A Case of Acral Lichen Sclerosus et Atrophicus

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Introduction

Lichen sclerosus et atrophicus is a chronic, lymphocyte-mediated inflammatory condition that most frequently involves the genitalia with an unknown but likely multifactorial etiology.[1-5] Clinically, lesions are most often porcelain white, atrophic, and pruritic plaques.[2] Lichen sclerosus is considered to be underdiagnosed and undertreated with a reported delay in diagnosis of approximately 5 years.[3] Untreated and undertreated lesions of the genitalia are associated with an increased risk of squamous cell carcinoma (SCC) and scarring, although this risk is significantly decreased with proper treatment.[3,6] Therefore, accurate diagnosis and management are critical.

Extragenital lichen sclerosus may occur in approximately 6-20% of patients and often involves the trunk and proximal extremities.[2,3] Involvement of the palms and soles is rare and may be limited to these locations or occur in more widespread disease.[1,2,7,8] Here, we present a case of a patient with lichen sclerosus that was limited in distribution to the acral region.

Case Report

A 67-year-old female presented with multiple, white, hyperkeratotic papules involving the bilateral palms, flexural wrists, toe webs, and the sides of the feet and toes (Figs. 1, 2). At the time of presentation, the patient reported soreness and pain when walking and palpation, but denied pruritus. Despite the distribution of the lesions on her palms and soles, these lesions did not affect her daily functioning.

The eruption first appeared 6 years previously and was limited to her acral regions throughout her disease course. She had no history of genital lesions. She also was evaluated by her gynecologist in the same month as her recent presentation to the dermatologist, and she had an unremarkable genital examination Histopathologic examination demonstrated in Fig. 3 showed findings consistent with lichen sclerosus et atrophicus. She was managed with halobetasol propionate 0.05% cream twice daily, and, with treatment, the patient noted the lesions on the feet became soft, purpuric, and sore, resulting in her discontinuing topical corticosteroid therapy.

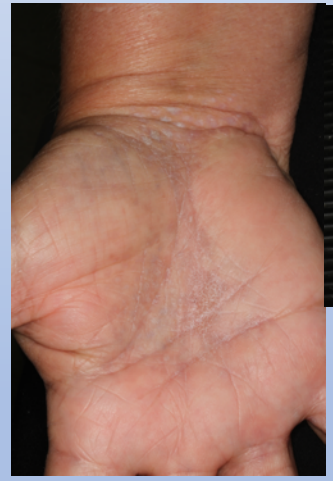

Fig. 1

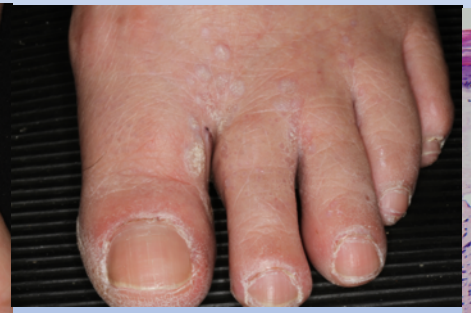

Fig. 2

Figs. 1, 2. Multiple, well-circumscribed, white papules with overlying scale and erythema of the palm and foot.
compact stratum corneum.

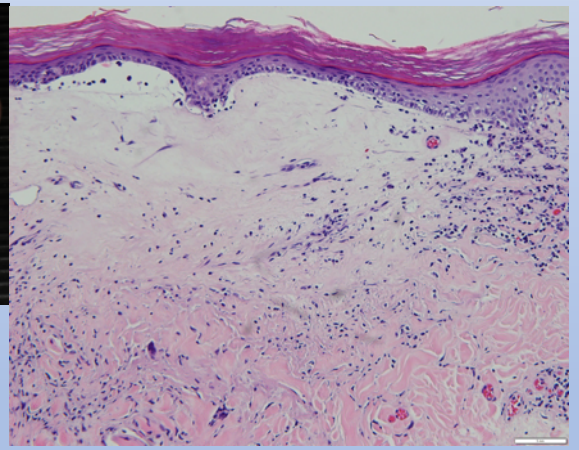

Fig. 3 Histology of lichen sclerosus demonstrating edema and homogenization of the connective tissue in the papillary dermis with scattered lymphocytes and a compact stratum corneum.

Discussion

Diagnosis of lichen sclerosis presenting on the acral regions should prompt the clinician to perform a thorough physical examination to assess for genital lichen sclerosus and consider long-term follow-up to assess for the development of genital lichen sclerosus.[6] One case report[5] described a patient who presented with lichen sclerosus initially of the extremities and subsequently involving the perigenital region.

Therefore, lichen sclerosus should be considered in the differential diagnosis in the setting of ivory atrophic or bullous palmar-plantar lesions, even when lesions are isolated to acral regions.[4]

This may lead to earlier diagnosis of genital disease, initiation of proper treatment, and reduction of the patient's risk of developing scarring and SCC of the genitalia.[1,3,6] Although SCC arising in extragenital lichen sclerosus has been reported, this is rare and has not involved lesions of lichen sclerosus in acral sites.[1,9]

Conflicts of Interest: Haley D. Heibel, Angela R. Styles, and Clay J. Cockerell declare that they have no conflicts of interests that may be related to the contents of this case.

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