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# **EVALUATION OF THE COMBINED EFFECT OF** *LAGHUMANJISTHADI KWATH* AND *ADAGAZADI LEPA* IN *DADRU*

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## **ABSTRACT:**

**Background:** Skin is the largest organ of human body. All the skin diseases in *Ayurveda* have been classified under the broad heading of "*Kustha*". *Dadru* is one amongst them having *Kapha* and *Pitta* dominance .It is frequently found in society. The main *Lakshanas* of *Dadru* include *Kandu*, *Raga*, *Utsanna mandal* and *Pidika*. *Dadru* can be correlated Tinea corporis which is a fungal infection. **Aim:** Evaluation of the combined effect of the *Laghumanjishtadi kwath* and *Adagazadi lepa* in *Dadru*. **Method:** In the present study *Laghumanjishtadi Kwath* and *Adagazadi Lepa* were selected for clinical trial in Dadru. **Method:** In the present study *Laghumanjishtadi Kwath* and *Adagazadi Lepa* were selected for clinical trial in Dadru. The study comprises of a series of 40 patients of *Dadru*. The patients were selected from OPD and IPD of Kayachikitsa of Gurukul Campus Uttarakhand University, Haridwar. These patients were randomly selected, on the basis of inclusion and exclusion criteria depending upon subjective and objective parameters with detailed clinical trial was analyzed statistically. Overall assessment was done for both subjective and objective parameters based on the significance of stastistical test. In trial 89.48% had marked improvement, 5.26% had complete relief and 5.26% had moderate imorovement. **Conclusion:** In present study, *Laghumanjisthadi Kwath* and *Adagazadi Lepa* showed highly significant result in *Kandu, Raga*, Size of *Utsanna mandal*, No. of *Utsanna mandal* and *Pidika*. Thus *Laghumanjisthadi Kwath* and *Adagazadi Lepa* provided better relief to patients of *Dadru*.

Keywords- Dadru, Laghumanjisthadi Kwath, Adagazadi Lepa

## **INTRODUCTION:**

The skin is the largest organ of the body<sup>1</sup>. Skin is a vital sense organ of our body which executes various physiological functions and it also prevents invading pathogens. Skin diseases can affect an individual at any age.

There is a wide and extensive description of skin diseases in *Ayurveda*. In *Ayurveda*, almost all the skin disorders are under the heading of *Kushta roga*. The term *Kushta* can be defined as the state in which disfigurement of body occurs. It has been elaborately described in almost all *Ayurvedic* texts. According to *Acharya Charaka 'saptko dravya sangrha'* (group of 7 factors) is responsible for formation of all kind of *Kushtas*<sup>2</sup>. This group of 7 factors includes three *doshas* namely- *Vata*, *Pitta*, *Kapha* and four *Dushyas* namely- *Twak*, *Rakta*, *Mamsa* and *Lasika*. So it is obvious that vitiation of all three *Doshas* is responsible for the development of *Kushta* (skin disorders), but what kind of *Kushta* will develop, it totally depends on the predominance of particular *Doshas* on their combination. The disease in which there is *Kandu*(itching), *Raga*(erythema or redness), *Pidika*(eruptions) & *Utsanna mandal* (elevated circular skin lesion)<sup>3</sup>.

*Dadru* can be correlated fungal infections. Fungal infections are common throughout much of the natural world. The related fungi are dermatophytes capable of causing skin changes of the type known as Tinea or ringworm or dermatophytosis or Mycosis<sup>4</sup>.

Dadru is a *Kapha pitta pradhanvyadhi* which is managed by *Shodhana, Shamana* and *Bahiparimarjana* (topical) *Chikitsa*. The current study was undertaken with aim to evaluate the combined effect of *Laghumanjisthadi Kwath* and *Adagazadi Lepa* in *Dadru*.

## **MATERIAL AND METHODS:**

**a**) **Source of Data:** 40 patients within the age group 18 to 60 years diagnosed as suffering from Dadru were selected from OPD & IPD of Gurukul Campus, Haridwar.

b) Study design: Single arm trial study

## **CRITERIA FOR SELECTION OF PATIENTS:**

#### c) INCLUSIVE CRITERIA:

- 1. Well diagnosed patients of Dadru.
- 2. Both previously treated and fresh cases were taken.
- 3. Chronicity upto 5 years.
- 4. Patients of either sex.

5. Patients from age group of 18-60 years.

#### d) EXCLUSIVE CRITERIA:

- 1. Patient suffering from Diabetes Mellitus.
- 2. Pregnant and lactating women.
- 3. Chronicity more than 5 years.
- 4. Patients of age below 18 and more than 60 years.
- 5. Patients of Dadru with chronic systemic disorder which was interfering the present study were excluded.
- 6. Patients with serious medical illness and psychiatric disorder was excluded.
- 7. Drug induced reaction.

#### e) INTERVENTION:

Drug: Laghumanjisthadi Kwath and Adagazadi Lepa

Method: Oral administration and external application on affected area

Treatment duration: 30 days

Follow up during Treatment: After every 10 days

Follow up after Treatment: After 15th day

#### f) Preparation of Laghumanjisthadi Kwath:

Mixture of coarse powder of all dry herbs was taken in amount of 5 grams. After adding 16 times of water, it will be allowed to boil in an open mouthed container on low flame. Boiling was be done till it reduces to one-fourth. Then after filtering, it was given to patient in lukewarm form. Each time fresh Kwatha (decoction) was prepared in the same method as above.

#### h) Preparation of Adagazadi Lepa:

All the contents in it are mixed in equal proportion. Then it is applied with sauviraka on affected area.

#### i) Preparation of Sauviraka

The peeled barley was added with 10 times of water, then it was subjected to heat. When barley is prepared it is poured into a clay pot for 10 days. After 10 days, clay pot was opened and *pariksha* was conducted. The prepared formulation is sieved and this formulation is known as *Sauviraka*.

## j) CRITERIA FOR ASSESSMENT AND GRADING:

## Criteria for assessment:

- 1. Kandu(itching)
- 2. *Raga*(erythema)
- 3. No. of Utsanna mandala (elevated circular skin lesion)
- 4. Size of Utsanna mandala (elevated circular skin lesion)
- 5. *Pidika*(eruptions)

## Grading (G) of criteria:

Sr.No.	PARAMETER	OBSERVATIONS	SCALE	
1	Kandu (itching)	No Kandu	0	
		Mild and occasional itching	1	
		Moderate(tolerable)itching	2	
		Severe itching ,disturbing sleep and other activities	3	
2	Raga (erythema)	Normal; skin colour	0	
		Faint and near to normal	1	
		Blanching red colour	2	
		Red colour	3	
3	Size of <i>Utsanna</i>	0	0	
	<i>mandal</i> (elevated circular skin lesion)	<5 cm	1	
		5- 10 cm	2	
		>10 cm	3	
4	No.of utsanna mandal	0	0	

	(elevated circular skin	<5	1
	lesion)		
		5-10	2
		>10	3
5	Pidika (eruption)	No pidika	0
		1-3 pidika	1
		4-6 pidika	2
		>7 pidika	3

## **OBSERVATIONS AND RESULTS:**

Maximum patients belong to the age group of 31-40 years (34.21%). Maximum number of patients belong to Hindu community (73.68%). The number of male patients were more (52.63%). Maximum number of patients were from Rural areas (63.16%). Maximum patients have educational qualification Intermediate (26.32%). Maximum patients belong to Lower class (39.47%). Maximum patients were Housewives (34.21%).

Tea addiction was observed in 39.47% of patients. Maximum patients had a sound sleep pattern (76.32%). Maximum i.e.18.42% patients were having 1 year chronicity. Most of the patients i.e.63.16% were having regular bowel habit. Maximum patients were of *Pitta-Kaphaj* (52.3%) *Prakriti*.

#### **RESULTS:**

After administration of *Laghumanjisthadi Kwath* and *Adagazadi Lepa*, stastically highly significant results was found in *Kandu*, *Raga*, Size of *Utsanna mandal*, Number of *Utsanna mandal* and *Pidika*.

Subjective Parameters	Mean		Median		SD		Wilcoxon	P-Value	%	Result
	ВТ	AT	BT	AT	ВТ	AT	W	r-value	Effect	Kesult
Kandu	2.24	0.39	2.00	0.00	0.59	0.50	-5.521 <sup>b</sup>	0.00000034	82.35	HS
Raga	1.95	0.21	2.00	0.00	0.73	0.41	-5.469 <sup>b</sup>	0.000000045	89.19	HS

Size of Utsanna Mandala	1.79	0.00	2.00	0.00	0.66	0.00	-5.498 <sup>b</sup>	0.000000038	100.00	HS
No of Utsanna Mandala	1.34	0.00	1.00	0.00	0.53	0.00	-5.610 <sup>b</sup>	0.000000020	100.00	HS
Pidika	1.79	0.00	2.00	0.00	1.04	0.00	-5.080 <sup>b</sup>	0.000000377	100.00	HS

From above table we can observe that, P-Value for all parameters is less than 0.001. Hence, we can conclude that, effect observed in all parameters is highly significant.

#### **DISCUSSION:**

The present study was aimed at finding a safe and effective method for treatment of Dadru.

PROBABLE MODE OF ACTION OF ADAGAZADI LEPA: The contents of Adagazadi lepa viz. Chakrmarda, Kustha, Sarsapa, Vidanga and Saindhava lavana are mixed with Sauvirakam which possess Ushna, Tikshna, Laghu, Ruksha, Vishada Guna, Ushna Virya properties. The Lepa is said to be Sukshma in nature as it is macerated with Sauvirakam for two times. Upon topical application, the active principles of the Lepa reach to the deeper tissues through Siramukh and Swedvahi Shrotas and it stain with its Sukshma and Tikshna property<sup>5</sup>. Due to its Ushna, Tikshna, Vishada and Sukshma properties it blocks the obstruction in Swedvahi shrotas and allows the local toxins to flow out through the Sweda, thus clearing out the microchannels. The ushna virya of Adagazadi lepa and Snigdha guna of its vehicle i.e. Sauvirakam causes pacification of Kapha which forms the Samprapti thus alleviating the symptoms. In most of the patients Kandu was relieved due to property of Chakrmarda and Kushtha. The abatement in scaling can be attributed to the anti scaling property of Sauvirakam<sup>6</sup>. Tropical penetrartion applied might have acted by *ruksha* and *lekhan* property for pacifying the *Kapha doshas* locally and maintained the equibilirium with the other Doshas. The Sukshma property of drugs used might have penetrated into deeper shrotas and dissolved the sanga. After acting locally, the impaired Dhatawagni of Rasa and Rakta might be corrected to some extent by Agnideepana property of the ingredients present in the lepa. By this Dhatu shaithilya might have resolved and provided nourishment to Twacha. When a lepa is applied over the surface of skin opposite to the direction of hairs on it, through a proper base, the active principles of Lepa are released into that base. After that, this combination enters the romakupa and further gets absorbed through the swedvahi shrotas and siramukh it does cutaneous biotransformation and which will pacify the Doshas and leads to breaking of Samprapti. However, it should be kept in mind that the pilosebaceous uptake i.e. absorption of lepa differs as per the site variation, skin condition and more important is the base through which applied.

#### PROBABLE MODE OF ACTION OF LAGHU MANJISHTADI KWATHA

The overall mode of action can be made out by summation of characters of all the drugs along with their effects on the pathogenesis of disease.

All the drugs are of *Laghu* and *Ruksha Guna* therefore, *Kledashosha* is done effectively by *Kwath*. All the drugs are of *Tikta* and *Kashaya rasa* so *Aampachan*, *Agnideepan*, *Kleda Shoshan*, *Pitta* and *Kapha Shaman* was excepted so that *Rakta prasadan* action is effectively carried out. *Triphala* have *Madhur vipaka*, which is useful to pacify *Pitta Dosha* in *Rakta*. It also helps in *Sarvadhatu vardhan* and acts as *Rasyana*. Some drugs are of *Ushna virya* helps in *Aampachan*, *Srotoshodhan* and *Agnideepana* and *Sheeta Virya* is critical in *Rakta prasadan*. All the drugs have their actions targeted mainly on *Rasa*, *Rakta* and *Mamsa Dhatu*. These three are the main components of *Kustha samprapti*. *Kutaki* and *Triphala* are mainly *Virechak Dravya*. Many other drugs also have minor function of *Vata Anulomana*. This *Virechak* property is very critical in destroying the *Doshasanghata* which is main factor in *Kustha* formation. Frequent *Shodhan* is indicated in *Kushtha*. So *Laghumanjisthadi Kwath* plays a major role by its mild purgative action.

## **CONCLUSION:**

Dadru Kushtha is a Kshudra Kushtha as well as Mahakushtha has Pitta-Kapha dominance. The results suggests that the combined effect of Laghumanjisthadi Kwath and Adagazadi Lepa showed highly significant results after treatment in Kandu, Raga, No. of Utsanna mandal, Size of Utsanna mandal and Pidika variables. All the patients enrolled in the study completed the full course of treatment without any adverse reaction to drug. Hence it can be suggested that Laghumanjisthadi Kwath and Adagazaddi Lepa can be used in the patients suffering from Dadru Kustha.

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#### CASE NO. 1:



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