lated (1). The interval between the first and the second disease is variable. The preceding disease is frequently a herpesvirus infection and herpes zoster is by far the most common of them. Post-zoster diseases include granulomatous vasculitis (2), granulomatous lesions (3), granuloma annulare (4), sarcoid granuloma (5), pseudolymphoma (6), lymphoplasmocytoid lymphoma (7), Kaposi's sarcoma (8), basal cell carcinoma (9) and squamous cell carcinoma (9, 10).

In literature, only one case of cutaneous B cell lymphoma has been reported arising in a site of a previous zoster eruption (7). In that patient, however, the B cell lymphoma had already been diagnosed when the zoster erupted. In our case, instead, the isotopic response was the first manifestation of the cutaneous lymphoma.

The pathogenesis of isotopic response is unclear (1). Either the virus is directly responsible for the second disease or the latter is the result of an immunologic hypersensitivity to viral antigens or to the tissue damage. Evidence is the detection of varicella-zoster virus DNA in post-zoster granulomatous lesions and of herpes simplex DNA in a squamous cell carcinoma (3, 10). On the other hand, in a case of post-zoster granulomatous vasculitis no viral DNA was detected in the lesional skin (2).

Centroblastic-centrocytic lymphoma is a low-grade malignant B cell lymphoma, involving the skin and confined to it for many years without any lymph node or visceral involvement (11). The back and the thorax are zones of preference and the possibility of a fortuitous coincidence cannot be excluded.

REFERENCES

1. Wolf R, Brenner S, Ruocco V, Filioli FG. Isotopic response. Int J Dermatol 1995; 34: 341–348.
2. Langenberg A, Yen BTS, LeBoit PE. Granulomatous vasculitis occurring after cutaneous herpes zoster despite absence of viral genome. J Am Acad Dermatol 1991; 24: 429–433.
3. Serfling U, Penneys NS, Zhu W-Y, Sisto M, Leonardi C. Varicella-zoster virus DNA in granulomatous skin lesions following herpes zoster. J Cutan Pathol 1993: 20: 28–33.
4. Friedman SJ, Fox BJ, Albert HL. Granuloma annulare arising in herpes zoster scars. Report of two cases and review of the literature. J Am Acad Dermatol 1986; 14: 764–770.
5. Bisaccia E, Scarborough DA, Carr RD. Cutaneous sarcoid granuloma formation in herpes zoster scars. Arch Dermatol 1983; 119: 788–789.
6. Wolff HH, Wendt V, Winzer M. Cutaneous pseudolymphoma at the site of prior herpes zoster eruption. Arch Dermatol Res 1987; 279 (Suppl): 852–854.
7. Aloi FG, Appino A, Puiatti P. Lymphoplasmocytoid lymphoma arising in herpes zoster scars. J Am Acad Dermatol 1990; 22: 130–131.
8. Niedt GW, Prioleau PG. Kaposi's sarcoma occurring in a dermatome previously involved by herpes zoster. J Am Acad Dermatol 1988; 18: 448–451.
9. Wyburn-Mason R. Malignant change arising in tissues affected by herpes. BMJ 1955; 2: 1106–1109.
10. Claudy AL, Chignol MC, Chardonnet Y. Detection of herpes simplex virus DNA in a cutaneous squamous cell carcinoma by in situ hybridization. Arch Dermatol Res 1989; 281: 333–335.
11. National Cancer Institute. Sponsored study of classifications of non-Hodgkin's lymphoma: summary and description of a working formulation for clinical usage. The non-Hodgkin's Lymphoma Pathologic Classification Project. Cancer 1982; 49: 2112–2135.

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Francesco Drago, MD, Paolo Rampini, MD, Cesare Lugani, MD, and Alfredo Rebora, MD, Department of Dermatology, University of Genoa, V. le Benedetto XV, 7, IT-16132 Genoa, Italy.

Surgical Treatment of Pemphigus Vulgaris Localized to the Genital Mucosa

Sir,

Cases of pemphigus vulgaris located on a single mucosa, sometimes preceding by months or even years a more diffuse development of the disease, are not unusual but the oral mucosa is nearly exclusively involved in such observations.

We here report an original observation of an immunologically typical, unilesional pemphigus vulgaris located on the foreskin in a middle-aged man. The patient was completely cured by a limited surgery, without relapse after a 3-year follow-up.

CASE REPORT

A 47-year-old man was first referred to our institution in 1993 for chronic, bullous and erosive lesions of the foreskin of 2 years' duration. Clinically, a limited area of the balano-prepucial fold and of the free foreskin mucosa was involved, with a number of small erosions ranging from 1–2 mm in diameter. The patient denied taking any long-duration medication and no other mucous membrane manifestations had ever been present. The mucocutaneous and general examination were otherwise normal and no Nikolski's sign was present. ESR, full blood count, comprehensive chemical panel, liver tests and renal function were all normal. Two different biopsy specimens taken on the margin of the erosions revealed a suprabasal cleavage with a typical acantholytic picture, along with an important mononucleated infiltrate of the upper chorion (Fig. 1). Direct immunofluorescence showed the deposition of intercellular IgG and C3c in the epithelium;

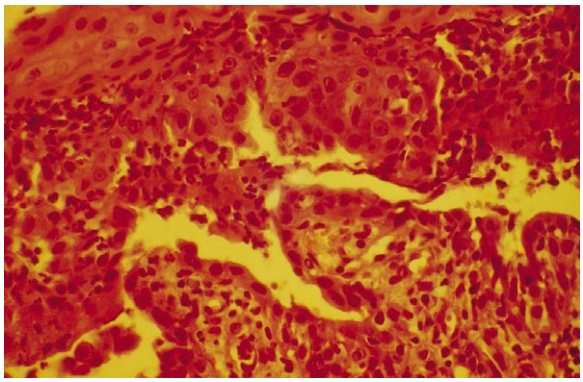

Fig. 1. Typical suprabasal acantholysis.

however, no circulating antibodies could be detected by indirect immunofluorescence. No Western blot could be performed. The diagnosis of unilesional pemphigus vulgaris of the foreskin was then considered. Class I topical corticosteroids were initially effective but the relapse was rapid after tapering the applications. The fixity and the small size of the affected area prompted us to remove it surgically by a posthectomy. No relapse occurred at the scar and the patient remained disease-free after a 3-year follow-up.

DISCUSSION

Two main points are of interest in this unusual observation: – the occurrence of chronic, histoimmunologically proved lesions of pemphigus vulgaris limited to the prepucial area for 2 years has not, to our knowledge, been previously reported. The diagnosis was established on consistent clinical, histological and immunological data. The lack of circulating autoantibodies is reported in at least 10% of patients (1), and the very limited clinical involvement in our patient may be partly related to a weak rate of antibodies, under the threshold of detection of the test. An atypical form of drug-induced pemphigus could be ruled out since the patient received neither the classical triggering medications, nor other long-lasting oral treatment. Regarding localized mucosal lesions in pemphigus, initial involvement of oral mucosa is a well-known feature of the disease, which originates in the oral cavity in 50 to 70% of patients. These lesions are usually followed by the onset of more disseminated ones, on other mucosa and/or on the skin, after a time lapse ranging from weeks to months, exceptionally some years. However, a small subset of patients never develop any involvement of the glabrous skin. All other stratified mucous epithelia may be affected but we are not aware of cases limited to the genital mucosa, even for shorter periods of time before extension. On the other hand, solitary lesions on glabrous skin are very seldom reported, with sometimes an unusual, nodular presentation (2–4). We have no convincing explanation for the unusual clinical presentation of our case, the oral mucosa usually appearing more "sensitive" to the pemphigus antibodies than the genital area. – a surgical treatment of this localized pemphigus appeared to be fully effective, with no relapse after a 3-year follow-up. This original therapeutic option has not yet, to our knowledge, been reported in pemphigus vulgaris, whereas it has already been successfully applied to familial benign pemphigus by some authors. This method, potentially quickly efficient and without serious side-effects, could perhaps be more often considered in localized, long-lasting forms of pemphigus when a simple surgical procedure is technically possible.

REFERENCES

1. Korman N. Pemphigus. J Am Acad Dermatol 1988; 18: 1219–1238.
2. Mokni M, Rouatbi M, Haouet S, et al. Localized pemphigus vulgaris resembling seborrheic keratosis. Eur J Dermatol 1996; 6: 39–40.
3. Newton JA, McGibbon DH, Monk B, Rowell NR. Pemphigus foliaceus localized to the nose. Br J Dermatol 1988; 118: 303–312.
4. Ohta M, Yamamoto M, Utani A, Ohno S, Danno K. Pemphigus vulgaris presenting as a nodular lesion (letter). J Am Acad Dermatol 1990; 23: 522–523.

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O. Dereure[1], P. Stoebner[1], G. Barnéon[2] and J. Guilhou[1]
[1]Department of Dermatology-Phlebology and [2]Laboratory of Pathology, Saint-Eloi Hospital, 2, avenue B. Sans, CHRU Montpellier, FR-34295 Montpellier, France.

A Case of Mycobacterial Skin Disease Caused by *Mycobacterium peregrinum* and *M. scrofulaceum*

Sir,

Ever since *M. marinum* infection in man was described by Nordén & Linell (1) in 1951, numerous cases of tropical fish tank granulomas caused by several kinds of mycobacteria have been reported in many countries. However, *M. peregrinum* and *M. scrofulaceum* infection in the skin, contracted from tropical fish tanks, has not been reported.

In this paper, we report a case of mycobacterial skin infection caused by both *M. peregrinum* and *M. scrofulaceum*, and their bacterial characterization.

CASE REPORT

A 45-year-old Japanese man was referred to the dermatology clinic of Yokohama City University Hospital in October, 1993. He had a brown infiltrated plaque on his left arm (24 × 28 mm). Six granulomas of several millimeters in diameter were situated on the border of the plaque (Fig. 1). The lesion was dry and scaly, without abscess or pus. No bacilli or fungus were found in the scales or smears with microscope. The patient was a fish-fancier with many tropical fish tanks in his home. Laboratory examination, including chest X-ray, revealed no abnormal or immunocompromising findings. An intradermal purified protein derivative (PPD) test was positive.

A biopsy of the skin demonstrated hyperkeratosis, parakeratosis, acanthosis, and exocytosis in the epidermis, and giant cells and epidermoid cell infiltration in the dermis. No bacillus was found by PAS or acid-fast stain.

Skin tissue was ground and placed on special media for mycobacteria (Ogawa egg medium) and fungi (Sabouraud). Fungal culture showed no growth, but the mycobacterial culture grew mycobacteria in 3 and 15 days.

The patient received sparfloxacin (SPFX, 200 mg/d) for 8 weeks. Granulation diminished only very slowly. Therefore, he was put on minocycline (MINO, 200 mg/d) for 7 weeks. Lesions progressively shrank during treatment with MINO and then disappeared after 7 weeks, leaving only a few scarred spots.

No recurrence has been noted during a follow-up period of 3 years.

The characterization of different kinds of mycobacteria was studied. To identify the genes of mycobacteria, we applied a series of tests in consideration of the properties described in the narrative parts of the text and DNA-DNA hybridization described by Kusunoki et al. (2). Briefly, quantitative microdilution plate hybridization was used to identify *Mycobacterium* species. DNAs of our samples were rapidly extracted and labeled with photoreactive biotin. Labeled DNAs were