



MANAGEMENT OF 30 PATIENTS OF CUTANEOUS LICHEN PLANUS WITH KADALI KSHAR: CASE STUDY ON 30 PATIENTS

Dr. Jejulee Narzary

PG Scholar, Deptt. Of Roga Nidan, Govt. Ayurvedic College & Hospital, Guwahati.

Dr. Anup Baishya

MD(AY), PhD, Professor & HOD, Deptt. Of Roga Nidan, Govt. Ayurvedic College & Hospital, Guwahati.

Dr. Pankaj Kr. Barman

Prof. & HOD, Deptt. Of Shalya Tantra, Govt. Ayurvedic College and hospital, Guwahati, Assam.

Dr. Ramakanta Sharma

Prof. & HOD, Deptt. Of Rasa Shastra & Bhaisajya Kalpana Govt. Ayurvedic College and hospital, Guwahati, Assam.

ABSTRACT

Lichen planus is an idiopathic inflammatory disease of the skin and mucous membranes. It was first introduced by Erasmus Wilson in 1869. Classical LP is characterized by pruritic, violaceous papules that favor the extremities. Two thirds of the patients develop LP between the ages of 30 and 60 years, though the onset of LP occurs most commonly during the fifth or sixth decade. There is no racial predisposition. Men and women are almost equally affected. Family history plays a significant role as higher onset, higher relapse rate and more common involvement of oral mucosa is seen in cases with positive family history. In this study we registered 30 patients with Lichenified skin lesions to study the efficacy of Kadali tikshna Pratisaraniya kshar. The kadali used for making the kshar was the variety *Musa balbisiana* Colla. This variety is commonly available and is used for cooking traditional food dishes in Assam. The kshar was prepared in Assam State Pharmacy, Govt. Ayurvedic College & Hospital according to the classical method as mentioned by Sushruta in Ksharapakavidhi adhyaya, Chapter 11. Kadali tikshna pratisaraniya kshar showed good effect on decreasing the itching and bringing back the colour and texture of the skin. This study showed that kadali kshar can be used in Lichenified skin lesions like Lichen planus.

KEYWORDS : Cutaneous Lichen planus, Kadali pratisaraniya tikshna kshar, *Musa balbisiana* Colla., alkali, clinical study.

INTRODUCTION-

Lichen planus is a chronic dermatosis characterized by irregular, violaceous, shining, flat-topped, pruritic papular lesions which can involve the skin, mucous membrane, hairs and nails. The lesions are distributed symmetrically with sites of predilection being flexor surfaces of the wrists, forearms, legs and external genitalia. It is associated with significant morbidity because of the severe itching that most of the patients suffer and also due to post inflammatory pigmentation seen at the site of lesions that is quite resistant to treatment. Histological features include marked hyperkeratosis, focal hypergranulosis, irregular acanthosis and liquefactive-degeneration of the basal layer¹. Even though lichen planus has been described as a self-limiting disease, it has been shown that the recurrences in the disease are quite common. Another cause of concern is the development of squamous cell carcinoma in few cases of oral lichen planus and hypertrophic lichen planus. The first line of treatment of lichen planus are topical glucocorticoids. Second choice would be systemic corticosteroids for symptom control and more rapid resolution. Oral Anti-histamine are given for pruritus.

In Ayurveda, skin lesions like lichen planus has been described under Kusthas^{2,3,4,5,6} and Kshudra rogas^{7,8,9}. Kustha deals with maximum number of skin diseases and it comes under Santarpanjanya vyadhi. Kusthas are difficult to treat without differential diagnosis because of the involvement of identical doshas & clinical features, hence considered as one among Astamahagada/Maharogas in classics. The dushtas involved are twak, rakta, mamsa and ambu and along with tridoshas they are called the saptakodrava of kustha. Cutaneous Lichen planus can be studied under Charma kustha^{2,3,4,5,6}, Kitibha kustha^{2,3,4,5,6} and Vicharcika^{7,8,9}.

Definition of kshar¹⁰ by Sushruta states as "Tatra ksharanat kshnanatva Kshara" i.e., which acts on the vitiated tissues and makes them fall off it is called Kshar. Kshargunas¹³ are- Na atithikshna, Na ati mridu, Shukla, Slakshna, Picchilla,

Abhisyandi, Shiva, Shigra. Kadali has been mentioned one among the 23 kshar dravyas¹² of Sushrut. Kadali kshar (traditionally used in Assam as Kola kshar), has a specific importance in Assam and it is basically used for cooking traditional dishes. It is easily available in Assam and is known as Bhim Kol. Ksharkarmas¹¹ like Dahana, Pachana, Darana, Vilayana, Shodhana, Ropana, Shoshana, Stambhana and Lekhana has been mentioned in the classics along with the references for use of kshar in skin lesions¹⁶. But still very few research papers have been published for their use in skin conditions. In this study we tried to establish clinically the use of Kadali kshar in Cutaneous Lichen planus.

MATERIALS AND METHOD-

Selection Of Patient And Study Design:

1. All the patients were randomly selected from OPD, IPD; Govt. Ayurvedic College and Hospital, Guwahati, Assam.
2. Total 30 patients of Lichen planus were registered for study from age group 18-60 years. Patients who gave their consent for Kadali kshar application were selected.
3. Selected patients have been examined for their clinical symptom and have undergone follow up on the basis of subjective and objective parameters, before and after treatment.

Preparation Of Medicine

The classical method for preparation of pratisaraniya kshar was followed according to Sushruta Samhita chapter 11, Ksharapakavidhi adhyaya.

Time Period Of Study

The total duration of study was 2 years.

Methodology-

Materials required-

1. Kadali kshar
2. Cotton
3. Sterile gauze
4. Triphala kwath

5. Yastimadhu siddha ghrita
6. Roll bandage
7. Kidney tray
8. Forceps
9. Petroleum Jelly

Informed written consent was taken. Depending on the location of the lesion, the patient was placed in an appropriate position. The region of the lesion was first cleaned with triphala kwath. Kadali kshar was applied carefully to the affected part specifically, avoiding the surrounding healthy areas and kept for 100 vakmatras¹⁴ (40-60 seconds). Petroleum Jelly was applied to the surrounding area for protecting it from burn by the kshar. The site was then washed immediately with nimbu swaras and applied yastimadhu siddha ghrita. The lesion was then bandaged with a clean gauze. The patient was advised for follow up on 7th, 14th, 21st and 30th day.

Inclusion Criteria

Patients within the age of 18 to 60 years of both sexes, diagnosed with cutaneous Lichen planus and who gave their consent for clinical study were included.

Exclusion Criteria

1. Patients below 18 years and above 60 years, pregnant and lactating mothers.
2. Patients with secondary skin infection.
3. Suspected cases of Malignancy
4. Patients with systemic disease and immunocompromised states like HIV, TB, Diabetes Mellitus, Hepatitis B & C etc.
5. All the contraindications mentioned by acharya Sushruta.

Criteria For Withdrawal:

1. Aggravation of disease during the trial period.
2. Discontinuation of treatment during the trial period.
3. Any other serious complication requiring change in treatment

Routine Examination, Assessment And Follow Up:-

All the patients were selected as per the specially designed proforma.

Required laboratory investigations were done for all patients and clinical assessment was done before, during and after the treatment.

Duration of treatment: - The duration of clinical trial for every patient was 1 month.

Follow up: - Follow-up is to be made on the 7th day of first application of kshar. A regular follow-up is to be made at 7 days' interval for up to maximum one month.

Laboratory Investigations-

Hb%, TC, DLC, ESR, BT, C'T, CRP, RBS

RESULTS AND OBSERVATION

#BT-Before Treatment

#FU1-Follow up 1, FU2-Follow up 2, FU3-Follow up 3, FU4-Follow up 4

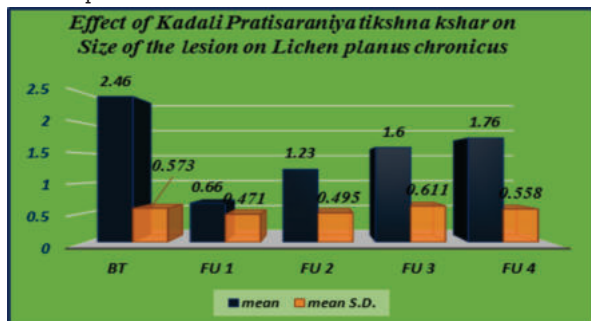


Table I- Effect Of Kadali Pratisaraniya Tikshna Kshar On Size Of The Lesion On Lichen Planus Chronicus On 7th,14th,21st And 30th Day (n=30 Patients)

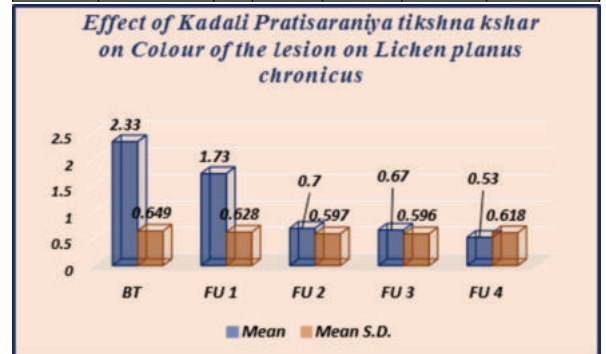
GROUP	Mean±S.D	df	S.E.	t value	p value	Remark
BT	2.46±0.537	29	0.01	7.615	<0.05	Significant
FU 1	0.66±0.471					
FU 2	1.23±0.495	29	0.01	13.403	<0.05	Significant
FU 3	1.6±0.611	29	0.01	14.547	<0.05	Significant
FU 4	1.76±0.558	29	0.01	17.026	<0.05	Significant

Kadali kshar karma effect on size of the lesion was calculated according to the grading score and observed before and after treatment. The mean and S.D. before treatment was 2.466 and 0.498.

After treatment on 30th day it was 0.70(mean) and 0.495(S.D) and the t-Value is 17.02 with p-Value <0.05 i.e. statistically significant. It signifies that Kshar karma has a very good effect on decreasing the size of the lesion in the treatment of cutaneous Lichen planus.

Table II- Effect Of Kadali Pratisaraniya Tikshna Kshar On Colour Of The Lesion On Lichen Planus Chronicus On 7th,14th,21st And 30th Day (n=30 Patients)

GROUP	Mean±S.D	df	S.E.	t value	p value	Remark
BT	2.33±0.649	29	0.01	6.595	<0.05	Significant
FU 1	1.73±0.628					
FU 2	0.7±0.597	29	0.01	13.403	<0.05	Significant
FU 3	0.67±0.596	29	0.02	12.836	<0.05	Significant
FU 4	0.53±0.618	29	0.02	12.953	<0.05	Significant



Kadali kshar karma effect on size of the lesion was calculated according to the grading score and observed before and after treatment. The mean and S.D. before treatment was 2.33 and 0.649.

After treatment on 30th day it was 2.33 (mean) and 0.618 (S.D). The t-value is 12.953 with p-Value <0.05 i.e. statistically significant. It signifies that Kshar karma has a very good effect on decreasing the size of the lesion in the treatment cutaneous Lichen planus.

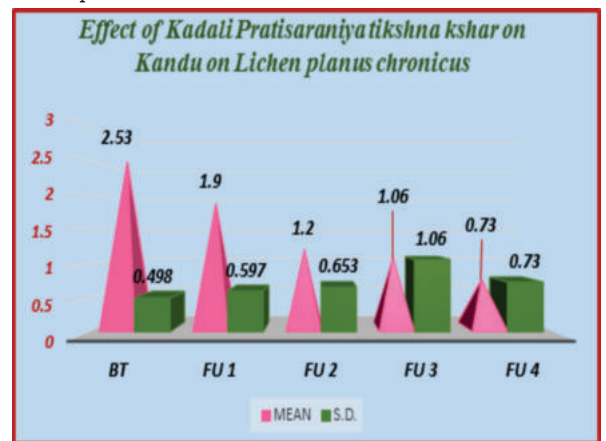


Table III- Effect Of Kadali Pratisaraniya Tikshna Kshar On Kanđu On Lichen Planus Chronicus On 7th, 14th, 21st And 30th Day (n=30 Patients)

GROUP	Mean±S.D	df	S.E.	t value	p value	Remark
BT	2.53±0.498	29	0.01	7.077	<0.05	Significant
FU 1	1.9±0.597					
FU 2	1.2±0.653	29	0.01	11.050	<0.05	Significant
FU 3	1.06±0.727	29	0.02	11.788	<0.05	Significant
FU 4	0.73±0.628	29	0.02	13.800	<0.05	Significant

Kadali kshar karma effect on Kanđu was calculated according to the grading score and observed before and after treatment. The mean and S.D. before treatment was 2.53 and 0.498.

After treatment on 30th day it was 0.73(mean) and 0.628(S.D) and the t-Value is 13.800 with p-Value <0.05 i.e. statistically significant. It signifies that Kshar karma has a very good effect on treating kanđu in the treatment of Cutaneous Lichen planus.



[Picture I]



[Picture II]



[Picture III]



[Picture IV]

DISCUSSION-

Kshar has karmas like Dahana, Pachana, Darana, Vilayana, Shodhana, Ropana, Shoshana, Stambhana and Lekhana. It also has gunas like Na atithikshna, Na ati mridu, Shukla, Slakshna, Picchilla, Abhisyandi, Shiva, Shigra. Kshar karma is also considered more important than shastras and anu-shastras because it has qualities like chedan, bhedan, lekhan, tridosha shaman and it can be used for special activities. Due to its lekhana, dahana, pachana, shodhana, ropana and tridosha shaman properties it can be used in skin lesions like Lichen planus chronicus.

CONCLUSION-

1. Kshar Karma has very good effect in removing the lichenified lesions on the skin. Post kshar karma on the 3-4th day the lesion turns black and shedding starts post 4-6 days.
2. It is also effective in reducing itching, reducing the size of the lesion and returning the normal colour of the skin after completion of the treatment. So, we can conclude that Kadali Tikshna Pratisaraniya kshar can definitely be used for the management of chronic Cutaneous lichen planus if it is used with precaution.

Consent Of The Patients-

Written informed consent has been taken from the patients for the clinical trial as well as for publication of data without disclosing the identity.

Limitation Of The Study-

The study was conducted in a small sample and so study in larger samples may help come to a concrete conclusion.

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