

# AYURVEDIC MANAGEMENT OF DADRU KUSTHA (TINEA FACIEI)- A CASE STUDY

\*Jyoti Rani, \*Shikha Chuadhary, \*\*VG Huddar, \$R K Yadava

\*PG Scholar, \*\*Associate Prof, \$HOD & Asso. Prof

All India Institute of Ayurveda, New Delhi

## ABSTRACT

*Beauty is the wish of every individual to give pleasure to the sense. Ayurveda affirms on both external and internal beauty and external beauty is complimented by internal beauty. Skin represent the inner health and outer beauty of an individual. Skin health is important not only for one's appearance, but more importantly because skin performs many essential tasks for our body & is one of the most powerful indicators of health. Now-a-days, there has been a considerable increase in occurrence of skin diseases. Most of the skin diseases are caused due to bacterial or fungal infections. Tinea faciei is a superficial fungal infection and contributes about 5-10 % of overall skin diseases. According to Ayurveda all skin diseases are included under one heading of 'Kushtha Roga'. In Ayurveda skin fungal infection is termed as Dadru kushtha. Acharya Vagbhata and Sushruta have explained Dadru Kushtha under Mahakushtha. Acharya Charaka has included Dadru in Kshudra Kushtha. In the present study, A 19 years old female patient (case of dadru kushtha (Tinea faciei) has been treated with Shamana and Bahiparimarjana chikitsa i.e Nimbadi churna, Shudh Gandhak, Triphla gugglu, Aragwadharishtam, Krimimudgar Ras, Neemelia oil. After few weeks of treatment, significant improvement has been observed in parameters like kandu (itching), daha (burning sensation), rookshata (dryness), raga (erythema), pidika (lesions).*

**KEYWORDS:** *Kushtha roga, Dadru kushtha, Tinea faciei, Fungal infections, Pidika*

## INTRODUCTION

In recent years, there has been a considerable increase in the incidence of skin problem in the tropical and developing countries like India<sup>1</sup>. All the skin diseases in Ayurveda have been classified under the broad heading of 'Kushta' which are further classified in to Mahakushta and Kshudrakushta. Dadru is one among the Kushta<sup>2</sup>. It is kapha-pittaja vyadhi coming under the Kshudra-kushtha according to Acharya Charaka<sup>3</sup> and it is kaphaja-vyadhi coming under the Mahakushtha which occurs in tamra (4th layer) & vedini (5th layer) of the skin, according to Acharya Sushruta<sup>4</sup>. Clinical features of Dadru Kushtha are Raga (erythema), Kandu (Itching), Pidika (Papule), Utsanna Mandala (elevated circular lesions)<sup>5</sup>. Its

itching sensation is attributed to kapha dosha, papules & erythema is attributed to pitta dosha. Varna (color) are described as red, dark brown & wide spread according to Acharya Charaka, Sushruta & Vagbhata respectively. Acharya Sushruta describes the color of the lesions in dadru more specifically like that of copper or the flower of Atasi and mentions that its pidaka are in the form of parimandala having spreading nature (visarpanshila) but slow in progress or chronic in nature (chirrottham) with kandu<sup>6</sup>. Dadru is kapha dominant vyadhi. It mainly involves Rasavaha and Raktavaha Srotas. The treatment should be on the principles of Raktavaha srota-dushti.

On the basis of clinical presentation of Dadru, it can be compared with ringworm (tinea infections) in

modern concept. Skin diseases are mainly caused by the involvement of several microorganism where Tinea is one among them. Tinea/Ringworm infection is caused by a distinct class of fungi. They thrive in keratin layer of the epidermis, hairs and nails. Tinea faciei is a superficial dermatophyte infection limited to the glabrous skin of the face<sup>7</sup>. In pediatric and female patients, the infection may appear on any surface of the face, including the upper lip and chin. It has a predilection for tropical humid climates. The pattern of infection depends on the geographic location or the endemic dermatophyte strains of a given area or the cultural population habits<sup>8</sup>. It is frequently reported from tropical countries; however, it is seen worldwide. It affects all age groups with 2 peaks in children between 2 and 14 years and adults between 18 and 40 years of age<sup>9</sup>. Both trichophyton and microsporum species can cause tinea faciei<sup>10</sup>

In contemporary Medical science, management of Tinea is carried out with usage of topical or systemic antifungal, corticosteroids. Medications are often strong, and their use may cause such undesirable side effects as headache, dizziness, nausea, vomiting, or abdominal pain.<sup>11</sup> Owing to these reasons, there is a need for treatment having good efficacy and no toxicity profile. So, this case study was conducted considering Ringworm (Tinea faciei) as Dadru kushtha and Ayurvedic management was planned accordingly.

### Personal history

Name – XYZ	Age – 19 yrs
Sex – Female	Marital status – Unmarried
Occupation- Student	Diet – Non-vegetarian
Addiction- None	Sleep – Inadequate due to itching
Appetite – Average	Bowel – Irregular
Bladder- Regular	

### General Examination

Height	157cm
Weight	52 kg
BMI	21.1kg/m <sup>2</sup>
B.P	110/80mm hg

### MATERIAL AND METHODS

**Study place-** All India Institute of Ayurveda, New Delhi

### CASE PRESENTATION

A 19 years old female patient with a chief complaints of a large reddish rash over face (covering forehead, cheeks, neck, ears and around the eyes) with multiple vesicular lesions and well defined irregularly marked margins visited the skin OPD No.7 of AIIA on 5.9.18. Initial history revealed that she was apparently healthy before 4 months. Gradually she developed these symptoms which went on increasing day by day. She had itching, burning sensation over affected area and also had irregular or incomplete evacuation of stools, decreased appetite and disturbed sleep due to itching as other associated symptoms. Previously, she consulted an allopathic dermatologist for the same and was diagnosed with tinea faciei. She took allopathic treatment which includes both systemic & topical medication and also experienced significant relief initially. But after sometime, such large and circular reddish patch with itching & burning sensation reappears on the face. As the complaints were not satisfactorily reduced she opted for the Ayurvedic treatment and consulted in OPD No.7 All India Institute of Ayurveda, New Delhi.

Temperature	Afebrile
Pulse Rate	78/min
Respiratory Rate	20/min
Pallor	Not Present
Pedal edema	Not Present
Icterus	Not Present
Lymphadenopathy	Not Present
Clubbing	Not Present
Cyanosis	Not Present

### Local examination

On Examination, there are a large erythematous and infiltrated central cleared annular patch with multiple vesicular lesions and well defined irregularly marked margins on the face ( Figure 1.covering the forehead,cheek,ear and neck area). Periphery of the lesions was studded with minute pustules.No history of any other systemic diseases noted.

**AYURVEDA PERSPECTIVE**In Ayurveda according to signs and symptoms and pathology of disease we can correlate this clinical entity with dadru kustha.It can be diagnosed by clinical symptoms like Raga (erythema), Kandu (Itching), rookshata (dryness), Pidika (Papule), daha (burning sensation),Utsanna Mandala (elevated circular lesions)<sup>12</sup>. All Kushtha are Tridoshaja.<sup>13</sup> But according to Acharya Sushruta Dadru is Kapha Pradhan<sup>14</sup> and according to Charaka and Vagbhata it is Pitta- Kapha dominance<sup>15,16</sup>. Acharya Sushruta describes the color of the lesions in dadru more specifically like that of copper or the flower of Atasi and mentions that its pidaka are in the form of parimandala having spreading nature (visarpanshila) but slow in progress or chronic in nature (chirrottham) with kandu.

### Ashtavidha Pareeksha

Nadi- Pitta-kaphaja	Mala – Baddha
Mutra – Prakruta	Jivha- Ishat Saam
Shabda – Spashta	Sparsa – Prakruta
Druk – Prakruta	Aakruti – Madhyam

### Dashvidha Pareeksha

Prakriti	Vata-Pittaja
Vikrati	Prakriti sam samveta
Sara	Madhyam
Samhanan	Madhyam
Pramana	Madhyam
Satmya	Madhyam
Satva	Madhyam
Vyayama Shakti	Madhyam
Jarana Shakti	Madhyam
Vaya	Madhyam

**TREATMENT**

S.No	Medicines Given	Dose with Duration	Route	Anupana
1.	Nimbadi churna	3gm twice a day before meal	Orally	Koshana jala
2.	Shudh Gandhak bhasma	500mg twice a day before meal	Orally	Koshana jala
3.	Triphala Gugglu	1 tab thrice a day after meal	Orally	Water
4.	Aragwadharishta	15ml thrice a day after meal	Orally	Equal amount of water
5.	Krimikuthar Ras	1tab thrice a day after meal	Orally	Water
6.	Ne.... ia oil	As per area	External application on face twice daily (morning and bed time)	-

**Case follow up**

Assessment of the skin lesions was done on first visit and patient follow up at the interval of 15-20 days was done up till complete remission of the clinical symptoms. During the treatment and follow-ups the patient was advised to avoid incompatible food items, junk/fast food, excessive oily-salty spicy food. Patient is advised to avoid day time sleep. Patient is suggested to maintain personal hygiene.

**GRADING CRITERIA FOR ASSESSMENT****Table 1: Grading criteria.**

S.No	Clinical feature	Grade 0	Grade 1	Grade 2	Grade 3
1.	<b>Kandu (Itching)</b>	Absent	Mild	Moderate	Severe
2.	<b>Raga (Erythema)</b>	Absent	Mild -faint red	Blanching and red colour	Red colour
3.	<b>Daha(Burning sensation)</b>	Absent	Mild burning	Moderate burning	Severe
4.	<b>Utsanna Mandala(elevated patches)</b>	Absent	Mild elevated	Moderate elevated	Severe elevated
5.	<b>Pidika(Papules)</b>	Absent	1-3 papules	4-7 papules	More than 7
6.	<b>Rookshata (Dryness)</b>	Absent	Mild dryness	Mild	Moderate

**OBSERVATIONS AND RESULTS**

Assessment of the patient for Dadru kustha was done according to grading criteria in Table 1

S.No	Clinical feature	Before Treatment On 12.09.18	After about 1 month on 17.10.18	Next month on 28.11.18
1.	Kandu (Itching)	3	2	0
2.	Raga (Erythema)	3	1	0
3.	Daha(Burning sensation)	2	1	0
4.	Utsanna Mandala(elevated patches)	0	0	0
5.	Pidika (Papules)	3	2	1
6.	Rookshata (Dryness)	3	1	1

**BEFORE TREATMENT****FIGURE 1**



**AFTER ONE MONTH**



## AFTER TWO MONTHS



## DISCUSSION

The present study was aimed at finding a safe and effective method for managing Dadru. Dadru is a Kapha-pittaja Vyadhi and to control it such a recipe should be selected which is having Kapha-pitta shaamaka properties. It involves rasavaha & raktavaha srotas, so the treatment should be on the principles of Raktavaha srota-dushti. In this present case study, significant relief has been observed in symptoms like Raga (erythema), Kandu (Itching), rookshata (dryness), Pidika (Papule), daha (burning

sensation). During the study, a significant improvement has also been observed in appetite and bowel habits.

The mode of action of the drug under trial can be understood on the basis of inherent properties of the drug.

*Nimbadi choorna* is a well-known, extensively used ayurvedic formulation indicated in kusta roga. This formulation is having main ingredient Neem chhal, that have Tikta, Kashaya Rasa and Laghu, Snigdha

properties by which Pitta Shamaka action can be observed. It contains other herbs like Giloy, Harde, Amla, Somraji, Saunth, Vaidang, Pavad, Pippal, Ajwain, Bach, Jeera, Kutki, Khair chhal, Saindha Namak, Yavshar, Haldi, Daruhaldi, Nagarmotha, Devdaru which performs pitta virechana, kapha shamana and vata anulomana. It also possesses Rakta Prasadaka and Twak Doshahara properties.

**Gandhak rasayanis** is a well-known, commonly used formulation mainly indicated in Kushtha Roga. It acts as a blood purifier. It reduces Kandu and Daha. It is Raktashodhak, Vranaropak, Twachya, Krumighna. Gandhaka Rasayana is able to keep the Vata, Pitta, Kapha, Dosha balanced. Hence selected for this study.<sup>17</sup>

**Triphla Gugglu** It is one of the most well-studied Ayurvedic formulations, and experiments have shown it to possess antibacterial, antifungal, anti-inflammatory, immunomodulatory properties. Hence selected for this study.

**Aragwadharishta** Its main ingredient is Aragwadha which is having Kusthaghna and Kandughna properties<sup>18</sup>. It is known to have anti-inflammatory and wound healing properties which were beneficial in reducing the swelling, itching and burning sensation of the lesions<sup>19</sup>. It is also known anti-fungal and anti-bacterial activity also<sup>20</sup> by which possibly significant efficacy was observed.

**Triphla Gugglu**-Triphala is one of the most well-studied Ayurvedic formulations, and experiments have shown it to possess antibacterial, antifungal, free radical scavenging, antioxidant, anti-inflammatory, laxative, antiarthritic, anticataleptic, hypolipidemic, antihyperlipidemic, hepatoprotective, anti-stress, antidiabetic, antimutagenic, anticancer, chemopreventive, chemoprotective, radioprotective, and immunomodulatory properties.

**Krimikuthar Ras**-It is an important herbo-mineral formulation which contains Karpura, Kutaja, Trayamana, Ajamoda, Vidanga, Hingula Bhasma, Vatsanabha, Palasha Beeja, It is specially indicated in

**Krimi Janya Tvak Vikara.** Sankramika or Aupasargika Roga Nidana of Kustha is explained by Achaya Susrutha. Dadru is also considered as *Sankramika Vyadhi*. Incidence rate of Dadru gradually increasing day to day because of improper Vihara like uncleanliness of body, sharing cloths of others etc. These Sankramika Vyadhi spreads from person to person by Krimi through Sweda also. Hence this is one of the reasons it is selected for this study.

**Ne... ia oil**-It is an important formulation which contains nimba, bakuchi, tuvrak, karpur, til taila. It bears pitta pacifying and kapha-kleda nashaka action. It is especially indicated in kandu (itching), raga (erythema) & daha (burning sensation).

## CONCLUSION

Dadru though curable but is very tenacious in nature. If the course of treatment is not handled carefully, the remission and relapses are common therefore one should take necessary treatment as early as possible. Through this case report we would like to demonstrate that the line of treatment of dadru kustha mentioned in Ayurveda texts certainly has a great potential. In contemporary Medical science, management of Tinea is carried out with usage of topical or systemic antifungal, corticosteroids. Medications are often strong, and their use may cause such undesirable side effects as headache, dizziness, nausea, vomiting, or abdominal pain. Owing to these reasons, there is a need for treatment having good efficacy and no toxicity profile. So this case study was conducted considering Ringworm (Tinea faciei) as Dadru kustha and Ayurvedic management was planned accordingly. This shows that if plan of treatment is selected according to principles of Ayurveda along with proper drugs, doses, duration, anupana, pathya and apathya there is assurance of success in treatment as seen in this case of dadru kustha.

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