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Review Article

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### LICHEN PLANUS: AN ACUMEN THROUGH AYURVEDA

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#### **ABSTRACT**

Twak (skin) is one of the 5 gyanendriyas (sensory organs) according to Ayurveda, which is responsible for sparshagyan (touch sensation). In Ayurveda all the skin diseases have been narrated under kushtaroga. Kustha's are additionally classified into mahakushta and kshudrakushta. Lichen planus can be correlated with charmakushta due to their more or less similar clinical appearance. According to Charaka, charmakushta is vata-kapha predominant which is mentioned under kshudrakushta. Charmakushta is also mentioned in Ashtang Sangraha and Ashtang Hridaya. Lichen planus is rare skin

disease affecting about less than 1% of world's population but should not be ignored. It is an inflammatory, papulosquamous disorder affecting either or all of the skin, mucous membranes, hair and the nail which is clinically characterized by erythematous-to-violaceous, flat topped, polygonal papules distributed mainly on the flexor aspects of the extremities, associated with intense pruritus. Beholding into the management in modern medicines, steroids have been the drugs of choice. Their hazards, side effects are well known. There is a need to treat the patient with effectual and safe treatment based on the *dosha* dominance. Lichen planus is a crucial entity to manage. Thus, it would be a great vantage if this disease could be managed through traditional system of medicine like Ayurveda, which would prove to be a good accustomed treatment and prevent the development of complications. This article aims at understanding of lichen planus through a modern and Ayurvedic perspective and critically analyzes the treatment options in Ayurveda and recent researches.

**KEYWORDS:** Lichen planus, *charmakushta*, medicinal herbs, Ayurvedic *chikitsa*, *pathyaapathya*.

#### INTRODUCTION

Lichen planus is an inflammatory papulosqamous disorder affecting either all of the skin, mucous membranes, hair and nail. The name lichen planus has been derived from Greek word 'liechen' (tree moss) and Latin word 'planus' (flat).<sup>[1]</sup> Lichen planus can be correlated with *charmakushta* due to their more or less similar clinical appearance. According to *Charaka, charmakushta* is *vata-kapha* predominant which is mentioned under *kshudrakushta*. In *charmakushta*, the skin over the patch becomes thick like the skin of the elephant.<sup>[2]</sup>

### **Epidemiology**

Prevalence of Lichen planus is less than 1% worldwide.<sup>[3]</sup> An incidence of 0.38% has been reported from India.<sup>[4]</sup>

### **Etiology and Pathogenesis (Modern medicine)**

Infectious agents, drugs and chemicals are known to be involved in the pathogenesis of Lichen Planus.<sup>[1,5]</sup> Dental amalgam materials are known to cause oral lichenoid reactions.<sup>[6]</sup> Activation of cell-mediated immune response destined towards keratinocyte apoptosis is the prime event. The process involves,

LP-specific antigen recognition

↓

Cytotoxic lymphocyte activation

↓

Keratinocyte apoptosis

# Etiology and Pathogenesis (Ayurveda)<sup>[7]</sup>

- 1. Intake of mutually contradictory food and drinks which are liquid, unctuous and heavy.
- 2. Suppression of the urge for vomiting and other natural urges.
- 3. Performance of physical exercise in excessive heat and after taking very heavy meal.
- 4. Transgression of the prescribed order with reference to heat and cold as well as fasting and intake of food.
- 5. Use of cold water immediately after exposure to scorching sun, exertion or exposure to frightening situation.
- 6. Intake of uncooked food and intake of food before the previous meal is digested.
- 7. Transgression of the procedure of *panchakarma*.

- 8. Excessive intake of food preparations of freshly harvested grains, curd, fish, salt and sour substances.
- 9. Excessive intake of *masa* (Phaseolus mungo), *mulaka* (radish), *tila* (seasame seeds), milk and jaggery.
- 10. Performance of sexual act in the state of indigestion.
- 11. Sleep during day time.

Three vitiated *doshas* (*vata*, *pitta*, *kapha*) in turn vitiate the *tvak* (skin), *rakta* (blood), *mamsa* (muscular tissue) and *ambu* (lymph). These are taken together, constitute the seven fold pathogenic substance of *kushta*. The seven and eleven varities of kushta are caused by all of them. Kushtas are never caused by the vitiation of only one of the above mentioned pathogenic substance, i.e. all of them are necessarily involved in the causation of this disease.

#### **Classification and Clinical features**

#### **Clinical features**

Classical lesions of cutaneous Lichen planus has been described erythematous-to-violaceous, flat topped, polygonal papules distributed mainly on flexor aspects of extremities, associated with intense pruritus. The oral cavity, genitals, nails and scalp may also be involved.<sup>[8]</sup>

#### Classification

## A. Linear morphology<sup>[1, 5]</sup>

- 1. Hypertrophic
- 2. Atrophic
- 3. Guttate (eruptive)
- 4. Annular
- 5. Linear
- 6. Vesiculobullous
- 7. Follicular
- 8. Ulcerative
- 9. Lichen planus pigmentosus

#### **B.** Sites of involvement

- 1. Mucosal (oral, genital)
- 2. Palmoplantar
- 3. Nail

- 4. Scalp
- 5. Inverse

### C. Special forms

- 1. Actinic
- 2. Lichen planus pemphigoides

### **Diagnosis**

Histopathological confirmation is necessary where clinical picture is not so classical, and in some clinical variants.<sup>[8]</sup>

## Treatment<sup>[8]</sup>

Different treatment modalities are in use for Lichen Planus.

### A. Topical Therapy

- a) Corticosteriods (Potent corticosteroid oinments)
- b) Topical Calineurin Inhibitors

### **B.** Systemic Therapy

- a) Systemic Corticosteroids
- b) Systemic Retinoids

## What Ayurveda says?<sup>[9]</sup>

- 1. The patient suffering from *kushta* dominated by *vayu* should first be administered ghee internally.
- 2. The patient suffering from *kushta* dominated by *kapha*s should first be administered emetic therapy.

So preferably we can do *snehapana* and *vamana* in *charmakushta* as it is *vata* and *kapha* dominated.

#### MATERIALS AND METHODS

Materials related to concept of Lichen Planus, and other relevant topics have been collected. For Ayurvedic and modern concepts of Lichen Planus reference have been taken from textbooks, various websites, electronic media and articles.

# 1. Mustadi Churna<sup>[10]</sup>

This is an infallible remedy for the treatment of kustha.

## 2. Triphaladi Churna<sup>[11]</sup>

This is an excellent for the cure of *supti* (numbness).

### 3. Kanakabindvarista<sup>[12]</sup>

Intake of this is useful in *kushta's* caused by *tridosha*. However, use of decoction of *Kritamala* (in the place of *Khadira*) in this will make it separately useful in curing *kaphaja kushta*.

## 4. Triphaladi Kashaya<sup>[13]</sup>

This cures kushta caused by kapha and pitta.

Medicated ghee prepared by boiling with the decoction of the mentioned drugs in *triphaladi kashaya* cures *vata* type of *kushta*.

## 5. Shveta Karavirapallayadya Taila [14]

External application of this *taila* eradicates *kustha* and *kandu* (itching).

## 6. Tikteshvadi Taila [15]

External application of this taila cures kandu (itching).

## 7. Mahatiktaka ghrita [16]

Administration of this *ghrita* cures *kushta* and *kandu* (itching).

## 8. Vajrak taila<sup>[17]</sup>

Application of this taila cures kushta but especially kapha-vata type of kushta.

This ghee is administered in appropriate time and suitable time in accordance with the strength of the patient.

### Pathya-Apathya<sup>[18]</sup>

The patient suffering from *kustha* should take following types of diet:

- 1. Laghu ahara Light and wholesome food
- 2. Tikta shaka Vegetables (leafy) having bitter taste
- 3. Food preparations and medicated ghee prepared by boiling with *Bhallalaka*, *Triphala* and *Nimba*

- 4. Old (not freshly harvested) cereals and
- 5. Jangala Mamsa and preparations of Mudga (green gram) mixed with Patola. Intake of heavy and sour food, milk, curd, fish, Guda (Jaggery) and Tila are prohibited for patients of kustha

#### What's new?

- 1. *Tulsi* (Ocimum sanctum) have the unique property of acting on the skin and blood tissue and also bring about the desired immunomodulators and it one of the treatment options in Ayurveda for treating Lichen Planus.<sup>[19]</sup>
- 2. A pilot study was conducted in the Department of Oral and Maxillofacial surgery, KGMU, Lucknow. The 10 patients were included in the study, they were clinically diagnosed and histopathologically confirmed as patients of oral lichen planus. The extract of turmeric in the ointment form was made and used for local application twice/day for a period of 3 months.<sup>[20]</sup>

#### **CONCLUSION**

Lichen planus is a crucial entity to manage. As the medications for Lichen Planus according to modern medicine may cause adverse effects in the body may lead to anxiety in the patient. The herbs mentioned in this article can be effectual and safe treatment based on the *dosha* dominance. Further researches in Ayurveda will help patient to stay away from adverse effects and complications. Thus, it would be a great vantage if this disease could be managed through Ayurveda, which would prevent the development of complications

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