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# A CLINICAL STUDY ON THE ROLE OF MUALAKADI LEPA IN THE MANAGEMENT OF (CHARAKOKTA & SUSHRUTOKTA) TYPE 1 DADRU &TYPE 2 DADRU KUSHTA

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### **ABSTRACT**

Skin diseases are common manifestation in present era and more so frequent in the elder age. The patients of skin disease are additionally prone to experience physical, emotional & socio-economic embarrassment in the society due to disfigured appearance. Normally 10- 15% of the general practitioners encounter with skin disorders in their day to day practice. Kustha a type of skin disorder mentioned in Ayurveda is a Tridoshaja Vyadhi, where Twaka, Rakta, Mamsa and Ambu are the main Dushyas. Dadru (Fungal skin infection), one of the most common but miserable variety of Kushtha affects the population of all the age groups and stands as a challenge to different medical

systems inspite of many advances. According to Charaka Dadru, is a Kapha Pitta Pradhan Vyadhi and According to Sushruta Dadru is Kapha Pradhan vyadhi, management of which includes Shodhana, Shamana and Bahirparimarjana Chikitsa among them Shamana measure

in the form of Lepa has shown appreciable result in many prior research studies. Present study was conducted on 13 diagnosed patients of Type 1 Dadru and 15 Patients of Type 2 Dadru in whom Mulakadi Lepa was applied. The ingredients of which are the drugs possessing Shodhana & Kushtahara property. The results revealed significant effect of Lepa in various subjective parameters like Kandu, Raga and number of Mandala, number of Pidika after treatment. The effect of the drug also continued during follow up period of 15 days which suggested the sustained effect of the combination.

KEYWORDS: Type 1 and Type 2 Dadru Kushta Mulakadi Lepa and Bahiparimarjana Chikitsa.

### INTRODUCTION

Dadru (Ringworm) is one of the most common but miserable Twak Vikar affecting all the ages of population still stands as a challenge to different medical systems. Many research works have been done on skin disorders in modern medical science but no drug has yet been claimed to cure this skin disease completely and prevent its recurrence. According to Charaka Dadru is a Kapha pitta pradhanavyadhi and According to sushruta Dadru is a Kapha Pradhanvyadhi which is managed by Shodhana, Shamana and Bahiparimarjana (topical) Chikitsa. (difference between kshudra and Maha kustha- w.s.r. (Dadru & Sidhma Kustha According to Acharya Charaka dadru is a Kshudra Kustha while according to Susruta it is Mahakustha. In Susruta black colour and deep seated dadru is called Mahakustha and which is no blackish in colour and superficially seated and redish in colour and circular lesion dadru is called Kshudra Kustha. Susruta mentioned these type of radish colour circular lesion as Visharpa Kustha, Because it spread more. Sidhma – In the same way deep seated Sidhma mentioned as Maha Kustha in Charaka. In Susruta, Sidhmapushpika which spreads on skin considered in Kshudra Kustha. Gadadhar includes blakish colour Sidhma in blakish colour dadru Kustha. The Sidhma described by Charaka considered as dadru of Susruta. according to Jejjata, differentiate each other by name only. Local application works faster due to physiological effect of heat on the skin. As per the need of fast life of today's society, Bahiparimarjana in the form of lepa was selected which is easily done and act as sthanika Chikitsa for fast relief Despite Mulakadi lepa being mentioned as 'Sadyah Siddhi Karaka' (immediate relief provider). The current study was undertaken with an aim to evaluate the role of Mulakadi lepa in the management of (Charkokta & Susrutokta) Type 1&Type 2 Dadru.

## **MATERIAL AND METHODS**

- (a) **Source of Data:** 28 patients with in the age group 16 to 70 years diagnosed as suffering from Type 1 &Type 2 Dadru were selected from O.P.D. and I.P.D of N.I.A.
- **b) Study design:** A clinical study on the Role of Mulakadi lepa in the management of (Charkokta & Susrutokta) Type1 & Type2 Dadru

#### CRITERIA FOR SELECTION OF PATIENTS

#### **Inclusion Criteria**

- a. Patient with the classical sign and symptoms of Dadru Kustha.
- b. Patient with positive KOH test for Fungal Dermatophytes.
- c. Patient 16 years to 70 years of age were included.
- d. Patients belonging to either gender were included.

### **EXCLUSION CRITERIA**

- a. The patient suffering from systemic disorders. (e.g. DM, HIV etc.) were excluded.
- b. The pregnant women and lactating mother were excluded.
- c. Patient less than 16 yrs. and above 70 yrs. of age were excluded.

INTERVENTION: Drug: Mulakadi Lepa

Method: External application on affected area

Time: Morning and evening Treatment.

**Duration:** 30 days: Follow up during treatment: After every 15days.

**Preparation of Mulakadi Lepa and Ingredients:** Mulakadi Lepa is a combination of eleven drugs i.e., Mulaka, Sarshapa, Laksha, Hridra, Chakramarda, Shrivestaka, Shunthi, Pippali, Maricha, Vidanga, Kutha, the base like Gomutra possesses.

## **Assessment criteria**

Classical sign and symptoms of Dadru were scored and assessed accordingly. Assessment of effects of the therapy was done on the basis of various subjective and objective criteria. For the purpose of assessment, a detailed research performed were incorporating various parameters like Daśavidha parikṣa, Aṣṭavidha parikṣa etc. Assessment was done every 15 days during the entire study period. Affected area assessment by photography 0 day, 30 day of treatment. Following criteria were adoped for the purpose of assessment.

(a) Subjective parameters.

- (b) Objectives parameters
- (c) Laboratory investigation based parameters

## **Subjective parameters**

On the basis of Ayurvedika classical signs and symptoms of Dadru were considered under subjective parameters and assessment the overall effect of therapies a special scoring method was adopted as follows.

## Clinical features score of *Dadru Kustha* type 1 (acc. To Charaka)

1. Kandu	Score
No Itching	0
Mild Itching	1
Moderate Itchin	g 2
Severe Itching	3

**Mild Itching**: Which comes occasionally, does not disturb routine activity, duration is 2-3 min usually scratching is not required.

**Moderate Itching**: Which occurs frequently and disturbs the routine activity but does not disturb sleep. lasts for longer time, Scratching every time is essential, recurs 3-4 times in 12 hrs.

**Severe Itching**: Frequently occurs, disturbs routine activity & sleep, lasts for 20-30 min. scratching very essential, recurs 8-10 times in 12 hours.

Raga	Score
Normal skin colour	0
Faint Normal	1
Blanching + Red Colour	2
Red Colour	3

Number of Mandal	Score
No Mandal	0
1 to 3 Mandal	1
4 to 6 mandal	2
More than 6 mandal	3

Size of Mandal	Score
No.of mandala	0
Less than 5 cm	1
5 to 10 cm	2
More than 10 cm	3

No of Pidika	Score
No. Pidika	0
1 to 3 pidika	1
4 to 6 pidika	2
More than 6 pidika	3

# Clinical features score of Dadru Kustha type 2 (acc. to Sushrut)

No of lesion	Score
No. lesion	0
1 to 3 lesion	1
4 to 6 lesion	2
More than 6 lesion	3

No of Pidika	Score
No. Pidika	0
1 to 3 pidika	1
4 to 6 pidika	2
More than 6 pidika	3

# Visarpana (Spreading)

On Body	Score
Avisarpana	0
Adhah to Urdhva or Urdhva to Adhah	1
Shakha to Madhya Sharira or	2
Madhya Sharira to Shaakha	
Whole Body	3

## Tamra Varna

Normal skin colour 0

Light Red Brown Colour	1
Black Colour	2
Red Brown (Tamra Varna)	3

Atasi Puspa Varna	Score
Normal Skin Colour	0
Reddish Colour	1
White Colour	2
Bluish White Colour (Atasi Puspa Varna)	3

# **OBSERVATIONS AND RESULTS**

# Group - A Type 1 Dadru.

Sr.no	O.P.D. No.	Bt Total	At Total	Diff.	Relief%
1	13413112017	10	2	8	80
2	31413112017	10	2	8	80
3	13816112017	15	7	8	53.33333
4	20422311201	19	7	12	63.15789
5	18324112017	15	4	11	73.33333
6	13425112017	19	6	13	68.42105
7	6630112017	19	9	10	52.63158
8	6302122017	19	9	10	52.63158
9	8505122017	16	7	9	56.25
10	16014122017	15	5	10	66.66667
11	1815122017	19	12	7	36.84211
12	25921122017	15	5	10	66.66667
13	1322122017	19	11	8	42.10526

# Group - A Type 2 Dadru.

Sr.no	O.P.D. No.	Bt Total	At Total	Diff.	Relief%
1	3616112017	16	8	8	50
2	24217112017	17	7	10	58.82353
3	31417112017	17	13	4	23.52941
4	2723112017	20	16	4	20
5	17423112017	20	15	5	25
6	39128112017	17	6	11	64.70588
7	5201122017	18	11	7	38.88889
8	19801122017	17	6	11	64.70588
9	4604122017	13	5	8	61.53846
10	11304122017	16	8	8	50
11	23311122017	20	12	8	40
12	9812122017	20	12	8	40
13	7514122017	19	14	5	26.31579
14	12713122017	23	18	5	21.73913
15	10316122017	19	12	7	36.84211

## Statistical Result of MLG drug on D1.

Group	Patient of D1	BT	AT	Diff.	Rilief%	Pvalue
A	13	16.15	6.61	9.53	59.009	0.0002

## Statistical Result of MLG drug on D2.

	Group	Patient of D2	BT	AT	Diff.	Rilief%	Pvalue
ĺ	A	15	18.13	10.86	7.26	40.04	< 0.0001

### Total Score of the clinical features like

\*Type 1dadru:- Kandu, Raga, No. of Pidika, No. of Mandal, Size of Mandal

## Total Score of the clinical features like

\*Type 2dadru: No. of lesion, No. of Pidika, Visharpana, Tamra varna, Atasipushpa varna The result obtained regarding the parameter Kandu, before mean was 2.18 after treatment it was a 0.49 & t value was 7.34 which showed highly significance as the 'P' value is less than 0.0001. The result obtained regarding the parameter Raaga, before treatment mean was 1.77 after treatment it was converted into 0.64 't' value was 6.34 Which was statistically highly significant (p<0.0001). In parameter Pidaka, before treatment mean was 1.78 after treatment it became 0.64 and 't' value is 8.57 Which was statistically highly significant (p<0.0001). Among 28 patients, the number of Mandal, before treatment mean was 1.46 after treatment it was 0.45 & 't' value was 7.49 which was statistically highly significant (p<0.0001). Among 28 patients before treatment size of Mandal mean was 1.85 it converted into 0.53 after treatment & 't' value was 7.72 totally result was statistically highly significant (p<0.001). The result obtained regarding the parameter Atisipushpa varna, before mean was 1.28 after treatment it was a 0.98 & t value was 7.24 which showed highly significance as the 'P' value is 0.0002. The result obtained regarding the parameter Tamre varna before treatment mean was 1.77 after treatment it was converted into 0.64 't' value was 6.34 Which was statistically highly significant (p<0.0001). In parameter Visharpana, before treatment mean was 1.87 after treatment it became 0.63 and 't' value is 6.72 Which was statistically highly significant (p<0.0001). Among 28 patients, the number of Lesion, before treatment mean was 1.78 after treatment it was 0.64 & 't' value was 8.34 which was statistically highly significant (0.0002).

## **RESULTS**

After administered of Mulakadi Lepa, statistically significant changes were observed in Type 1 dadru: Kandu, Raga, Size of Mandala and Number of Mandala. No. of Pididka After

administered of Mulakadi Lepa, statistically significant changes were observed in Type 2 dadru: No. of lesion, No. of Pidika, V isharpana, Tamra varna, Atasipushpa varna.



## **DISCUSSION**

According to Charaka Dadru, is a Kapha Pitta Pradhan Vyadhi and According to Sushruta Dadru is Kapha Pradhan vyadhi, Besides its Rasagata manifestations. Hence considering this Acharya Sushruta has described its treatment as application of Shodhana Lepa. Bahiparimarjana Chikitsa or Shamana shows excellent result in the form of Lepa. The disease mainly involves Rasavaha and Raktavaha Srotas. Further Srotas are never involved. This is the specificity of the pathogenesis of Dadru. The selected drug for this study was Mulakadi Lepa'. Highly significant result was observed in the symptom Kandu, this may be because of the Kandughna, Kustaghna, Kaphvata hara, Ushna Virya, which justifies the above result with regards to the Bahya Shaman Aushadha. Raga is resultant of Pitta Prakopa. The Lepa

have the properties of Pittashamana and Rakta Shodaka, Varnya, hence the observed above result. The Pidika are produced due to the Kapha Pitta Pradhana Tridosha. The Ushna, Rooksha, Tikshna Gunas of Mulakadi lepa acts on reducing the Pidikas. Mandal are resultant of Tridosha and four Dhatu. The Kustghna, Twakdoshara, Raktadoshahara, Laghurooksha Guna, etc. Gunas of Lepa helped in reducing the Mandal of Dadru. Visharpana Due to kusthagna property of drugs the frequency of the disease subsides either with intensity or area. Visarpaṇa is due to rakta Duṣṭi and tikṣṇata of pitta. Lepa is useful in Pitta and Rakta dominance disease and reduce Visarpaṇa. Tamra varna (Raga is present due to Pitta Doṣa and Rakta Dhatu Duṣṭi.) Raga has reduced significantly because of the Raktaśodhaka properties of the drug.

### **CONCLUSION**

The results suggested that Mulakadi lepa showed significant result after treatment in Kandu, Raga Size of mandala, no of pidika, no of mandala Tamra varna, Atisi pushpa varna, visharpana variables and the efficacy of the treatment was highly significant even during follow up. 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 Mulakadi lepa can be used in the patients suffering from Dadru Kushta. (result of dadru 1 is better than Dadru 2 Overall Results proved that in Kshudra kustha (D1 Group) the percentage of relief is more dominant than Mahakustha (D2 group) Mahakushtha type of Dadru (D2) is dominant as per it's colour, clinical presentation & stability and the main drug Mulakadi (in MLG Group) may able to invade the deeper tissues due to its Tikshna and Ushna qualities. But in superficial stage of kushtha Ushna drug always try to spread the disease very rapid way (Kustha is stable due to manda pitta and that is the main difference between kushtha and Visarpa). Mahakushtha is always difficult to cure than Kshudra Kustha. It is mentioned in the Classical text and again proved though this small clinical trial.

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