

A COMPARATIVE STUDY OF APAMARGA (ACHYRANTHES ASPERA LINN.) PANCHANGA LEPA & APAMARGA PANCHANGA CHURNA ALONG WITH LEPA IN THE MANAGEMENT OF DADRU

Tarun Choudhary¹, Shiromani Mishra²

1. MD. (Ayu) Dravyaguna, Government Dhanwantari Ayurvedic College and Hospital Ujjain (M.P.).
2. Guide and Associate professor Dept. of Dravyaguna, Govt. Dhanwantari Ayurveda College Ujjain (M.P.)

Corresponding Author: drtarun1432@gmail.com

<https://doi.org/10.46607/iamj1111082023>

(Published Online: August 2023)

Open Access

© International Ayurvedic Medical Journal, India 2023

Article Received: 03/07/2023 - Peer Reviewed: 25/07/2023 - Accepted for Publication: 10/08/2023.



ABSTRACT

Skin is the most important outermost covering of the human body, as it protects the body from invading pathogens. There is an increase in incidences due to poverty, unhygienic environmental conditions, poor sanitation, improper skin care, malnutrition etc. In *Ayurveda* all skin diseases are classified under a broad heading “*Kushta*”. *Dadru* is one among *Kushta*. *Dadru* is caused by vitiation of *Kapha* and *Pitta Dosha*, with clinical features like *Kandu*, *Raga*, *Daha*, *Pidika*, *Utsanna Mandala* and *Rookshata*. In *Ayurveda* so many drugs are mentioned in the treatment of the *Dadru*, among them *Apamarga Panchanga Churna* is selected. It has *Katu*, *Tikta Rasa*, *Laghu*, *Ruksha*, *Tikshna Guna*, *Ushna* in *Virya*, *Katu* in *Vipaka* and also having properties like *Kapha-Vata Shamaka*. In this clinical study *Apamarga Panchanga Churna* and *Lepa* has shown statistically significant improvement in *Kandu*, *Pidika*, *Utsaanmandal*, *Daha*, *Raga*, *Rookshata* etc.

Keywords: *Dadru*, *Kushta*, *Apamarga*, *Lepa*, *Churna*

INTRODUCTION

In recent years, skin diseases have gained more importance and attention, by medical science as well as

by the public. There is a definite increase in incidences due to various reasons like poverty, unhygienic

environmental conditions, poor sanitation, illiteracy, malnutrition, improper skin care etc. All the skin diseases in *Ayurveda* have been classified under the broad heading " *Kustha*". *Dadru* is one among *Kustha*. *Dadru Kustha* is mentioned under both *Mahakustha* and *Kshudrakustha* by different *Acharyas*.¹ *Dadru* is characterized by *Kandu* (itching), *Raga* (redness), *Pidaka* (pimples) and circular patches with elevated edges.²

with the predominance of *Kapha Dosha*³ and it is also mentioned as " *Anushangini*". On the basis of presenting symptomatology most of the scholars have simulated *Dadru* with "Tinea" through modern perspective which comes under superficial fungal infection of skin. Tinea/ringworm infection is caused by a distinct class of fungi. Typically, they are on the exposed skin, characterized by circular lesions sharply margined with a raised edge and inflammatory signs. If left untreated the eruptions spread wide and are often intensively itchy. Topical fungicidal requires prolonged application and recurrence poses a problem in addition to appearance of resistance and long-lasting usage produce the adverse effect also. Therefore, while spelling out the *Chikitsa* for *Dadru* both *Antaparimarjana* and *Bahirparimarjana* treatment is mentioned.⁴

As a house on fire is brought to normalcy by sprinkling water, likewise the *Lepa* applied brings down the concerned *Vikara*. This similar by *Sushruta* imparts the importance of *Lepa*, which is one among the *Bahirparimarjana Chikitsa karma*. Therefore the " *Apamarga Panchanga Churna* is taken for the study. *Apamarga* (*Achyranthes aspera* Linn.) is easily available, and not very costly. *Apamarga* is botanically known as *Achyranthes aspera* Linn. And in English, it is called as "Prickly chaff flower".⁵

It is available abundantly. Copious descriptions of *Apamarga* are available in *Ayurveda*. *Apamarga* is well known drug in *Ayurveda* and also mentioned for the treatment of *Dadru* by various.⁶ In the present study, 60 Patients were having the signs and symptoms of *Dadru* were selected and administered with above said medicine for 1 month and 15 days follow-up.

OBJECTIVE -Evaluate the efficacy of *Apamarga Panchanga Churna* in *Dadru* and to compare the effect of *Apamarga Panchanga Churna Lepa* and *Lepa* along with internal use of *Churna* in the management of *Dadru*.

MATERIAL AND METHODS- For the present study a total of 60 patients fulfilling the diagnostic criteria of *Dadru* were randomly selected and registered from outpatient departments of Government Dhanwantari Ayurvedic College and Hospital Ujjain. Criteria for selection- The selection was done on the basis of chief complaints of *Dadru*, such as *Kandu*, *Pidika*, *Raga*, *Utsannamandala* in age group of patients between 15 to 70 years. In pathological point of view CBC, KOH and Urine examination was carried out during the course of the treatment.

Exclusion Criteria –

1. Patients aged below 15 and above 70 years.
2. Patients with other systemic disorders like Diabetes Mellitus, Skin cancer, Psoriasis, Eczema etc.
3. Pregnant ladies and lactating mother.
4. Severe accidental cases like Burn, Fracture and Trauma.

Trial drug Grouping and Posology- the patents were divided into two groups.

Apamarga- Rasa-Tikta, Katu, Guna - Laghu, Tikshna, Ruksha, Virya- Ushna, Vipaka-Katu Doshakarma – Kaphavatasamaka, Kaphapittasamsodhaka.⁷

Group A - *Apamarga Panchanga Churna* (*Achyranthes aspera* Linn.) *Lepa* with Lukewarm water, Local application on affected area for period of 1 month (Follow up- 15th Day)

Group B - *Apamarga Panchanga Churna* (*Achyranthes aspera* Linn.) *Lepa* with lukewarm Water externally and *Apamarga Panchanga Churna* for internal use.

Dose - 3 gm x BD for *Churna* & *Lepa* for period of 1 month (Follow up- 15th Day)

Pathyapathya - Patients were instructed to follow *Pathyapathya* while taking medication.

Assessment criteria- The cases were assessed by subjective and objective parameters before and after treatment. The parameters are *Kandu*, *Raga*, *Utsan-*

namandala, Pidika, Daha, Rookshata, Size of lesion, number of lesions, KOH, Hb% and so on.

Assessment Scale-

Grade *Kandu* [Itching]

- 0 - No Itching
- 1 - Occasionally
- 2 - Mild Itching
- 3 - Moderate itching

Grade *Raga* [Color changes]

- 0 - No color changes
- 1 - Pink Color
- 2 - Pinkish Red Color
- 3 - Red Color

Grade *Daha* [Burning sensation]

- 0 - No Burning
- 1 - Mild Burning
- 2 - Moderate Burning
- 3 - Severe Burning

Grade *Pidika*

- 0 - No lesion
- 1 - Mild Visible lesion
- 2 - Moderately Visible lesion
- 3 - Prominent Visible lesion

Grade *Rookshata* [Dryness]

- 0 - No dryness
- 1 - Mild dryness
- 2 - Moderate dryness
- 3 - Severe dryness

Grade Size of lesions

- 0 - Below 0.5/1cm
- 1 - 1 to 2cm
- 2 - 2 to 3 cm
- 3 - 3 to 4 cm

Grade Number of lesions [*Sankhyatmak*]

- 0 - NO Lesion
- 1 - Only 1 lesion
- 2 - 1 lesion
- 3 - lesion or more than 4 lesion

Clinical assessment criteria-

The overall assessment of the Patient was made based on following Criteria:

100% Cured

75 – 100% Marked improvement

50 – 74% Moderate improvement

25 – 49% Mild improvement

< 25 % No improvement

Application of each group (within group) was tested for statistical significance by using paired Student “t”- test, whereas the comparative effect of trial and control groups (between two groups) was tested by using unpaired Student “t” test. Wilcoxon Signed Rank Test and MANN WHITNEY U-Test was done wherever Student “t”- test was not possible. The results were interpreted at $P < 0.05$, $P < 0.01$, and $P < 0.001$ significance levels. The obtained results were interpreted as: Insignificant $P > 0.05$, significant $P < 0.05$, highly significant $P < 0.01$ or $P < 0.001$.

OBSERVATION AND RESULTS-

A total of 60 patients (30 in each group) were studied. All these 60 patients of *Dadru* were diagnosed mainly on the basis of clinical features and physical examination stated in the criteria of diagnosis. The tientsentse patients were divided into two groups randomly.

➤ The first one is ‘Group A’ comprising 30 patients of *Dadru* treated with *Apamarga Panchanga Churna Lepa* with Lukewarm water and the Route of administration is Local application on affected area.

➤ The second one is ‘Group B’ comprising of 30 patients administered with *Apamarga Panchanga Churna Lepa* with lukewarm water externally and *Apamarga Panchanga Churna* for internal use.

The majority of patients were between the age group 16-32, that is 55 % followed by 28.33 % were belonged to 33-48 years and 16.67% in the age group of 49-70 years. Majority of patients were males i.e., 85% and 15 % of Female patients. A maximum of 65% of patients were Married and 35.00% were Unmarried. In the study 46.67 % of patients belonged to Poor Category, 43.33 % patients belonged to Middle Category and the rest patients i.e., 10% belonged to High economic status. 63.33 % patients belonged to be with family history and 36.67 % patients were belonged to patients without any family history. 55% of patients suffered with *Dadru* belonged to mixed diet group, because nonveg diet contributes to *Rakta Dushti*, 45 % were habitual for vegetarian type of

diet. Maximum no. of patients i.e., 55 % were *Pitta-Kaphaja Prakruti*, 30 % were *Vata-Kaphaja Prakruti* and 15 % were *Vata-Pittaja Prakruti*. All the patients of both the groups were having *Kandu*. Before the treatment all the patients were positive for KOH test. After the treatment 91.67% patients were negative for KOH test and 8.33% were remain positive for KOH test. All the patients Urine findings found to be nor-

mal. All the patients had responded to all subjective criteria like *Kandu*, *Raga*, *Daha*, *Pidika*, *Utsanna Mandala* and *Rookshata* in Group A and Group B, the basic parameters and the statistical calculations are shown in Table-1. The percentage of improvement is shown in the Table-2. The effect of therapy in group B were better than group A.

Table- 1: Assessment on the basis of classical signs and symptoms

S. no.	SYMPTOMS	Group A			Group B			Comparative in both Group MANN WHITNEY U- Test
		% of Relief	Wilcoxon matched pairs signed	p value	% of Relief	Wilcoxon matched pairs signed	p value	
1.	<i>Kandu</i>	43.53%	W= 416	p=0.001, S	53.79%	W= 421	p=0.0010, S	0.000 (S), U=76
2.	<i>Raga</i>	41.80%	W=253,	p= 0.003, S	46.85%	W=257	p= 0.000, S	0.001 (S), U=190
3.	<i>Daha</i>	52.31%	W=335,	p= 0.000, S	64.67 %	W= 354	p= 0.000, S	0.015 (S), U=149
4.	<i>Pidika</i>	41.91%	W=165,	p =0.05, S	53.10%	W=171	p =0.03, S	0.012 (S), U=278
5.	<i>Utsanna Mandala</i>	46.42%	W=271,	p =0.02, S	54.76 %	W=278	p =0.01, S	0.000 (S), U=171.50
6.	<i>Rookshata</i>	44.57%	W=4	p =0.000, S	46.06%	W=409	p =0.000, S	0.000 (S), U=125

Table-2: Clinical assessment of result on the basis of Percentage.

Effects (Group A)	Relief	Effects (Group B)	Relief
Cured (100%)	17%	Cured (100%)	21%
Marked improvement (75-100%)	37.5%	Marked improvement (75-100%)	41.3%
Moderate improvement (50-74%)	21%	Moderate improvement (50-74%)	26.7%
Mild improvement (25-49%)	24.5%	Mild improvement (25-49%)	12%
No improvement (<25%)	0%	No improvement (<25%)	0%

DISCUSSION

Skin diseases have gained more importance. There is a definite increase in incidences due to various reasons like poverty, unhygienic environmental conditions, poor sanitation, illiteracy, malnutrition, improper skin care etc. All the skin diseases in *Ayurveda* have been classified under the broad heading " *Kustha*". *Dadru* is one among *Kustha*. *Dadru Kustha*

is mentioned under both *Mahakustha* and *Kshudrakustha* by different *Acharyas*. It involves the clinical features like *Kandu*, *Raga*, *Pidika*, *Utsannamandala* with the predominance of *Kapha Dosha*, and it is also mentioned as " *Anushangin*". *Dadru* is indicated under *Kshudra Kushta*, and the predominant *Dosha* is of *Kapha-Pitta* by *Acharya Charaka*. *Acharya Susruta* Included *Dadru* under *Maha-kushta* and the predominant *Dosha* is *Kapha*. It is the colour of *Atasi*

Puspha (flax flower) with *Tamra Varna* (Copper colour) spreading *Pidika*.

Clinical study has been carried out to validate the concept practically. In the clinical study, patients of *Dadru* were selected as per inclusion criteria and were randomly. *Apamarga Panchanga Lepa* was provided as drug in Group A and in Group B *Apamarga Panchanga Lepa* along with *Churna* internally was given. A total of 60 patients (30 in each group) completed the treatment. The effect of therapy on Subjective criteria as well as objective criteria were assessed. The second part deals with Observations and results. The observation was based on all important points related to study. The observations on the factors such as age, sex, religion, socioeconomic status, etc. were also done. They were given with drug *Apamarga Panchanga Churna*. The assessment was done by grading the parameters of the study before and after the treatment. The mean scores of the parameters were done before and after treatment. After the overall assessment, a significant result was observed in the reduction of *Kandu*, *Utsannamandala*, *Rookashata*, *Pidika*, *Daha*, *Raga*, etc. The overall result showed statistically significant with a “p” value < 0.05. In group A overall therapy response was mild improvement (44.70%) and in group B moderate improvement (53.19%) reported.

Probable mode of action- *Apamarga* is having *Katu-Tikta Rasa*, By the *Tikta Rasa*, it will act as *Pittaghna* & by both *Katu* and *Tikta Rasa*, it will result in *Kaphaghna* there by effective on *Dadru*. Balances *Vata* and *Kapha Dosha*. In the preparation of *Apamarga Panchanga Lepa*, *Apamarga Panchanga Churna* with Lukewarm water is used. It is having *katu, tikta, rasa, laghu, ruksha, tikshna guna* and also having properties like *Kapha-Vata Shamaka*, *Kapha Pitta Sanshodhak*, *Kandughan*, *Swedjanan*, *Shothahar*, *Raktashodhak*, *Lekhana*, *Twagdoshhar*, *Vishagna*, *Vranashodhak*, *Kushtagna*⁸ acts on *Dadru Kushta*. *Kandu* & *Utsannamandala*- *Lagu*, *Ruksha*, *Tikshna* property of *Apamarga Panchanga Churna* has acted on these *kaphaja* attributes. *Raga*, *Pidaka* & *Twak Rukshata*- Have reduced significantly because of the *Twagdoshhar* and *kushtagna* properties

of the drug. The *Apamarga* plant contains Phytoconstituents like alkaloid *Achyranthine*, *Ecdysone*, *Ecdysterone*, *Oleanolic acid*, *Saponin* etc. *Apamarga* Plant indicated to have different actions like antifungal, Antiallergic activities. *Dadruhara* & *Kanduhara*- *Apamarga* will help detoxify blood thereby improving skin conditions and preventing itching.

Possible mode of Action of *Lepa*:

External application of drug by *Lepa* the permeability of drug enters through *Romakupa*, *Swedavahini* & *Siramukha* Increases blood circulation Removes the local *Doshas* by removing *Sthanika Srotoavarodha*.

Overall therapy: In group A overall therapy response was mild improvement (44.70%) and in group B moderate improvement (53.19 %) reported.

CONCLUSION

It is obvious from the foregoing study that provided significant relief in signs and symptoms of *Dadru*. While comparing the results of both drugs it can be stated that group B provided better relief in the patients of *Dadru* in comparison to Group A. Thus, it can be concluded that if *Apamarga* is used externally and internally it is found to be more effective in *Dadru* when compared to used only externally.

REFERENCES

1. SUSRUTA- SAMHITA, Dalhan's commentary translated by P.V. Sharma chaukhambha Visvabharati Varanasi, Vol-II nidana sthana 5/5 reprint 2005, page no-37.
2. AGNIVESA'S CARAKA SAMHITA, CAKRAPANI DATTAS AYURVEDA DIPIKA Translated by dr. R.K. Sharma and Vaidya Bhagwan Dash, Chaukhamba Press Varanasi, Vol- III Chikitsaa Sthaana 7/23 Reprint edition 2003. Page 325.
3. SUSRUTA- SAMHITA, Dalhan's commentary translated by P.V. Sharma chaukhambha Visvabharati Varanasi, Vol-II nidana sthana 5/7 reprint 2005, page no-37.
4. Prof. Ajay k. Sharma Kaya Chikitsa, Vol-2 Chaukhambha orientalia Varanasi, edition 2017, P-183-184
5. Sharma Monika and Sahu Subash Gallery of medicinal plants (Dravyaguna vigyan) Thieme medical and scientific private limited, Noida up2020 P-32
6. Prof. P.V. Sharma Kaiyadeva- Nighantu, Chaukhambha Orientalia Varanasi, reprint-2019 Aushadhi Varga/1034, Page no-191

7. Prof. P.V. Sharma. Dravyaguna Vidnyan (vol2). Varanasi; Chaukhamba Bharati Academy. Reprint 2005. P-543
8. Pandey Gyanendra Dravyaguna Vijnana, Chowkhamba Krishnadas Academy, Varanasi, 4th edition 2015, P-155-156

Source of Support: Nil

Conflict of Interest: None Declared

How to cite this URL: Tarun Choudhary & Shiromani Mishra: A Comparative Study of Apamarga (Achyranthes Aspera Linn.) Panchanga Lepa & Apamarga Panchanga Churna Along with Lepa in the management of Dadru. International Ayurvedic Medical Journal {online} 2023 {cited August 2023} Available from: http://www.iamj.in/posts/images/upload/1875_1880.pdf