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**Pulmonary Medicine** 

# A Rare Case of Extensive Lichen Planus Eruption during Fixed Dosed Regimen of Anti Tubercular Therapy

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Abstract Case Report

Introduction: Lichen Planus is a mucocutaneous disease with idiopathic etiology. Lichenoid drug eruption/Drug induced lichen planus an uncommon adverse effect of several drugs. Lichen planus can be distinguished from Lichenoid drug eruption by clinical and microscopic features. Case report: 62 year old male presented with left lung consolidation with effusion .Analysis of pleural fluid was consistent with koch's etiology. Patient was started on fixed dose regimen of anti-tubercular therapy .Patient developed rash all over the body initially over legs and later on progressed to entire body involving oral mucosa, lips and scalp. On examination purplish to blakish plaques mostly over extremities, and also scalp, buccal mucosa, lips involved. A differential diagnosis of Psoriasiform lichen planus/Psoriasis/Prurigo nodularis was made and skin biopsy was sent for histopathological examination which showed lichen planus. Dermatologist consultation was taken and patient was started on topical steroids and anti-histamines .Anti tubercular therapy was continued and completed the course for 6months.patient is in a verge of relief of symptoms and hyperpigmentation.

Keywords: Extensive, Eruption, Anti Tubercular, Lichen Planus.

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#### Introduction

Lichen Planus is a chronic inflammatory autoimmune disease occurring in 0.1 to 4% of general population [1]. Lichen Planus can appear at any age, but most cases occur between 30 and 60 years of age [2]. Lichen Planus can be diagnosed clinically in classic cases, although biopsy is often helpful to confirm the diagnosis. The histology shows a characteristic "sawtooth" pattern of epidermal hyperplasia; hyperparakeratosis with thickening of the granular cell layer and vacuolar alteration of basal layer of epidermis with an intense infiltration at dermal -epidermal junction.

### CASE PRESENTATION

We report a case of 62 yrs old male presented with left lung consolidation with effusion. Sputum for acid fast bacilli is negative. Analysis of pleural fluid showed lymphocytic predominance; ADA 48IU. Analysis of pleural fluid was consistent with tubercular etiology.

Patient was started on anti-tubercular regimen (fixed dose regimen) in febrauary 2019. Three months after initiation of anti-tubercular therapy patient developed an erythematous to violaceous eruption all over the body initially over legs and later on progressed to entire body involving oral mucosa, lips and scalp.

Physical examination revealed purplish to blackish plaques mostly over extrimities involving scalp, buccal mucosa and lips.

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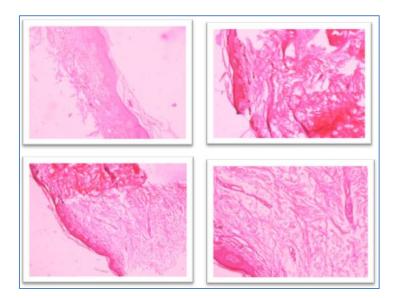
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A differential diagnosis of Psoriasiform lichen planus/Psoriasis/Prurigo nodularis was made. Punch biopsy from skin was sent for histo pathological examination. In hematoxilin and eosin stained sections from skin biopsy, Epidermis showed hyperkeratosis, Acanthosis. Upper dermis showed band like inflammatory infiltrate, histological features are suggestive of lichen planus.



Dermatologist consultation was taken and patient was started on topical steroids and antihistamines. Anti-tubercular therapy was continued and completed the course for six months. Patient currently is in a state of resolution of skin lesions.

### **DISCUSSION**

Idiopathic LP usually develops insidiously and can affect any area of the body surface. It is most likely to appear on the wrist, lumbar region, and ankles. Oral

lesions are more pleomorphic and may occur in up to 30-70% of patients. Patients typically complain of pruritus, but this may be completely absent [3]. Druginduced LP produces lesions that are clinically and histologically indistinguishable from idiopathic LP the two can be differentiated only by the time course of skin or mucous membrane involvement in relation to the drug, and confirmed by rechallenge. Considering the variability in the disorder's natural history, diagnosing drug-induced LP can be difficult, and a definitive diagnosis is generally not possible.

The terms LP-like or lichenoid describe Skin eruptions caused by certain drugs and compounds and can be identical or similar to lichen planus. For most drug eruptions, the latent period between the beginning of administration of a drug and the appearance of the eruption is about 1 or 2 Weeks [4] or up to 1 month [5]. The latent period is dependent on the offending drug but other factors may also play a role in determining its duration, that is, the dosage of the drug, the patient's individual reaction to the drug, and treatment with other drugs. The latent period may be shortened significantly if the patient has been previously exposed to the offending drug [5].

Idiopathic LP has a predilection for the flexor aspect of the forearms and the legs. Moreover, a photo distributed pattern in idiopathic LP is not likely. However, Lichenoid drug eruption usually appears as asymmetric eruption on the trunk and extremities [6]. Involvement of the oral mucosa in Lichenoid drug eruption is less common than in idiopathic LP. It may occur with or without cutaneous involvement

Antitubercular drugs responsible for Lichen Planus eruption are [7, 8].
Ethambutol
P-Amino salicylic acid
Isoniazide
Streptomycin

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