

COMPARATIVE CLINICAL STUDY ON BAKUCHI CHURNA AND SOMARAJI TAILA IN THE MANAGEMENT OF SWITHRA W.S.R. TO VITILIGO

Mahesh Kumar¹, Muralidhar P Pujar², Mahesh Raju³

¹Assistant Professor, Department of Kayachikitsa, Sharada Ayurvedic Medical College, Yadgir - 585202, Karnataka, India.

²Deputy Medical Superintendent & Professor in Department of Panchakarma, Sri Dharmasthala Manjunatheshwara College of Ayurveda & Hospital, Hassan- 573201, Karnataka, India

³Assistant Professor, Department of Swasthavritta & Yoga, Sharada Ayurvedic Medical College, Yadgir, - 585202, Karnataka, India

Email: dr.maheshkumarmamani@gmail.com

ABSTRACT

Skin is considered as organ of beauty; the colour of the skin plays a very important role in the society especially in India. Serves as the boundary between ourselves and the outside world, a 'first point of contact' when strangers meet us. When person suffers with white patch manifesting as a pathological entity considered as social stigma. *Switra* is a depigmentary disorder of the skin. This disease does not cause any pain or ulcer, but it creates an inferiority complex in the effected peoples. Hence the current study "Comparative clinical study on *Bakuchi Churna* and *Somaraji taila* in the management of *Switra* with special reference to vitiligo" was undertaken. This study was single blinded clinical study at OPD level in a tertiary *Ayurveda* hospital. A minimum of 30 patients were taken and divided in to two groups randomly A and B containing 15 patients in each group, Selected subjects in group A-*Bakuchi Churna* given internally 3grams TID with lukewarm water after food for one month, and in the Group B- *Somaraji Taila* applied externally on affected area for one month. Follow up was done once in a week during treatment. After completion of one month the changes in the patches of *Switra* are recorded and results are like, in *Bakuchi* group significant results in parameters like *Daha* and *Kandu* and in *Somaraji Taila* group it has significant results in parameters like *Daha*, *Kandu*, and change in colour and increase in Number of black spots.

Keywords: *Switra*, *Bakuchi churna*, *Somaraji Taila*, *Ayurveda*, Vitiligo, White Patches.

INTRODUCTION

Switra, one of the common skin disorders which is correlated with Vitiligo to certain extent in contemporary system of medicine. Normal skin colour is dependent on haemoglobin (in both the oxygenated and reduced state), carotenoids and melanin pigment. Viti-

ligo is a common disorder of unknown etiology even today. It is an acquired condition in which circumscribed de-pigmented patches develops. Worldwide prevalence of Vitiligo is observed as 1% of the world population. The incidence of vitiligo is found to be

0.25% to 2.5% in India. The disease *Switra* is a cosmetic problem for all the age groups. *Ayurveda* practices that the pigmentation management of such skin disorders that are developed by agony. Many tropical/systemic drugs administrations are practiced mediating mind and body.

Review of literature

Acharya Charaka describes *Switra* in *Kusta Chikitsa Adhyaya* of *Chikitsa Sthana* after explaining the other types of *Kusta*. Special emphasize is given to the *Nidanas* of *Switra*¹, *Acharya Sushruta* mentioned *Switra* in *Kusta Nidana* of *Nidana Sthana* where the difference between *Kusta* and *Khilasa*, types of *Switra* and its *Sadhyasadhya* is explained². The treatment of the disease is mentioned in *Chikitsa Sthana*³. In *Dalhana* commentary of *Nidana Sthana Bhojas* opinion on types of *Switra* is mentioned⁴.

In *Kashyapa Samhita* scattered references regarding disease *Switra* are available. In *Sutra Sthana* while classifying the diseases *Switra* is said to be three types⁵. In *Shareera Sthana* it is mentioned that the disease *Switra* is caused due to vitiation of *Twak Gata Udaka*⁶. In *Chikitsa Sthana* definition of *Switra* is mentioned and enumerated as five types⁷. In *Kalpa Sthana* it is mentioned that the person suffering from *Switra* should not take *Ikshu Rasa*⁸. *Lashuna* and *Gandhasarpi* are indicated in *Switra*⁹. In *Siddhi Sthana Virechana* and *Niruha Basthi* are indicated for *Switra*¹⁰. In *Bhela Samhita Lakshana* of *Switra* are mentioned in *Chikitsa Sthana*¹¹. In *Hareetha Samhita Pandura Kusta Chikitsa* is mentioned separately, which is like *Switra chikitsa*¹².

Objectives of the Study:

1. To evaluate the effect of *Bakuchi Churna* given internally in relieving *Switra*.
2. To evaluate the effect of *Somaraji Taila* applied externally in relieving *Switra*.

3. To compare the efficacy of both *Somaraji taila* and *Bakuchi Choorna* in the management of *Switra*

Drug Review

***Bakuchi Churna* Method of Preparation:** As *Bakuchi* is mentioned in the *Bhashajya Ratnavali*¹³. It is prepared in s.m. pandit Ayurveda Pharmacy a Gmp certified company Mysore. *Bakuchi Churna* is soaked in the *Gomutra* for nine days for *Shodhanartha*. *Gomutra* is daily changed for nine days, finally it is dried in the shade sun light and fine powder was obtained with the help of power making machine.

Bakuchi churna can be given internally as *Shamana* line of treatment in the management in *Switra*. In *Ayurvedic* system of medicine, *Bakuchi* (*P. corylifolia*) seeds are used for the treatment of Vitiligo. *Psoralens* have been used as topical and systemic applications for Vitiligo since decades.

1. Oral and topical *Psoralens* have both been used with varying results in the treatment of vitiligo.
2. *Psoralea Corylifolia* (*Bakuchi*) is a renowned herb and is a rich source of naturally occurring *Psoralen*. It sensitizes human skin to the tanning effect of UV and sunlight.

SOMARAJI TAILA¹⁴:

Somaraji Taila Contains *Bakuchi*, *Haridra*, *Daruharidra*, *Sarshapa*, *Kusta*, *Karanja*, *Edagaja*, *Aragvada*, *Sarshapa Taila*, *Jala* etc. In *Bhaishajya Ratnavali Somaraji Taila* is mentioned in the management of *Switra*. *Switra* is caused due to mainly in derangement in *Bhrajaka Pitta* in the management of *Switra* and any type of skin diseases in *Ayurveda* the concept of *Lepa Chikitsa* plays major role to treat it efficiently. Hence in this study it was tried to evaluate the efficacy of *Somaraji Taila* as *Lepa Chikitsa* in the management of *Switra*.

Table 1: Shows the Contents of *Somaraji Taila*

Sl no	Name of plant	Botanical name	Part used	proportion
1	<i>Bakuchi</i>	<i>Psoralea corylifolia</i>	Seed	1 part
2	<i>Haridra</i>	<i>Curcuma longa</i>	Rhizome	1 part
3	<i>Daruharidra</i>	<i>Berberis aristata</i>	Stem	1 part
4	<i>Sarshapa</i>	<i>Brassica juncia</i>	Seed	1 part

5	<i>Kusta</i>	<i>Sessurea lappa</i>	Root	1 part
6	<i>Karanja</i>	<i>Pongamia glabra</i>	Seed	1 part
7	<i>Edagaja</i>	<i>Cassia tora</i>	Seed	1 part
8	<i>Aragvada</i>	<i>Cassia fistula</i>	Leaf	1 part
9	<i>Sarshapa taila</i>	<i>Brassica juncia</i>	Seed oil	4 parts
10	Water	<i>Drava dravya</i>	16 parts	

Method of Preparation:

It is mentioned in *Bhishajya Rathnavali*, the ingredients are *Bakuchi*, *Haridra*, *Daruharidra*, *Aragvada*, *Sarshapa*, *Kusta*, *Edagaja*, Heat the Plain *Sarshapa Taila* (four parts) to make it free from froth. Add 16 parts of water along with powder of mentioned drugs. Boil it on moderate heat till only the oil portion remains. This process removes unpleasant odor of the oil. It obtains good color and fragrance. *Somaraji taila* is specially indicated in the management of *Switra*. It is also indicated in the *Nadivran*, *Dustavrana*, *Pidakas*, *Vyanga*, *Gambhira Vatarakta*, *Kandu*, *Kachhapa*, *Dadru*, *Pama*¹⁵ etc.

Somaraji Taila more effective in the management of *Switra* compare to *Bakuchi Churna* may be due to *Somaraji Taila* contains 11 ingredients all are *Usna Virya*, *Kandugna*, *Kustagna*, *Rasayana* properties for *Twak*. It was applied externally on the affected area this might be the reason shown faster action than *Bakuchi Churna* when given internally.

Materials and Methods

Source of Data: Patients who have attended the OPD of SDM Hospital, Hassan during the period 25th June 2013 to 28 Feb. 2014, with the complaints of *Switra* like *Twakswetata*, *Arunavarnata*, *Tamravarnata*, *Twakrukshata*, *Kandu*, *Daha* are used for forming the materials for this study.

Methods of Collection of Data:

- Study design:** This study done as single blind clinical study at OPD level in a tertiary *Ayurveda* hospital.
- Sample sizes:** A minimum of 30 patients were taken and treated in two groups.

Total study duration: 30 days

A) Diagnostic Criteria:

- Lakshana* of *Switra* as mentioned in *Ayurvedic* classics.

- Borders of patches Hyper pigmented and well defined.

- Sensation is normal.

- Absence of swelling and scaly lesions.

B) Inclusion Criteria:

- Patients with *Sadhya Lakshanas* of *Switra*.
- Patients in age group of 16- 60 years.
- Patients having *Switra* patch with normal sensation in touch.
- Size of patches less than 5cm × 5cm.

C) Exclusion Criteria:

- Pregnant women and lactating women.
- Patient suffering from other systemic disease.
- Burnt areas.
- Lesion over lip, genital areas should be excluded.
- Switra* (Vitiligo) caused by the other autoimmune disorder.
- The old refractory causes not responding after extensive use of modern medicine.
- Switra* (Vitiligo) more than two to five years old.

Plans of Treatment: Sampling: Randomly allocated.

Grouping Method: Two groups A and B each containing 15 patients.

Study design: Unblended study.

Selected 30 patients of Switra were randomly divided into two groups A and B containing 15 patients each group was selected. Details of the treatment schedule for the above said groups are as follows.

Group A: Bakuchi Group:

15 patients were selected in this group and *Bakuchi Churna* given internally 3 grams TID with lukewarm water after food for one month. Follow up was done once in a week during treatment. After completion of one month the changes in the patches of *Switra* were recorded.

Group B: Somaraji Group:

15 patients were selected in this group and *Somaraji Taila* applied externally on the affected area for one month. Follow up was done once in a week during treatment. After completion of one month the changes in the patches of *Switra* were recorded.

Out of a total number of 30 patients taken for the study, 2 dropped out in the middle in Group A & 3 patients in **Group B** did not continue treatment. The left out 25 patients constituted of 13 & 12 in each group respectively.

Laboratory Investigation:

Blood: Haemoglobin estimation, RBS, Total leukocyte count, Differential WBC count and Erythrocyte sedimentation rate.

Assessment Criteria:

1. Alteration in colour of the *Switra* (Vitiligo patches) or number of black dots appearing were recorded periodically observed.
2. Numbers of dots will be counted and joining of two dots were noted and recorded.
3. Change in the margin of observed patches were recorded. The criteria kept for grading to observe any improvement is as following before and after treatment.

DISCUSSION

Bakuchi Churna is given internally as *Shamana* line of treatment in the management of *switra*. In the *Ayurvedic* system of medicine, *Bakuchi* (*P. corylifolia*) seeds are used for the treatment of vitiligo. Psoralens have been used as topical and systemic applica-

tions for vitiligo since decades. In the present study *Bakuchi*, which used in internal preparation was purified in *Gomutra* for 9 days. *Ardraka Swarasa* is also advised for *Bakuchi Sodhana*. Being *Kushta Switrahara lekhanadi gunas Gomutra* has been selected for *Bakuchi beeja shodhana* in present clinical study.

Mode of Action: *Bakuchi churna* consisting of *Katu, Tikta, Rasa, Usna, Ruksha, Gunas, Usna, Virya, Katu, Vipaka* and *Rasayana* properties and, they possess the *Kapha Medohara* property and acts as *Kustagna, Shvitragna* and *Kandugna*. *Bakoochi* contains psoralen, which on application over the hypo pigmented skin causes erythematic and residual pigmentation and it has photosensitizing action.

Somaraji Taila has Significant results in following parameters *Daha, Kandru*, increase in number of black spots and it has not shown any significant results in following parameters like *Tvak Shwetata, Arunavarnata, Tamravarnata, Twak-rukshata*, there is no significant difference between the results in between the groups. *Somaraji Taila* is more effective in the management of *switra* compare to *Bakuchi churna* may be due to 11 ingredients in it and all are *Usna Virya Kandugna, Kustagna, Rasayana* properties for *Tvak*.

Results

Data was tabulated and analysed using friedmann’s test to know the overall improvement before and after the treatment. Wilcoxon signed rank test with bonferoni correction was used to know the improvement in the parameters during specific period treatment. Mannvitney’s test was applied to compare significant difference between the groups.

Table 2: shows there is no significant difference between the results of between the groups.

Variables	Significance		Friedman test (P)		Wilcoxon(P)	
	GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B
<i>Twakswetata</i>	NS	NS	0.135	0.368	0.157	0.317
<i>Arunavarnata</i>	NS	NS	0.368	0.369	0.317	1.000
<i>Tamravarnata</i>	NS	NS	0.369	0.269	1.000	1.000
<i>Twakrukshata</i>	NS	NS	0.223	0.224	0.317	0.157
<i>Kandru</i>	S	S	0.050	0.000	0.050	0.025
<i>Daha</i>	S	S	0.004	0.002	0.025	0.046
Colour	-	S	-	0.000	-	0.140
Number of black spots	-	S	-	0.001	-	0.014

Table 3: Shows the Significance of Friedman Test and Wilcoxon (P) values in group A (*Bakuchi*) and B (*Somaraji*)

PARAMETERS	N	Mean rank		Sum of rank		U value	P value (Asymptotic sig)	P value (Exact sig)	Remark
		SOM GRP	BAK GRP	SOM GRP	BAK GRP				
<i>Twakswetata</i>	13	6.75	7.40	54.00	37.00	18.00	0.735	0.833	NS
<i>Arunavarnata</i>	7	4.50	3.80	9.00	19.00	4.00	0.527	0.857	NS
<i>Tamravarnata</i>	5	3.0	3.00	9.00	6.00	3.00	1.000	1.000	NS
<i>Twakrukshata</i>	5	2.00	3.67	4.00	11.00	1.00	0.182	0.400	NS
<i>Daha</i>	17	9.00	9.00	72.00	81.00	36.00	1.000	1.000	NS
<i>Kandu</i>	20	8.63	13.31	103.50	163.50	25.00	0.059	0.082	NS
Colour	25	12.42	13.63	161.50	163.50	70.00	0.558	0.689	NS
Margin	25	12.23	13.83	159.00	166.00	68.00	0.564	0.611	NS
Number	25	14.23	11.67	185.00	140.00	62.00	0.270	0.406	NS

In (Group A) *Bakuchi churna* has significant results in following parameters: Reducing *Daha*, Increasing Number of black Spots and it has not shown much significant results in following parameters like *Tvak Shwetata*, *Arunavarnata*, *Tamravarnata*, *Tvak-Rukshat* and *Kandu*. In (Group B) *Somaraji taila* Shown significant results in following parameters: Decreasing *Daha*, *Kandu*, Number *Somaraji taila* has not shown significant results in following parameters: *Tvak Shwetata*, *Arunavarnata*, *Tamravarnata*, *Twakrukshata*.

CONCLUSION

This clinical trial shows that *Somaraji taila* and *Bakuchi churna* shown great help in reduction of some of the signs and symptoms of *Switra* like *Twakswetata*, *Arunavarnata*, *Tamravarnata*, *Twakrukshata*, *Kandu*, *Daha*, Colour, Increase in number of black spots, at the end of the treatment there was an improvement in both groups, specifically some of the parameters like Reduction in *Kandu* and *Daha* with significant p values in *Bakuchi* group, were as other parameters in this study showed no significance, But *Somaraji Taila* has good effect in improving some of the parameters like *Kandu*, *Daha*, improved colour and increase in no of black spots. Hence *Somaraji Taila* is more effective in the management of *switra* compare to *Bakuchi churna* may be due to its eleven ingredients and all are having *Usna Virya*, *Kandugna*, *Kustagna*, *Rasayana guna* for *Tvak*. It was applied externally on the affected area

this might be the reason shown faster action than *Bakuchi Churna* when given internally.

REFERENCES

1. Acharya Jadavaji trikamji. *Charaka samhita*. 9th ed. Varanasi. Chaukhambha Orientalia; 2011 p.451
2. Acharya Jadavji trikamji. *Susruta samhita*. reprint ed. Varanasi. Chaukhambha sanskrit sansthan; 2012 p.386
3. Acharya Jadavji trikamji. *Susruta samhita*. reprint ed. Varanasi. Chaukhambha sanskrit sansthan; 2012; p.446
4. Acharya Jadavji trikamji. *Susruta samhita*. reprint ed. Varanasi. Chaukhambha sanskrit sansthan; 2012; p.389
5. Satyapala. Kashyapa. *Samhita with Vidyotini Hindi commentary*. Reprint ed. Varanasi: Chaukhambha Sanskrita Sansthan; 2010; p.48
6. Satyapala. Kashyapa. *Samhita with Vidyotini Hindi commentary*. Reprint ed. Varanasi: Chaukhambha Sanskrita Sansthan; 2010. P.73
7. Satyapala. Kashyapa. *Samhita with Vidyotini Hindi commentary*. Reprint ed. Varanasi: Chaukhambha Sanskrita Sansthan; 2010. P.112
8. Satyapala. Kashyapa. *Samhita with Vidyotini Hindi commentary*. Reprint ed. Varanasi: Chaukhambha Sanskrita Sansthan; 2010. P.213
9. Satyapala. Kashyapa. *Samhita with Vidyotini Hindi commentary*. Reprint ed. Varanasi: Chaukhambha Sanskrita Sansthan; 2010. P.180
10. Satyapala. Kashyapa. *Samhita with Vidyotini Hindi commentary*. Reprint ed. Varanasi: Chaukhambha Sanskrita Sansthan; 2010. P.168
11. Sharma P.V. *Bhela Samhita with English translation, commentary*. Reprint ed. Varanasi: Chaukhambha Bharati Academy; 2008. p.330.

12. Pandey Jaymini. Harita Samhita with Nirmala Hindi commentary. 1st ed. Varanasi: Chaukhambha Visvabharati; 2010. p. 433
 13. Shastry A. *Bhaishajya Ratnavali*. 14th ed. Varanasi. Chaukhambha Sanskrit Sansthan; 2001; 4/19
 14. Shastry A. *Bhaishajya Ratnavali*. 14th ed. Varanasi. Chaukhambha Sanskrit Sansthan; 2001; p. 1285
 15. Shastry A. *BhaishajyaRatnavali*. 14th ed. Varanasi. Chaukhambha Sanskrit Sansthan; 2018; p. 910-11, ISBN:978-93-86735-39-3.
-

Source of Support: Nil

Conflict of Interest: None Declared

How to cite this URL: Mahesh Kumar et al: Comparative Clinical Study On Bakuchi Churna And Somaraji Taila In The Management Of Swithra W.S.R. To Vitisigo. International Ayurvedic Medical Journal {online} 2019 {cited December, 2019} Available from: http://www.iamj.in/posts/images/upload/2190_2195.pdf