ASSESSING THE EFFECTIVENESS OF SHODANA IN TREATING LICHEN PLANUS, WITH A FOCUS ON KITIBA KUSTA

Abstract: Lichen planus is a long-lasting, inflammatory, autoimmune condition affecting the skin, oral mucosa, genital mucosa, scalp, and nails. While the precise cause of LP is currently unknown, it is noted that the autoantigen XVII collagen (COL17) is linked to its development. According to Ayurveda, the skin is the body’s primary defense. Diseases manifesting in its seven layers are considered twak roga, involving twaka, rakta, mamsa and lasika. Ayurveda categorizes nearly all skin ailments as Kushta Rogadhikara. The Brihatrayee mentions 18 types of kustharoga, including 7 mahakustha and 11 kshudrakustha. Kitibha Kusta falls under kshudra kustha, sharing similarities with lichen planus in signs and symptoms.

In kusta, "Bahudosha Nirharana" (aggressive purgation) is cautioned against as it may further weaken the body by aggravating Vata [1]. Virechana, a cleansing therapy, is recommended in Pitta and Rakta predominant disorders, including various skin conditions. Although Kitibha is a Vata-Kapha disorder, its primary cause is Rakta Dhatu and Tridosha vitiation.

This article aims to assess the effectiveness of Virechana in managing lichen planus.

Materials and methods: A 38-year-old patient presented with complaints of skin lesions all over the body for 2 years. Virechana is an ideal method for Pitta and Rakta dushti.

Result: The subject showed marked improvement in symptoms.

Discussion: Virechana was administered to treat the root cause of the disease and the underlying cause with internal medicines for which the patient got significant relief from the symptoms.

Conclusion: High-potency topical corticosteroids, antihistamines, oral retinoids, and immunosuppressants are first-line treatments. However, corticosteroids can have adverse psychological effects, affecting patients' quality of life. Ayurveda suggests addressing the root cause of the disease and reversing the pathology by removing deep-seated toxins. Treatment according to Ayurveda involves toxin removal, metabolism correction, increasing ojus production and immune system correction. Additionally, Shamana Yoga and Bahirparimarjana Chikitsa are administered after Shodhana therapy to provide further relief and aid in eradicating lichen planus.

Keywords: Lichen planus, Kitiba kustha ,Pitta and Rakta Dushti, Virechana
I. INTRODUCTION

Lichen planus is a long-lasting, inflammatory, autoimmune condition affecting the skin, oral mucosa, genital mucosa, scalp, and nails. Typically, it manifests as itchy, purplish papules and plaques, often appearing on the wrists, lower back and ankles. Lichen planus is an idiopathic disease. Its pathogenesis is not fully understood, but it appears to represent a T-cell-mediated autoimmune disease.

The prevailing theory is that exposure to an exogenous agent such as a virus, drug, or contact allergen causes alteration of epidermal self-antigens and activation of cytotoxic CD8+ T cells. The altered self-antigens cross-react with normal self-antigens found on basal keratinocytes resulting in T-cell targeting and apoptosis.[3]

Oral lichen planus is correlated with contact allergies to a variety of metals found in dental restorations including mercury, copper, and gold. Removal of the sensitizing metal resulting in clearance of LP lesions has been described. [3]

Many drugs have been associated with LP, but recurrence of lesions following drug rechallenge is rare. More commonly associated drugs include antimalarials, ACEIs, thiazide diuretics, NSAIDs, quinidine, beta-blockers, tumor necrosis factor (TNF)-alpha inhibitors, and gold. [4]

Lichen planus also be triggered by Hepatitis C infection, Flu vaccine, Certain pigments, chemicals and metal, Pain relievers, such as ibuprofen and naproxen, Certain medications for heart disease, high blood pressure or arthritis

Kitiba

In Ayurveda, most skin diseases are categorized under Kushta Rogadhikara, highlighting the skin's role as the body's primary defense. Diseases affecting the seven layers of the skin, including twaka, raka, mamsa, and lasika, are considered Twakaroga. Ayurvedic classifications such as Mahakustha, Khudrakustha, and Khudraroga are seen as obstinate skin conditions in modern medicine.

“Kushnati Shareersiya Shonitam Vikrute” means vitiation of Rakta Dhatu leads to Kushta. [6]

Twak Vikaras Nidana are most commonly arising due to Mithyahara, Vihara, Manasika vitiate Tridosha which further leads to the affliction and aggravation of Rasa, Rakta, Mamsa and Lasika. Each Dosha vitiation elicit the different Lakshanas in the Twacha. [7]

The Brihatrayee mentions 18 types of kustharoga, with 7 classified as mahakustha and 11 as kshudrakustha. Kitibha Kusta falls under kshudra kusta and shares signs and symptoms with lichen planus. According to Charaka Acharya,

Kitibha Kushta is one of the Raktapradoshá Vikara caused by vitiation of Vata and Kapha Dosha in excess having Lakshanas like Shyava Varna (blackish brown colour), Kina Khará Sparsham (rough on touch), Parusham (Dryness), Ruksha Pidika (skin eruption) and Kundu (itching). [7]

Kitibha Kushta which includes Shyava, Krishna Varna, Parushata, Khara sparsha, Kandu, Ghanatwa and Srava can be co-related to lichen planus in clinical features has been classified and explained under kshudra kushta.
Samprapthi

Nidan of Kushta aggravates the Doshas

It causes Agnimandya and it produces Dhath Shaithilyata.

Among all Doshas, Kapha Vata Dosha is aggravated predominantly and causes Shaithilyata of Dushya

Such as, Twak (skin), Rakta (blood), Mamsa (muscles), Lasika (channels).
It gets obstructed in Lomakupa (sweat glands), leading to Sanghatmak Vikruti (vitiation) in Swedavaha Srotas (channels of sweat glands).

This Prakupita (vitiated) Doshas enter RasaratadiParibhamana (systemic circulation), especially Sanchara (movement) in Tiryak Sira (vein)

Finally, it lodges in Bahya Roga Marga (skin) and resulting in Mandalotpatti (formation of skin lesions).

SAMPRAAPTHI GHATAKA

Dosa: Vata (Vyana vayu), Pitta (Bhrajaka pitta) and Kapha.

Dhatu: Rasa, Rakta, Mamsa.

Upadhatu: Tvacha

Agni: Jataragni, dhatwagni mandya (Rasa, rakta, mamsa)

Srotas: Rasa, rakta, mamsa

Srotas dushti prakara: Sanga

Udbhava sthana: Amashaya, Pakvashaya

Sanchara sthana: Sarvasharira

Adhisthana: Twak, rakta, mamsa, lasika

Vyakta sthana: Twak

Srotas: kasa, rakta, mamsa

Srotas dushti prakara: Sanga

Udbhava sthana: Amashaya, Pakvashaya

Sanchara sthana: Sarvasharira

Adhisthana: Twak, rakta, mamsa, lasika
Comparison of symptoms of Lichen Planus and Kitibha Kusta

<table>
<thead>
<tr>
<th>LICHEN PLANUS</th>
<th>KITIBHA KUSTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thick and rough patches</td>
<td>Shyava (blackish scaly lesion)</td>
</tr>
<tr>
<td>Scaly lesions</td>
<td>Kina, khara sparsha (hard to touch)</td>
</tr>
<tr>
<td>Flat top / polygonal papules and plaques</td>
<td>Vritam (round- and coin-shaped lesions)</td>
</tr>
<tr>
<td>With angular borders and symmetrically distributed</td>
<td>Ghanam (well-defined borders)</td>
</tr>
<tr>
<td>Recurrent, pruritic, inflammatory eruption</td>
<td>Vriddhimanti (spreading in nature)</td>
</tr>
<tr>
<td></td>
<td>Snigdha (unctuous)</td>
</tr>
<tr>
<td></td>
<td>Prashanti cha punar utpadyante (subsides and relapse).</td>
</tr>
</tbody>
</table>

II. CASE REPORT

Vedana Vruttanta (History of present illness)

A female aged 38 years complaints of flaky reddish black lesions all over the body with itching and peeling off the greyish skin since 3 years. She consulted many allopathic physicians but got only temporary relief. Since 1 year, he observed spreading of lesions to both the hands and later to abdomen and legs associated with severe itching followed by peeling off greyish skin. Hence for further needful treatment he consulted the OPD of Sri Sri College of ayurvedic science and research, Bangalore

HISTORY OF PAST ILLNESS – No known case of DM and HTN. There is no family history, and there is no relevant history of drug allergies.
PERSONAL HISTORY

Appetite: Good appetite
Diet: Mixed
Bowel: Regular-once/day
Sleep: Disturbed
Micturition: 6-7 times/day

EXAMINATION GENERAL EXAMINATION

General condition: good
RS: B/L NVBS
CVS: S1S2 heard; no added sounds
CNS: conscious, well-oriented
P/A: Soft Pulse: 78bpm
BP: 130/90mmhg
Moderately built with no other systemic illness

LOCAL EXAMINATION

Lesion: Redish black multiple round coin shaped lesions with well-defined borders. No pus discharge was found
Size: 1-2 mm
Margin: well, defined

Table 1. Treatment chart

<table>
<thead>
<tr>
<th>NAME OF TREATMENT</th>
<th>DRUGS</th>
<th>DAYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deepana - Pachana</td>
<td>Panchakola phanta</td>
<td>Day 1 – 3</td>
</tr>
<tr>
<td>Snehapana</td>
<td>Panca tiktaka ghrita</td>
<td>Day 4 – 7</td>
</tr>
<tr>
<td>Sarvanga</td>
<td>Nalpamaradi taila</td>
<td>Day 8 – 10</td>
</tr>
<tr>
<td>Abhyanga followed by Bashpa Sweda</td>
<td>Trivruth lehya</td>
<td>Day 11</td>
</tr>
</tbody>
</table>

Table 2. Treatment chart

<table>
<thead>
<tr>
<th>DRUGS</th>
<th>DOSE</th>
<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaishora Guggulu</td>
<td>2 tab two times a day</td>
<td>3 months</td>
</tr>
<tr>
<td>Cap.psora</td>
<td>1 tab two times a day</td>
<td>3 months</td>
</tr>
<tr>
<td>Manjistadi kashayam</td>
<td>15ml with 30ml of warm water, two times a day</td>
<td>3 months</td>
</tr>
</tbody>
</table>

111. DISCUSSION

As per Ayurveda poor metabolism leads to the production and deposition of Ama - an endotoxin. When this Ama associates with the immune cells it results in their abnormal behavior. This causes autoimmune diseases. So for proper treatment of any autoimmune disease, this Ama needs to be expelled out of the body. Panchakarma is the tool for this. Deep cellular level removal of toxins should be planned for the treatment of autoimmune diseases.

In kusta Bahudosha Nirharana is contraindicated because it may lead to further weakening of the body due to Vata Prakopa.
Virechana is one of the Shodhana Chikitsa specially advised in the Pitta and Rakta pradhana disorders and is very effective in various skin diseases.
Though Kitibha is Vata-Kapha dominating skin disorder, it primarily due to vitiation of Rakta Dhatu and Tridosha

So, in this article an attempt is made to evaluate the efficacy of Virechana in the management of lichen planus
A) ROLE OF SNEHAPANA

In lichen planus, when administering snehapana with Panchatikta ghrita, the predominant ingredients of the ghritha are Tikta Rasa, Ruksha, and Laghu Guna. It acts mainly on Kleda, Meda, Lasika, Rakta, Pitta and Kapha which helps in balancing the vitiated Dosha and Dhatu.

It subsides the symptoms like Rukshata, Daha etc. It has properties like Deepana, Pachana, Strostoshodhaka, Raktashodhaka, Raktapasadaka, Kashtaghna, Kandughna and Varnya. [8]

It also have anti-inflammatory properties, antimicrobial properties, analgesic properties, astringent properties, and anthelminthic properties. [8]

While taking snehapan the essential fatty acids, which are required for lipid barrier of skin is increased, and this will correct epidermal fluid loss and making skin susceptible for reaction. So Ghrita plays role by enhancing lipid barrier. Ghrita has lipophilic action so it helps in ion transportation to a target organ.

This lipophilic nature of Ghrita helps in the entry of drug into cell, and its delivery to mitochondria and nuclear membrane also it helps in restoring the normal texture to skin.

- Pacification of Kapha Dosha helps to subside itching, boundaries and thickness of plaque, and adhesion of plaque

Owing to pacification of Vata Dosha, roughness, dry scaling as well as blackish brown color patches in lichen planus subsides.

So, all these properties that act mainly at cellular level and it improves cell cycle so helps in decreasing keratinization of cell layer

The primary aim with snehapan is to make sure that all the cells in the body are saturated with so much fat that its ready to expel everything out at the first chance, and in the process, flushing out toxins as well.

B) ROLE OF SWEDANA

After snehapan, the patient was recommended for Baspa sweda. Swedana aids in detoxification and restoring the equilibrium of Vata, Pitta, and Kapha in the body.

Sweat glands are crucial for eliminating toxins, and when stimulated, they can help mobilize toxins from the skin and muscles, aiding in their elimination.

This makes swedana an essential preparatory step in Panchakarma treatment.

Swedana by its qualities like Ushna, Tikshna acts for stimulation in the body. It increases the metabolic rate in the body.

Ushnaguna of Sweda dilates the capillaries thus it increases circulation. Increased circulation leads to more elimination of waste products and more absorption of Sneha or drugs through the skin.

Also, it stimulates muscles and nerves which promotes its renovation and heat administration by Swedana may produce hypoalgesia effect by diverted stimuli.
During swedana, there will be an increase in body temperature.

- It stimulates the sweat glands (via hypothermic action of sympathetic nerve).
- It increases the sweat production and
- More waste removal occurs.

And finally, Swedana corrects swedavaha srotodushti.

❖ Mode of Action of swedana in lichen planus –

- **Moisturizes dry skin**: In lichen planus the skin will be skin dry and itchy. Steaming can help to moisturize the skin by increasing blood flow and opening pores, allowing reducing the dry skin.
- **Boosts immunity**: As lichen planus is an autoimmune condition where the immune system mistakenly attacks healthy skin cells, leading to the characteristic skin changes. Swedana can help to boost the immune system by increasing blood flow and reducing stress. It can also help to remove toxins from the body and promote relaxation, which can strengthen the immune system.
- **Reduces stress and anxiety**: Stress can trigger lichen planus flare-ups, so managing stress might indirectly support immune function. So, reducing stress can potentially benefit those with lichen planus, as stress is known to trigger or exacerbate various skin conditions, including lichen planus.
- **Relieves muscle tension**: Reducing muscle tension can potentially help manage stress, which is known to trigger or exacerbate lichen planus symptoms in some individuals. Techniques like swedana helps in muscle relaxation can aid in reducing muscle tension.

C) Role of Abhyanga

*Nalpamaradi Taila* is opted for *sarvanga abhyanga* in this case trial owing to the unique property of its ingredients to soothe the dry and itchy skin and for toning the skin.

**Taila preparations**, by nature, have the capacity to normalize the vitiated *Vata-Kapha* in the skin which is a major aspect for skin conditions presenting with skin exfoliation, dryness, itching, etc.

All the ingredients of the oil have the inherent ability to alleviate Pitta and Kapha Doshas and are hence used as a frontline option for external application in lichen planus. [9]

❖ Action of abhyanga in lichen planus –

- **Hydrates the skin**: In lichen planus the skin will be dry and flaky. A body massage can help to hydrate the skin, leaving it feeling soft and supple.
- **Boosts the immune system**: Massaging the body can stimulate the lymphatic system, which helps to remove toxins from the body and boost the immune system.
- **Boosts circulation**: Massaging the body can improve blood flow and promote better circulation.
- **Reduces stress and anxiety**: A body massage can help to reduce stress and anxiety by promoting relaxation and a sense of calm.
Relieves muscle tension and pain

D) Mode of action of Virechana Drugs

*Trivritta leha* was given as Medicines for the process of *Virechana* (40 gms) Dose is decided by assessing *Bala* of the patient.

- By virtue of the *Sukshma guna*, Virechana drugs can pass through minute channels of body and reach at cellular level to act at the site of pathogenesis of lichen planus.
- Due to *Vikasi guna*, Virechana drugs are dispersed in the whole body without their digestion and help to loosening of *Dosha-Dushya sanghatana*.
- *Tikshna guna* has strong potency to open various channels to flush out toxins by enhancing the opening of various *Srotas*, it softens the tight *Dosha-Dushya sanghatana* and make them ready to flow from open *Srotas*.
- By virtue of *Ushna guna*, *Dosha-Dushya* gets melt due to its hotness and easily moves towards elementary canal after liquification.
- Due to *Saratva guna*, collected *Dosha-Dushya* are encouraged to pass out through rectum by its laxative property.

E) PROBABLE MODE OF ACTION IN LICHEN PLANUS

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Mode of action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aswedanam (absence of sweating)</td>
<td><em>Virechana dravya which has Srotoshodhaka</em> property opens the microchannels and improves circulation, resulting in perspiration.</td>
</tr>
<tr>
<td>Vritam (large round- and coin-shaped lesions)</td>
<td>It is seen due to the vitiation of <em>Kapha Dosha &amp; Rakta Dhatu</em>. <em>Virechana</em> with <em>Pitta Kaphahara</em> property corrects <em>Rakta Dhatu</em>, thus reducing big lesions.</td>
</tr>
<tr>
<td>Snigdham Ghanam (well-defined borders)</td>
<td></td>
</tr>
</tbody>
</table>
Shyava, parushya
(blackish scaly lesion)

kina, khara sparsha
(hard)

It’s also called hyper keratinization, it is due to vitiation of Tridosha, Virechana acts on all Doshas and controls scaling.

Candle grease sign

It indicates increased Ruksha and Khara Guna in Twak, it is caused by vitiation of Vata Dosha, Virechana corrects it by Vatanulomana and ultimately reducing Rukshita.

Auspitz sign

It is seen mainly due to vitiation Pitta and Rakta Dushya, Virechana removes vitiated Pitta Dosha and Rakta, thus reducing Daha.

Kandu

It indicates the involvement of Kapha, Rasa, and Rakta Dushya, Virechana has Pitta Shodhaka and Rasa Rakta Prasadana property, so it reduces itching

III. RESULT
IV. CONCLUSION

High potency topical corticosteroids, antihistamines, Oral retinoids and immunosuppressants are used in the first-line treatment. These corticosteroids has adverse psychological effects thus effecting the quality of life of patients. Ayurveda recommends working on the root cause of the disease and the reversal of pathology. Whatever disease it might be, toxins are always involved in a disease. Therefore, the best way to treat a disease is to remove the deep-seated toxin. So the line of treatment according to Ayurveda will be as follows:

- **Toxin removal**
- **Metabolism correction**
- **Increase in ojus production**
- **Immune system correction**

In addition, *Shaman Yoga, Bahirparimarjana Chikitsa* (external application) is administered after taking the proper course of *Shodhana*, which then provides additional relief and thus helps in the eradication of lichen planus.

ACKNOWLEDGMENT: The authors acknowledge the patient for her cooperation.

PATIENT’S PERSPECTIVE: The patient felt better with the treatment given. There were significant and visible changes noted in her physical aspects. She also strictly adhered to the advised *Pathya Ahara Vihara*. The patient also acknowledged the improvement in her general well-being after taking the advised internal medications.

INFORMED CONSENT: The authors certify that they have obtained the appropriate patient consent form. In the form, the patient has given her clinical information to be reported in the journal. The patient understands that her name and initials will not be published and due efforts will be made to conceal her identity, but anonymity cannot be guaranteed.

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CONFLICT OF INTEREST: The authors have no conflicts of interest to declare.

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