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Lichen sclerosus et atrophicus: atypical case simulating lichen planus

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Abstract

Lichen sclerosus et atrophicus (LSA) is a chronic inflammatory dermatosis, characterized by shiny, atrophic, hypochromic papules with a predilection for the genital and perineal skin. Extragenital involvement may occur, but is rare in the isolated form. LSA more commonly affects prepubertal and postmenopausal women. We describe an unusual case of isolated extragenital LSA, restricted to the wrists and mimicking lichen planus.

Keywords: lichen sclerosus et atrophicus; lichen planus; skin diseases

Introduction

Lichen sclerosus et atrophicus (LSA) is a chronic, benign and infrequent inflammatory dermatosis. It is clinically characterized by atrophic, hypochromic papules arranged in small clusters that may coalesce; the most common site of involvement is the anogenital region. [1] Extragenital involvement is unusual, especially when the anogenital region is not affected [1-3]. We describe a patient with isolated extragenital LSA mimicking lichen planus (LP).

Case Synopsis

A 71-year-old woman presented with a 5-year history of asymptomatic hypopigmented papules on both wrists. After resolution, residual hyperpigmentation remained (**Figure 1**). She had a history of hypertension, type 2 diabetes, and hypothyroidism.

Upon careful examination including mucosal surfaces, multiple 2-4 mm ivory colored papules and hyperchromic macules were noted on the ventral surface of both wrists. The remaining physical examination showed no remarkable alterations. A



Figure 1. Ivory papules and hyperchromic macules on (Top) left, (Bottom) right wrist.

punch biopsy was performed.

Histopathology demonstrated an atrophic epidermis with hyperkeratosis. The papillary dermis showed areas of sclerosis, dilated capillaries, and an interstitial lymphocytic infiltrate, findings consistent with LSA (**Figure 2**). The patient was treated with topical corticosteroid for a month followed by six months of

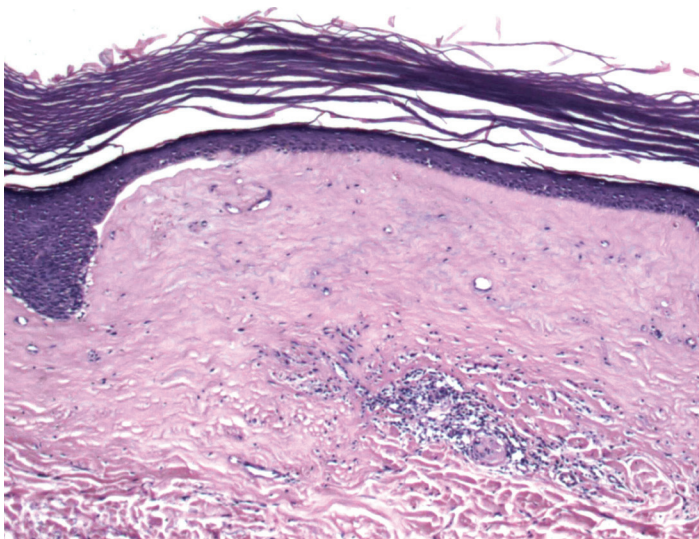


Figure 2. Atrophic epidermis with hyperkeratosis and mild vacuolar degeneration of the basal layer with localized clefting. The papillary dermis has areas of sclerosis, dilated capillaries and an interstitial lymphocytic infiltrate. H&E, 40x.

topical tacrolimus with significant improvement.

Case Discussion

Extragenital involvement is unusual in LSA, occurring in 15-20% of cases [1-3]. The rate of isolated extragenital involvement is 2.5% [3]. When present, the extragenital involvement is more common on the trunk, neck, and upper extremities. Wrists, palmoplantar region, papillary-areolar complex, and face are rarely involved. There are no systemic manifestations and extragenital lesions are usually asymptomatic. Disseminated forms of the disease are extremely rare. An extragenital guttate form of LSA has been described [4].

The etiology of LSA remains unknown, but a multifactorial pathogenesis is speculated, involving genetic, autoimmune and hormonal mechanisms [5-8]. LSA commonly affects more females, with a ratio of 10 women for every affected man. There is a bimodal incidence peak with a first peak in the prepubertal years and another in the menopausal phase.

LSA shares several common features with LP, such as a lymphocytic infiltrate at dermo-epidermal junction, clinical involvement of both skin and mucosa, and erosive disease of mucosal surfaces [9]. The coexistence of LSA and LP has been described in the literature [10, 11]. However, LSA cases with atypical presentation simulating lichen planus are rare [9, 12].

Topical corticosteroids are the treatment of choice for anogenital LSA [13]. Although there are no randomized controlled trials for extragenital LSA, localized forms may be managed similarly to anogenital LSA, with topical corticosteroids and topical calcineurin inhibitors [14].

Conclusion

In the present case, although lesions were clinically consistent with LSA (ivory papules), the symmetric distribution on the wrists was more characteristic of lichen planus. Dermatologists should be aware of atypical presentations of LSA.

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