A middle aged lady with annular athrophic papules and plaques on her back: What is your diagnosis?

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CLINICAL PRESENTATION

A 51 year old woman was referred to dermatology clinic with multiple asymptomatic erythematus papules and plaques on her back, which she had developed over the previous 2 months ago. In the dermatological examination, there were multiple atrophic papules with hypopigmented centers and sharp borders on her back, some of which were annular with elevated violaceous borders (Figures 1, 2). Further observed were multiple purple, polygonal, shiny papules and plaques on her lower extremities. Mucosa was normal, and there was no nail change. The general physical examination was normal, and she had no family history of similar problems. An incisional biopsy was carried out on one of the atrophic papules.

What is your diagnosis?

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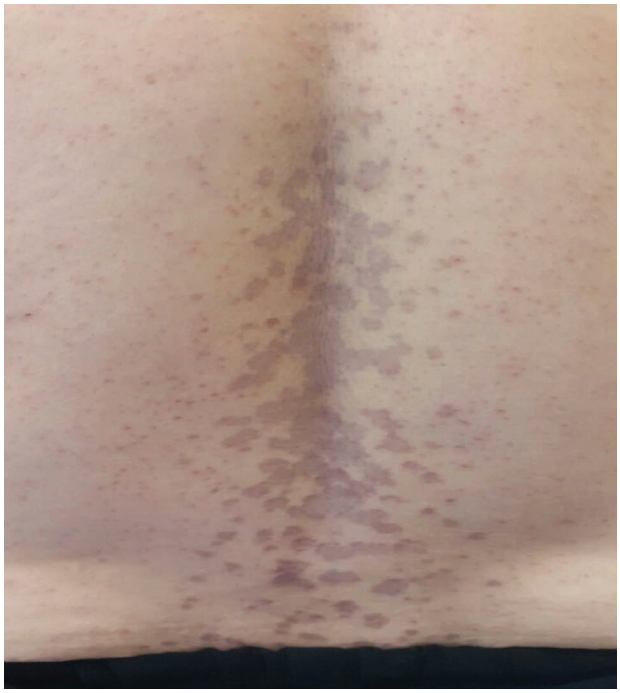

Figure 1. Atrophic papules and plaques with pale centers.

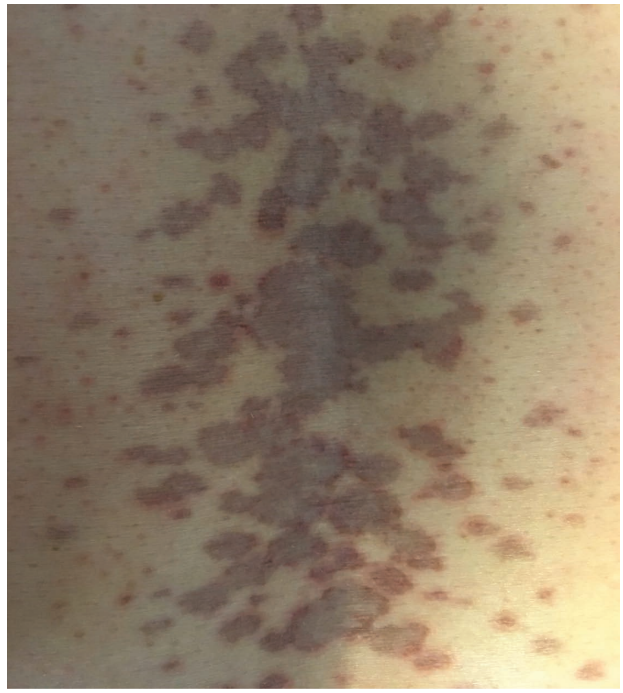

Figure 2. Annular lesions on the back.

Diagnosis

Atrophic lichen planus and annular atrophic lichen planus

Microscopic Findings

Microscopic examination shows the thinning of the epidermis with intact basal layer. Moreover, upper dermis reveals severe pigment incontinence, a few colloid bodies and mild perivascular lymphohistiocyte infiltrate (Figure 3).

DISCUSSION

Lichen planus (LP), a common inflammatory papulosquamus disease, engages the skin, nails and mucous membranes and has a chronic course. Many inducers can initiate the disease including viral and bacterial antigens, drugs, metal ions and physical factors [1,2]. This disease has multiple clinical subtypes. Atrophic LP, for instance, is characterized by white-bluish papules and plaques with central atrophy, and can most commonly be seen on the lower extremities and trunk [2,3].

Annular atrophic LP is a rare variant of lichen planus characterized by annular papules or plaques with elevated margins and atrophic centers which have highly variable distribution [4,5]. This disease has unknown origins and occurs in both sexes, more commonly in middle aged adults, aging from 30 to 70 years [6].

In histopathology annular atrophic lichen planus has mixed pathological findings of annular lichen planus and atrophic lichen planus [6]. The border of the lesion has typical signs of LP, but the center undergoes a thinning of epidermis with a reduction and fragmentation of elastic fibers [6,7].

Common topical treatments for LP include topical corticosteroids, calcipotriol and topical calcineurin inhibitors. Common systemic treatments are phototherapy, retinoids, methotrexate, corticosteroids, hydroxychloroquine and immunosuppresive agents [1,8].

Annular atrophic LP is a chronic subtype which is, not infrequently, resistant to treatment with topical corticosteroids, retinoids, photochemotherapy and immunosuppresive agents [6]. The patient was treated with 0.1% tacrolimus ointment, every day, and Hydroxychlorquin 200 mg, twice daily. There results were totally acceptable.

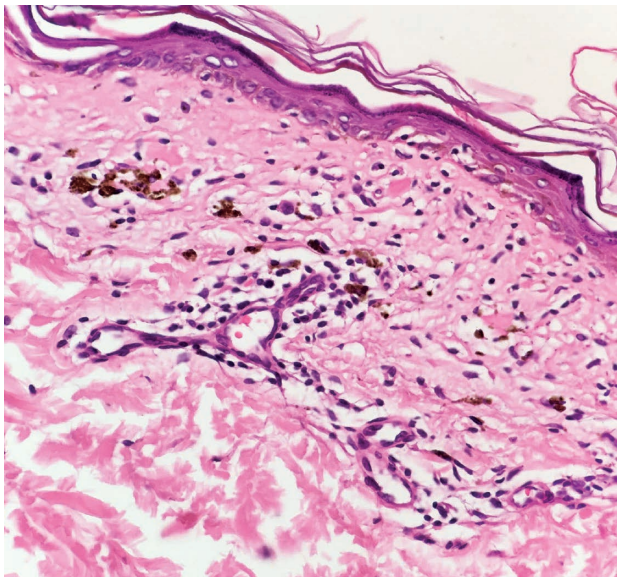

Figure 3. Thinning of epidermis, severe pigment incontinence and mild lymphohistiocytic infiltrate with few colloid bodies in the papillary dermis (H&E ×400).

Conflict of Interest: None declared.

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