall any injuries to the area and there were no accompanying systemic symptoms.

Physical Examination

Physical examination revealed a well-circumscribed, firm erythematous nodule measuring approximately 1 cm on the right ala of the nose. (Fig. 1).

Histopathology

Histologic examination showed a diffuse folliculocentric mixed infiltrate throughout the dermis. The infiltrate was composed of lymphocytes, plasma cells, histiocytes, and some eosinophils (Fig. 2). Immunohistochemical staining showed almost equal proportions of CD20+ and CD3+ cells in the infiltrate (Fig. 3). Focal CD30 positivity was also observed and S100 protein staining showed some dendritic cells around the follicles. Molecular biology analysis showed the infiltrate to be polyclonal.

Additional Tests

The results of laboratory tests were unremarkable.

Figure 1  Erythematous nodule on the right ala of the nose.

Figure 2  Hematoxylin-eosin staining, original magnification x40.

Figure 3  CD20 and CD3 staining, original magnification x40.
Diagnosis

Pseudolymphomatous folliculitis.

Clinical Course and Treatment

Biopsy of the lesion was followed by complete regression of the nodule. At the time of writing, more than a year later, the patient remains asymptomatic.

Comments

Pseudolymphomatous folliculitis, a condition first described by McNutt in 1986, is a rare clinicopathologic variant of cutaneous lymphoid hyperplasia, with just under 50 cases described to date.\(^1\)-\(^3\) It usually presents as a solitary nodule on the face, particularly on the nose, cheeks, or forehead, although it is occasionally found at other sites.\(^1,\)\(^2\) The nodule grows rapidly, reaching a maximum size of no more than 1.5 cm and producing few symptoms; it typically presents in the fourth decade of life and affects men and women equally.\(^1\)-\(^3\) Biopsy is required for diagnosis, with results showing a polymorphous infiltrate containing abundant lymphocytes in a distinctive arrangement around the hair follicles.\(^1,\)\(^3\) Characteristic changes in the hair follicles are sometimes observed, including irregular hyperplasia, epithelial deformation, and blurring of the follicle walls.\(^1,\)\(^3\) Positive immunohistochemical staining for CD3 and CD20 demonstrates the presence of T lymphocytes and B lymphocytes, as does, on occasions, CD1a and $\beta$100 protein positivity in the cells around the follicles. Most cases are reported to be polyclonal.\(^1,\)\(^3\) Although pseudolymphomatous folliculitis and cutaneous lymphoid hyperplasia may be considered to be similar or even overlapping entities, the latter has a number of distinguishing features.\(^3,\)\(^5\) It presents as a plaque or nodule or a group of plaques or nodules on the face, trunk, or upper extremities and can take months or years to resolve. Histologic examination shows a dense dermal lymphoid infiltrate with germinal centers, which is more intense in the upper dermis.\(^3,\)\(^5\) Other entities that should be considered in the differential diagnosis of pseudolymphomatous folliculitis are lymphoma, granulomatous rosacea, inflamed cyst, lupus tumidus, lymphocytic infiltrate, and insect or spider bites.\(^3,\)\(^5\) The clinical course is benign and self-limiting. In all the cases reported to date, including ours, biopsy led to the complete regression of the lesion. Although there is no evidence that pseudolymphomatous folliculitis can progress to lymphoma, some authors recommend close monitoring.\(^3,\)\(^6\) The etiology and pathogenesis of pseudolymphomatous folliculitis are still poorly understood but the most widely accepted theory is that it is a subtype of cutaneous lymphoid hyperplasia. It has, however, also been speculated that it might be a variant of rosacea or a previously uncharacterized hair follicle disease. On examining the biopsy results of 15 patients with pseudolymphomatous folliculitis, Arai et al.\(^6\) coined the term *activation of hair follicles* to describe the changes observed.\(^6\) It has been postulated that the follicle may contain an antigen that triggers an exaggerated local immune response.\(^6\) The fact that a biopsy would eliminate the antigen would explain why the lesions disappear following this procedure. We present a new case of pseudolymphomatous folliculitis, a controversial entity or pseudo-entity that should be considered in the differential diagnosis of nodular lesions in the midface region.

References


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