

Pseudolymphoma Due to Gold Sodium Thiosulfate

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PRECIS

Hypersensitivity skin reactions to gold are rare, but some case reports have described pseudolymphoma caused by gold piercing, acupuncture, and injections.^{1,2} We are reporting the case of gold-induced pseudolymphoma due to a patch test application.



Figure 1. A pruritic well-demarcated round lesion exactly on the place where the positive reaction to GSTS was reproduced.

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DISCUSSION

A 46-year-old woman presented over a year ago with hand dermatitis. She was offered a patch test (T.R.U.E. Test), which revealed contact allergic reaction to nickel sulfate and gold sodium thiosulfate (GSTS). After 11 months, she returned with a pruritic well-demarcated round lesion exactly on the place where the positive reaction to GSTS had occurred (Fig. 1). She reported that since the patch test this area had never faded away and had remained pruritic; therefore, this lesion was biopsied.

The histology revealed a nodular dermal infiltrate, comprising small to medium lymphoid cells. There was a suggestion of germinal center formation. The overlying epidermis appeared spared by a grenz zone, and there was no epidermotropism (Fig. 2). On immunohistochemistry, the infiltrate was CD2, CD3, CD5 T cells, and CD20 B cells positive and mostly related to germinal centers. T cells were Bcl-2 positive with a CD4-predominant population. B cells were negative for Bcl-2 but positive for Bcl-6. This was consistent with cutaneous lymphoid hyperplasia (pseudolymphoma). Taking into account negative autoimmune screen, normal complement levels, full blood count, and liver and renal function, a diagnosis of pseudolymphomatous contact dermatitis to GSTS was made. Her hand dermatitis responded well to treatment with potent topical steroids, and the reaction to gold thiosulfate was not linked with her hand dermatitis.³ The affected area on the back was not treated and resolved spontaneously after the biopsy.

The positive reaction to GSTS in healthy volunteers has been reported in the literature to occur with frequency 8% to 10%. The clinical relevance can be difficult to ascertain.⁴ Some positive reactions to GSTS can persist for weeks or even months. However, it is not reported to persist for 11 months such as in our case.

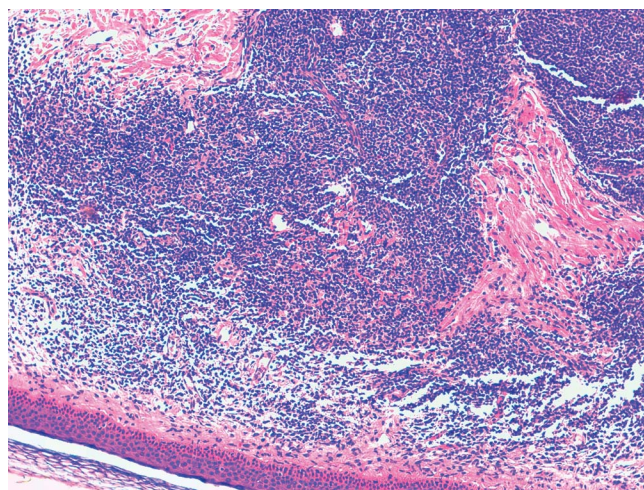


Figure 2. The histology revealed nodular dermal infiltrate, comprising small to medium lymphoid cells. There was a suggestion of germinal center formation. The overlying epidermis appeared spared by a grenz zone, and there was no epidermotropism.

Cutaneous pseudolymphoma can be tricky to differentiate from cutaneous lymphoma. It is a T- or B-cell proliferative disease and has a benign clinical presentation; however, histologically, it can be difficult to differentiate it from cutaneous lymphoma. We believe that it is important to differentiate these diseases, because the diagnosis will significantly affect the clinical management of the patient.

PEARLS

Cutaneous pseudolymphoma is a collection of mature or abnormal-looking T or B lymphocytes in the dermis; it can mimic malignant lymphoma clinically and histologically. It is a reactive process and can present as localized or disseminated skin lesions. Systemic and some topical drugs can cause such presentation. Other less common causes of pseudolymphoma include human immunodeficiency virus, viral infections, syphilis, and immunotherapy. First-line management is to treat the etiology of the main condition. Second line can include UVA, photodynamic therapy with aminolevulinic acid, topical imiquimod, topical tacrolimus, and hydroxychloroquine. However, we present a rare case of cutaneous pseudolymphoma due to gold. The prognosis is good, and the underlying cause should be taken into account.

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Concomitant Phytophotodermatitis and Allergic Contact Dermatitis Due to “Natural” and “Vegan” Cosmetics

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D.H. is an employee and a first-degree relative of the owner of SmartPractice, a company that manufactures and distributes patch test materials. J.K. is an employee of SmartPractice.

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PRECÍS

We present a case of concomitant facial fragrance allergic contact dermatitis (ACD) and facial phytophotodermatitis to “vegan” cosmetics.

DISCUSSION

A 47-year-old nonatopic white woman presented with a chief complaint of “lemon allergy”—a phenomenon that began with a severe bullous eruption of the face and neck with resolving streaking hyperpigmentation, first noticed after sunbathing and applying lemon juice to her hair at the age of 18 years. Since then, she has had intermittent, steroid-responsive, pruritic facial dermatitis with involvement of the eyelids, ears, and neck at least several months per year. She seeks treatment when she experiences a more severe episode involving blistering and resolving with hyperpigmentation, occurring once every several years. She was referred for patch testing and for evaluation for possible photopatch testing.

On examination, she had a few eczematous papules on the bilateral superior helices and subtle edema of the right upper eyelid. TRUE Test, a modified Allergic Contact Dermatitis Society core series, and a modified fragrance/citrus series were used. Positive patch test reactions at 96 hours included nickel sulfate 1+, *Myroxylon pereirae* 1+, isoeugenol 1+, *Jasminum grandiflorum* 1+, and majantol 1+. After further discussion, it was found that she is a daily perfume user, and although she avoids lemons, she has a “vegan” skin care routine, which contains botanical extracts. With avoidance of fragrance allergens, she is clear at 3 months and has deferred photopatch testing (Fig. 1).

Phytophotodermatitis is a phototoxic, nonimmunologic cutaneous reaction caused by UVA-activated furanocoumarins, a naturally occurring compound found in many plants including citrus fruits, figs, and celery.¹ Although classically associated with oranges and limes, phytophotodermatitis after exposure to lemons has been reported.¹ The injury results in erythematous, blistering lesions, followed by hyperpigmentation. This toxic reaction may be induced by the photopatch test process, but phytophotodermatitis is neither an ACD nor a form of photoallergic contact dermatitis. When phytophotodermatitis is triggered by perfume or cosmetic use, it is sometimes referred to as berloque dermatitis, historically linked to the use of bergamot oranges in fragrances. Reports of phytophotodermatitis are still associated with fragrances or other cosmetics with plant extracts.²

Facial dermatitis from fragrances is also a common manifestation of ACD. ACD is a common skin condition and may coexist with or complicate other classic skin diseases, such as seborrheic dermatitis and psoriasis.^{3,4} In the context of this patient's history and testing, the diagnosis was chronic ACD, but this diagnosis was delayed because of her classic description of intermittent phytophotodermatitis.

ZEBRA

Facial ACD may coexist with intermittent phytophotodermatitis diagnosis, as complex fragrance mixes and botanical cosmetic