Abstract
Cutaneous lesions in sarcoidosis are seen in nearly 20–30% and include lesions like papules, nodules, plaques, infiltrated scars, and erythema nodosum. Lichenoid variants of cutaneous sarcoidosis, a type of papular variant is quite rare. Herein we report a case of lichenoid sarcoidosis in a 40-year-old male who presented with raised itchy lesions over his legs and lower back of 8 years duration.

Key Words: Lichenoid sarcoidosis, rare presentation, sarcoidosis

Introduction
Cutaneous sarcoidosis lesions are divided into specific skin lesions characterized by sarcoidal granulomas on histopathology like maculopapules, nodules, plaques, subcutaneous nodules, infiltrative scars, lupus pernio, and non-specific forms consisting of reactive inflammatory processes like erythema nodosum, calcification, prurigo, and erythema multiforme.[1] Lichenoid sarcoidosis is one of the rarest types of cutaneous sarcoidosis and is clinically characterized by abundant pinhead-sized yellowish lesions closely grouped in round or oval clusters generally mimicking lichen planus.[2] Here we report this rare cutaneous form of sarcoidosis where the lesions were in the form of multiple scaly hyperpigmented papules clinically resembling papular amyloidosis rather than lichen planus.

Case Report
A 45-year-old healthy man presented with multiple dark colored pruritic, scaly, 4–5 mm-sized papules located symmetrically on the lower extremities and lower back of 8 years duration. The lesions initially appeared over the legs symmetrically and in crops. Over the next 2 years they continued to appear in crops over both legs and also lower back. Lesions were extremely pruritic in nature and disturbed his sleep. He consulted numerous doctors who treated him with oral antihistaminics and topical ointments with which he had mild relief in symptoms. He did not complain of any systemic symptoms or taking any kind of drugs prior to the onset of lesions. There was no history of pain or redness of eyes, joint pains, cough, chest pain, breathlessness, allergies, or evening rise of temperature. General physical and systemic examinations did not reveal any abnormality or lymphadenopathy.

Dermatological examination revealed presence of multiple hyperpigmented scaly papules discrete to confluent located over both lower extremities and lower back [Figure 1].

Complete blood count, hepatic, and renal functions were normal. Serum angiotensin-converting enzyme level and calcium level were normal at 43.0 UI/L and 9.50 mg/dL, respectively. Mantoux test was negative. Chest radiograph revealed no abnormality. Skin biopsy showed epidermis lined by keratinized stratified squamous epithelium, orthokeratosis, focal wedge-shaped hypergranulosis, mild follicular plugging, and basal cell layer ballooning and vacuolation. At places saw toothing and melanin incontinence was noted. Superficial reticular dermis showed well-formed epithelioid granulomas with multiple Langhans type of giant cells aligned in a wavy linear pattern along the neurovascular bundles [Figures 2-4]. Few Langhans giant cells showed ingested melanin pigment. Perivascular and periadnexal lymphocytic...
Sinha, et al.: Lichenoid sarcoidosis mimicking papular amyloidosis

inflammatory infiltrate was present but no vasculitis was noted. Ziehl–Neelsen (ZN) stain was negative for acid-fast bacillus (AFB) and periodic acid-Schiff (PAS) was negative for fungal elements. Contrast-enhanced computed tomography (CECT) chest revealed presence of enlarged right paratracheal group of mediastinal and right hilar lymph nodes [Figure 5a-c]. Pulmonary function tests were normal.

On the basis of the above clinical, radiological, and histopathological findings, a final diagnosis of sarcoidosis was made with the skin lesions in the form of cutaneous lichenoid variant.

Patient was put on treatment in consultation with pulmonologist with oral prednisolone, tab hydroxychloroquin, and topical high potent corticosteroid for skin lesions. He showed good response to the above treatment with regression of nearly 50% of skin lesions. He was under regular follow up till reporting.

Discussion
Sarcoidosis is a condition where diagnosis is a challenge because of the variety of lesions described. Exclusion of many other diseases is required as there is no single diagnostic test to prove this granulomatosis.[1]

It is a multisystem disease of unknown etiology characterized by the presence of epithelioid cell granulomas without caseation in multiple organs. It can present clinically as an acute self-limiting form, a chronic form exclusively involving the skin or a systemic chronic disease with widespread lesions, involving multiple systems.[2] Cutaneous involvement may occur at any stage of sarcoidosis, although it is more frequent at the onset of the disease. Maculopapular lesions are the commonest cutaneous lesion.[1]

In general, specific cutaneous lesions have no prognostic significance, do not correlate with the extent of systemic

![Figure 1: Multiple hyperpigmented scaly papules discrete to confluent at places located over both legs](image1)

![Figure 2: Histopathology shows orthokeratotic hyperkeratosis with follicular plugging, band like dermoeidermal infiltrate, and granulomatous infiltrate in a perineurovascular distribution. The right edge shows saw toothing (H and E, ×20)](image2)

![Figure 3: Lichenoid areas with dermoeidermal lymphocytic infiltrate and basal cell vacuolation (H and E, ×200)](image3)

![Figure 4: Granulomas with multinucleate giant cells. Some of the giant cells have ingested brownish melanin pigment secondary to the lichenoid reaction (H and E, ×200)](image4)
involvement, and do not indicate a more serious form of sarcoidosis. However, it has been seen that erythema nodosum shows a good prognosis because of its association with spontaneous resolution of sarcoidosis.\cite{2,3}

Lichenoid sarcoidosis is among the rarest variants of cutaneous sarcoidosis found in less than 2% of skin sarcoidosis patients. It tends to mimic lichen planus generally appearing as grouped yellowish colored 1–3 mm pinhead size erythematous to skin colored lesions.\cite{4} Lesions can occasionally show superficial scaling. Sites commonly involved include trunk, limbs, and face and these lesions have been reported earlier in small children.\cite{3} Lichenoid lesions generally have been reported earlier with the eye and joint complications and less of pulmonary involvement unlike our case in which the patient had distinctive lymph node enlargement.\cite{5}

Histopathologically the distinct features of lichenoid granulomatous dermatitis in the form of ballooning degeneration with vacuolation at the dermoepidermal junction along with well-formed granulomas as in our patient has been infrequently reported. These characteristic features find a mention in the case report by Garrido-Ruiz et al.\cite{5}

The dermoscopy findings usually reveal circular or oval yellowish brown lesions with the absence of Wickham’s striae. This feature is not specific for sarcoidosis but such homogeneous appearance of lesions indicates a granulomatous skin disease.\cite{6}

The main differential diagnosis of lichenoid sarcoidosis is lichen scrofulosorum, but in our case no morphological or histopathological resemblance to lichen scrofulosorum was seen. Also evaluation for tuberculosis was negative.

Treatment approaches for such patients include oral and topical corticosteroids, azathioprine, methotrexate, thalidomide, allopurinol, isotretinoin, and topical calcineurin inhibitors.\cite{7}

We report this case for its uncommon clinical presentation and distinct histopathological features.

**Declaration of patient consent**

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

**Financial support and sponsorship**

Nil.

**Conflicts of interest**

There are no conflicts of interest.

**References**

1. English JC III, Patel PJ, Greer KE. Sarcoidosis. J Am Acad Dermatol 2001;44:725–43.
2. Fujii K, Okamoto H, Onuki M, Horio T. Recurrent follicular and lichenoid papules of sarcoidosis. Eur J Dermatol 2000;10:303-5.
3. Seo SK, Yeum JS, Suh JC, Na GY. Lichenoid sarcoidosis in a 3-year-old girl. Pediatr Dermatol 2001;18:384-7.
4. Collin B, Rajaratnam R, Lim R, Lewis H. A retrospective analysis of 34 patients with cutaneous sarcoidosis assessed in a dermatology department. Clin Exp Dermatol 2010;35:131-4.
5. Garrido-Ruiz MC, Enguita-Valls AB, de Arriba MG, Vanaclocha F, Peralto JL. Lichenoid sarcoidosis: A case with clinical and histopathological lichenoid features. Am J Dermatopathol 2008;30:271-3.
6. Vazquez-Lopez F, Palacios-Garcia L, Gomez-Diez S, Argenziano G. Dermoscopy for discriminating between lichenoid sarcoidosis and lichen planus. Arch Dermatol 2011;147:1130.
7. Tsuboi H, Yonemoto K, Katsuoka K. A 14-year-old girl with lichenoid sarcoidosis successfully treated with tacrolimus. J Dermatol 2006;33:344-8.