## Lichen Sclerosus et Atrophicus Affecting the Wrists and Left Ankle and Clinically Simulating Lichen Planus

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Lichen sclerosus et atrophicus (LSA) is a disease of unknown etiology, although hereditary, endocrine, and autoimmune factors are known to be involved. Although the anal and genital regions are predominantly affected, 2.5% of patients only present with extragenital lesions-particularly of the trunk, neck, and upper limbs. The wrists, palmoplantar regions, nipples, and face are less commonly involved. The possible relationship between LSA and both lichen planus and localized scleroderma (morphea) has not been clearly established, although in a number of cases, several of these conditions have been found simultaneously. We report the case of a 61-year-old woman with LSA lesions affecting only the wrists and left ankle. The unusual character of this presentation is pointed out, along with its clinical similarity to lichen planus.

L ichen sclerosus et atrophicus (LSA) is a disease of unknown yet multifactorial etiology in which hereditary, endocrine, and autoimmune factors are known to be involved.<sup>1,2</sup> The disease tends to affect the anogenital region either alone or in combination with other areas (15.5% of patients). In 2.5% of cases, only extragenital areas are affected<sup>2</sup> in the form of depressed and atrophic, whitish papules or maculae that merge to form larger plaques. The lesions tend to affect the upper half of the trunk, neck, and upper limbs. The face,<sup>3</sup> nipples,<sup>4</sup> wrists,<sup>5</sup> and palmoplantar regions<sup>5-8</sup> are involved less frequently.



Figure 1. Polygonal papular and centrally depressed lesions on the right wrist.

## **Case Report**

A 61-year-old woman with a history of uterine polypectomy presented with a 3-year history of asymptomatic lesions that initially developed on the right wrist and posteriorly also appeared on the contralateral wrist and left ankle. Exploration revealed small, centrally depressed, polygonal papular lesions on the right wrist (Figure 1) that left

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**Figure 2.** Bilateral, symmetric lesions and residual hyperpigmentation affecting both wrists.

residual hyperpigmentation upon resolution. The left wrist (Figure 2) and ankle only showed atrophic and hyperpigmented areas, without clinically active lesions. There were no lesions of the oral mucosa, genitals, or rest of the body. Physical examination was otherwise normal.

Laboratory studies, including hemogram, biochemistry, and antibodies against thyroid, parietal cells, thyroglobulin, mitochondria, and antinuclear antibodies revealed slightly elevated cholesterol levels of 275 mg/dL. The remaining parameters were either normal or negative.

The histopathologic study of one of the lesions on the right wrist showed compact, predominantly follicular, orthokeratotic hyperkeratosis, along with epidermal atrophy, homogenization of the underlying collagen, dermal papillary edema, and a lymphohistiocytic band infiltration of the superior dermis (Figures 3 and 4).

The patient was diagnosed with extragenital LSA, and topical corticosteroid treatment produced a clear improvement of the lesions.

## Comment

Cases have been reported of simultaneous LSA and



**Figure 3.** Orthokeratotic hyperkeratosis, epidermal atrophy, collagen homogenization, and band infiltration of the superior dermis (H&E, original magnification ×100).



**Figure 4.** Detail of dermal papillary edema and homogenized collagen (H&E, original magnification ×400).

localized scleroderma (morphea) in the same patient and even within the same lesion.<sup>9-13</sup> The coexistence of LSA and lichen planus<sup>14-16</sup> and even the coexistence of all 3 diseases also has been described in the literature.<sup>17</sup>

All of these findings support the hypothesis of a similar etiopathogenesis shared among these 3 diseases which, according to certain authors,<sup>13:17</sup> could reflect the same disease with different clinical and histopathologic patterns of presentation. In this case, the lesions were clinically suggestive of LSA (white-grayish, centrally depressed, papular lesions with keratotic plugs), although both the symmetric distribution and residual hyperpigmentation were more characteristic of lichen planus.

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