

# EC CLINICAL AND MEDICAL CASE REPORTS

**Case Report** 

# Lichen Planus of 12 Years Duration Treated Successfully with Acitretin, Apremilast and Normal Saline

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#### **Abstract**

A 27 year old young unmarried man presented with a diffuse pruritic skin lesion on the dorsal surface of both feet. He was suffering for the past 12 years. The lesions were very pruritic, violaceous, hyperkeratotic, dark colored and oozed due to prior scratching. There were no other similar lesions nor any mucosal involvement. His nails and hair were also normal. Patient was did not have regular medical care and used topical steroid ointment and antihistamine but without much improvement.

According to the clinical presentation the patient was diagnosed with Lichen planus. No biopsy was taken because the patient refused. We performed a hematological examination and found his CBC was within normal limits, SGPT and S. Creatinine were normal, IgE was slightly elevated.

The patient was initially treated with Normal Saline soaks twice daily and Acitretin 25 mg daily for 2 months in addition to topical steroids. Patient improved, and after 2 months he was unable to continue the acitretin therapy due to high treatment cost. We then started apremilast 30 mg daily for 2 months followed by 30 mg apremilast on alternate days for 3 months. We checked his liver and kidney function by checking the blood parameters which were normal. Patient's condition improved but he was not totally cured. Then we continued the apremilast treatment for another 2 months at the same dose. After 11 months patient was totally cured and shows no major adverse effect except weakness.

Keywords: Lichen Planus; Apremilast; Acitretin; Pruritic; Violaceous

#### **Abbreviations**

LP: Lichen Planus; NS: Normal Saline; SGPT: Serum Glutamic Pyruvic Transaminase; CBC: Complete Blood Count

## Introduction

Lichen planus, a papulosquamous disease in its classical presentation is characterized by pruritic violaceous papules most commonly on the extremities. It also be accompanied by involvement of oral and genital mucous membrane.

The course of LP is generally self-limited for a period of several months to years, but it may persist. Persistent LP is a premalignant condition. Lichen planus is noncontagious.

## **Case Report**

A 27 years old young unmarried man presented with diffuse pruritic skin lesion on his dorsal surface of both feet. He was suffering for last 12 years. Both the lesions were very pruritic, violaceous, hyperkeratotic, dark colored and little bit oozy due to severe scratch. There

was no other similar lesion nor the mucosal involvement.

His nails and hair were also normal. Patient was in irregular treatment and took topical steroid ointment and antihistamine but not much improvement.

According to clinical presentation patient was diagnosed as Lichen planus. No biopsy was taken because the patient did not consent to take biopsy. We did hematological examination and found CBC within normal limit, SGPT and S. Creatinine found normal, IgE was little bit higher than normal limit.

The patient was initially treated with Normal Saline soak 2 times daily and Acitretin 25 mg daily for 2 months with topical steroid. Patient shows better response. After 2 months patient was unable to carry on the acitretin therapy due to high treatment cost. After that we started apremilast 30 mg daily for 2 months then we started 30 mg apremilast on alternate days for 3 months. We checked his liver and kidney function by checking the blood parameter which was normal. Patient's condition was good enough but not totally cured. Then we continued the apremilast treatment another 2 months at the same dose. After 11 months patient was totally cured and shows no major adverse effect except weakness.

### **Discussion**

Lichen planus (LP) is a chronic mucocutaneous inflammatory disease. Lichen planus was first described by Erasmus Wilson in 1869. It involves the skin, mucous membranes, hair and nails. Skin lesions are accompanied with severe pruritus [1-4]. The pathogenesis remains unclear but it thought to be an autoimmune phenomenon.

Diagnosis of Lichen planus is usually clinical. However histological evidence is also important [5]. Cutaneous Lichen planus may spontaneously resolve, often within a year [6]. The use of acitretin has been proven highly effective in Lichen planus. Some authors consider acitretin as a first line therapy at a dose of .5 - .7 mg/kg until remission is achieved and at a dose of .3 - .5 mg/kg thereafter. This can be used either as monotherapy or in combination with topical or systemic corticosteroids [7]. Acitretin, a second generation retinoid which activates certain retinoic acid receptor subtypes to control epidermal maturation and skin inflammation may also be utilized. However, acitretin is highly teratogenic, thus a strict contraception has to be used for up to three years after treatment. Mucocutaneous side effects, like xerosis cutis, mucosae, hair loss, dyslipidemia and elevation of liver enzymes are reversible after discontinuation [8]. Systemic corticosteroids are considered as a second line therapy for Lichen planus [9]. 3 recalcitrant cases of oral lichen planus were effectively treated with apremilast, a drug recently approved for psoriasis and psoriatic arthritis [10]. Tenpatients with biopsy-proven LP received 20 mg of apremilast orally twice daily for 12 weeks with 4 weeks of treatment-free follow-up. The primary efficacy end point was the proportion of patients achieving a 2-grade or more improvement in the Physician Global Assessment (PGA) after 12 weeks of treatment [11]. It has been seen that 15% - 20% of patients with LP demonstrate a relapsing and remitting course, often resistant to most conventional modalities of treatment [12].

## Conclusion

Though persistent Lichen planus is a premalignant condition it can be successfully treated with acitretin and apremilast with topical corticosteroid.

## **Conflict of Interest**

Author has no conflict of interest.

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