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Original Research Paper

Dermatology

LICHEN SCLEROSUS ET ATROPHICUS MASQUERADING AS VITILIGO- A RARE CASE REPORT

Shreya Srinivasan Junior Resident Department of Dermatology, Venereology & Leprosy, Sree Balaji Medical College& Hospital, Bharath University,Chennai 600044, Tamil Nadu, India.

Sobimeena Senior Resident Department of Dermatology, Venereology & Leprosy, Sree Balaji Medical College& Hospital, Bharath University,Chennai 600044, Tamil Nadu, India.

Jayakar Thomas* HOD & Professor Department of Dermatology, Venereology & Leprosy, Sree Balaji Medical College& Hospital, Bharath University,Chennai 600044, Tamil Nadu, India. *Corresponding Author

ABSTRACT Lichen sclerosus et atrophicus is a common inflammatory disease of the skin which commonly involves the anogenital skin but can also involve extragenital areas. We report a case of lichen sclerosus et atrophicus on the back and left arm which was initially thought as early vitiligo.

KEYWORDS : Lichen sclerosus et atrophicans, Vitiligo

Introduction:
Lichen sclerosus et atrophicus described by Hallopeau, is a chronic but benign inflammatory disorder of the skin with unknown etiology[1]. Vitiligo is a depigmentary disorder of the skin with a genetic basis which can masquerade a LSA.Although the treatment of vitiligo and LSA is the same, the consequences of LSA are severe and a diagnosis should not be missed. We report a 28 year old female who was diagnosed with lichen sclerosus et atrophicus but presented with lesions similar to vitiligo.

Case report:
A 28 year old female patient came to the skin OPD with complaints of multiple hypopigmented patches over the back and left arm for the past 10years.The patches progressively increased in size over the past 5 years. The patient did not give any history of itching,pain,fever,weight loss or any other constitutional symptoms. Patient gave history of being treated with oral and topical antifungals with no response.

On general examination there was pallor. Systemic examination was normal.

Dermatological examination revealed multiple hypopigmented patches on the upper back and extensor surface of the left arm. There were few areas of pigmentation within the hypopigmentation. There was no evidence of scaling. Oral and genital mucosae were normal.

Biopsy from the lesion on the back revealed epidermal atrophy with flattening of the rete ridges, basal cell degeneration, a subepidermal clear zone(Grenz zone) and homogenization of the collagen in the papillary dermis . All these findings were suggestive of lichen sclerosus et atrophicus.

Discussion:
Lichen sclerosus et atrophicus is an inflammatory condition of the skin which has an increased propensity towards anogenital skin. LSA of the male glans and prepuce is known as Balanitis xerotica obliterans and LSA of the labia majora and minora, perineum and anogenital region in females is known as Kraurosis vulvae. Extragenital lichen sclerosus et atrophicus is a relatively rare condition occurring commonly over the trunk, neck and upper limbs and less commony over the wrists, face and palmoplantar areas.

Although the exact etiopathogenesis is unknown, Borrelia infections[2], hepatitis C[3], genetic factors, autoimmune factors and irregularities in the androgen levels are thought to be involved.

Clinically, the patient is asymptomatic and in the early stages, presents with white polygonal papules which coalesce to form plaques. There might be comedo like plugging. As the lesion progresses over time, the plugging disappears and leaves behind porcelain-white plaques.

On histopathology, the salient features are hyperkeratosis with follicular plugging, atrophy of the epidermis, hydropic degeneration of the basal cell layer, homogenization of the collagen in the upper dermis and in the early stages, inflammatory infiltrate can be seen in the mid dermis. In the early stages of the lesion, there is a band like inflammatory infiltrate of lymphocytes, plasma cells and histiocytes which are present closer to the epidermis. As the lesion ages, there is homogenization of collagen which pushes the infiltrate into the mid dermis. In old lesions, the infiltrate is absent, the collagen in the mid and lower dermis is swollen, homogenized and eosinophilic imparting a scerotic appearance.

Some of the differentials for LSA are anetoderma, acrodermatitis chronic atrophicans, morphea, vitiligo, pityriasis versicolor, idiopathic guttate hypomelanosis, lichen planus, Zoon's balanitis.

Treatment of extragenital LSA is for extensive, symptomatic lesions or for cosmetic purposes. First line treatment includes topical superpotent corticosteroids[4]. Topical calcineurin inhibitors like tacrolimus and pimecrolimus are the second line of management. Other modalities of treatment include systemic steroids, systemic retinoids, intralesional steroids, narrow band ultra violet B therapy[5], cyclosporine[4],methotrexate, topical estrogen, testosterone and calcipotriol.

Vitiligo is a differential diagnosis for LSA. It is a pigmentary disorder of the skin, usually an autoimmune condition, which presents as well circumscribed, depigmented macules and patches and can involve any part of the body. On histopathology, there is complete absence of melanocytes at the dermo-epidermal junction with epidermal vacuolization. Early lesions may show a perivascular inflammatory infiltrate. Treatment of vitiligo includes topical steroids, topical calcineurin inhibitors and NB-UVB, the same as LSA. LSA has to be differentiated from vitiligo, because unlike vitiligo, which when left untreated will not have a poor prognosis, untreated LSA may result in disfigurement and increased risk of squamous cell carcinoma.

CONCLUSION:
Pigmentary disorders are relatively common and need to be distinguished from each other , as in this case where a patient initially diagnosed as early vitiligo was found to have lichen sclerosus et atrophicus.

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None

CONFLICT OF INTEREST
The authors declare that they have no conflict of interest.

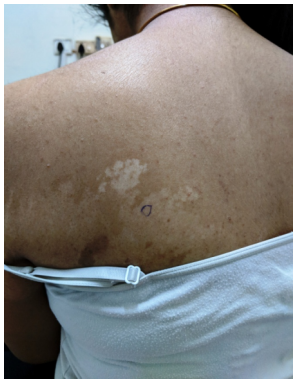

Figure 1 Clinical picture showing hypopigmented patches on the back and left arm respectively.

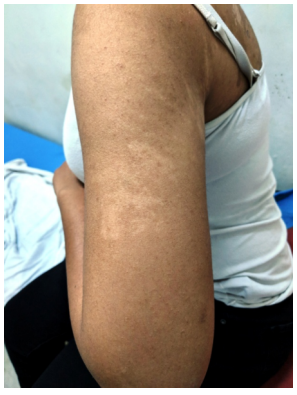

Figure 2 Clinical picture showing hypopigmented patches on the back and left arm respectively.

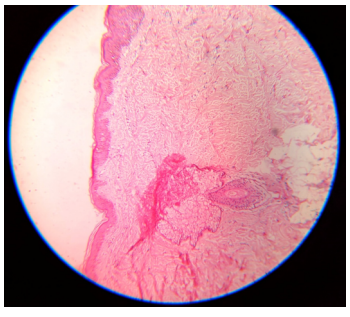

Figure 3: Histopathological picture on scanning microscopy showing atrophic epidermis

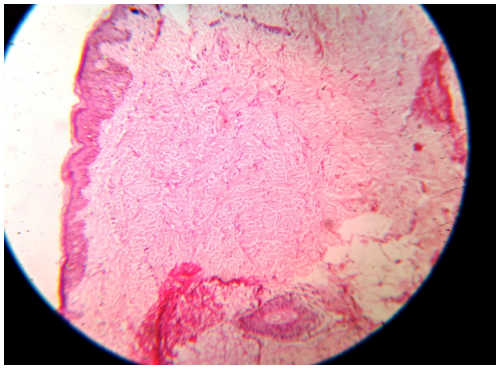

Figure 4: Histopathological picture on low power magnification showing Grenz zone(Subepidermal clear zone) and homogenized collagen in papillary dermis

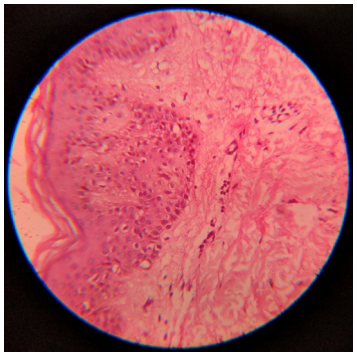

Figure 5: Histopathological picture on high power magnification showing degeneration of the basal cells

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