A COMPARISON OF BHALLATAKADI LEPAND GANDHAKA MALAHARA LEPA IN THE MANAGEMENT OF DADRU KUSHTA

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ABSTRACT

Most of the skin diseases in Ayurveda are explained under the umbrella of Kushta. It is considered as one among AshtaMahagada. It is caused due to the vitiation of tridoshas. Dadrukushta is one of the commonly occurring skin diseases, which has been included under the banner Mahakushta by Susrutha and Vagbhata while other authors considered it among the Kshudrakushta. The Bhallatakadilepa mentioned by vagbhata in his Ashtangasangrahauttarasrthana is indicated specifically for Dadrukushta. Thus, this clinical study is an attempt made to evaluate the efficacy of Bhallatakadilepa in the management of Dadrukushta. It was done as a comparative study on 30 patients in two groups of Bhallatakadilepa and the standard drug Gandhakamalahara for a period of 21 days. After fulfilling the inclusion and exclusion criteria, 30 patients were randomly distributed in to 2 groups A & B. 15 patients of group A were treated with external application of BhallatakadiLepa with Sheetajala while in Group B, 15 patients were treated with external application of Gandhakamalahara with Sheetajala, as a comparative group. BhallatakadiLepa with Sheetajala has shown 70% change in Kandu during 21 days of study period. It was not significant statistically compared to Gandhakamalahara. Gandhakamalahara has shown 80% change in Kandu and also other symptoms like Utsanna mandala, Raga, Pidaka also got reduced. It has been concluded that Gandhakamalahara has a significant role in reducing the symptoms of Dadru compared to BhallatakadiLepa.

Key words: Dadru, Bhallatakadilepa, Gandhakamalahara, AgadaYogas, Kushtaroga

INTRODUCTION

Skin is the largest organ of the human body. Its size and external location make it susceptible to a wide variety of disorders. Nowadays skin diseases are very common. Though skin diseases are common at any age of the individual, they are particularly frequent in the elderly. The patients always experiences physical, emotional & socio-economic embarrassment in the society. Normally 10 - 15% of the general practitioners deal with skin disorders’. Most of the skin diseases in ayurveda are explained under the chapter of Kushta. It is considered as one of the AshtaMahagada. It is caused due to the vitiation of tridoshas. It affects the dhatu, resulting in their vikruthi. Dadru Kushtai one of the commonly occurring skin diseases, which has been included under the “Mahakushta” by Susrutha and Vagbhata and majority of the other authors considered it among the “kshudrakushta”’. It is identified by its cardinal symptoms of kandu (itching), raga (redness) ,pidakas (pimples), utsanna-
mandala (elevated circular patches) with the predominance of kapha dosha. Though no specific and separate nidana, poorvaroopa, samprapti, chikitsa sutra are mentioned for Dadru, there is a mention of separate and specific chikitsayogas. The “Bhallatakadilepa” mentioned by vagbhatais indicated specifically for Dadru kushta. According to Dalhana, commentator on Susruthasamhita, the Sītha variety of dadrukushtais sukhasadyavyadhi. i.e, absence of severe pain and disability, not involving tridoshas, incapacitating with limited signs and symptoms, affecting only one rogamarga (bahya), absence of involvement of marmasthana and not being chronic. Therefore, while spelling out the chikitsa for dadru, only bahirparimarjana-treatment is mentioned. As a house on fire is brought to normalcy by sprinkling water, likewise the lepa applied brings down the concerned vikara. This simile by Susrutha imparts the importance of lepa, which is one among the Bahirparimarjana-karma. Therefore the “Bhallatakadilepa” mentioned by Vagbhata indicated for Dadru chikitsa is taken for the study.

Aims and Objectives: To compare the efficacy of Bhallatakadilepa and Gandhakamalaharan in the management of Dadru kushta

MATERIALS AND METHODS
Data were collected from 30 patients of either sex attending the O.P.D. and I.P.D of SDMCA and Hospital, Hassan after screening. The inclusion and exclusion criteria were duly considered before including the patient for the study. They were randomly selected irrespective of their socio economic, educational or religious status. Ethical clearance was also obtained from the institution.

Diagnostic criteria
Patients with lakshanas of Dadrumentioned in Ayurvedic classics like kandu, Utsanna mandala, Rookshata, Raga &Pidaka.

Inclusion criteria
1. Patient between the ages of 16-60 years.
2. Patient having history of less than two years of origin.

Exclusion criteria
1. Patients taking immuno-suppressive medications.
2. Pregnant women and lactating women.
3. Patients who have undergone recent surgeries.

Assessment criteria
It was made on the basis of following parameters. Conclusions were drawn on the basis of suitable statistical analysis.

- **Kandu (Itching)**
- **Utsanna Mandala** (elevated circular patches)
- **Raaga** (redness)
- **Pidaka** (pimples)
- **Twakrookshata** (dryness)

Scoring criteria: Composition of drugs

<table>
<thead>
<tr>
<th>Kandu (Itching)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 0 - No Itching</td>
</tr>
<tr>
<td>Grade 1 - Mild (No disturbance to work)</td>
</tr>
<tr>
<td>Grade 2 - Moderate (Disturbs work)</td>
</tr>
<tr>
<td>Grade 3 – Severe (Disturbs sleep)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pidaka (Eruption)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 0 – Nopidaka</td>
</tr>
<tr>
<td>Grade 1 – Alpapidaka</td>
</tr>
</tbody>
</table>
Grade 2 – Madhyamapidaka
Grade 3 – Bahupidaka

Utsanna mandala (Elevation):
Grade 0 – No mandala
Grade 1 – Mild mandala
Grade 2 – Moderate mandala
Grade 3 – Severe mandala

Raga (Erythema ) :
Grade 0 – Normal skin colour
Grade 1 – Mild redness
Grade 2 – Moderate red
Grade 3 – Severe / Deep brown

Rookshata (Dryness)
Grade 0 – No rookshata
Grade 1 – Mild rookshata
Grade 2 – Moderate rookshata
Grade 3 – Severe rookshata

Table 1: Bhallatkadilepa:

<table>
<thead>
<tr>
<th>SL.NO</th>
<th>NAME OF PLANT</th>
<th>BOTANICAL NAME</th>
<th>PARTS USED</th>
<th>PROPORTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Vatsanabha</td>
<td>Aconitum ferrox.Wall</td>
<td>Kanda</td>
<td>1 part</td>
</tr>
<tr>
<td>2.</td>
<td>Bhallataka</td>
<td>Semicarpus Anacardium Linn</td>
<td>Beeja</td>
<td>1/2 part</td>
</tr>
<tr>
<td>3.</td>
<td>Shamyaka(Aragvadha)</td>
<td>Cassia fistula</td>
<td>Patra</td>
<td>1 part</td>
</tr>
<tr>
<td>4.</td>
<td>Agni(Chitraka)</td>
<td>Plumbagozylanica</td>
<td>Moola</td>
<td>1 part</td>
</tr>
</tbody>
</table>

The ingredients of Bhallatakadi Lepa were collected from Udupi, Karnataka. The drugs were checked with the criteria mentioned in the classical Ayurvedic texts and modern botanical parameters with experts before using them in the study. Preparation: All the 4 ingredients were taken in equal quantity and Vatsanabha, Chitraka and Bhallataka are subjected to Shodhana process. After that the drugs are dried and made into fine powder and filled into 200gms airtight polythene packs with locking.

Table 2: Gandhakamalahara:

<table>
<thead>
<tr>
<th>SL.NO</th>
<th>NAME OF THE DRUG</th>
<th>PROPORTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gandhaka</td>
<td>6gms</td>
</tr>
<tr>
<td>2</td>
<td>SikthaThaila</td>
<td>70 gms</td>
</tr>
</tbody>
</table>

Gandhakamalahara has been taken from SDM Pharmacy and given to the patient.

Study design
It was a comparative clinical study on the efficacy of Bhallatakadi Lepa against Gandhakamalahara in the treatment of Dadru. After fulfilling the criteria mentioned in the form of inclusion and exclusion criteria, 30 Patients were randomly distributed into 2 groups and informed consent from all patients were obtained prior to the study. A complete history was taken using a special proforma. A thorough dermatological examination was
conducted on the patients. The drugs were distributed to the patients in both groups in the following way:
- Group A - 15 patients were treated with external application of *Bhallatakadi Lepa* with *Sheetajala*.
- Group B - 15 patients were treated with external application of *Gandhakamalahara* with *Sheetajala*, as a comparative group. Both medications were asked to apply in sufficient quantity on the affected parts twice daily.

**Duration of the study** The total duration of the study was 21 days. All the changes were observed during the treatment, on the 14th day and 21st day on the completion of treatment and were entered in the case sheets.

**RESULTS**

The subjective and objective parameters of base line data to post medication were compared for assessment of the results. All the result analysis was done by using SPSS ver.20 software, and obtained result were interpreted statistically for ‘p’ value. Wilcoxon signed rank test was done for post Hoc with Bonferroni correction on parameters which show significance in Fried-man’s test, to interpret the time of significant change.

**Table 3: Parameters in *Bhallatakadi Lepa* Group**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Negative ranks</th>
<th>Positive ranks</th>
<th>Ties</th>
<th>Total</th>
<th>Z Value</th>
<th>P value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>MR</td>
<td>SR</td>
<td>N</td>
<td>MR</td>
<td>SR</td>
<td></td>
</tr>
<tr>
<td><strong>KANDU</strong></td>
<td>15</td>
<td>8</td>
<td>120</td>
<td>0</td>
<td>.00</td>
<td>.00</td>
<td>0</td>
</tr>
<tr>
<td><strong>RAAGA</strong></td>
<td>9</td>
<td>5</td>
<td>45</td>
<td>0</td>
<td>.00</td>
<td>.00</td>
<td>6</td>
</tr>
<tr>
<td><strong>PIDAKA</strong></td>
<td>14</td>
<td>7.50</td>
<td>105</td>
<td>0</td>
<td>.00</td>
<td>.00</td>
<td>1</td>
</tr>
<tr>
<td><strong>UTSANNA MANDALA</strong></td>
<td>12</td>
<td>6.50</td>
<td>78</td>
<td>0</td>
<td>.00</td>
<td>.00</td>
<td>3</td>
</tr>
<tr>
<td><strong>TWAK ROOK-SHATA</strong></td>
<td>0</td>
<td>.00</td>
<td>.00</td>
<td>8</td>
<td>4.50</td>
<td>36</td>
<td>7</td>
</tr>
</tbody>
</table>

**Table 4: Parameters in *Gandhaka Malahara* Group**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Negative ranks</th>
<th>Positive ranks</th>
<th>Ties</th>
<th>Total</th>
<th>Z Value</th>
<th>P value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>MR</td>
<td>SR</td>
<td>N</td>
<td>MR</td>
<td>SR</td>
<td></td>
</tr>
<tr>
<td><strong>KANDU</strong></td>
<td>15</td>
<td>8</td>
<td>120</td>
<td>0</td>
<td>.00</td>
<td>.00</td>
<td>0</td>
</tr>
<tr>
<td><strong>RAAGA</strong></td>
<td>15</td>
<td>8</td>
<td>120</td>
<td>0</td>
<td>.00</td>
<td>.00</td>
<td>0</td>
</tr>
<tr>
<td><strong>PIDAKA</strong></td>
<td>13</td>
<td>7</td>
<td>91</td>
<td>0</td>
<td>.00</td>
<td>.00</td>
<td>2</td>
</tr>
<tr>
<td><strong>UTSANNA MANDALA</strong></td>
<td>12</td>
<td>8</td>
<td>120</td>
<td>0</td>
<td>.00</td>
<td>.00</td>
<td>3</td>
</tr>
</tbody>
</table>
DISCUSSION

In recent years, there has been a notable increase in the superficial fungal infections of the skin. Studies on fungal infection have revealed the fact that 1/5 of the world’s population is suffering from superficial mycosis. According to Modern Medical science, warm & humid climate, tight under garments which prevents evaporation of the increased perspiration produced during warm weather are the chief causes of Tinea infections. Living in polluted environment & unhygienic living conditions also predisposes these diseases. Dadru can be defined as an entity manifested by intractable itching, scaling, erythema with the lesions of discoid in shape. But it is not true for all. Practically we get many variants of Dadru as per the involvement of sites. Hence the shape of the lesions is not one and only the same everywhere it differs as the site of occurrence changes. Both the disorders are insidious in onset & persistent. Hence even after successful treatment recurrences are common.

In AshtangaSangraha uttarasthana, Acharya Vagbhata has mentioned about the uses of vishadravyas and explained that the vishadravyas can be used to cure skin ailments if properly prepared. There are many agadayogas which if properly purified will act as rasayana. The agadayogas which are having ushna, teekshna and vyavayi properties will help in the removal of diseases from the body and these yogas mainly act because of its prabhava. It has been observed that the lakshanas of dadru can be observed in the poorvaroopa of Kushta like Raaga, Kandu, Pidaka and also Utsanna mandala, rooksha, Daha, Visarpiniare also observed as Poorvaroo-

pa of Kushta. In this study salt, sour, curd and milk mixed with foods and some improper diet habits practiced in this area are found to be common causative factors of this disease. All the symptoms of Dadru-Kushta which are mentioned in the classics were not seen together in any of the patients. This may be because of the limited sample size.

Reason behind selecting the topic: The Bhallatakadi lepa which is mentioned in AsthangaSangrahaUttarasthana, Vishayogi Adhyaya explains about Prativishaprayoga and Vishaprayoga in conditions other than Visha. In Kushtadhyaya, there is a reference where the kustha which is Paashana, kathina, Parusha, Supa, sthira, Purana and where all other treatments fail, there agadayogas should be tried out. There is direct reference in Rasatarangini, were Vishadravyas after proper purification act as an Amruta, with logical utility. The Ingredients of BhallatakadiLepa includes Vatsanabha, Bhallataka, Chitraka and Aragvadha are from Mahavisha and Upavisha category. This yoga collectively has ushna, teekshna, yogavahi properties which will help in the easy and fast reduction of the diseases. These drugs enters the srotomukha and will remove the sthanikasrotosanga by removing local doshas.

Observation during Clinical trial:

In the Bhallatakadilepa group, patients developed Visphota and Raga also got increased. Kandu, Utsanna mandala, pidaka and twakrookshata were reduced. Daha also increased during the study after lepa application. These may be because of the ushna, teekshna effects of the drug. Blackish discolouration was seen after the appli-
cation of the drug and this may possibly be because of the krisheekarana property of the Bhallataka.

In Group ‘A’ – calculation specifies that mean relief of the therapy in Kandu was 70%, Pidaka was 40% and Utsanamandalawas 30%. This is due to Karmas like Kandughna, Kushtaghna, Vranaropaka and Rasayana. Overall formulation is Kaphavataghnain nature which will help in curing the disease. Non-significant result was found in Twakrukshata and Raaga. Daha got increased due to the teekshna and ushnagunas of Bhallataka and Chitraka.

In Group ‘B’ – Mean relief of the therapy in Kandu was 80%, Raaga 58%, Pidaka 30%. This is due to Karmas like Kandughna, Kustaghna and Vranaropaka. Overall formulation is Kaphavataghnain nature which will help in curing the disease. Non-significant results were found in Twakrukshata. However, overall effect of therapy was significant in 21 days of study.

Overall effect of therapy-
The overall effect of the therapy was assessed in five grades like; No change (0-25%), Mild improvement (25-50%), Moderate improvement (50-75%), Marked improvement (75-99%) and cured (100%). Bhallatakadi Lepa has shown marked improvement in 1(6.67%) patients, moderate improvement in 3(20.00%) and mild improvement in 11 (73.3%) patients in Kandu, Pidaka and Utsanna mandala. Assessment of Gandhakamalahara revealed that marked improvement in 3(62.01%) patients, moderate improvement in 4(26.68%) and mild improvement in 8 (53.36%) patients in Kandu, Raaga, Pidaka and Utsanna mandala.

PROBABLE MODE OF ACTION OF BHALLATAKADI LEPA
The Bhallatakadi Lepa comprises of 4 ingredients- Bhallataka, Vatsanabha, Chitraka, Aragvadha. In this two of them are from mahavisha and upavisha category. Bhallataka10 is having kushtaghna-kandughna-twachya property. Chitraka11 is having kandughna-kushtaghna karma. Vatsanabha12 is krimighna and kushtaghna. Aragvadha13 possesses kushtaghna, kandughna and raktashodhaka property. The combined bhallatakadi lepa contains the properties of laghu, rookshaguna, ushnaveerya, tridoshahara, kushtaghna and krimighna which act on dadrukushta.

- Laghu, rookshaguna, ushnaveerya properties of bhallatakadilepa deblocks the obstruction in the swedavahisrotas and allows the toxins localized to go out through the sweda, thus clearing out the micro channels of skin.
- Sheetajala pacifies the teekshnata of drug and will help in reducing burning sensation etc in the body after its application.
- Shodhana process reduces the toxic contents of VishaDravya and enhances the therapeutic action of Vishadravya.

CONCLUSION
1. Bhallatakadi Lepa with Sheetajala has shown 70% change in Kandu during 21 days of study period. It was not significant statistically compared to Gandhakamalahara. During the course of treatment, it was observed that the lesions developed blackish discoloration on application of Lepa and also blister formation and burning sensation was also observed.

2. Gandhakamalahara has shown 80% change in Kandu and also other symptoms like Utsanna mandala, Raaga, Pidaka also reduced to an extent and there were no complications observed during the treatment period.
3. It has been found that *Gandhaka mala-hara* plays a more significant role in re-ducing all the symptoms of *Dadrus-kushta* compared to *Bhallatakadi Lepa*

4. *Bhallatakadilepa* was effective to a certain extent on reducing the *Kandu, Pidaka* etc., but it produced burning sensation and *twakrookshata* got in-creased during the treatment.

5. From our personal observation and findings, *Dooshivisha* can also be con-sidered as a causative factor of the dis-ease.

6. It has been found to be of acute origin and was able to get good results, so it can be considered as a *sadyavyadhi* if proper hygiene and food habits are main-tained.

7. Tropical applications are found to be producing significant improvement in the disease management, because even if it is used alone without any internal medications, it can produce favourable results.

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