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

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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. Vitiligo 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, Acharya Sushrutha mentioned Switra in Kusta Nidana of Nidana Sthana where the difference between Kusta and Khilasa, types of Switra and its Sadhyasadhtya is explained. The treatment of the disease is mentioned in Chikitsa Sthana. In Dalhana commentary of Nidana Sthana Bhojas opinion on types of Switra is mentioned.

In Kashyapa Samhita scattered references regarding disease Switra are available. In Sutra Sthana while classifying the diseases Switra is said to be three types. In Shareera Sthana it is mentioned that the disease Switra is caused due to vitiation of Twak Gata Udaka. In Chikitsa Sthana definition of Switra is mentioned and enumerated as five types. In Kalpa Sthana it is mentioned that the person suffering from Switra should not take Iksu Rasas, Lashuna and Gandhasarpi are indicated in Switra. In Siddhi Sthana Virechana and Nirah Basti are indicated for Switra. In Bhela Samhita Lakshana of Switra are mentioned in Chikitsa Sthana. In Hareetha Samhita Pandura Kusta Chikitsa is mentioned separately, which is like Switra chikitsa.

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. 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. Psoraleins 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 TAILA:

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 Bhrayaka 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

<table>
<thead>
<tr>
<th>Sl no</th>
<th>Name of plant</th>
<th>Botanical name</th>
<th>Part used</th>
<th>proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bakuchi</td>
<td>Psoralea corylifolia</td>
<td>Seed</td>
<td>1 part</td>
</tr>
<tr>
<td>2</td>
<td>Haridra</td>
<td>Curcuma longa</td>
<td>Rhizome</td>
<td>1 part</td>
</tr>
<tr>
<td>3</td>
<td>Daruharidra</td>
<td>Berberis aristata</td>
<td>Stem</td>
<td>1 part</td>
</tr>
<tr>
<td>4</td>
<td>Sarshapa</td>
<td>Brassica juncia</td>
<td>Seed</td>
<td>1 part</td>
</tr>
</tbody>
</table>
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 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:
1. Study design: This study done as single blind clinical study at OPD level in a tertiary Ayurveda hospital.
2. Sample sizes: A minimum of 30 patients were taken and treated in two groups.
Total study duration: 30 days

A) Diagnostic Criteria:
1. Lakshana of Switra as mentioned in Ayurvedic classics.
2. Borders of patches Hyper pigmented and well defined.
3. Sensation is normal.

B) Inclusion Criteria:
1. Patients with Sadhya Lakshanas of Switra.
2. Patients in age group of 16- 60 years.
3. Patients having Switra patch with normal sensation in touch.
4. Size of patches less than 5cm × 5cm.

C) Exclusion Criteria:
1. Pregnant women and lactating women.
2. Patient suffering from other systemic disease.
3. Burnt areas.
4. Lesion over lip, genital areas should be excluded.
5. Switra (Vitiligo) caused by the other autoimmune disorder.
6. The old refractory causes not responding after extensive use of modern medicine.
7. 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 applications 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 Switrashara 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 psoralens, 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, Kandu, 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 known the overall improvement before and after the treatment. Wilcoxin signed rank test with bonferroni 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.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Significance</th>
<th>Friedman test (P)</th>
<th>Wilcoxon(P)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GROUP A</td>
<td>GROUP B</td>
<td>GROUP A</td>
</tr>
<tr>
<td>Twakswetata</td>
<td>NS</td>
<td>NS</td>
<td>0.135</td>
</tr>
<tr>
<td>Arunavarnata</td>
<td>NS</td>
<td>NS</td>
<td>0.368</td>
</tr>
<tr>
<td>Tamravarnata</td>
<td>NS</td>
<td>NS</td>
<td>0.369</td>
</tr>
<tr>
<td>Twakrukshata</td>
<td>NS</td>
<td>NS</td>
<td>0.223</td>
</tr>
<tr>
<td>Kandu</td>
<td>S</td>
<td>S</td>
<td>0.050</td>
</tr>
<tr>
<td>Daha</td>
<td>S</td>
<td>S</td>
<td>0.004</td>
</tr>
<tr>
<td>Colour</td>
<td>-</td>
<td>S</td>
<td>-</td>
</tr>
<tr>
<td>Number of black spots</td>
<td>-</td>
<td>S</td>
<td>-</td>
</tr>
</tbody>
</table>
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, Twak-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, Twak-rukshata.

**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 Tvak Shwetata, 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**


Source of Support: Nil
Conflict of Interest: None Declared