

## A SINGLE CASE STUDY OF TREATING HYPERTROPHIC LICHEN PLANUS WITH AYURVEDIC MEDICINES

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### ABSTRACT

Ayurvedic medicines are often considered effective for chronic and lifestyle disorders. Hypertrophic Lichen planus (HLP) is a rare inflammatory skin condition and develops into squamous cell carcinoma into few cases. It has resemblance with *Charma Kushtha* mentioned in ayurvedic classics. Conventional therapy used in this condition is unsatisfactory and is not free from side effects. A case of long standing systemic steroid-dependent HLP is presented here which was intervened successfully with Ayurvedic modalities.

**KEYWORDS:** Ayurveda, *Charma Kushtha*, *Kshudra Kushtha*, Hypertrophic lichen planus.

### INTRODUCTION

Ayurveda, the science of life, evolved from the quest of man to have happy life. The main Aim of Ayurveda is maintaining health of healthy person and curing the diseased ones.

[1] Ayurvedic medicines are often considered effective for treating chronic & lifestyle related diseases and few of them have been systematically evaluated for treating chronic illness.[2]

In Ayurveda, almost all skin diseases are explained under the spectrum of *Kushtha* and they are classified as *Maha kushtha* & the *Kshudrakushtha*. As per *Acharya Charak*, the vitiation of *Dosha's* i.e. *Vata*, *Pitta* & *Kapha* along with *Twacha*, *Rakta*, *Mamsa* & *Lasika* have major role in pathogenesis of *Kushtha*.<sup>[3]</sup> Among the *Kshudrakushtha*, *Charmakushtha* is dominant of *Vat* & *Kapha Dosha*. In *Charmakushtha*, skin over the patch becomes thick like the skin of elephant.<sup>[4]</sup> The *Charmakushtha* can be correlated<sup>[4]</sup> with hypertrophic Lichen planus due to similarity in signs & symptoms.

Hypertrophic lichen planus is a subacute or chronic variant of lichen planus of unknown etiology.<sup>[5]</sup> It is thought to be an autoimmune disorder in patients with a genetic predisposition but it may be caused by drugs or can be associated hepatitis B or hepatitis C infection.<sup>[6]</sup> It is an inflammatory disorder in which T lymphocytes attack the basal epidermis, producing characteristic clinical & Histological lesions. It is characterized by epidermal hyperplasia in response to persistent itching & gets intense by stress.<sup>[7,8]</sup>

Here, details of a systemic steroid dependent HLP patient, effectively intervened with complex Ayurvedic modalities have been described. A significant reduction in pruritus & improvement in the skin lesion were observed for a period of 1 year of regular treatment. The improvement is observable through the photographs.

## **MATERIAL AND METHODS**

### **Case Report Presenting concern**

A 25-year male patient diagnosed with hypertrophic lichen planus by dermatologist presented in Outpatient Department (OPD) of Government Ayurvedic College & Hospital, Nagpur, Maharashtra. (OPD Reg.no. CR-675) on dated 9<sup>th</sup> April 2019 with complaints of itchy, large verrucous lesions on both medial and lateral aspect of ankle joint along with anterolateral aspect of both legs since last 19-years. There is on and off in itching since last 7 to 8 years but no significant change in size of lesions occurs.

### **Past history of disease**

Patient presented with pruritus and maculopapular skin rashes all over body (at age of 6 yrs.)

H/o chicken-pox (Dec 2017)

No h/o DM/HTN/TB/BA/or any other major illness. No h/o any surgical illness

No h/o drug allergy

No h/o blood transfusion

## Timeline of the case

Date	Duration	Intervention	Disease condition
2001	4-years	Treated with corticosteroid (Betamethasone 1mg) & antihistamine (Fexofenadine 5mg) drugs with topical cream containing corticosteroid (Clobetasol 0.05%).	Patient presented with pruritus & skin lesions all over body including face, neck, chest, back abdomen, limbs. Symptoms get relived except on lower limbs.
2004	5-years	Prednisolone 20mg & Inj.Triamcinolone at local lesions.	Itching and papulovesicular skin lesions are go on increasing on both lower limbs
2009	6 months	cap.Vit A & cap. zinc acetate 220mg	No relief in itching and size of lesions
Aug 2009 to Feb 2012	19 months	Ayurvedic medicines (Gandhak Rasayan 1bd, Raktashodhak vati 2bd, kaishour guggul 2bd, khadirarishth)	Mild decrease in itching but no change size of lesions.
Mar2012	14 months		Significant increase in appetite and weight. No improvement in lesion condition.
June 2013 to Dec 2016	2 ½ -years	Treated with antihistaminic (Fexofenadine 5mg), corticosteroid (betamethasone & prednisolone), antifungal(Griseofulvin), Immuno-suppressant drug(Azathioprine)	Decrease in itching but no improvement in skin lesions.
2017 to Mar 2019	27 months	Treated with homeopathic medication along with Tab.vit B12 and vit D3	Increase in itching & size of skin lesions over both lower limbs.

## Timeline of Case In GACH, Nagpur

Date & follow-up visits	Intervention	Description of skin lesion
9 <sup>th</sup> Apr 2019	Aarogyavardhini vati+Triphala Guggul+Khadirarishtha In prescribed dosage insuring dietary and lifestyle modification	Itchy large verrucous lesions over medial & lateral aspect of ankle joint along with anterolateral aspect of both lower limbs below knee joint.
30 <sup>th</sup> Apr 2019	Aarogyavardhini vati+Triphala Guggul+Khadirarishtha tab.atrisor 1bd	Mild decrease in itching No change in size and color of skin lesions
21 <sup>st</sup> May 2019	Aarogyavardhini vati+Triphala Guggul+Khadirarishtha+ Karanj tail for local application	Moderate decrease in itching. Moist skin over lesions. Big papular lesions with hyperpigmented margins
18 <sup>th</sup> June 2019	Aarogyavardhini vati+Triphala Guggul+Khadirarishtha+ Karanj tail for local application	Moderate decrease in itching. No change in size & color of skin lesions.
9 <sup>th</sup> July 2019	Aarogyavardhinivati+Triphala Guggul+Khadirarishtha+ Karanj tail for local application	Significant decrease in itching. Moist skin over lesions. Big papular lesions with more hyperpigmented margins

2 <sup>nd</sup> Aug 2019	Aarogyaverdhinivati+Triphala Guggul+Khadirarishtha+ Shatavari churn + sunthi churn Karanj tail for local application	Significant decrease in itching. Moist skin over lesions. Big papular lesions with more hyperpigmented margins
7 <sup>th</sup> Sept 2019	Manjishtha churn + sariva churn +arogyaverdhini vati+ Karanj tail for local application	Significant decrease in itching. Moist skin over lesions. Big papular lesions with more hyperpigmented margins
1 <sup>st</sup> bOct 2019	Manjishtha churn + sariva churn +arogyaverdhini vati+Aragvadhasav+Panchtikth ghruth orally	No itching. Skin over lesions becomes dry.no change in size and colour of skin lesions.
25 <sup>th</sup> Oct 2019	Manjishtha churn + sarivachurn +arogyaverdhinivati+Aragvadhasav+Panc htikth ghruth orally	No itching. Skin over lesions becomes dry with mild hypopigmented margins of lesions. No change in size of lesions.
26 <sup>th</sup> NOV 2019	Manjishta churn + sariva churn, arogyavardhini vati, panchtikht ghrut, sarivadyasav, 777oil for local application.	No itching. Surface over lesions becomes dry, presence of crust, reduction in papillated excrescences.
3 <sup>rd</sup> Jan 2019	Manjishta churn + sariva churn, arogyavardhini vati, panchtikht ghrut, sarivadyasav, 777oil for local application	No itching. surface over lesions dried, presence of crust papillae significantly reduced, pigmentation reduced.
1 <sup>st</sup> Feb 2019	Manjishta churn +sariva churn, arogyavardhini vati, panchtikht ghrut, sarivadyasav, 777oil for local application	No itching. Lesions becomes hypopigmented centrally, decrease in size of lesions, significant reduction in papillated excrescences.
7 <sup>th</sup> Mar 2019	Manjishta churn + sariva churn, arogyavardhini vati, panchtikht ghrut, sarivadyasav, 777oil for local application	No itching. Lesions becomes hypopigmented centrally with significant decrease in size of lesions.

The patient was advised to report at an interval of 1 month or report as and when required for assessment.

### Follow-up and outcomes

Picture of the affected skin was taken at the time of initiation of the treatment and subsequently on every visit. The patient was assessed clinically on every monthly visit. The consecutive photographs were taken during each follow up when compared with the before treatment status were able to exhibit changes in the skin lesions. This shows the considerable improvement in skin lesions following the therapy to the before treatment status. No adverse effect pertaining to the prescribed drug was reported. There was no extra recurrence of lesions.

### DISCUSSION

*Charma kushtha* is a type of skin disease mentioned in Ayurveda under the classification of *Kshudra kushtha*. The classical sign of *Charma kushtha* is thickening of the skin like the skin of an elephant.<sup>[9]</sup> It is verrucous lichenification of skin and usually develops in patients with

psoriasis, dry eczema, and LP. Treatment of all types of *Kushtha* consists of purification therapy (*Samshodhana*)<sup>[10]</sup>, internal and external administration of the drug (*Samshamana*)<sup>[11]</sup> Dietary and life style modification also play an important role in the management of *Kushtha*.<sup>[12]</sup> LP has a strong association with anxiety, stress, and diabetes.<sup>[6]</sup> HLP and few varieties of long-standing, erosive LP develop into Bowen's disease, a premalignant condition, and squamous cell carcinoma. Although the disease is diagnosed from its clinical features, biopsy is often recommended to make the diagnosis and to look for cancer. The current conventional treatment involves topical and a long course of oral steroids, calcineurin inhibitors, retinoid, acitretin, hydroxychloroquine, methotrexate, azathioprine, and phototherapy. Various studies had shown the use of indigenous medicines in oral LP.<sup>[13,14]</sup> There are also limitations for the use and drawbacks of topical steroids and systemic glucocorticoids because of suppression of hypothalamic–pituitary–adrenal axis and other systemic side effects.<sup>[15]</sup>

Ayurvedic principles have shown potential to be used in noncommunicable and lifestyle disorders. These are convenient, safe, and least expensive in compare to the conventional method of treatment.<sup>[16]</sup> Here, the drugs, dietary, and lifestyle modification were chosen on the basis of *Nidanam* (causative factors of disease), involvement of dominant *Dosha*(*Kapha-Vata*), and nature of the disease (*Vyadhi*). Formulations having *Kaphavataharam*, *Vishaharam*, *Kandughna*, *Kushthaghna* properties were used. Blood-letting (*Rakta-Mokshana*) is also one of the effective treatments.

## CONCLUSION

HLP is a rare and difficult skin condition to cure. It is notorious for its recurrence and has also the possibility to develop into squamous cell carcinoma. The conventional treatment options available are also not satisfactory and are not free from systemic side effects. This observation endorses a step toward the practice of Ayurvedic intervention in HLP.

## Recovery of symptoms can be observed with following photographs

9 <sup>th</sup> April 2019		7 <sup>th</sup> Sept2019	
21 <sup>st</sup> May 2019		1 <sup>st</sup> Oct 2019	
18 <sup>th</sup> June 2019		26 <sup>th</sup> Nov 2019	
9 <sup>th</sup> July2019		3 <sup>rd</sup> Jan 2020	
2 <sup>nd</sup> Aug 2019		7 <sup>th</sup> Mar 2020	

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