



# A case of lichen sclerosus et atrophicus on the scalp with unusual localization

*Kafa derisinde sıradışı yerleşimli liken sklerozus ve atrofikus olgusu*

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Dear Editor,

Lichen sclerosus et atrophicus (LSA) is a benign chronic inflammatory dermatosis with unclear pathogenesis affecting both the epidermis and the dermis. The typical finding is white opalescent papules that may cluster and progressively result in parchment-like appearance of the skin. Most commonly, it presents as atrophic plaques in the genital region, but can

occur in extra-genital locations<sup>1</sup>. Mostly, extragenital lichen sclerosus is common on the face, neck, shoulders and upper trunk<sup>2</sup>. Uncommon presentations include lesions on the oral mucosa and scalp<sup>3</sup>. In this report, a case with unusual localization of LSA was presented.

A 34-year-old female patient was admitted to our dermatology department for a ten-year history of atrophy on her scalp, face and hands. It was learned from her past



**Figure 1.** Well-defined, violaceous brownish plaques with different sizes and slightly atrophic center on the malar region of the face and frontal side of the scalp

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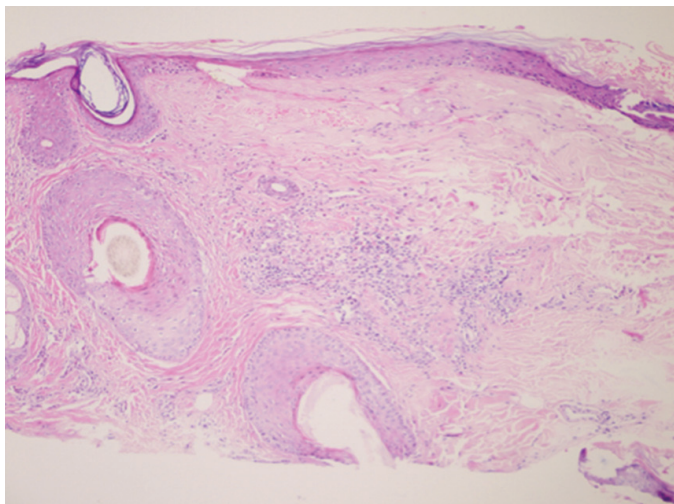
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history that the lesions started from the malar region of the face and extended slowly up to the vertex. She had a microadenoma in the pituitary gland however; any family history associated with similar skin diseases was not detected. The patient had not been undergone any treatment for her skin lesion before she was admitted to our clinic. Clinical examination revealed well-defined, violaceous-brownish plaques in different sizes with a slightly atrophic center on the malar region of the face and frontal side of the scalp (Figure 1), and the dorsal part of her hands (Figure 2). Histological examination of the skin biopsy specimen taken from the edge of the scalp lesion showed hyperorthokeratotic scale, atrophic epidermis, homogenization of the collagen in the upper epidermis, inflammatory infiltrate in the mid dermis, and hydropic degeneration of basal cells (Figure 3). Papillary dermal elastic fibers were absent with Verhoeff-van Gieson stain (Figure 4). The patient was diagnosed with LSA based on the clinical and histopathological findings.

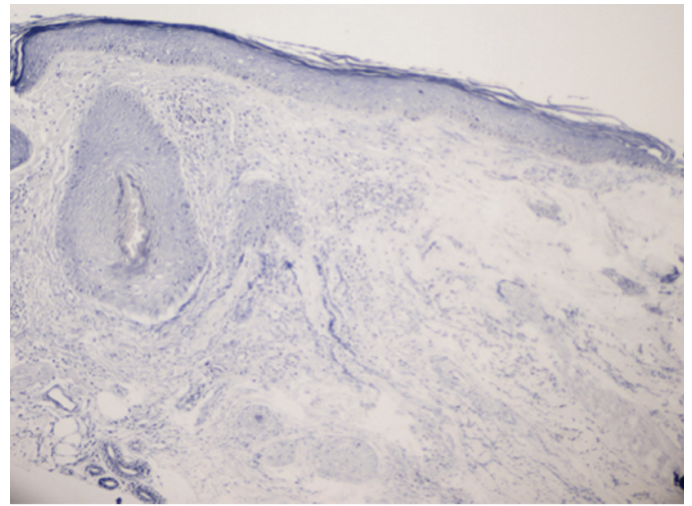
The cause of LSA is unknown, but genetic susceptibility and autoimmune mechanisms have been suggested. The occurrence of extragenital lesions has been reported in 15-20% of patients with LSA<sup>4</sup>.



**Figure 2.** Well-defined, violaceous brownish plaques with different sizes and slightly atrophic center on dorsal part of hands



**Figure 3.** Atrophic epidermis, pale upper dermis, inflammatory infiltrate in mid-dermis (Hematoxylin&eosin x100)



**Figure 4.** Papillary dermal elastic fibers absent with Verhoeff-van Gieson stain (Verhoeff-van Gieson, x100)

To our knowledge, few cases been present with scalp involvement. Extragenital LSA must be differentiated from morphea and atrophic lichen planus. Association with lupus erythematosus, alopecia areata, vitiligo and other autoimmune diseases has been reported<sup>5</sup>. Morphea, lichen planus, discoid lupus erythematosus, and parakeratosis by laboratory and histopathological findings were excluded. One of the distinctive features of our case was the localization on the scalp without genital involvement. Thus, it should be kept in mind that patients with LSA may present with this clinical presentation.

#### Ethic

**Informed Consent:** Informed consent was taken from patient.

**Peer-review:** Externally and Internally peer-reviewed.

#### Authorship Contributions

Concept: H.A., M.G., Design: H.A., M.G., Data collection or processing: H.A., A.G., H.B., Analysis or interpretation: H.A., M.G., Literature Search: H.A., M.G., Author: H.A., M.G.

**Conflict of Interest:** The authors declare no conflict of interest.

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