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# *Ayurvedic* management of a refractory skin disease clinically diagnosed as Cutaneous Lichen Planus—A case report

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ABSTRACT

This study reports the successful management of a recurrent, refractory skin disease diagnosed clinically as Cutaneous Lichen Planus (CLP) in a female patient with *Ayurvedic* treatment. A 42-year-old home maker from *Coimbatore* presented with blackish-red pigmented skin rashes and white streaks. Though mucous membranes were not affected, she did not respond to homoeopathic and biomedical treatment. The lesions were spread all over the body except for the face, scalp, axillary and genital region. In addition, she complained of dry skin, pain, and itching.

The condition was treated as *Kapha-Pitta* dominant *Tridoshaja Kushta* based on *Ayurvedic* clinical assessment. The patient recovered after one year of conservative *Ayurvedic* intervention. After six years, there was a relapse, and the patient was admitted for a full course of *Ayurvedic* treatment and recovered within six months. *Ayurvedic* interventions should be considered an option in refractory skin diseases like Cutaneous Lichen Planus.

## 1. Introduction

Skin diseases are among the most common health problems worldwide and contribute considerably to the global disease burden[1]. Lichen Planus (LP) is an autoimmune disease presenting as rashes on the skin.

LP may present as Cutaneous (CLP) or Mucosal (MLP) types. CLP affects the skin in the lower extremities but may also affect the upper extremities and trunk, whereas MLP can affect the oral mucosa and genitals [2]. The biomedical treatment includes systemic corticosteroids, retinoids, cyclosporine, photochemotherapy, hydroxychloroquine, azathioprine, or other immunosuppressants [3] but a tendency to flare up after stopping steroid treatment is very common [4]. The *Ayurvedic* approach to clinical diagnosis and management of skin diseases is based on the assessment of factors like *Dosha* (regulatory functional factors of the body), *Ama* (metabolic by-product generated due to improper or incomplete digestion and metabolism), and *Sthana* (site of manifestation) [5].

We are reporting the outcomes of *Ayurvedic* intervention in a patient diagnosed clinically by a dermatologist to be suffering from LP for more than a year. Her clinical presentation was suggestive of CLP. She responded well to conservative *Ayurvedic* intervention when biomedical and homeopathic interventions failed and her condition had worsened. The *Ayurvedic* assessment was *Kapha-Pitta* dominant *Tridoshaja Kushta* (skin disease with derangement of all three *Doshas* with dominance of *Kapha* and *Pitta*). Six years later, a relapse was also successfully managed with *Ayurvedic* treatment, which included bio-cleansing therapies. The outcomes suggest that *Ayurvedic* medicine can facilitate faster recovery in CLP.

## 2. Patient information

### 2.1. De-identified patient data

A 42-year-old female homemaker, native and living in *Coimbatore, India*, presented for clinical consultation during two episodes of her illness.

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### 2.2. Patient concerns & symptoms

The patient complained of blackish-red pigmented skin lesions with white streaks associated with dryness of skin, pain, and itching sensation of two months duration. The lesions were spread all over the body except for the face, scalp, axillary and genital region in the first episode. Six years later, she presented again with a less severe relapse of the same symptoms.

### 2.3. Medical, family, psychosocial history

The patient did not have any significant medical history. However, her mother's sister suffered from a similar skin ailment. The patient was stressed due to the discolouration of the skin and persistent itching, which caused sleep disturbance. Genetic predisposition was not assessed.

She was a homemaker and did not suffer from any other health issues before getting afflicted with this condition. She is known to have had some adverse reactions to biomedicines, which she noticed at the time of her child's delivery (the skin lesions started four months after childbirth).

### 2.4. Past interventions & outcomes

The patient was healthy before 2010 until she noticed small non-oozing blackish-red eruptions with white shades in the flexor surface of the legs with pain and an itchy sensation. In two months, it eventually became big and spread to the whole body except on the face, axillary, scalp, and genital region. These lesions mainly erupted at night. For this, she first consulted a dermatologist. She was prescribed oral corticosteroid medications and topical ointment for external applications, details of which are unknown. The skin lesions aggravated, so she consulted a homoeopathic practitioner after one month. She was prescribed oral and topical medications by the homoeopath (the patient does not recall the names of the medicines). In the first week, the patient noticed improvements, but then the symptoms aggravated and did not subside even after continuing homoeopathic medicines for one month. The patient was mentally stressed as her body became discoloured throughout, with a persistent itchy sensation, which aggravated at night. As a result, her sleep was disturbed. She tried biomedical interventions, which further worsened her condition. She was constipated and experienced profuse hair loss. At this juncture, she sought *Ayurveda* treatment for the first time. She was advised to use oral medications and oil application externally and completely recovered in a year.

The patient discontinued all the medicines after recovering. She was asymptomatic for six years after that and led a normal life. In 2018, there was a relapse of skin lesions throughout her body, for which she sought *Ayurvedic* treatment within one month of its appearance. Initially, she consulted the Outpatient facility twice between November 2018 to March 2019. She was given oral medications for *Agni Deepana* (enhancing metabolic fire), *Ama Pachana* (digesting), *and Sroto Shodhana* (cleansing the body channels). After administering the necessary preparatory procedures, *sodhana* treatment was implemented. The treatments for the two episodes were administered in two different hospitals, though the chief treating doctor was the same on both occasions.

## 3. Clinical findings

The skin texture was slightly rough, dry, and thick, with slight elevation and scaling. The lesions were maculopapular, diffuse with blackish-red colour, and polygonal in shape with irregular borders. The lesions were distributed all over the body except the face, scalp, head, oral mucosa, nails, and genitals. Flakes with white streaks (Wickham Striae) [6] were also associated with pruritus.

## 4. Timeline

In the first episode, the patient underwent biomedical and homoeopathic treatments without positive responses. Subsequently, she opted for *Ayurvedic* treatment, involving Out-Patient treatments focusing on *Mrdu Shodhana, Pachana Shodhana, Lekhana,* and *Shamana.* In the second episode, she exclusively pursued *Ayurvedic* care, encompassing Out-Patient oral medications for *Pachana, Shodhana, and Lekhana,* along with In-Patient interventions such as *Deepana, Pachana, Shodhananga Snehapana* (internal oleation for the purpose of *Shodhana*), and *Virechana.* Post this, she took oral *Rasayana* (rejuvenation) as an Out-Patient treatment.

The two episodes of the manifestation of symptoms, the respective interventions, their outcomes and follow-up have been detailed in the timeline. Please refer to Table 1.

## 5. Diagnostic assessment

### 5.1. Diagnostic methods

The biomedical diagnosis was based on clinical observations. A confirmatory test, which is a skin biopsy, was not done. *Ayurvedic* diagnostic methods employed included *Dasha Vidha Pariksha* (tenfold examination of the patient), providing a comprehensive assessment of the patient. *Nidana Panchaka* (five diagnostic principles) helped in identifying aggravating and relieving factors, which aided in planning the treatment. These assessments helped us in estimating *Ama, Dosha* and *Sthana* and accordingly decide specific medications for *Deepana, Pachana, Shodhana, Shamana* and *Rasayana.*

### 5.2. Diagnostic challenges

A dermatologist provisionally diagnosed the case as Lichen Planus. There are many variants of LP. A specific diagnosis can be arrived at by clinical assessment and confirmatory biopsy. A biopsy is not routinely performed, and clinicians prefer to rely on the clinical diagnosis. LP may also be associated with Hepatitis C infections, but it is uncommon in South Asia and was not investigated. Being an invasive procedure, the patient was not willing to undergo a punch biopsy.

Arriving at a precise *Ayurvedic* diagnosis was also a challenge because the clinical presentation of the patient did not correlate with diseases described in *Ayurvedic* texts.

### 5.3. Diagnosis

#### 5.3.1. Biomedical diagnosis

The dermatologist diagnosed the condition as LP, but the clinical presentation pointed specifically to Cutaneous Lichen Planus. Our patient presented erythematous, flat-topped, polygonal papules or macules that became umbilicated and took a violaceous colour. Pruritis is also present at the site of the lesions. When the lesions resolve, they leave behind hyperpigmented macules [3].

#### 5.3.2. Ayurvedic diagnosis

We reviewed the clinical presentation of the patient with descriptions of *Kushta* [7], *Kshudra Roga* [8] and *Visarpa* [9] in classical *Ayurvedic* texts. Yet, we could not correlate it with any known conditions mentioned in *Ayurvedic* texts.

The probable *Ayurvedic* diagnoses considered in this case were *Udumbara, Pittaja Visarpa, Charmadala, Kaksha, Mandala Kushta*, and *Charma Kushta, Vicharchika.*

*Udumbara Kushta:* Due to symptoms like reddish nodules, pain, burning, and itchy sensation at the lesions, *Udumbara Kushta* was included for differential diagnosis, but as excessive brownish hair, the typical appearance of lesions in clusters which are very distinguishing of this *Kushta* were absent, it was excluded [[7], chapter 5 verse 8].

*Charmadala:* Due to pustular eruptions associated with an itching

**Table: 1**

| Date | Patient complaints | Interventions |
|---|---|---|
| **1st Episode:** | | |
| **Non- Ayurvedic Interventions** | | |
| October 12, 2010 | Patient noticed small non-oozing eruptions in the legs with pain and an itchy sensation. It eventually became big and spread to the whole body except the face, axillary, scalp and genital region within two months and mostly erupted at night. | Took biomedical interventions – Corticosteroids for one month. No *Ayurveda* interventions were done. |
| November 20, 2010 | Lesions aggravated, and the patient started to feel stressed about the condition as her whole body became blackish-discoloured with profuse, itchy sensations and pain. She experienced a lack of sleep because the lesions aggravated at night and also due to stress. There was excessive hair loss during this time. | Homoeopathic medications for one month. No *Ayurveda* interventions were done. |
| **OP-based Ayurvedic Interventions** | | |
| April 03, 2011 | At the time of *Ayurveda* consultation, she presented with lesions that were maculopapular, diffuse with blackish-red colour, and polygonal in shape with irregular borders. The lesions were distributed all over the body except the face, scalp, head, oral mucosa, nails, and genitals. Flakes with white streaks (Wickham Striae) were seen associated with itching. | *Ayurvedic* internal medications for *Mrdu Shodhana, Pachana Shodhana* and *Lekhana* were prescribed along with external applications for 30 days. |
| May 04, 2011 to July 23, 2011 | After one month of medications, the patches became light. The dryness and pain reduced. Occasional itching was present. | Continued *Mrdu Shodhana, Pachana* and *Shamana* medicines as internal medications. Medicated oils to moisten the skin and to normalise the skin colour were advised for three months. |
| July 23, 2011 to April 19, 2012 | Only light marks of the early lesions were visible on the skin, and there was no pain, itching or dryness. | Continued *Ayurvedic* internal medications and external applications for 9 months. |
| **2nd Episode: OP-based Ayurvedic Interventions** | | |
| November 14, 2018 | Recurrence of hard, dry, raised and blackish discolouration of the skin, mainly in hands and legs, with itching and burning sensation. | Started with out-patient-based *Pachana, Shodhana* and *Lekhana* treatment for 33 days. |
| **IP-based Ayurvedic Interventions** | | |
| April 18, 2019 to April 30, 2019 | The blackish-red lesions on the skin reduced in intensity, and there was relief from pain, itching and dryness with oral medications. The lesions still persisted in the hands and legs with mild itching and burning sensation. | *Deepana and Pachana* medications were given for 2 days. |
| | There were no changes in the skin lesions, but the itching and burning sensation had reduced. | *Shodhananga.* *Snehapana* was administered for 7 days, *Sarvanga Abhyanga* and *Bashpa Sweda* for 3 days, *Virechana* 1 day and *Samsarjana Krama* for 1 day. |
| May 01, 2019 | The lesions and itching sensation had resolved. | Discharged and advised to take *Madhusnuhi Rasayana* for 30 days. |
| **Follow-up** | | |
| October 20, 2020 | On telephonic conversation, the patient reported no fresh lesions and is symptom-free | No medications from the last six months |
| May 11, 2021 | On telephonic conversation, patient reported to be symptom-free | Stopped taking all the *Ayurvedic* medications |
| July 30, 2022 | On telephonic conversation, patient reported to be symptom-free | No medications |

sensation seen in the patient, *Charmadala* was included for differential diagnosis, but as the burning sensation was not that prominent in the patient, it was excluded [[8], chapter 5 verse 10]

*Kaksha*: Symptoms of reddish-black, round indurated eruptions appearing along with pain predominantly distributed over the arms are seen in *Kaksha (Kshudra Kushta)*. These symptoms were seen in this patient, the absence of fever and lesions in the axillary area, it was excluded [[8], chapter 13 verse 16].

*Mandala Kushta*: The skin lesions in *Mandala Kushta* are thick, erupted, with whitish shade, also resembling the symptoms in our patient but as the symptoms such as slimy yellowish copious discharge with maggots were absent this diagnosis was excluded [[7], chapter 5 verse 8].

*Charma Kushta*: Thick lesions as in *Charmadala* are seen in this patient and thus it was included for differential diagnosis, but as the lesion was not as thick as the skin of an elephant (lichenification) typical of *Charma Kushta*, it was excluded [[10], chapter 14 verse 20].

*Vicharchika:* Due to symptoms of blackish papular lesions and itchy sensation seen in the patient, *Vicharchika* was included for differential diagnosis, but as there was no discharge from the lesions, it was excluded [[10], chapter 14 verse 18].

*Pittaja Visarpa*: The lesions in this patient resembled that of *Pittaja Visarpa* in which there are many eruptions, rapidly spreading and associated with pain, but as it is also known to be suppurative, which was not seen in this case, it was excluded in the differential diagnosis [[8], chapter 5 verse 8]

Based on evaluating the symptoms and comparing them with the above-mentioned differential diagnosis, we could not get a single condition that fitted perfectly into any of them.

Hence, we considered this an *Anuktavyadhi* (a disease condition with no specific naming mentioned in the *Ayurvedic* texts) [[11], chapter 18 verses 44–45].

We could identify itching, white shade, and lines on the papules and thickness as the symptoms of aggravated *Kapha*; burning sensation and tenderness as a prominent symptom indicating the presence of aggravated *Pitta*; dryness, dark blackish-red discolouration, scaling, pain, and constipation as associated symptoms points to the presence of *Vata*. Thus, the condition was considered to be a *Kapha-Pitta Pradhana Tridoshaja Kushta*.

### 5.4. Prognosis

LP involving the flexor surface of the extremities (Cutaneous LP) is known to be self-limiting (resolves within six months to a year of onset), though the untreated hypertrophic variant can persist for years. In contrast, LP involving mucous membranes is known to have a chronic or progressive nature and does not attain complete remission Our patient presented with features of CLP involving both extremities and trunk, but her condition worsened after biomedical intervention, prompting her to seek *Ayurvedic* treatment. *Kushta* is one amongst the eight *Mahavyadhis* and is generally considered difficult to cure, especially when all three *Doshas* are involved. In this case, the clinical assessment pointed to a diagnosis of *Kapha-Pitta Pradhana Tridoshaja Kushta*, a condition difficult to treat.

## 6. Therapeutic intervention

### 6.1. Types of therapeutic intervention

*Lekhana* (scraping), *Pachana* (digesting), and *Shodhana* followed by *Brmhana* (nourishment) was the line of treatments chosen for the management of this condition.

In the first episode, the *Lekhana* and *Pachana,* and *Mrdu Shodhana* (mild bio-cleansing) were done. In the second episode, as the treatment was being done after a gap of six years, *Lekhana* and *Pachana* had to be repeated, and a classical method of *Shodhana* was also administered. As a follow-up, mild bio-cleansing, *Prasadana* (quality enhancing), and *Rasayana* medications were also administered.

### 6.2. Administration of therapeutic intervention

#### 6.2.1. Internal mediations

For first episode: *Manibhadra Lehyam* [[12], *chapter 19 verse 31–32], Aragwadhadi Kashayam* [[5], chapter 15 verse 17-18 ], *Patolamuladi Kashayam* [[12], *chapter 19 verse 28–30], Patolakaturohinyadi Kashayam* [[5], chapter 15 verse15], *Shaddharana Churnam* [[12], *chapter 21 verse 14], Drakshadi Lehyam* [[12], *chapter 16 verse 29–31], Trvrt Lehyam* [[13] *chapter 2 verse 9–10], Mahatiktakam Kashayam* [[12], *chapter 19 verse 8–11*], *Tiktaka Ghrtam* [[12], *chapter 19 verse 2–7], Mulakadi Kashayam, Hriberadi Kashayam* [[14], *Soothika roga p.107 ]and Drakshadi Kashayam* [[12], *chapter 1 verses 55–58].*

For the second episode: Along with the above-said medicines, the following are the additional medications given in the second episode: *Hinguvachadi Churnam* [[12], *chapter 14 verse 31–33], Nimbamrtasavam* [[12], *chapter 21 verse 58–61], Vaishvanara Churnam* [[14], *Choorna yoga p.190], Panchakola Phanta* [[5], *Chapter 6 verse 166]., Madhusnuhi Rasayana [*[14], *lehya prakarana. p. 229]* and *Mahatiktaka Ghrtam* [[12], *chapter 19 verse 8–11],* Refer to Table 2 for a complete list of internal medications.

#### 6.2.2. External therapies

First episode: External therapies included *Tiktaka ghrtam*[[12], *chapter 19 verse 2–7],* to be applied on the lesions, *Nimbadi Churnam* [[15], *Bh.Ra.vatarakta adhikara.31–38]* to be applied as a *Lepa* (herbal paste). Oils *Eladi Keram* [15], *Durvadi Tailam* [9] *[S.Y. taila prakarana. p. 149], Ksheerabala Tailam* [[14], *Taila prakarana p.315]* and *Vitpala Tailam* for oil massage before bath.

Second episode: External application of *Eladi Tailam* [[5], *chapter 15 verse 43–44], Nalpamaradi Tailam [*[14], *taila prakarana. p.289]* for oil massage before bath.

Refer to Table 3 for a complete list of medications for external therapies.

#### 6.2.3. Pathya (diet and lifestyle modifications advised)

The patient was put on a strict vegetarian diet and was advised to avoid green chillies, green peas, chickpeas, brinjal, spicy foods, curds, *Upma*, *Puttu, Idli, Sambar*. Excessive use of salt, pungent and sour foods was also restricted. She was advised to incorporate easily digestible, non-allergy-causing and natural foods into her diet. The lifestyle modifications suggested were avoiding day sleep, snacking/taking meals frequently, being awake late at night, and using irritant cosmetics. This diet was advised for both episodes. However, patient compliance was better in the second episode. This was advised based on the principles of

**Table: 2**
Administration of internal Therapeutic intervention.

| Date | Rationale | Interventions | Dosage | Adjuvant | Duration |
|---|---|---|---|---|---|
| 03/04/2011 to 19/04/2012 | *Mr˙rdu Shodhana* | *Manibhadra Lehyam (Herbal)* | 10 gm at bedtime | hot water | 31 |
| | *Pachana* | *Aragwadhadi Kashayam (Herbal)* | 15 ml before 1 Hr before breakfast and dinner | 45 ml of warm water | 291 |
| | *Shodhana* | *Patolamuladi Kashayam (Herbal)* | 15 ml before 1 Hr before breakfast and dinner | 45 ml of warm water | 100* |
| | *Pachana* | *Shaddharana Churnam (Herbal)* | 5 gm before lunch | with buttermilk | 360* |
| | *Lekhana* | *Patolakaturohinyadi Kashayam* | 15 ml before 1 Hr before breakfast and dinner | 45 ml of warm water | 291* |
| | *Mrdu Shodhana* | *Drakshadi Lehyam + Trvrt Lehyam (Herbal)* | 15 gm in the morning, empty stomach on weekends | with warm water | 48* |
| | *Shamana* | *Mahatiktakam Kashayam (Herbal)* | 15 ml before 1 Hr of breakfast and dinner | 45 ml of warm water | 69 |
| | | *Mulakadi Kashayam (Herbal)* | 15 ml before 1 Hr of breakfast and dinner | 45 ml of warm water | 329 |
| | | *Tiktaka Ghrtam (Herbal)* | 15 ml before 1 Hr of breakfast and dinner | 45 ml of warm water | 260 |
| | | *Hriberadi Kashayam (Herbal)* | 15 ml before 1 Hr of breakfast and dinner | 45 ml of warm water | 260 |
| | | *Drakshadi Kashayam + Tiktakam Kashayam* | 15 ml before 1 Hr of breakfast and dinner | 45 ml of warm water | 260* |
| 14/11/2018 to 03/06/2019 | *Pachana, Shodhana & Lekhana* | *Patolamuladi Kashayam (Herbal)* | 15 ml before 1 Hr of breakfast and dinner - For the first week, only | With 45 ml of warm water | 7* |
| | | *Patolakaturohinyadi Kashayam (Herbal)* | 15 ml at 06:00 a.m.m and 03:00 p.m.m | With 45ml warm water | 42* |
| | | *Shaddharana Churnam (Herbal)* | 5 gm before lunch | With buttermilk | 113* |
| | *Mr˙rdu Shodhana* | *Drakshadi Lehyam + Trvrt Lehyam (Herbal)* | 10 gm in the morning, empty stomach on weekends | with warm water | 4* |
| | *Mrdu Shodhana* | *Trvrt Lehyam (Herbal)* | 10 g at bedtime | with warm water | 119 |
| | *Shamana* | *Drakshadi Kashayam + Tiktakam Kashayam (Herbal)* | 15 ml before 1 Hr before breakfast and dinner | 45 ml of warm water | 188* |
| | | *Drakshadi Kashayam (Herbal)* | 15 ml before 1 Hr before breakfast and dinner | 45 ml of warm water | 39 |
| | *Pachana* | *Hinguvachadi Churnam (Herbal)* | 2 tsp | With warm water before lunch | 113 |
| | | *Nimbamrtasavam (Herbal)* | 25 ml after lunch and dinner | – | 80 |
| | *Pachana* | *Vaishvanara Churnam (Herbal)* | 5 gm at bedtime | Warm water | 42 |
| | *Pachana* | *Panchakola Phanta (Herbal)* | 500 ml to be taken throughout the day | – | 1 |
| | *Rasayana* | *Madhusnuhi Rasayana (Herbal)* | 1tsp twice daily | | 33 |
| | *Shamana* | *Tiktakam Kashayam (Herbal)* | 15ml before 1 Hr before breakfast and dinner | 45 ml of warm water | 42 |
| | *Snehapana* | *Mahatiktaka Ghrtam (Herbal)* | 30 ml, 80 ml, 60 ml, 90 ml, 120 ml, 150 ml, 200 ml | hot water | 6 |

***Note:** Total duration of intake of *Patolamuladi Kashayam* is 107 days, *Patolakaturohinyadi Kashayam* is 333 days, *Shaddharana Churnam* is 473 days, *Drakshadi Lehyam + Trvrt Lehyam* is 52 days, *Drakshadi Kashayam + Tiktakam Kashayam* is 448 days.

**Table: 3**
Administration of external Therapeutic intervention.

| Date | Changes in therapeutic interventions | Interventions | Duration |
|---|---|---|---|
| April 03, 2011 to April 19, 2012 | For moisturising the skin and normalise the skin colour | External application of *Eladi Churnam, Vitpala Tailam, Eladi Keram (Herbal)* | 31 |
| | For moisturising the skin and normalise the skin colour | External application of *Tiktaka Ghrtam, Eladi Keram, Durvadi Tailam, Nimbadi Churnam, Ksheerabala Tailam (Herbal)* | 260 |
| | For moisturising the skin and normalise the skin colour | External application of *Tiktaka Ghrtam (Herbal)* | 69 |
| | For moisturising the skin and scraping off the thickened skin | External application of *Eladi Keram, Durvadi Tailam, Nimbadi Churnam, Ksheerabala Tailam (Herbal)* | 260 |
| April 26, 2019 to April 28, 2019 | Used for *Sarvanga Abhyanga* before *Virechana* | External application of *Eladi Tailam, Nalpamaradi Tailam (Herbal)* | 2 |

diet and lifestyle recommended in *Ayurveda* classical texts on Kushta.

### 6.3. Changes in the therapeutic intervention

During the first episode, after the removal of *Dosha* through *Lekhana* and *Pachana* medications, signs of body heat and burning sensation started to show up, indicating aggravation of *Pitta* even though the itching had subsided to some extent. In this stage, *Shamana* was attempted by *Mahatiktakam Kashayam* and then by *Mulakadi Kashayam* because of its indication in *Visarpa*. However, this did not give much relief, and the medication was changed to *Drakshadi* and *Hriberadi Kashayam*, which provided good relief from body heat and burning sensation. The other *Kashayams* were also continued at this time. During this phase, *Shaddharana Churnam* was also introduced for *Pachana* and to balance *Pitta*.

Even as these treatments continued, the patient began to complain of constipation. To prevent further accumulation of *Dosha* and to maintain the movement of *Dosha* from *Sakha* to *Koshta* (from the peripheries of the body to the GIT), *Manibhadra Lehyam* was prescribed. However, the patient could not tolerate the medicine for longer due to its palatability. Hence, the medications were changed to *Trvrt Lehyam* and *Drakshadi Lehyam*, which were mixed and given at bedtime. It helped keep the bowel movements stable.

In the second episode, the treatment started with oral medications for *Deepana* and *Pachana* and upon achieving *Niramavastha*, In-Patient based *Snehapana* and *Shodhana* treatments followed. This time, the medicines were not changed during the treatment as there was better compliance.

## 7. Follow-up and outcomes

In the first episode, the *Shodhana* treatment was not done, and with this treatment, she got relief after one year. The second time, she came for a follow-up treatment after six years due to recurrence.

After completion of treatment during the second episode, the follow-up medications were prescribed after a course of *Virechana* (purgative therapy) focusing on *Rasayana Chikitsa* specific to the skin so that the relapsing episodes could be restricted. She was prescribed *Madhusnuhi Rasayana* to end the treatment in the final stage. The patient observed complete remission in symptoms and was advised to stop all the oral medications after 30 days upon getting discharged from the hospital. The patient also had been in touch with us telephonically thrice till the date after medications were stopped. The first time at an interval of 18 months, the second time after seven months of the previous contact and the third time after 14 months of the second follow-up. There has been no recurrence, and she is symptom-free.

### 7.1. Clinician and patient-assessed outcomes

#### 7.1.1. Clinician assessed outcomes

In the first episode of Out-Patient based treatment:

When the patient last reported for consultation after the first Out-Patient based treatment, only light marks of the early lesions were visible on the skin, and the other symptoms had subsided. The skin had also got a normal texture.

See Fig. 1:Episode 1 of Out-Patient based treatment.

In the second episode of Out-Patient & In-Patient-based treatment:

After six years, all previous symptoms reappeared with less intensity. After one month of Outpatient-based treatment, the lesions reduced considerably throughout the body, with no itching, burning sensation, or body heat but did not resolve completely. Hence, *Shodhana* (bio-cleansing) treatment was done.

See Fig. 2 & Fig. 3: Episode 2 of Out-Patient & In-Patient based treatment.

#### 7.1.2. Patient-assessed outcomes

An immediate outcome the patient could appreciate was pain reduction of the lesions in the first episode. The intensity of pain started to reduce within a day of the application of *Maha Tiktaka Ghrtam* externally. Another significant outcome that the patient reported is that no new lesions appeared after the start of *Ayurveda* treatment orally. The patient also noted that the skin recovered to normal appearance and texture, which reduced stress.

Similarly, even in the second episode, the patient started to respond immediately after the start of oral medications intended to prepare her body for an In-Patient-based classical bio-cleansing treatment. Soon after completing the in-patient treatment, new lesions stopped occurring. The follow-up medicines helped bring back the normal texture and colour of the skin.

### 7.2. Important follow-up diagnostic and other test results

The patient was not advised to undergo any investigatory tests during the follow-up as it was not necessary.

### 7.3. Intervention adherence and tolerability

The patient could not tolerate taking *Manibhadra Lehyam* for a more extended period due to palatability. During the second episode, she complied well and tolerated both the Out and Inpatient based treatments. She also adhered to the diet, which she felt was very restrictive.

### 7.4. Adverse and unanticipated events

No serious adverse events were noticed throughout the complete course of treatment for both episodes.

There was a notable unanticipated event during the second episode of treatment. During the In-Patient treatment, the patient was given medicine to purge. It was expected that she would get bowel movements a minimum of ten times, but she had it only five times. It probably could be because of the low dosage of the purgative administered. It was later compensated with administering a mild purgative daily in the follow-up medications, and the patient responded positively to it.

## 8. Discussion

### 8.1. Strengths and limitations

One of the strengths of this case report is the long follow-up of twelve years that helped to document the long-term outcomes of remission and

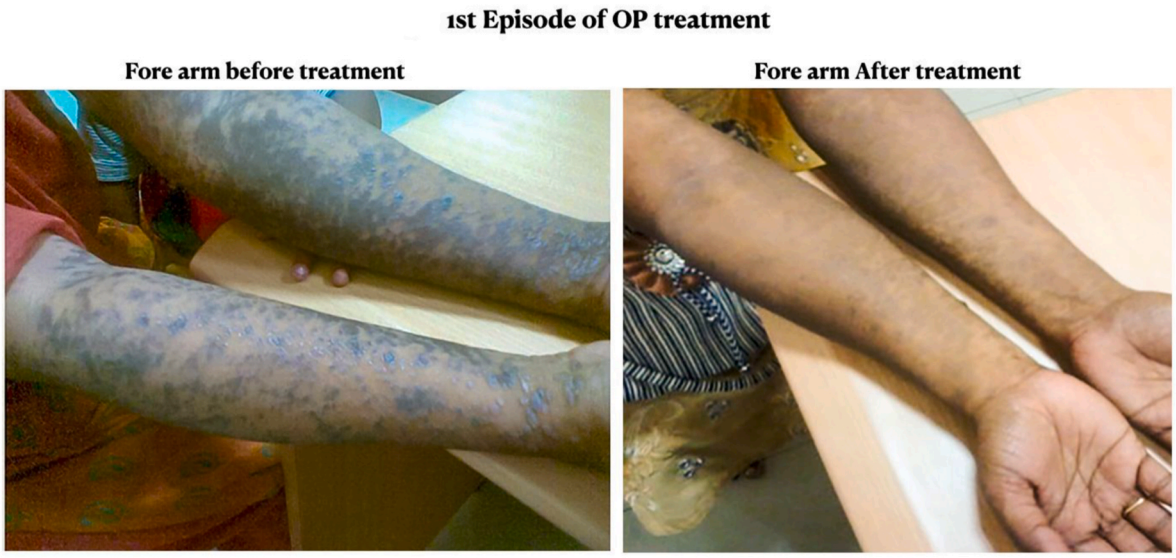


**Fig: 1.** 1st Episode of OP treatment.


**Fig. 2.** 2nd episode of OP & IP treatment.

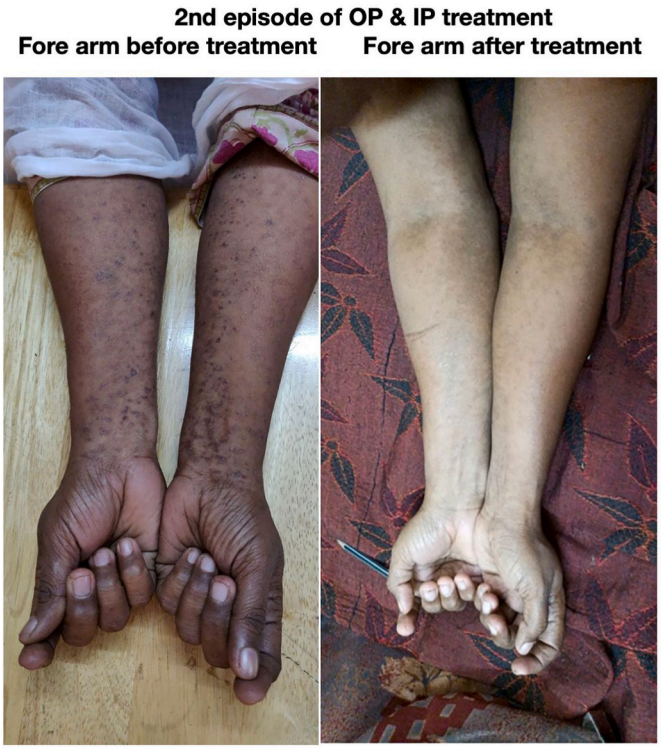


**Fig. 3.** 2nd episode of OP & IP treatment.

recurrence. This case report also demonstrates how a disease could be looked at from the perspective of *Ama, Dosha* and *Sthana* and the changing patterns of predominant *Dosha* from time to time. Positive outcomes could be achieved when the treatment was tailored, focusing on these patterns.

In this case, the specific biomedical diagnosis was not confirmed using a biopsy by the dermatologist who treated the patient before the initiation of *Ayurveda* treatment.

### *8.2. Discussion of relevant medical literature*

This case was tentatively diagnosed as a case of LP without specifying the variant by the treating dermatologist. However, the clinical presentation points to the diagnosis of a sub-type of Cutaneous Lichen Planus [2].

In *Ayurveda*, we could not find a single disease in the context of *Kushta, Visarpa* or *Kshudra Roga,* which matches the patient's presentation of CLP. Hence, this condition was considered an *Anuktavyadhi* (not listed or described in the classical texts) and assessment was made considering the *Nidana* (aetiology), *Dosha* and *Dushya* (that which gets vitiated) following the guideline laid in the *Charakasamhita*.

*Ama* plays an important role, especially in the manifestation of skin conditions, and the success of treatment depends on how the *Ama* is managed.

In the first episode, the case was treated based on the assessment of *Ama, Dosha* and *Sthana*.

The *Sthana* being *Tvak* (skin) and the disease being *Amashayodbhava* (originating from the alimentary tract), *Pachana* and *Shodhana Chikitsa* were administered considering the *Bahudoshavastha* (copious quantity of vitiated *Dosha*) and *Chala Ama* (mobile *Ama*). As the patient was not willing to undergo a bio-cleansing therapy, *Mrdushodhana* (mild repeated bio-cleansing) and *Shamana* (pacifying) treatment were administered. She responded well to this treatment and was disease-free for six years, after which there was a relapse.

We assumed that the relapse was likely because of not administering *Shodhana* treatment during the first episode due to the patient's non-compliance. In the second episode, we planned for a *Shodhana Chikitsa*, followed by *Rasayana* treatment after bio-cleansing to prevent further relapse. The treatment during the second episode was also aimed at removing the *Leena* (deep-seated) *Ama* by *Lekhana* and *Pachana* treatments. It was observed that the recovery was faster this time, with no relapse of symptoms over the last two years despite stopping all medications and diet restrictions.

### 8.3. Conclusions

A literature search for *Ayurveda* case reports on LP retrieved three case reports on hypertrophic LP [16], Lichen Simplex Chronicus [17] and LP Pigmentosus [18]. These three cases showed effective outcomes from *Ayurveda* treatment, but the presentations of all three are different from ours. Hence, our case report is not a repetition of previously published case reports on LP.

From the point of view of bio-medicine, LP is self-limiting if the mucous membrane is not involved. However, on the contrary, our case had not responded to biomedical and homoeopathy treatments and had also aggravated after the interventions.

This case report also highlights the importance of *Shodhana* therapy in *Kushta,* which gave faster results than the *Shamana* treatment. Nevertheless, the effect of *Shodhana* (therapy cannot be fully confirmed until the patient's condition is followed up for a much longer time until we conclude that the disease did not recur after *Shodhana* therapy is pursued.

### 8.4. The primary takeaway lessons of this case report

This case report suggests that *Ayurvedic* treatment has the potential to hasten recovery in CLP that is not responding to the standard of care. It also points to the need for long-term follow-up of the patients to gain a better understanding of the remission and relapse patterns of the disease. This case report also demonstrates how *Ayurvedic* principles of diagnosis and treatment can be applied to successfully manage diseases that are *Anuktavyadhi*.

## 9. Patient's perspective

"Allopathic medications do not suit me at all. *Ayurveda* treatment was very effective and comfortable for me. I do not have words to describe how good I feel about the treatment. I should say that the *Ayurveda* treatment worked best for me.

The pain in the lesions subsided first after the start of *Ayurveda* treatment. My skin was very sensitive to touch back then. After that, the new lesions ceased to appear. Following this, the dark blackish-red discolouration of the skin started to become normal. The discolouration was very dark previously but has now become normal.

The results that I got were very quick with regard to pain. After applying *Maha Tiktaka Ghrtam* externally, the pain subsided within a day. I got 100% relief after taking this treatment and did not experience any discomfort after starting the *Ayurveda* treatment. While I was on allopathic medicine, the skin condition had aggravated very much, but after *Ayurveda* treatment, there wasn't even a single aggravation of symptoms. Whatever symptoms I had started to reduce day by day. I am very much satisfied with the treatment."

## 10. Informed consent

Informed consent was obtained from the patient to publish de-identified medical information.

## Author contributions

**SN:** Writing, Visualization, Validation, Formal Analysis – Original Draft.
**SK:** Visualization, Validation, Formal Analysis.
**AAR**: Compilation of data.
**RP:** Writing – Review and Editing.

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## Declaration of competing interest

The authors declare that the research was conducted without any commercial or financial relationships that could be construed as a potential conflict of interest. All the physicians who treated the case in both episodes are included as authors; hence, there is no conflict of interest. Moreover, the chief physician who treated the patient was the same in both episodes.

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