



Letter

Rare cause of periorbital and eyelids lesions: discoid lupus erythematosus misdiagnosed as allergy

We present a rare case of discoid lupus erythematosus (DLE) that clinically presented with eyelid-only involvement.

A 67-year-old woman presented with erythema and light swelling of her upper eyelids and periorbital area without itching (Fig 1). Symptoms appeared 4 month previously. The patient had no history of allergy. The patient was evaluated by several dermatologists and treated for presumed allergic contact dermatitis and fixed drug eruption to occasionally taken nonsteroidal anti-inflammatory drugs. The patient was empirically treated with various topical medicaments (eg, corticosteroids and pimecrolimus for approximately 2 months) and oral antihistamines, without effect. She discontinued her nonsteroidal anti-inflammatory drugs for 3 months and her antihypertensive drugs were changed, but no improvement was observed. At presentation, slight edema and violaceous erythema of the right and left eyelids and periorbital area were present without eczematous changes. The notable absence of pruritus was contrary to the diagnosis of allergic contact dermatitis and the violaceous pigmentary hue without duskinness, symmetry, and non-intermittency was contrary to fixed drug eruption.

The allergy workup performed included skin prick tests, the results of which were positive for Betulaceae tree pollen mixture (≥ 2) and a 4-cereal pollen mixture (≥ 2 ; Stallergenes, Antony, Haute-de-Seine, France). These findings were irrelevant because her skin problems were not related to the pollination season. Epicutaneous patch testing with European baseline and Cosmetics series (Chemotechnique, Vellinge, Sweden) with readings at 48 hours, 96 hours, and 7 days showed at least 1 reaction (according to the reading criteria of the International Contact Dermatitis Research Group) to shellac. Because the patient used no nail or eye cosmetics containing shellac, this was deemed clinically irrelevant.

Therefore, skin biopsy examination of an upper eyelid lesion was performed. Histopathologic analysis with hematoxylin and eosin staining showed changes consistent with DLE: epidermal atrophy, vacuolar changes, and focal necrosis of basal keratinocytes (68 $\times$ magnification). Higher magnification (158 $\times$) showed massive periadnexal and perivascular lymphocytic infiltration in the dermis. Focal infiltration showed a lichenoid pattern in the basal layer of the epidermis and the epithelium of the hair follicle.^{1,2} Antinuclear antibody results were negative, but immunoblot results for extractable nuclear antibodies for Sjögren syndrome antibody A were strongly positive and the erythrocyte sedimentation rate was increased (48–63 mm/h). Results of baseline liver and renal function tests, whole blood cell count, and urine analysis were within normal limits. The Schirmer tear test result was normal and suggested against Sjögren disease.

The patient was treated with 400 mg/d of hydroxychloroquine for 6 months, with slight effect; thus, 0.1% tacrolimus ointment was prescribed for local treatment and after 3 months only slight erythema without swelling was visible. Photoprotection and ultraviolet radiation avoidance were prescribed. Follow-up after 1 year showed a good response to the treatment. Erythrocyte sedimentation rate was still slightly increased (35 mm/h), but no systemic organ involvement was detected.

Periorbital dermatitis can be a manifestation of endogenous diseases (eg, atopic dermatitis) or the result of external exposure (eg, allergic contact or irritant contact dermatitis).³ DLE rarely affects the periorbital areas, preferring the zygomatic regions or cheeks.⁴ Palpebral involvement of cutaneous LE has been estimated to occur in up to 5% of all patients with mucocutaneous DLE.⁵

Our patient had minimal dermatitis at presentation. This case underscores the importance of cautious interpretation of tests results, which in conjunction with symptoms, objective signs, and medical history, allowed us to conclude that external factors were not relevant in this case. Periorbital lesions also are typical for dermatomyositis,⁴ but our patient had no clinical signs of myositis. Positive titers of extractable nuclear antibodies for Sjögren syndrome antibody A are found mostly in Sjögren syndrome and in systemic LE and scleroderma, but other investigative results were negative for these diseases. Skin biopsy examination was performed to aid in the determination of an accurate diagnosis. The biopsy result was consistent with DLE. DLE solely affecting the eyelids is exceptionally rare and diagnostic delay frequently occurs.^{6,7}



Figure 1. Clinical presentation of eyelid and periorbital eruptions before treatment. Well-demarcated, dark-red, partly violet erythema with small papules are visible on the patient's bilateral inner and upper eyelids from the frontal view. Mild eyelid and periorbital edemas also are visible.

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