



## A CLINICAL STUDY ON THE ROLE OF GANDHAK MALAHAR 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. In Ayurveda all the skin disease considered in Kushta. Which are further categorised in to Maha Kushta and Kshudra Kushta. Kushta is produced in variably by the vitiation of the seven factors i.e. 3 Dosha and 4 Dushya. When the vitiated Dosha provoke the four body elements and if this derangement of seven Dravya is not cared to, a disease is formed inside the body which manifests itself on outermost part of the body. Acarya Charaka has depicted Dadru as a Kshudra Kushta. and Acarya Sushruta has depicted Dadru as a mahakushta As per charaka it's definition, the reddish coloured Pidika in the form of Mandala with elevated borders and itching is known as Dadru. and As per sushruta its definition the atasipushpa varna and tamra varna and spreading in nature and pidika is know as Dadru According to Charaka Dadru, is a Kapha Pitta Pradhan Vyadhi and According to Sushruta Dadru is Kapha Pradhan vyadhi the management of which includes Shodhana, Shamana and Bahiparimarjana Chikitsa among them Shamana measure in the form of Lepa has shown appreciable result in many prior research studies. Present study was conducted on 15 diagnosed patients of Type 1 Dadru and 11 Patients of Type 2 Dadru in whom Gandhaka Malahar and was applied. The ingredients of which are the drugs possessing Shodhana & Kustahara property.

**KEYWORDS:** Type 1 and Type 2 Dadru Kushta Gandhaka Malahar 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 Kushta According to Acharya Charaka dadru is a Kshudra Kushta while according to Susruta it is Mahakushta. In Susruta black colour and deep seated dadru is called Mahakushta and which is no

blackish in colour and superficially seated and redish in colour and circular lesion dadru is called Kshudra Kushta. Susruta mentioned these type of radish colour circular lesion as Visharpa Kushta, Because it spread more. Sidhma – In the same way deep seated Sidhma mentioned as Maha Kushta in Charaka. In Susruta Sidhmapushpika which spreads on skin considered in Kshudra Kushta. Gadadhar includes blakish colour Sidhma in blakish colour dadru Kushta. 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:** 26 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 of Gandhak Malahar in the management of (Charkokta & Susrutokta) Type1 & Type2 Dadru

### Criteria for selection of patients

#### Inclusion criteria

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

#### Exclusion Criteria

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

**Intervention:** Drug: Gandhak Malahar

**Method:** External application on affected area

**Time:** Morning and evening Treatment

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

### Preparation of Gandhak Malahar and Ingredients:

Gandhak Malahar is a combination of six drugs i.e., Tilaitail, wax, Gandhak, Girisindura, Tankan, Karpura.

### 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 adopted for the purpose of assessment.

- Subjective parameters
- Objectives parameters
- 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 Itching | 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     |

|                                      |              |   |              |
|--------------------------------------|--------------|---|--------------|
| <b>No of Pidika</b>                  | <b>Score</b> | <b>Tamra Varna</b>                      |              |
| No. Pidika                           | 0            | Normal skin colour                      | 0            |
| 1 to 3 pidika                        | 1            | Light Red Brown Colour                  | 1            |
| 4 to 6 pidika                        | 2            | Black Colour                            | 2            |
| More than 6 pidika                   | 3            | Red Brown (Tamra Varna)                 | 3            |
| <b>Visarpana (Spreading) On Body</b> | <b>Score</b> | <b>Atasi Puspa Varna</b>                | <b>Score</b> |
| Avisarpana                           | 0            | Normal Skin Colour                      | 0            |
| Adhah to Urdhva or Urdhva to Adhah   | 1            | Reddish Colour                          | 1            |
| Shakha to Madhya Sharira or          | 2            | White Colour                            | 2            |
| Madhya Sharira to Shaakha Whole Body | 3            | Bluish White Colour (Atasi Puspa Varna) | 3            |

## OBSERVATIONS AND RESULTS

### Group – B Type 1 Dadru

| Sr. no. | O. P. D. No. | Bt Total | At Total | Diff | Relief%  |
|---------|--------------|----------|----------|------|----------|
| 1       | 84310112017  | 10       | 9        | 1    | 10       |
| 2       | 4716112017   | 18       | 6        | 12   | 66.66667 |
| 3       | 8417112017   | 10       | 1        | 9    | 90       |
| 4       | 3323112017   | 10       | 6        | 4    | 40       |
| 5       | 20723112017  | 21       | 7        | 14   | 66.66667 |
| 6       | 39228112017  | 15       | 11       | 4    | 26.66667 |
| 7       | 6530112017   | 19       | 15       | 4    | 21.05263 |
| 8       | 19230112017  | 15       | 8        | 7    | 46.66667 |
| 9       | 25230112017  | 14       | 5        | 9    | 64.28571 |
| 10      | 7401122017   | 21       | 9        | 12   | 57.14286 |
| 11      | 27601122017  | 19       | 8        | 11   | 57.89474 |
| 12      | 4504122017   | 18       | 10       | 8    | 44.44444 |
| 13      | 5804122017   | 19       | 12       | 7    | 36.84211 |
| 14      | 10704122017  | 15       | 9        | 6    | 40       |
| 15      | 4621122017   | 15       | 4        | 11   | 73.33333 |

### Group – B Type 2 Dadru

| Sr.no | O.P.D. No.  | Bt Total | At Total | Diff | Relief%  |
|-------|-------------|----------|----------|------|----------|
| 1     | 14013112017 | 14       | 8        | 6    | 42.85714 |
| 2     | 11317112017 | 22       | 9        | 13   | 59.09091 |
| 3     | 18618112017 | 17       | 13       | 4    | 23.52941 |
| 4     | 17923112017 | 21       | 15       | 6    | 28.57143 |
| 5     | 18424112017 | 14       | 3        | 11   | 78.57143 |
| 6     | 5301122017  | 15       | 7        | 8    | 53.33333 |
| 7     | 6912122017  | 18       | 13       | 5    | 27.77778 |
| 8     | 10212122017 | 13       | 3        | 10   | 76.92308 |
| 9     | 1313122017  | 15       | 9        | 6    | 40       |
| 10    | 4414122017  | 16       | 13       | 3    | 18.75    |
| 11    | 22415122017 | 21       | 12       | 9    | 42.85714 |

### Statistical Result of GMG drug on D1

| Group | Patient of D1 | BT    | AT   | Diff. | Rilief% | Pvalue  |
|-------|---------------|-------|------|-------|---------|---------|
| B     | 15            | 15.93 | 8.00 | 7.93  | 49.78   | <0.0001 |

### Statistical Result of GMG drug on D2

| Group | Patient of D2 | BT    | AT   | Diff. | Rilief% | Pvalue |
|-------|---------------|-------|------|-------|---------|--------|
| B     | 11            | 16.90 | 9.54 | 7.36  | 43.55   | 0.0010 |

### 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 1.67 after treatment it was a 0.51 & t value was 6.34 which showed highly significance as the 'P' value is less than < 0.0001. The result obtained regarding the parameter Raaga, before treatment mean was 0.77 after treatment it was converted into 0.44 't' value was 7.34 Which was statistically highly significant (p<0.0001). In parameter Pidaka, before treatment mean was 1.32 after treatment it became 0.87 and 't' value is 5.57 Which was statistically highly significant p value 0.0002. Among 26 patients, the number of Mandal, before treatment mean was 1.18 after treatment it was 0.59 & 't' value was 7.23 which was statistically highly significant (p value 0.0002). Among 26 patients before treatment size of Mandal mean was 1.20 it converted into 0.75 after treatment & 't' value was 6.71 totally result was statistically highly significant (p value 0.0005). The result obtained regarding the parameter Atisipushpa varna, before mean was 0.59 after treatment it was a 0.26

& t value was 8.21 which showed highly significance as the 'P' value is < 0.0001. The result obtained regarding the parameter Tamra varna before treatment mean was 1.83 after treatment it was converted into 0.71 't' value was 6.54 Which was statistically highly significant (p<0.0001). In parameter Visharpana, before treatment mean was 0.73 after treatment it became 0.10 and 't' value is 6.21 Which was statistically highly significant (p value 0.0005). Among 26 patients, the number of Lesion, before treatment mean was 2.46 after treatment it was 1.42 & 't' value was 7.42 which was statistically highly significant (<0.0001).

**RESULTS**

After administered of Gandhaka malahar, statistically significant changes were observed in Type 1 dadru: Kandu, Raga, Size of Mandala and Number of Mandala. No.of Pididka After administered of Gandhaka malahar statistically significant changes were observed in Type 2 dadru: No. of lesion, No.of Pidika, Visharpana, Tamra varna, Atasipushpa varna.



D1 BT



D1 AT



D2 BT



D2 AT

## 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 Gandhak malahar'. 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 Gandhak malahar' 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 kushthagna 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 Gandhaka Malahara 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 Gandhak Malahar 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 kushtha (D1 Group) the percentage of relief is more dominant than Mahakushtha (D2 group) Mahakushtha type of Dadru (D2) is dominant as per it's colour, clinical presentation & stability and the main drug Gandhak Malahara (in GMG 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 (Kushtha is stable due to manda pitta and that is the main difference between kushtha and Visarpa). Mahakushtha is always difficult to cure than Kshudra Kushtha. It is mentioned in the Classical text and again proved though this small clinical trial.

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