



Research Article

A CLINICAL STUDY ON THE EFFICACY OF AYURVEDIC LEPA IN THE MANAGEMENT OF SHWITRA

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ABSTRACT

The colour of the skin plays a very important role in cosmetic world and trying to be more beautiful and attractive is natural tendency of human being. Based on the symptoms, *Shwitra* can be correlated with Vitiligo where we find improper distribution of melanocyte pigment. Based on some dermatological out patient records it is roughly estimated to be between 3 – 4% in India. The vitiligo affects the estimated 1% of world population. In the present study 15 patients were treated with *lepa* and 6.67% patients showed complete remission, 26.66% patients showed marked improvement, 60% patients showed moderate improvement and 6.67% showed mild improvement.

Key words:

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INTRODUCTION

Modern era we can witness a shift from the expected life style of individual due to mechanical life style and ignorance of food and other activities. This resulted in certain genetic mutation as well as other health problems. *Shwitra* is one such disorder commonly seen in day to day practice which is also considered as social stigma. As colour of the skin plays a very important role in cosmetic world and trying to be more beautiful and attractive is natural tendency of human being, although *Shwitra* doesn't produce pain, ulcer or discomfort, but eventually creates an inferiority complex in individual which later lead to disturbances in his social, personal and educational life.

Based on the symptoms, *Shwitra* can be correlated with Vitiligo where we find improper distribution of melanocyte pigment. Vitiligo a hypo pigmentation disorder may be of genetic or acquired cause. The disease may start at any age but usually seen in child hood at 10 years of age or in second decade of life. Based on some dermatological out patient records it is roughly estimated to be between 3 – 4% in India. The vitiligo affects the estimated 1% of world population¹. We find many hidden cases of *Shwitra* due to certain misbeliefs and myths related to this disease. Of course all the hypo pigmented diseases are not vitiligo as colour of skin depends on many other factors.

But any cause which disturbs the colour of skin is called as *Kustain Ayurveda*. *Shwitra* is considered amongst the varieties of *Kustain* the classics², due to vitiation of *Dhatus* like *Rasa*, *Rakta*, *Mamsa* and *Meda*³, Seven *Dushys* and *Tridoshas*. Depending upon the duration of the disease and the involvement of *Dhatus*, the disease becomes prognostically bad. At the same time *Shwitra* has also been counted among the *Rakthapradoshajavikara*.⁴

MATERIALS AND METHOD

In this study total 15 patients of *Shwitra* were registered. Patients of *Shwitra* were treated with *Ayurvedic Lepa (Anubhut Yoga)* for local application externally on effected part. The ingredients of *Ayurvedic Lepa (Anubhut Yoga)* are *Bakuchi*, *Kasis*, *Vidang*, *Guduchi*, *Kakodumbar*, *Chandan*, *Khadir* and *Nilini*.

Inclusion Criteria

- Patient with classical symptoms of *Shwitra* as explained in *Ayurvedic* classics and diagnosed case of vitiligo according to the contemporary diagnostic system are included.
- Patient between 11 to 60 years of age are included.

Exclusion Criteria

- Patient below 11 years of age irrespective of sex.
- Patient above 60 years of age irrespective of sex.

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- Pregnant women and lactating mother.
- Patient suffering from other systemic diseases.
- Patches due to burn, chemical explosion etc.
- Patches over lips and mouth angulations.
- Genital area patches.
- All other de-pigmentary disorders

Criteria for Assessment

- Special scoring pattern was adopted for scrutinizing the symptomatology. The score was given on the basis of Size of patches, Colour of patches, Number of patches, and Percentage of body area involvement and VASI Score. For the assessment of the involvement of body surface area, the Rule of Nine described in the forensic medicine was used with certain modifications.
- Once the percentage was obtained by above calculation it further scrutinized as below.

Percentage of Area as Rule of Nine

Percentage of area	Score
1%	1
2%	2
3%	3
4%	4
>4	5

Size of Patch

Size of patch	Score
1cm	1
2cm	2
3cm	3
4cm	4
>4cm	5

Colour of Patch

Colour of patches	Score
Normal Skin colour	1
Red colour	2
White to reddish	3
Red to white	4
White	5

Number of Patches

Number of patches	Score
1	1
2	2
3	3
4	4
>4	5

Chronicity of Patches

Chronicity of patches	Score
1 yr	1
2 yr	2
3 yr	3
4 yr	4
>4 yr	5

- Total score was obtained from calculation of table (1) to (5).
- Maximum score was 25.
- Then they were divided into mild, moderate and severe category as below

Category	Total Score
Mild	1-8
Moderate	9-16
Severe	17-25

- VASI² - (Vitiligo Area Scoring/Severity Index)

**VASI= Area (palm units) X Extent of depigmentation
Total body surface area**

Criteria for Assessment of Total Effect

Percentage	Effect of therapy
0-25	No change
26-50	Mild improvement
51-75	Moderate improvement
76-99	Marked improvement
100	Cured

OBSERVATION AND RESULTS

In the present study 20.00% of patients belong to the age group of 11- 20 years, 33.33% of patients belong to age group of 21-30 years, 26.67% of patients were observed in age group of 31-40, while 13.33% of patients belong to age group of 41-50 years and 6.67% of patients belongs to the age group of 51-60 years

Effect of Therapy (n=15)

Sign & Symptoms of Patches	Mean		Mean Diff.	% Change	S.D.±	S.E.±	t	p
	B.T.	A.T.						
Colour	4.92	1.92	3.00	60.87 ↓	0.78	0.21	14.31	<0.001
Number	4.57	2.57	2.00	43.75 ↓	0.78	0.21	09.54	<0.001
Area	3.57	1.64	1.93	54.00 ↓	1.14	0.29	06.32	<0.001
Size	4.29	1.79	2.50	58.33 ↓	1.09	0.30	08.57	<0.001
VASI	3.64	1.29	2.36	64.71 ↓	1.45	0.39	06.10	<0.001

↑- Increasing, ↓- Decreasing

Above table shows that in colour of patches 60.87% improvement was found, in number of patches 43.75% reduction was found, in Area of patches 54.00% reduction was found, in Size of patches 58.33% reduction was found and in VASI Score 64.71% improvement was found. All these changes were statistically highly significant (p<0.001).

Overall Effect of Therapies

Gradations	Group A(n=15)	
	No. of patient	%
Complete Remission	1	6.67
Marked Improvement	4	26.66
Moderate Improvement	9	60
Mild Improvement	1	6.67
Unchanged	0	0.00

Symptoms of patches

In present Study it is observed that all the patients had *Svetabha Vaivarnata* (Whitish discoloration) and *Mandalotpatti* (Beginning of patch) as a symptom while 43.33% and 36.67% respectively had *Snigdhatta* (Unctuousness) and *Bahala* (Thickness) symptom while 30% and 26.67% were having *Rukshta* (Dryness) and *Kandu* (Itching) as the symptoms respectively. Our *Acharyas* have also mentioned the above two symptoms as the main signs of the diseases.

Chronicity of patches

The majority of patients, who came for the treatment i.e. 70%, were having the illness with the duration 1 month to 3 years. While 26.67% of patients were came with the duration of 4-6 years. 3.33% of patients came with duration 7-10 year chronicity.

It is observed that vitiligo is a chronic and spreading in nature. If it is not treated in its initial stage it can spread entire body. Vitiligo of recent onset have good prognosis whereas vitiligo with a chronicity of more than 3 years is difficult to cure. It was also noted that patients come to Ayurvedic side after visiting Allopathy, Homeopathy and other pathies etc. As the disease does not have any satisfactory treatment in other

systems. So most of the patients in the present study were having chronicity more than 1 year .

Distribution of Patches (Table No. 23)

In present study, Overall 83.3% of patients (25) belongs to asymmetrical distribution of patches suggesting high incidences in asymmetrical distribution of patches in present study. So the effect was very satisfactory within a very short period

Adverse Drug Reaction

During this trial patients were advised for the exposure to the Sun light for atleast 5-10 minutes after the Lepa application. But no complain of burning, itching or blister formation was reported.

DISCUSSION AND CONCLUSION

Number of black spot in observed patches

In the present study the patient were evaluated for number of black spot appeared in observed patches and grading of same was done on completion of trial of two month. Very significant result (P value-0.0078) with the 60.15% extremely significant has been observed. This clearly suggests the effect of trail drug at the level of skin and melanocytic cells stimulating production of melanin pigment. Appearance of blackish spots also suggests the deposition of melanin pigment secreted by melanocytes cells of skin production of which has been governed in melanocyte secreting hormones of the Pituitary and Pineal gland. This result suggests influences of *Ayurveda Lepa* for it's all the eight ingredients for its *Switraghna* properties.

Colour changes in observed patches

In the present study the patient of the both groups were evaluated for change in color in observed patches and graded at the completion of trial of two month. After statistical analysis very significant result (P value-0.0078) was obtained with the 60.83% relief. After administration of the trail drug the whitish patches turn pink within few days followed by appearance of blackish spots. *Ushna*, *Teekshna* property of the drug leading to increasing blood supply to the spot and correction of *Bhrajakapitta* might have been responsible for this. Further pigmentory properties of *Nilini*, *Kakodumbar* and *Bakuchi* play a very important role.

Size decrease in observed patches

In the present study the patients evaluated for decrease in size of the observed whitish patches and same is graded to get a statically data at the completion of six months trial. Extremely significant result (Pvalue-0.0010) was obtained with the 57.80% relief with rapidly appearing blackish spot and colour changes by *AyurvedicLepa* in reducing the whitish patches and normalizing the skin.

On the basis of present work, some conclusions are drawn as follows

1. *Shwitra* characterized by white discoloration of patches is *TridoshajaVyadhi* in nature but there is dominance of *Pitta Dosha* and vitiation of *RaktaDhatu* along with *Rasa Mamsa* and *MedaDhatuDushti*. It can be compared with the Vitiligo or Leucoderma according to modern science.
2. On primary examination, only *Shweta Mandala* (hypo pigmented or white coloured patches and macules) were found in most of the patients, instead of any other symptoms.
3. *ViruddhaAhara* and *MithyaAhara* like milk with salt, milk with sour foods, excess taking of fermented foods were observed in most of patients of *Shwitra*.

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