

A Case of Cutaneous Pseudolymphoma in a Clinical Appearance of Keloid

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Cutaneous pseudolymphoma is a heterogeneous group of benign reactive T-cell or B-cell lymphoproliferative process, which clinically and histologically simulates cutaneous lymphomas. A few cases of pseudolymphomas, showing atypical clinical forms, have been reported previously in the literature, but are rare. A 23-year old male was presented with 4-year duration of cutaneous lesion on the right retroauricular area. On physical examination, about a 2×1 cm sized erythematous, elevated and protruded, firm nodule was seen. The cutaneous lesion resembled the appearance of keloid, but the patient did not have any obvious history of trauma. A punch biopsy was performed, and histologically, the lesion was diagnosed as cutaneous pseudolymphoma. After a single treatment of triamcinolone acetonide intralesional injection, the lesion was almost cleared. In this report, we present an interesting case of pseudolymphoma with a clinical finding resembling the appearance of keloid in a patient without any traumatic history. (*Korean J Dermatol* 2012;50(11):1006~1008)

Key Words: Keloid, Pseudolymphoma

INTRODUCTION

Cutaneous pseudolymphoma, first described by Kaposi in 1891¹, is a heterogeneous group of benign reactive T-cell or B-cell lymphoproliferative process, which can clinically and histologically simulate cutaneous lymphomas². In this report, we present a case of cutaneous pseudolymphoma that had an atypical appearance, mimicking the clinical morphology of keloid.

CASE REPORT

A 13-year old male was presented with 4-year duration of cutaneous lesion on the right retroauricular area. On physical examination, about a 2×1 cm sized well-demarcated erythematous to brownish, elevated and protruded, firm nodule was seen, and slight hyperesthesia was felt on the lesion. The patient did not have any medical or familial history. According to its firm, rubbery and erythematous

nodular appearance accompanied with pain and itching, the cutaneous lesion resembled the clinical manifestation of keloid, but he did not have any obvious history of trauma or any previous cutaneous diseases on the site. A punch biopsy was performed, and histologically, the lesion showed diffuse dermal lymphoid cell infiltration with lymphoid follicle formation with positive in the reactive B- and T-lymphocytes by CD20 and CD3 immunohistochemical staining (Fig. 1). BCL-2 was not expressed in the germinal center. According to the clinical and histologic findings, the patient was diagnosed as pseudolymphoma, and after a single treatment of 20 mg/ml triamcinolone acetonide intralesional injection, the lesion was almost cleared (Fig. 2). Two further injections were done, and the lesion was resolved without any evidence of recurrence for six months.

DISCUSSION

The term, 'pseudolymphoma', only implies the lymphocytic infiltration in response to the various stimuli without any information about the cause³. In most cases, cutaneous pseudolymphomas are idiopathic, but foreign antigens, such as tattoo dyes, vaccinations, arthropod venoms, acupuncture, and infections with *Borrelia burgdorferi*, varicella-zoster virus, human immunodeficiency virus, and also trauma are well known causes. Medications, including phenytoin, carbamazepine

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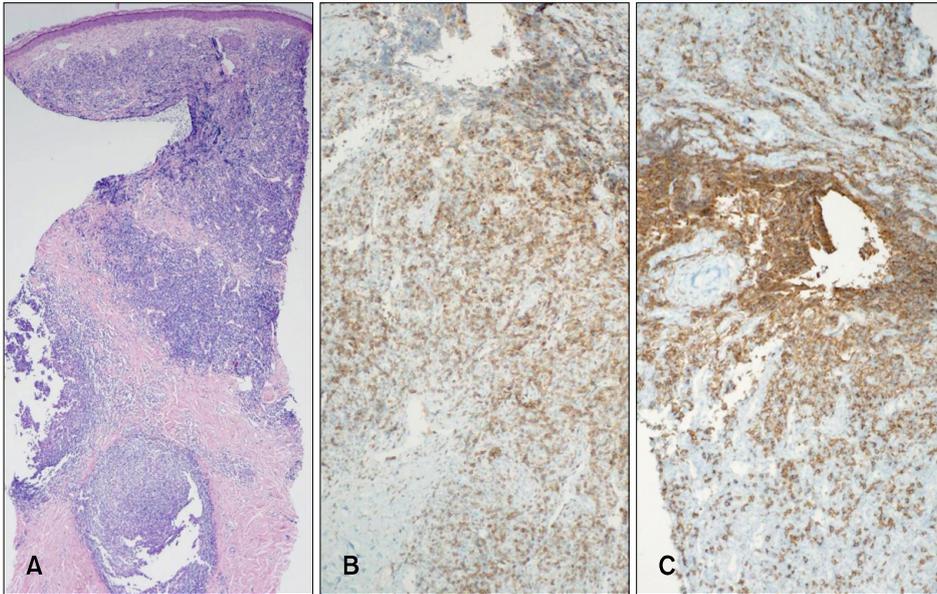


Fig. 1. Histologic findings shows diffuse dermal lymphoid cell infiltration with lymphoid follicle formation. (A) H&E $\times 40$, (B) CD3 $\times 100$, (C) CD20 $\times 100$

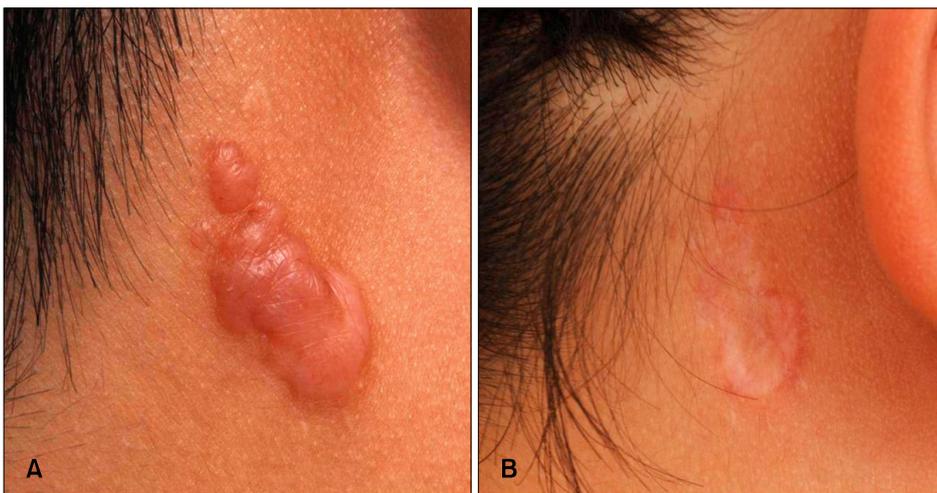


Fig. 2. Clinical appearance of the cutaneous pseudolymphoma at initial visit (A) and 1 month after a single injection of intralesional corticosteroid (B)

pine, captopril, atenolol, verapamil, allopurinol, penicillin, dapsone, and etc. have also been reported to induce cutaneous pseudolymphomas^{3,4}.

The cutaneous lesions of pseudolymphoma commonly present as an erythematous to brownish or violaceous solitary nodule, but it also commonly appears as single or multiple papules or infiltrated plaques. There has been some prior reports describing clinically unusual forms of cutaneous pseudolymphomas, appearing as ulcerating facial masses⁵, for example, but are rare. To our knowledge, cutaneous pseudolymphoma mimicking the clinical appearance of keloid has never been reported.

Different treatment options for cutaneous pseudolympho-

ma include antibiotics, intralesional or systemic corticosteroids, excision, cryosurgery, and local radiotherapy. In widespread cases, antimalarials and immune suppressants have also been successfully used^{3,4}. Although spontaneous resolution is observed in some cases, the clinical course of cutaneous pseudolymphoma widely varies, requiring proper treatment in many cases. Therefore, the treatment should be chosen considering various factors, such as the extent of disease and its biologic behavior, anatomical site, and the patients need. In our patient, as he presented with a single, localized cutaneous lesion, intralesional corticosteroid injection was attempted as the first choice resulting in successful clinical outcome.

We have experienced an interesting case of cutaneous pseudolymphoma with an unusual clinical appearance, which responded well to intralesional corticosteroid injection. Our case suggests dermatologists to be aware that cutaneous pseudolymphomas can even mimic the appearance of keloid clinically.

REFERENCES

1. Bluefarb SM. Lymphocytoma cutis, In: Bluefarb SM, editor. Cutaneous manifestations of the benign inflammatory reticuloses. Springfield (IL): Charles C Thomas, 1960:131-199
2. Bergman R. Pseudolymphoma and cutaneous lymphoma: facts and controversies. Clin Dermatol 2010;28:683-674
3. Kerl H, Ackerman AB. Inflammatory diseases that simulate lymphomas: cutaneous pseudolymphomas, In: Fitzpatrick TB, Eisen AZ, Wolff K, Freedberg IM, Austen KF, editors. Dermatology in general medicine. 4th ed. New York: McGraw-Hill, 1993:1315-1327
4. Ploysangam T, Breneman DL, Mutasim DF. Cutaneous pseudolymphomas. J Am Acad Dermatol 1998;38:877-895
5. Nervi SJ, Schwartz RA. Plasma-cell-predominant B-cell pseudolymphoma. Dermatol Online J 2008;14:12