

**A COMPARATIVE CLINICAL STUDY ON MITRAPANCHAKA YOGA AND
AVALGUJABEEJADI LEPA IN THE MANAGEMENT OF SHWITRA W.S.R. TO
VITILIGO****Dr. Nirank Kumar^{*1}, Dr. A. R. Dave² and Dr. Monika Katiyar³**¹MD Scholar, Dept of Kaya Chikitsa, IPGT and RA, G.A.U, Jamnagar, Gujarat.²Associate Professor and I/C H.O.D. Dept of Kaya Chikitsa, IPGT and RA, G.A.U, Jamnagar, Gujarat.³MD Scholar Dept of RS and BK, IPGT and RA, G.A.U, Jamnagar, Gujarat.***Corresponding Author: Dr. Nirank Kumar**

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ABSTRACT

Shwitra is a disease described in Ayurveda; which is produced by vitiation of *Vata*, *Pitta* and *Kapha Doshas*. The signs and symptoms of *Shwitra* are; non exudative white, red or coppery-red coloured patches on the skin, destruction of the skin lusture, loss and discolouration of the hair, roughness, dryness, itching and burning sensation of the patches. It can be correlated with Vitiligo which is progressive whitening of the skin and hair characterized by the total absence of melanocytes in affected areas of the skin. **Aim:** To assess and compare the clinical efficacy of *Mitrapanchaka Yoga* with and without *Avalgubeejadi lepa* in the management of *Shwitra* (Vitiligo). **Material and methods:** In this trial, 34 patients were registered, out of which 30 completed the treatment. Patients were randomly divided in two groups with the help of computer generated random selection method viz. Group A and Group B. In Group A classical *Mridu Samshodhana* was given followed by oral administration of *Mitrapanchaka Yoga* as a *Shamana Yoga*, followed by *Avalgubeejadi lepa* for local application. In Group B patients were treated with *Mridu Samshodhana* followed by oral administration of *Mitrapanchaka Yoga* internally. Special scoring pattern was adopted for scrutinizing the symptomatology. The score was given on the basis of Size, Colour, Number of patches, percentage of body area involvement and chronicity of patches. VASI Score to know overall effect of therapy on two groups and VIS-22 Score for each patient was calculated. **Results:** On Applying VASI Score both groups showed highly significant results. VIS-22 Score was suggestive of high psychological involvement in disease. **Conclusion:** On comparison group A showed better results in percentage changes, result difference was significant in improvement in number of patches in Group A, which suggests that *Mitrapanchaka Yoga* and *Avalgubeejadi Lepa* together give better results than *Mitrapanchaka Yoga* alone.

KEYWORDS: Shwitra, Vitiligo, *Mitrapanchaka Yoga*, *Avalgubeejadi Lepa*.**INTRODUCTION**

Kaya is synonymous to body and skin is the structure which covers this body.^[1] Skin is the largest organ of our body covering around 1.73 meter square of area. According to Joseph Lister, "Skin is the best dressing". Beauty and attraction of an individual depends on skin condition. But there are certain disorders which wipe out this beauty and attraction by spoiling skin health. One among them is *Shwitra*. *Shwitra* harms beauty of skin so person may suffer from inferiority complex, anxiety, isolation etc. Thus *Shwitra* is a painless condition for body but it is painful for mind. *Shwitra* is produced by vitiation of *Vata*, *Pitta* and *Kapha Doshas*. The signs and symptoms of *Shwitra* are; non exudative white, red or coppery-red coloured patches on the skin, destruction of the skin lusture, loss and discolouration of the hair, roughness, dryness, itching and burning sensation of the

patches. It can be correlated with Vitiligo. It is a common pigmentary disorder of great socio-medical importance. It is defined as circumscribed, acquired, idiopathic, progressive, hypomelanosis of skin and hair. Often familiar and characterized by total absence of melanocytes microscopically.^[2]

These are some important features of Vitiligo:^[3]

- Depigmented macules
- Trichrome : Three shades

Central part is depigmented, surrounded by a hypopigmented rim and normal pigmented skin around it.

- Leucotrichia : Hairs remain same but in older cases they also get hypo pigmented.
- Koebner's phenomenon

The global incidence of Vitiligo is less than 1%⁴ with some populations averaging between 2-3% and as high as 16%^[5] but management is still unsatisfactory.

AIMS AND OBJECTIVES

To assess and compare the clinical efficacy of *Mitrapanchaka Yoga*⁶ with and without *Avalgubeejadi lepa*⁷ in the management of *Shwitra* (Vitiligo).

MATERIALS AND METHODS

Study Design

The study was Randomized open trial study cleared by the institutional ethics committee PGT/7-A/Ethics/2015-2016/1470. The trial was registered in Clinical Trial Registry of India (CTRI) (CTRI/ 2016/08/007171). Informed consent was taken from all the patients before including them into the trial. In this study, total 34 patients of *Shwitra* were registered. Patients were randomly divided into two groups with the help of computer generated random selection method viz. Group A and Group B:

Group 'A' – In this group classical *Mridu Samshodhana* with *Eranda Bhrishtha Haritaki*⁸ was given followed by oral administration of *Mitrapanchaka Yoga* as a *Shamana Yoga*, followed by *Avalgubeejadi lepa* for local application.^[9]

Group 'B' – Patients in this group were treated with *Mridu Samshodhana* followed by oral administration of *Mitrapanchaka Yoga* internally.

1. Dose

External Drug: *Avalgubeejadi lepa*, Quantity sufficient for local application.

Internal Drugs:

Eranda Bhrishtha Haritaki- 6gm HS after meals for 3 days.

Mitrapanchaka Yoga -1155mg (± 5 mg) in two divided doses after meals (with *Madhu* (3gm)-*Sarpi*(2gm) in unequal amounts).

Follow-up

Follow-up was done fortnightly to assess the changes in the patients.

Inclusion criteria

- Patients having signs and symptoms of *Shwitra* (vitiligo).
- Patients having *Sadhya Lakshana* of *Shwitra*.
- Patients in between 16 to 60 years of age.
- Patients with chronicity of less than 10 years.

Exclusion criteria

Patients having

- Chronicity more than 10 years.
- Serious cardiac, renal, hepatic diseases, major illness like IDDM, NIDDM, patches due to burning,

chemical explosion, any other serious systemic illness.

- Gravid and lactating women.
- Lesions at region of *Guhyanga* (genital organ), *Panipadatala* (sole of palm and feet), *Oshtha* (lips), *Aekanga* (particular whole organ), *Sarvanga* (whole body).^[10]
- Patches with *Raktaroma* (reddish hair) and *Samsakta* (coalescent).^[11]

Criteria for assessment

Special proforma was designed, grading and scoring system was adopted for assessing Subjective and objective parameters before the commencement of trial and after the completion of trial. For the assessment of the involvement of body surface area, Rule of Nine described used to calculate the percentage of burn was used (Table A) with certain modifications¹². Total score was obtained from calculation. (as per table 1.1-1.5)

Maximum score was 25. Then they were divided into mild, moderate and severe category. (as per table 1.6)

Subjective Criteria

Chief complaints (Table 1.1-1.4)

1. Size
2. Colour
3. Number of patches
4. Percentage of body area involved

Associated Complaints (Table 2.1-2.5)

1. Mandalottpatti (Circular skin lesion)
2. Rukshata (Dryness of skin)
3. Sapidaha (Burning sensation)
4. Bahalatva (Thickening of skin)
5. Kandu (Itching)

Parameters

VASI (Vitiligo Area Scoring Index) Scoring.^[13] (Table)
VIS-22 (Vitiligo Impact Scale-22) Scoring.^[14]

Statistical analysis

Wilcoxon signed rank test was applied to access the results for individual groups and Chi Square test for comparative results in chief complaints. Student's unpaired t-test was used to calculate the comparison of results between two groups. The results were interpreted at the level of $P < 0.001$ as highly significant, $P < 0.05$ as significant and $P > 0.05$ as insignificant.

RESULTS AND OBSERVATIONS

Demographic Profile

Maximum number of patients (40%) were from the age group of 31-45 years, were male (53.33%), married (80%) and Hindu (93.33%) by religion. Maximum patients were *Vata Kaphaja Prakriti* (30%), business/job person (50%), Graduates (43.33%), *Meda Sara* (33.33%), *Madhyama Satva* (46.67%), *Madhyama Samhanana* (73.33%), *Madhyama Pramana* (63.33%), *Madhyama*

Satmya (66.67%), Madhyama Vyayama Shakti (46.67%), Mandagni (50%) and Krura Koshta (66.67%) .

Nidana

In *Nidanas*, *Ahara* dominant in *Madhura* (73.33%), *Guru* (50%) and *Ushna Guna* (60%) was dominant. Also consumption of *Viruddhahara* (76.36%), *Lavana + Dugdha* (30%) and *Mithya ahara* (73.33%) food pattern (46.67%), Psychological disturbance during meal (56.67%) were found maximum. In *Vihara*, *Vegavidharana* (80%) and *Divaswapa* (40%) were observed *Nidanas* in maximum of patient.

Clinical Profile

Maximum patients displayed duration of disease of more than 2 years (63.33%), negative family history (60%) and positive medication history (56.67%). Maximum patients showed symptoms of *Swetabha Vaivarnyata* (63.33%), *Mandalopatti* (83.33%), *Rukshta* (60%), and *Kandu* (50%) of patches. Maximum patients (63.33%) were found with white coloured patches, more than 4 patches (53.33%), had 5 to 25% involved body area (46.67%), maximum patients (23.33%) found within 2 cm size of patches and maximum patients (65%) were found in severe disease condition.

Effect of therapy on chief complaints (Table E1.1-E1.4)

Both groups showed highly significant ($p < 0.05$) results in colour of patches. Effect of therapy on size of patches was significant ($p < 0.05$) in both the groups while in number of patches and in gradation of area only Group A showed significant ($p < 0.05$) results whereas Group B showed insignificant ($p > 0.05$) results.

Comparative Changes (Table E2.1-E2.4)

On comparison between two Groups, differences were insignificant ($p > 0.05$) except effect in number of patches where differences were significant ($p < 0.05$) and Group A found more effective.

Effect of therapy on associated complaints (Table E3.1-E3.5)

Group A showed insignificant ($p > 0.05$) results on associated complaints except *Mandalotpatti* where results were highly significant ($p < 0.0001$) whereas Group B showed insignificant ($p > 0.05$) results. Group B showed significant ($p < 0.05$) results in all associated complaints except *Paridaha* and *Kandu* where results were insignificant ($p > 0.05$).

Effect of therapy on VASI Score (Table E4.1-E4.2)

Both Groups showed highly significant ($p < 0.0001$) improvement on VASI Score and comparative difference found insignificant ($p > 0.05$) between two Groups.

In Group A: 26.67% patients showed moderate improvement, 26.67% showed mild improvement and 33.33% patients showed unchanged as well as worsened

results. 13.33% of patients showed marked improvement and no patient showed complete remission or remarked.

In Group B: 6.67% patients showed moderate improvement, 20% patients showed mild improvement and 73.33% patients showed unchanged. None of patient showed marked improvement and complete remission or remarked.

Table A: Body surface percentage Chart.

Involved Body Part		Percentage	Subtotal	Total
Head and Neck	Scalp	2.0		9
	Face	5.0		
	Neck	2.0		
Thorax	Dorsal	9.0		18
	Ventral	9.0		
Abdomen	Trunk	9.0		18
	Back	9.0		
Upper limbs (Right + Left)			(9R+9L)	18
	Finger to elbow		(4.5R+4.5L)	
	Dorsal	2.25		
	Ventral	2.25		
	Elbow to shoulder			
	Dorsal	2.25		
	Ventral	2.25		
One lower limb			(18R+18L)	36
	Finger to Knee		(4.5R+4.5L)	9
	Dorsal	4.5		
	Ventral	4.5		
	Knee to leg			9
	Dorsal	4.5		
	Ventral	4.5		
Perineal Part		1.0		1.0

Table 1.1: Percentage of Area as Rule of Nine.

Percentage of area	Score
Less than 5%	1
5 to 25%	2
25 to 50%	3
50 to 75%	4
More than 75%	5

Table 1.2: Size of Patch.

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

Table 1.3: Colour of patch.

Colour of Patches	Score
Normal Skin color	1
Red colour	2
White to reddish	3
Red to whitish	4
White	5

Table 1.4: Number of Patches.

Number of Patches	Score
1-2	1
3-4	2
5-6	3
7-8	4
>9	5

Table 1.5: Chronicity of Patches.

Chronicity of Patches	Score
1-2 yr	1
3-4 yr	2
5-6 yr	3
7-8 yr	4
9-10 yr	5

Table 1.6: Severity Index.

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

Table 1.7: Criteria for assessment of total effect.

Percentage	Effect of therapy
0 – 24	No change
25 – 49	Mild improvement
50 – 74	Moderate improvement
75 – 99	Marked improvement
100	Cured

Table 2.1: Mandalottpatti (Circular skin lesion).

Scale	Score
No Mandal	0
Few Mandala and smaller than coin	1
Few Mandala and bigger than coin	2
More Mandala and smaller than coin	3
More Mandala and bigger than coin	4

Table 2.2: Rukshata (Dryness of skin).

Scale	Score
No line on scrubbing with nail	0
Faint line on scrubbing with nail	1
Lining and even words can be written by nail	2
Excessive Rukshata leading to Kandu	3
Rukshata leading to crack formation	4

Table 2.3: Sapidaha (Burning sensation).

Scale	Score
No Burning sensation	0
Occasional localised Burning sensation	1
Localized mild Burning sensation in a particular hr. of day	2
Burning sensation throughout the day but tolerable and relieved after cold medications.	3
Intolerable Burning sensation throughout the day which cant be relieved by cold medications.	4

Table 2.4: Bahalatva (Thickening of skin).

Scale	Score
No Bahalatva	0
Mild thickening	1
Moderate thickening	2
Very thick	3
Very thick with induration	4

Table 2.5: Kandu (Itching).

Scale	Score
No Itching	0
Mild/ occasional Itching	1
Moderate frequent Itchin	2
Severe frequent Itching	3
Very severe Itching which disturb sleep and other routine activities	4

Table E1.1: Effect of therapy on gradation of Area (n=30).

Group (n=30)	N	Mean		Change		W	S	P
		B.T	A.T	Mean±SEM	%			
A	15	2.000±0.258	1.533±0.274	0.467±0.0165	23.35↓	-21	S	0.031
B	15	2.333±0.319	2.067±0.371	0.267±0.107	11.44↓	-10	IS	0.125

Table E1.2: Effect of therapy on Size of patches (n=30).

Group (n=30)	N	Mean		Change		W	S	P
		B.T	A.T	Mean±SEM	%			
A	15	2.067±0.316	1.333±0.333	0.733±0.153	35.46↓	-55	S	0.002
B	15	2.800±0.490	2.333±0.465	0.467±0.165	16.68↓	-21	S	0.031

Table E1.3: Effect of therapy on Colour of the patches (n=30).

Group (n=30)	N	Mean		Change		W	S	P
		B.T	A.T	Mean±SEM	%			
A	15	4.467±0.192	1.800±0.145	2.400±0.289	53.73↓	-120	HS	<0.001
B	15	4.333±0.187	2.333±0.159	2.000±0.239	46.16↓	-120	HS	<0.001

Table E1.4: Effect of therapy on Number of patches (n=30).

Group (n=30)	N	Mean		Change		W	S	P
		B.T	A.T	Mean±SEM	%			
A	15	2.800±0.470	2.000±0.447	0.800±0.223	28.57↓	-45	S	0.004
B	15	3.000±0.516	2.867±0.487	0.133±0.090	04.43↓	-3	IS	0.500

Table E2.1: Comparative effect of therapies on Area Score.

Comparative Effect of Therapy	Group	<50%	>50%	Row Total	X ²	S	P value
Area Score	Group A	09	06	15	0.635	IS	>0.05
	Group B	12	03	15			
	Total	11	09	30			

Table E2.2: Comparative effect of therapies on Size.

Comparative Effect of Therapy	Group	<50%	>50%	Row Total	X ²	S	P value
Size	Group A	08	07	15	1.350	IS	>0.05
	Group B	12	03	15			
	Total	20	10	30			

Table E2.3: Comparative effect of therapies on number of patches.

Comparative Effect of Therapy	Group	<50%	>50%	Row Total	X ²	S	P value
Number	Group A	09	06	15	5.208	S	<0.05
	Group B	15	00	15			
	Total	16	14	30			

Table E2.4: Comparative effect of therapies on Colour.

Comparative Effect of Therapy	Group	<50%	>50%	Row Total	X ²	S	P value
Colour	Group A	04	11	15	1.250	IS	>0.05
	Group B	08	07	15			
	Total	12	18	30			

Table E3.1: Effect of therapy on Mandalotpatti (n=30).

Group(n=30)	N	Mean		Change		W	S	P
		B.T	A.T	Mean±SEM	%			
A	15	1.600±0.214	0.867±0.215	0.733±0.118	45.81↓	-66.00	HS	<0.001
B	15	2.143±0.190	0.867±0.236	0.533±0.133	38.07↓	-36.00	S	0.008

Table E3.2: Effect of therapy on Rukshata (n=20).

Group(n=20)	N	Mean		Change		W	S	P
		B.T	A.T	Mean±SEM	%			
A	12	1.083±0.229	0.750±0.131	0.333±0.256	30.75↓	-14.00	IS	0.297
B	08	1.375±0.263	0.375±0.183	1.000±0.189	72.73↓	-28.00	S	0.016

Table E3.3: Effect of therapy on Paridaha (n=18).

Group(n=18)	N	Mean		Change		W	S	P
		B.T	A.T	Mean±SEM	%			
A	09	1.333±0.373	0.667±0.236	0.667±0.373	50.04↓	-22.000	IS	0.148
B	09	1.333±0.333	0.667±0.167	0.667±0.333	50.04↓	-16.00	IS	0.094

Table E3.4: Effect of therapy on *Bahalatva* (n=14).

Group(n=14)	N	Mean		Change		W	S	P
		B.T	A.T	Mean±SEM	%			
A	07	1.000±0.00	0.571±0.202	0.429±0.202	42.9↓	-6.000	IS	0.250
B	07	1.000±0.00	0.000±0.000	1.00±0.000	100↓	-28.000	S	0.016

Table E3.5: Effect of therapy on *Kandu* (n=17).

Group(n=17)	N	Mean		Change		W	S	P
		B.T	A.T	Mean±SEM	%			
A	08	1.250±0.313	1.000±0.267	0.250±0.366	20↓	-5.00	IS	0.625
B	09	1.444±0.242	0.889±0.111	0.550	38.50↓	-15.00	IS	0.156

Table E4.1: Effect of therapy on VASI Score.

Group(n=30)	N	Mean		Change		W	S	P
		B.T	A.T	Mean±SEM	%			
A	15	1.077±0.134	0.448±0.116	0.629±0.0783	58.40↓	-120.00	HS	<0.001
B	15	1.665±0.235	0.975±0.0.195	0.690±0.0743	41.44↓	-120.00	HS	<0.001

Table E4.2: Comparative Effect of therapies on VASI Score.

VASI	Group	<50%	>50%	Row Total	X ²	S	P value
Overall Effect of Therapy	Group A	07	08	15	0.134	IS	>0.05
	Group B	09	06	15			
	Total	16	14	30			

DISCUSSION

In present study *Eranda Bhirishtha Haritaki* is given for *Kostha Shuddhi* in initial 3 days of starting the treatment. According to Acharya Charaka *Shwitra* is *Rakta Pradoshaja Vikara* and for *Raktaja* and *Pittaja* diseases *Virechana* is the best treatment.^[15] In diseases having blood as causative factor line of treatment is one pacifying *Rakta* and *Pitta*. Also, *Virechana*, *Upavasa* and *Rakta mokshana* can be given.^[16] *Eranda* has *Deepana* property and *Eranda* and *Haritaki* both have *Vatanulomana* property. When *Vata* is in natural form it helps in elimination of all the *Mala* (waste products) from body. This work is mainly done by *Apana Vayu*, with the help of *Vyana Vayu*. Both these drugs together work in *Apanakshetra* and relieve *Vibandha* (constipation). *Haritaki* is placed in *Kushthaghna Mahakashaya* by Acharya Charaka. He also gave a formulation named *Abhyarishtha* in *Arsha Rogadhikara* containing *Haritaki* as one of the major ingredients along with *Amlaki* which is also indicated in *Shwitra*. *Haritaki* has *Pramathi Guna*, this property helps in removing deep seated *Dosha*. Both these drugs are *Ushna Veerya Madhura Vipaka* and *Vata-Kapha Shamaka* and by *Vatanulomana* property and *Kapha shamaka* property when *Shrotorodha* is removed *Virechana Karma* is produced which pacifies vitiated *Pitta Dosha* by its natural passage.

Shamana Drugs: Among the main ingredients of *Avalgubeejadi Lepa* and *Mitrapanchaka Yoga Bakuchi* is a renowned herb with many therapeutic properties.^[17] It has been extensively used in hypopigmentation with

great success. It contains psoralens, which on exposure to the sun rays brings out melanin in the depigmented lesions.^[18] As per the recent researchers, *Psoralea corylifolia* is a proven antibacterial, antistaphylococcal, antifungal, anti-inflammatory, vasodilator, skin photosensitizing, antitumour, immunomodulatory agent, these properties are useful in skin disorders.

Haratala, an arsenic compound, was used in the *yoga* along with *Bakuchi*. *Haratala* is best owed with immune modulating properties. It is one of the ingredients of the *Mallasindoora, Talakeshwara Rasa* which are widely used for some autoimmune disorders like allergic bronchial asthma etc. in which the etiopathogenesis is deranged immunity.^[19] Arsenic is absorbed through skin in addition to other routes. In *Shwitra*, the deranged immune system destroys the pigment synthesizing melanocytes. *Haratala* breaks this pathogenesis and prevents the self-destruction of melanocytes.^[20] The *Vyavayi* and *Ashukari* properties of *Hartala* may help the drug to reach the site quickly and remove the obstruction of *Srotasa*.^[21] *Gandhaka* is very effective in skin diseases. It is one of the most commonly used drug for skin conditions in Ayurveda. Most of the herbs which are useful in dermatic conditions they also contain sulphur as an active ingredient in them. Duly processed (*Sodhita*) *Gandhaka* is said to be a good rejuvenator and is useful in conditions like *Kushtha* (various skin diseases), *Visarpa* (erysipelas), *Dadru* (fungal infections) etc.^[22] *Gandhaka* is having properties like *Vatakapha Nashana, Rakta Shodhana, Krmighna Twakavikaranasaka, Dadrunasaka, Kusthanasaka Dipana, Amapacana, Kandughna*.

Madhu is known as *Yogavahi*.^[23,24] It is used as *Anupana* for different Ayurveda formulations, having properties like *Kapha-Pittahara and Meda, Sthaulya Nashana, Grahi, Atilekhanam, Sukshama, Ruksha*.^[25] These properties pacifies *Pitta, Kapha Dosha* and also increases bio-availability of drugs by *Yogavahi Guna*.

Ghrita is *Madhura, Guru, Snigdha, Mridu, Sheeta, Madhura, Vatapitta Prashamana. Gandhaka, Bakuchi* and *Hartala* are *Ushna* in property which can vitiate *Pitta*. *Ghrita* pacifies this vitiated *Pitta*. Honey and Ghee has been described as an *anupana* of *Haratala*.^[26] It is having specific property of *Sanskaranuvartana*^[27] which allows it to increase the potency of used drugs and keeping its own qualities also.

Gomutra is indicated in many skin conditions. It is having properties like *Krimihar, Kushthaghna, ksharatva, Vata-Kaphashamaka, Ruksha, Tikshana, Ushna, Laghu*. These properties induce inflammation when applied over skin with *Bakuchi* and *Hartala*. *Lepa* was applied in early morning because heat of the body comes out through the skin pores at night normally which is obstructed if applied at night.^[28] The therapeutic activity of single drug can be explained by principles of *Rasa Panchaka*. But the mode of action of the compound formulation is difficult to explain.

Eranda and *Haritaki* both have *Vatanulomana* property and helps in detoxifying body by inducing *Virechana*. *Rasadi Panchaka* of *Avalgubeejadi Lepa* has dominancy of *Tikta-Katu Rasa, Katu Vipaka, Ushna Veerya, and Sara-Tikshna Guna*. However most of the *Dravyas* in this *Lepa* are *Kushthaghna, Krimighna, Deepana, Pachana* and *Kandughana*.^[29] Hence as *Shwitra* is *Tridoshaja Pitta Pradhana Kushtha*, so this *Lepa* might have helped in *Samprapti Vighatana*. *Bakuchi, Haratala* and *Gomutra* (cow's urine) are specially indicated for *Shwitra*.^[30] *Hartala* and *Gandhaka* are *Vata-Kapha Shamaka* and *Jantughna*. *Hartala* and *Bakuchi* contain property of immunomodulation. *Madhu* and *Ghrita* are *Pitta Shamaka* and bio-enhancers which help drug to work more efficiently and reduce the side effects which could take place due to *Ushna Guna* of trial drugs. Findings of both the groups suggest that highly significant relief was seen on subjective parameters in both the groups, but better results were observed in Group A in percentage relief.

CONCLUSION

Clinically Group A and Group B both managements are effective in Cardinal Symptoms (Colour, Number, Area and Size of patches) and associated Symptoms (*Mandalottapatti, Rukshata, Saparidaha, Bahalatva* and *Kandu*) of *Shwitra* (Vitiligo). Both groups showed highly significant results on VASI Score. But Group A found to show more relief on number of patches where Group A found to be significant in comparison to Group B. Also

Group A showed more percentage improvement on sign and symptoms of disease which shows that *Mitrapanchaka Yoga* along with *Avalgubeejadi Lepa* is more effective in treating *Shwitra* (Vitiligo).

VIS-22 score suggests that Vitiligo has very high impact on psyche of patient. Also patients with high VIS-22 Scale scores were difficult to treat and improvement observed was also mild. It draws attention towards mental counselling for the patients of Vitiligo.

Further studies can be done at large sample size and for long duration to establish the curative effect of both the drugs.

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Conflicts of interest

There are no conflicts of interest.

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