

A COMPARISON OF BHALLATAKADI LEPA AND GANDHAKA MALAHARA LEPA IN THE MANAGEMENT OF DADRUKUSHTA

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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*. *Dadru-Kushta* is one of the commonly occurring skin diseases, which has been included under the banner *Mahakushta* by Susruta and Vagbhata while other authors considered it among the *Kshudrakushta*. The *Bhallatakadilepa* mentioned by Vagbhata in his *Ashtangasangraha Uttara-sthana* is indicated specifically for *Dadrुकushta*. Thus, this clinical study is an attempt made to evaluate the efficacy of *Bhallatakadilepa* in the management of *Dadrुकushta*. 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 into 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 experience physical, emotional & socio-economic embarrassment in the society. Normally 10 - 15% of the general practitioners deal with skin disorders¹. 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*s, resulting in their *vikruthi*. *Dadru Kushta* is one of the commonly occurring skin diseases, which has been included under the "*Mahakushta*" by Susruta and Vagbhata and majority of the other authors considered it among the "*kshudrakushta*"². It is identified by its cardinal symptoms of *kandu* (itching), *raga* (redness), *pidakas* (pimples), *utsanna-*

mandala (elevated circular patches) with the predominance of kapha dosha³. Though no specific and separate *nidana*, *poorvaroopa*, *samprapti*, *chikitsa sutra* are mentioned for Dadru, there is a mention of separate and specific *chikitsa yogas*. The “*Bhallatakadilepa*” mentioned by Vagbhata is indicated specifically for *Dadru kushta*⁴. According to Dalhana, commentator on *Susruthasamhita*, the *Sitha* variety of *dadrukushtas* *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^{5,6}. 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 *Bahirparimarjanachikitsa karma*. Therefore the “*Bhallatakadilepa*” mentioned by Vagbhata indicated for *Dadruchikitsa* is taken for the study.

Aims and Objectives: To compare the efficacy of *Bhallatakadilepa* and *Gandhakamalaha* 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

Kandu (Itching):

Grade 0 - No Itching

Grade 1 - Mild (No disturbance to work)

Grade 2 - Moderate (Disturbs work)

Grade 3- Severe (Disturbs sleep)

Pidaka (Eruption):

Grade 0 – *Nopidaka*

Grade 1 – *Alpapidaka*

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 Dadru mentioned 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

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: Bhallatakadilepa:

SL.NO	NAME OF PLANT	BOTANICAL NAME	PARTS USED	PROPORTION
1.	<i>Vatsanabha</i>	<i>Aconitum ferrox.</i> Wall	<i>Kanda</i>	1 part
2.	<i>Bhallataka</i>	<i>Semicarpus Anacardium</i> Linn	<i>Beeja</i>	1/2 part
3.	<i>Shamyaka (Aragvadha)</i>	<i>Cassia fistula</i>	<i>Patra</i>	1 part
4.	<i>Agni (Chitraka)</i>	<i>Plumbago zylanica</i>	<i>Moola</i>	1 part

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 *Vatsanab-*

ha, 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 pack with locking.

Table 2: Gandhakamalahara:

SL.NO	NAME OF THE DRUG	PROPORTION
1	<i>Gandhaka</i>	6gms
2	<i>Siktha Thaila</i>	70 gms

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 men-

tioned 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

Parameter	Negative ranks			Positive ranks			Ties	Total	Z Value	P value	Remark
	N	MR	SR	N	MR	SR					
<i>KANDU</i>	15	8	120	0	.00	.00	0	15	-3.690	0.003	S
<i>RAAGA</i>	9	5	45	0	0.00	0.00	6	15	-3.000	0.002	S
<i>PIDAKA</i>	14	7.50	105	0	.00	.00	1	15	-3.556	0.003	S
<i>UTSANNA MANDALA</i>	12	6.50	78	0	.00	.00	3	15	-3.274	0.004	S
<i>TWAK ROOK-SHATA</i>	0	.00	.00	8	4.50	36	7	15	-2.585	0.010	NS

TABLE 4: PARAMETERS IN GANDHAKA MALAHARA GROUP

Parameter	Negative ranks			Positive ranks			Ties	Total	Z Value	P value	Remark
	N	MR	SR	N	MR	SR					
<i>KANDU</i>	15	8	120	0	.00	.00	0	15	-3.771	0.003	S
<i>RAAGA</i>	15	8	120	0	.00	.00	0	15	-3.482	0.003	S
<i>PIDAKA</i>	13	7	91	0	.00	.00	2	15	-3.500 ^c	0.003	S
<i>UTSANNA MANDALA</i>	12	8	120	0	.00	.00	3	15	-3.77 ^c	0.003	S

TWAK	1	4.50	4.5	6	3.92	23.5	8	15	-	0.086	NS
ROOKSHATA									1.717 ^c		

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*⁷ 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* uttarasthana⁸, *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 poorvaroopta 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*⁹ which is mentioned in *AsthangaSangrahaUttarasthana*, *Visho-payogi Adhyaya* explains about *Prativishaprayoga* and *Vishaprayoga* in conditions other than *Visha*. In *Kushtadhyaya*, there is a reference where the *kushta* which is *Paashana*, *kathina*, *Parusha*, *Supta*, *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*, *Utsannamandala*, *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 *krishneekarana* property of the *Bhallataka*.

In Group 'A' – calculation specifies that mean relief of the therapy in *Kandu* was 70%, *Pidaka* was 40% and *Utsannaman-dalawas* 30%. This is due to *Karmas* like *Kandughna*, *Kushtaghna*, *Vranaropaka* and *Rasayana*. Overall formulation is *Kaphavataghna* 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*, *Kushtaghna* and *Vranaropaka*. Overall formulation is *Kaphavataghna* 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%).

Bhallatakadilepa 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 *Bhallatakadilepa* comprises of 4 ingredients- *Bhallataka*, *Vatsanabha*, *Chi-*

traka, *Aragvadha*. In this two of them are from *mahavisha* and *upavisha* category. *Bhallataka*¹⁰ is having *kushtaghna-kandughna-twachya* property. *Chitraka*¹¹ is having *kandughna-kushtahara* karma. *Vatsanabha*¹² is *krimighna* and *kushtaghna*. *Aragvadha*¹³ possesses *kushtaghna*, *kandughna* and *raktashodhaka* property. The combined *bhallatakadi lepa* contains the properties of *laghu*, *rookshaguna*, *ushnaveerya*, *tridosahara*, *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. *BhallatakadiLepa* 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*, *Raga*, *Pidaka* also reduced to an extent and there were no complications observed during the treatment period

3. It has been found that *Gandhaka malahara* plays a more significant role in reducing all the symptoms of *Dadru 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 increased during the treatment.
5. From our personal observation and findings, *Dooshivisha* can also be considered as a causative factor of the disease.
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 maintained.
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.
6. Murthy K R.ed. Sushruta Samhita, 2nd edition, Varanasi; ChawkhambhaOrientalia; 2005:vol.2.p.107.
7. Murthy K R.ed. Sushruta Samhita, 2nd edition, Varanasi; ChawkhambhaOrientalia; 2005:vol.2.p.106-107.
8. Murthy K R(ed).AstangaSangraha, 1sted.Varanasi: ChaukambaOrientalia Publication; vol 3.2012: p.451.
9. Murthy K R(ed).AstangaSangraha, 1sted.Varanasi: ChaukambaOrientalia Publication; vol 3.2012: p.456.
10. The ayurvedic pharmacopoeia of India, 1st ed.NewDelhi:Govt. of India publication;part 1; vol.2.1999.p.19-20.
11. Sastry J.L.N(ed).Madanapala Nighantu 1st ed.Varanasi:ChaukhambhaOrientalia Publication;2010.p.315.
12. The ayurvedic pharmacopoeia of India, 1st ed.NewDelhi:Govt. of India publication;part 1; vol.2.1999.p.171-172.
13. The ayurvedic pharmacopoeia of India, 1st ed.NewDelhi:Govt. of India publication;part 1; vol.5.2006.p.8-9.

REFERENCES

1. <http://www.ajpcr.com/Vol3Issue4/95.pdf>
2. Sharma R K.(ed). Charakasamhita, 1st ed. Varanasi: Choukamba Sanskrit Series Publication; vol 3.2012. p.325.
3. Sharma R K.(ed). Charaka-samhita, 1st ed. Varanasi: Choukamba Sanskrit Series Publication; vol 3.2012. p.327.
4. Murthy K R(ed).AstangaSangraha, 1sted.Varanasi: ChoukambaOrientalia Publication; vol 3.2012: p.456.
5. Murthy K R.ed. SushrutaSamhita, 2ndedition, Varanasi; ChawkhambhaOrientalia; 2005:vol.2.p.103.

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