



# AYURVEDIC MANAGEMENT OF DADRU KUSHTHA (TINEA CORPORIS): A CASE STUDY

Dr.Shivanand Majjagi<sup>1</sup>, Dr.S.S.Kalyani<sup>2</sup>, Dr.Sunilkumar M. Chabanur<sup>3</sup>

1. Post Graduate Scholar,

2. Professor Dept of Kayachikitsa

3. Associate Professor and HOD, Department of Kayachikitsa,

BVVS Ayurvedic Medical College and Hospital , Bagalkot

## ABSTRACT

*Dadru Kustha* is one among *Kshudra Kustha* which involves vitiation of *Rasa, Rakta and Mamsa Dhatu*<sup>1</sup>. It is one of the *Kaphapitta Pradhana Twakvikara*. It is characterized by *Kandu, Raga, Pidaka, Daha* and *Utsanna mandala*. Clinical features of *dadru kustha* resembles with the dermatological condition called *Tinea Corporis*. The Prevalence of this infection is ~2% among young adults. 39% of world Population is suffering from *Tinea*. In India also, 5 out of 1000 people are suffering from *Tinea* infection. A 21yrs old male came with complaints of blackish and reddish circular elevated lesions over left shoulder region and right knee joint with severe itching and burning sensation since 4months. *Nimbadi churna* with *Chinna (guduchi) kwatha* was prescribed as internal medication and *kasamaradadi lepa* was advised as external application for 30 days. After completion of treatment, significant improvement was observed in the parameters like *Kandu* (itching), *Raaga* (Erythema), *Pidika* (eruptions) and *Utsaana mandala* (elevated circular skin lesion). *Nimbadi Churna* mentioned in *Bhaisajyaratnavali* is indicated in *Dadru Kustha*. It has *Kandugna, Krimigna, Rakthashodaka, Anulomaka* ingredients. *Kasamardadi Lepa* mentioned in *Yogaratanakara Samhitha* is indicated in *Dadru Kustha*. It has ingredients like *Kasamardamula* which is *Krimigna* in action. *Souveera Phala*(*Badara Phala*) which is *Pittahara, Dahanivarana* in action. These properties helped in elimination of vitiated doshas and thus in *samprapti vighatana*. This case study gave us encouraging results in the management of *Dadru kushta*.

**Key Words:** *Dadru Kushta, Kandughna, Kushtaghna, Tinea corporis.*

## INTRODUCTION

In Vaidyaka Shabda Sindhu, Dadru is mentioned as a type of Kshudra kushta having the characteristics of tortoise.<sup>2</sup>

As per Sir Monier William's Sanskrit English Dictionary, Dadru is a type of Leprosy (kushta i.e. skin disease) characterized by skin lesions, which resembles tortoise<sup>3</sup>.

All the skin diseases in Ayurveda have been classified under the broad heading of 'Kushta' which are further classified into Mahakushta and Kshudrakushta. Dadru is one amongst them<sup>4</sup>. Acharya Charak has included Dadru in Kshudrakushta<sup>5</sup>, whereas Acharya Sushruta and Acharya Vagbhata have explained under Mahakushta<sup>6</sup>. Dadru has been classified as Sita and Asita<sup>7</sup>.

All the nidanas mentioned for kushta can be the nidanas for Dadru also. These etiological factors are categorised into aharaja, viharaja, chikitsa apacharaja, krimija and upasargaja. They include viruddahara, mityahara, atyashana, ajeernashana, asatmya ahara, shitoshna vyatyasa sevana, ativyayama, ativyavaya, atisantapa sevana, santarpana apatarpana vyatyasa, panchakarma apacharaja etc.

Some of the nidanas are highlighted as a specific causitive factors for Dadru in particular, viz; Among aharaja nidana there is an indication that, consuming matsya and ksheera together (viruddahara) causes shonita roga<sup>8</sup>. Dadru being one among the shonita roga the above mentioned specific type of aharayoga if consumed in excess causes Dadru<sup>9</sup>. In upasargaja nidana<sup>10</sup>, upasarga of infected vastra, gatra, mala and lepa acts as a specific nidana for developing Dadru. Krimi – the bahya krimi which develops in unhygienic condition<sup>11 12</sup> causes Dadru.

*Dadru Kushta* is one among *Kshudra Kushta* which involves vitiation of *Rasa, Rakta, Mamsa Dhatu*. It is one of the Kaphapitta Pradhana Twakvikara<sup>14</sup>. It is characterized by Kandu, Raga, Pidaka, Daha and Utsanna mandala<sup>15</sup>. Clinical features of dadru kushta resembles with the deramatological condition called Tinea Corporis.

The Prevalence of this infection is ~2% among Young adults. 39% of world Population is suffering from Tinea. In India also, 5 out of 1000 people are suffering from Tinea infection<sup>16</sup>.

Tinea corporis is the ringworm infection of glabrous skin and it includes lesions of the trunk and limbs excluding specialized sites such as the scalp, feet and groins<sup>17</sup>.

In Modern medicine, Tinea is treated with oral Antifungal, topical medication and steroids<sup>18</sup>. it needs to take long term ,may develop resistance to drug and more adverse effect. thus Alternative medicines are used in this case study Nimbadi Churna<sup>19</sup> has Pitta Kapha Shamaka Karma ,Kandugna, Krimigna, Rakthashodaka action. Tridosha Shamaka, Anulomana action. Kasamardadi Lepa<sup>20</sup> has having Kaphahara and Pittahara , Krimigna, Dahanivarana action.

### Case study -

A 21 years old male approached to *Kayachikitsa* OPD of BVVS Ayurvedic college and Hospital, Bagalkot with Chief complaints of Blackish and reddish circular elevated lesions over the left shoulder region and right knee joint with severe itching and burning sensation since 4months.

Patient was apparently healthy before 4 months , and then he gradually developed the round and reddish elevated lesions over the left shoulder region and right knee joint with severe itching and burning sensation . For that he had taken Allopathic treatment from local practitioner but didn't get satisfactory result ,then he developed with blackish and reddish circular elevated lesions over left shoulder and right knee joint with severer itching and burning sensation aggravated since 10days so, he came to BVVS AMC and Hospital for better management. There was no any past history of Diabetes mellitus, Hypertension, Hyperthyroidism & Hypothyroidism, All family members are said to be healthy.

**CLINICAL FINDINGS :**

Patients pulse rate was 80/min, blood pressure was 130/70mmhg, respiratory rate was 16/min, weight was 62kg, height was 168cm.

**SYSTEMIC EXAMINATION:**

Central Nervous System :Conscious and Well Oriented  
 Cardiovascular System :S<sub>1</sub>and S<sub>2</sub> Heard and No Murmurs  
 Respiratory System :Air entry bilateral equal and NVBS, No added sounds  
 Per Abdomen :Soft , Non Tender and No Organomegaly

**EXAMINATION OF SKIN :****Left shoulder Right knee joint**

Distribution : Asymmetrical Asymmetrical  
 Pattern of the Lesion : Circular Circular  
 Size of the Lesion : 14cm 10.5cm  
 Nature of the Lesion : Dry Dry  
 Colour of the Lesion : Blackish Blackish and Reddish

Table 1: Treatment Given.

<i>Aushadha</i>	<i>Matra</i>	<i>Anupana</i>	<i>Aushada sevana kala</i>	<i>Kala</i>	<i>Route</i>
<i>Nimbadi Churna</i>	1 gram TID	<i>Guduchi kwatha -15ml</i>	After food	30days	Internally
<i>Kasamardadi Lepa</i>	0.25thickness (1/4 <i>angula</i> )	-	Morning	30days	External application

**Assessment criteria**

The result will be assessed before & after the treatment, based upon Subjective and Objective Parameters.

Changes in the symptoms were noted with full gradation of subjective and objective parameter.

## Gradation of Parameters

### SUBJECTIVE PARAMETERS-

#### 1) *Kandu*

Grade 0	No Kandu
Grade 1	Mild
Grade 2	Moderate(Disturbs the work)
Grade 3	Severe (Disturbs the sleep )

#### 2) *Raga*

Grade 0	Normal skin colour
Grade 1	Mild Redness(Pinkish)
Grade 2	Moderate Red(Pinkish)
Grade 3	Deep Brown

#### 3) *Pidaka*

Grade 0	No Eruptions
Grade 1	Eruptions in 0-25% of affected area
Grade 2	Eruptions in 25-50% of affected area
Grade 3	Eruptions in 50-75% of affected area

#### 4) *Daha*

Grade 0	No burning sensation
Grade 1	Mild
Grade 2	Moderate
Grade 3	Severe

#### 5) *Rooksha*

Grade 0	No dryness
Grade 1	Loss in skin's normal unctuuousness
Grade 2	Moderate dryness of the skin
Grade 3	Excessive dryness of the skin

#### 6) *Utasanna mandala*

Grade 0	No elevation of the skin
Grade 1	Mild elevation of the skin
Grade 2	Moderate elevation of the skin
Grade 3	Severe elevation of the skin

**OBJECTIVE PARAMETERS<sup>26</sup>-**

## 1)Size of lesion

Grade 0	Below 0.5-1cm
Grade 1	1-2cm
Grade 2	2-3cm
Grade 3	3-4cm
Grade 4	4-5cm
Grade 5	More than 5cm

## 2)Number of lesions

Grade 0	No lesion
Grade 1	Only 1
Grade 2	2 lesions
Grade 3	3 lesions
Grade 4	4 lesions
Grade 5	More than 5lesions

**Observation and Results****SUBJECTIVE PARAMETERS:**

Complaints	Before treatment/ 1 <sup>st</sup> day	Observation period/ 15 <sup>th</sup> day	After treatment (31 <sup>st</sup> day )	On F/U 40 <sup>th</sup> day
Kandu	Grade 3	Grade2	Grade0	Grade0
Raga	Grade 3	Grade3	Grade1	Grade1
Pidaka	Grade0	Grade0	Grade0	Grade0
Daha	Grade2	Grade2	Grade0	Grade0
Rooksha	Grade2	Grade2	Grade1	Grade1
Uttsanna mandala	Grade1	Grade1	Grade1	Grade1

**OBJECTIVE PARAMETERS:**

	Before treatment/ 1 <sup>st</sup> day	Observation period/ 15 <sup>th</sup> day	After treatment (31 <sup>st</sup> day )	On F/U 40 <sup>th</sup> day
Size of lesion	14cm,10.5cm	13.8cm, 10.5cm	12cm 9.5cm	12cm, 9.5cm
Number of lesion	2	2	2	2



Before treatment Gradation of *Kandu* was 3 (Severe Itching which disturbs the sleep) which reduced to 2 (Moderate) during first follow up 15<sup>th</sup> day and it was absent on day 31<sup>st</sup> day and 40<sup>th</sup> day that is after completion of treatment. Before treatment Gradation of *Utsanna mandala* was 2 (moderate elevation of the skin) which reduced to 1 (Mild elevation of the skin) during first follow up 15<sup>th</sup> day and it was absent on day 31<sup>st</sup> and 40<sup>th</sup> day that is after completion of treatment. Before treatment *Raaga* (Erythema) was present that persists during first follow up and it was 1 mild redness on day 31<sup>st</sup>, 40<sup>th</sup> day that is after completion of treatment. Before treatment Gradation of *Daha* was 2 (moderate) it was absent on day 31<sup>st</sup> and 40<sup>th</sup> day that is after completion of treatment. Before treatment gradation of size of the lesion 14cm (left shoulder region), 10.5cm (Right knee joint) and it was 12cm and 9.5cm on 31<sup>st</sup> day and 40<sup>th</sup> day that is after completion of treatment. Thus complete improvement was observed in all subjective parameters and Moderate improvement was observed in objective parameters after completion of treatment. Same can be seen in following pictures taken before, during and after treatment.

Before Treatment: Figure-1-  
On day 1



After Treatment: Figure-2-  
On day 40<sup>th</sup>



## DISCUSSION

The basics principles of hetu of Dadru have been mentioned in Brihatrayi and Laghutrayi in the Kustha Nidana. Most of the Apathya Ahara Vihara mentioned in Ayurveda for causes of Kushttha, produces the healthy environment for the growth of fungal infection in the skin tissues. In modern science the clinical manifestation of Dadru is closely similar to Tinea infection which is caused by contact with diseased person, the weak immune system, poor nutrition, stress, obesity and contact with contagious things etc. In modern science KOH scraping (a Fungal Culture) would be useful to diagnose the Tinea along with clinical manifestations

It is one of the Kaphapitta Pradhana Twakvikara. Due to Nidana Sevana, the Tridoshas are vitiated simultaneously and also Shaithilyata in the Dhathus such as Twak, Raktha, Mamsa and Lasika. hence the disease Kustha gets manifested.

**Table Showing Samprapti Ghataka of Dadru**

<b>Dosha</b>	Tridosha - Pittakapha pradhana
<b>Dushya</b>	Twak, Rakta, Mamsa, Lasika
<b>Agni</b>	Jatharagni and Dhatvagni
<b>Ama</b>	Tajjanya
<b>Srotas</b>	Rasavaha, raktavaha, mamsavaha, swedavaha,
<b>Srotodushti prakara</b>	Sanga, vimarga gamana and atipravritti
<b>Rogamarga</b>	Bahya rogamarga
<b>Udabhavasthana</b>	Amashaya
<b>Sancharasthana</b>	Triyaka-gami sira
<b>Vyaktasthana</b>	Twacha
<b>Adhithana</b>	Chaturtha twacha-Tamra
<b>Swabhava</b>	Chirakari

**Lakshanas and dosha pradhanyata**

<b>Lakshanas</b>	<b>Dosha</b>
Kandu	Kapha
Raaga	Pitta
Pidaka	Pitta
Utsanna mandala	Kapha
Atasipushpa varna	Pitta
Tamra varna	Pitta
Visarpanshila	Vata

**Lakshanas and Dhatugatatva**

<b>Lakshanas</b>	<b>Dhathu</b>
Kandu	RasaRakta
Raaga	Rakta
Pidaka	RaktaMamsa
Utsanna mandala	Mamsa
Atasipushpa varna	Rakta
Tamra varna	Rakta
Visarpanshila	Rakta

In the Classics of Ayurveda, Shodana, Shamana and Bahirparimarjana Chikitsa explained for Dadru Kustha.

*Nimbadi Churna* mentioned in *Bhaisajyaratnavali* is indicated in *Dadru Kustha*. it is having ingredients mainly *Nimba, Khadira, Bakuchi* is having *Pitta Kapha Shamaka Karma* due to *Sita Virya, Katu Vipaka* and *Kandugna, Krimigna, Rakthashodaka* in action. *Haritaki, Amalaki, Guduchi* is *Tridosha Shamaka, Kandugna, Krimigna, Anulomana* in action . *Vidanga, Devadaru, Kustha, Vacha* is having *Kaphahara Karma* due to *Usna Virya, Katu Vipaka, Krimigna* and *Kandugna* in action.

*Kasamardadi Lepa* mentioned in *Yogaratnakara Samhitha* is indicated in *Dadru Kustha*. it is having ingredients like *Kasamarda mula* is having *Kaphahara* due to *Usna Virya, Katu Vipaka* and

*Pittahara due to Tiktha Rasa and Krimigna in action. Souveera Phala(Badara Phala) is having Pittahara, Dahanivarana due to Madura Rasa, Sheeta Virya.*

## CONCLUSION

*Dadru Kustha* is one among *Kshudra Kustha* which involves vitiation of *Rasa, Rakta, Mamsa Dhatu*. It is one of the Kaphapitta Pradhana Twakvikara. It is characterized by *Kandu, Raga, Pidaka, Daha* and *Uttsanna mandala*. Based on the similar Clinical features, *Dadru Kustha* can be closely compared with *Tinea Corporis*. As it is a contagious disease, personal hygiene is an important part in its management. From this case study it may be concluded that use of *Chikitsa upakramas* described in *Ayurveda* like *Shamana chikitsa Nimbadi Churna With Chinna(Guduchi Kwatha )* and *Bahiparimarjana chikitsa* i.e *kasamaradadi lepa* are effective in the management of *Dudru kushta(Tinea Corporis)*.

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