

AYURVEDIC MANAGEMENT OF DADRU (TINEA CORPORIS) – A CASE STUDY

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ABSTRACT

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. Poverty, poor sanitation, unhygienic conditions, pollution are some of the reasons for infections. According to WHO prevalence rate of superficial mycotic infection is 120-25%. According to Ayurveda all skin diseases are included under one heading of 'Kushtha Roga'. Causative factors of *Kushtha Roga* are incompatible food, daytime sleeping, suppression of natural urges, excessive salty or spicy food, etc. Tinea corporis is a superficial fungal skin infection of arms and legs. However it may occur on any part of the body. It is commonly found in society. Clinically it is similar to *Dadru Kushtha* described in Ayurveda. *Aacharya Vagbhata* and *Sushruta* have explained *Dadru Kushtha* under *Mahakushtha*. *Aacharya Charaka* has included *Dadru* in *Kshudra Kushtha*. In present study 65yr old female patient of *Dadru* was treated with *Aarogyavardhini Vati*, *Gandhak Rasayan*, *Laghu Manjishthadi Kwatha* internally and external application of *Gandhak Malahar*. Patient reported significant improvement in signs and symptoms.

KEYWORDS: Tinea corporis, *Dadru*, *Aarogyavardhini Vati*, *Gandhak Rasayan*, *Laghu Manjishthadi Kwatha*, *Gandhak Malahar*.

INTRODUCTION

Skin is the largest organ of human body. It executes various physiological functions including preventing invading of pathogens. On the other hand skin itself is prone to superficial fungal infections. Fungal infections are one of the most common skin diseases. According to WHO prevalence rate of superficial mycotic infection is 20-25%.^[1] Increase in skin diseases is due to poverty, unhygienic conditions, poor sanitation and pollution etc. According to Ayurveda all skin diseases are included under one heading of 'Kushtha Roga'. Incompatible food, suppression of natural urges, daytime sleeping, excessive salty or spicy food, intake of contaminated food, drinking cold water just after physical work or exposure to sunlight are some of the causative factors of *Kushtha*.^[2]

Tinea corporis is a superficial fungal skin infection of arms and legs. However, it may occur on any part of the body.^[3] Its clinical features are variable. The lesions are annular, erythematous, scaly with well defined edge and central clearing.^[4] On the basis of symptoms 'tinea' can be correlated with '*Dadru*' through Ayurvedic view. *Aacharya Sushruta*^[5] and *Vagbhata*^[6] included *Dadru* in *Mahakushtha* where as *Aacharya Charaka* described it under *Kshudra Kushtha*.^[7] Clinical features of *Dadru Kushtha* are *Raga* (erythema), *Kandu* (Itching), *Pidika* (Papule), *Utsanna Mandala* (elevated circular lesions).^[8]

All *Kushtha* are *Tridoshaja*.^[9] But according to *Aacharya Sushruta* *Dadru* is *Kapha Pradhan*^[10] and according to *Charaka* and *Vagbhata* it is *Pitta- Kapha* dominance.^[11,6]

In modern medicine science, Tinea is treated with topical or systemic antifungal, corticosteroids. Long time usage of these can produce adverse effects. The systemic and local use of Ayurvedic medicines has shown considerable effects in Tinea. There are number of formulations in Ayurveda for the treatment of *Dadru*. *Aarogyavardhini Vati*, *Gandhak Rasayana*, *Laghu Manjishthadi Kwatha* and *Gandhak Malahar* are some of the medicine found useful in present case of *Dadru Kushtha*.

MATERIALS AND METHODS

Place of study – Govt. Ayurvedic Hospital, Osmanabad, Maharashtra, India.

Case Report

A 65 yr. Old female – a housewife visited skin OPD of Govt. Ayurvedic Hospital, Osmanabad on 21/02/2018.

Patient had chief complaints –

- 1) Severe itching at Right lateral aspect of abdomen (*Kandu*)
- 2) Formation of erythematous lesions (*Utsanna Mandala*)

- 3) Burning sensation at the site of lesions (*Daha*)
4) Redness (*Raga*)

Patient was suffering from above problems since 6 months. Patient was having irregular bowel evacuation and loss of appetite. Previously, she consulted allopathic dermatologist for same complaints and was diagnosed

with *Tinea corporis*. She took allopathic treatment which included antifungal orally (flucanazole) and locally (Terbinafine, Clotrimazole), and also antihistaminic (cetirizine) for about 4 months. But there was no any significant relief. Patient is known case of hypertension and DM since 5 years. She was taking Tab. Amlodipine 5 mg and Glimepride 4mg OD.

Personal History

Table 1: Personal history.

Name – XYZ	Age – 65 yr	Sex – Female
Marital status – Married	Occupation- Housewife	Diet – Non-vegetarian
Addiction- None	Sleep – Inadequate due to itching	Appetite – Poor
Pulse – 80/min	BP – 134/80 mm Hg	Weight – 60 kg
G.C. – Fair	Temp.- Afebrile	

Table 2: Ashtavidh Pariksha.

<i>Nadi- Kapha- Pitta</i>	<i>Mala – Baddha</i> (Constipation)
<i>Mutra – Bahumutrata</i> (Frequent urination)	<i>Jivha- Saam</i> (Coated)
<i>Shabda – Spashta</i> (clear)	<i>Sparsha – Prakruta</i>
<i>Druk – Prakruta</i>	<i>Aakruti – Madhyam</i>

Local examination

10- 12 circular (1cm in diameter), erythematous scaly eruption on right lateral side of abdomen.

Hetu (causative factors) – *Viruddhanna* (Incompatible food), excessive non-veg intake, *Divaswap* (Daytime sleep), Poor hygiene

Lakshanas (Clinical features) – *Kandu* (Itching), *Daha* (Burning sensation)

Locally – Redness, erythematous, elevated scaly eruptions

Vyadhi Vinishchaya (Diagnosis) – *Dadru*

Treatment given

Table 3: Treatment regimen.

Medicine	Dose	Route	Anupana
<i>Aarogyavardhini Vati</i>	500 mg BD , after meals	Oral	<i>Koshna Jala</i> (Luke warm water)
<i>Gandhak Rasayana</i>	250 mg TDS	Oral	<i>Koshna Jala</i> (Luke warm water)
<i>Laghu Manjishthadi Kwatha</i>	20ml BD, after meals	Oral	20 ml <i>Koshna Jala</i> (Luke warm water)
<i>Gandhak Malahar</i>	As per area of skin lesion	External application twice daily(morning & bed time)	--

Duration – 1 month

Follow up – After every 7 days

Pathya- Apathya (Dietary and lifestyle modifications) – Patient is advised to avoid non- vegetarian food, incompatible food, excessive oily-spicy – salty food.

Patient is advised to avoid sleeping at day time. Patient is suggested to maintain her personal hygiene by taking bath daily, wearing clean clothes. She should wash clothes after soaking in warm water and dry them in sunlight.

Grading criteria for assessment

Table 4: Grading criteria.

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

OBSERVATIONS AND RESULTS

Assessment of the patient for *Dadru* was done according to grading criteria in Table 4, during follow up after each 7 days.

Table 5: Observations.

Sr. No.	Clinical features	Before treatment 21/02/2018 (Fig. 1)	After treatment		
			1 st follow up 28/02/2018 (Fig. 2)	2 nd follow up 07/03/2018 (Fig. 3)	3 rd follow up 14/07/2018 (Fig. 4)
1)	<i>Kandu</i> (Itching)	3	1	1	0
2)	<i>Raga</i> (Erythema)	3	1	0	0
3)	<i>Daha</i> (Burning sensation)	3	3	2	0
4)	<i>Utsanna Mandala</i> (elevated patches)	2	0	0	0
5)	<i>Pidika</i> (Papules)	3	2	1	0
6)	<i>Rookshata</i> (Dryness)	2	2	1	1

**Fig. 1: Before treatment - 21/02/2018.****Fig. 2: 1st follow up - 28/02/2018.**



Fig. 3: 2nd follow up - 07/03/2018.



Fig. 4: 3rd follow up - 14/07/2018.

There was significant relief in sign and symptoms of *Dadru*. There was more than 80% relief after 2 weeks. Also patient's appetite was normal and bowel evacuation became normal and regular.

DISCUSSION

Dadru is *Kapha* – *Pitta* dominant disease. There is involvement of *Rasa* and *Rakta* in Pathogenesis. This study was aimed at finding a safe and effective treatment for chronic cases of *Dadru*. *Dadru* is manifested as discoloured, elevated lesions with severe *Kandu* and *Rookshata*. It is chronic in nature. Recurrence is possible and hence difficult to treat. It is commonly found in unhygienic and immune-compromised people. *Acharya Sushruta* describes the colour of *Dadru* lesions as like that of copper or *Atasi* flower.^[12] *Pidika* are in the form

of *Parimandala* (circular), *Utsanna* (Elevated), *Visarpanshil* (spreading in nature) and *Chirothhan* (slow progressing).^[12]

In present case treatment given was *Aarogyavardhini Vati*, *Gandhak Rasayana*, *Laghu Manjisthadi Kwatha* internally and local application of *Gandhak Malahar*. Highly significant relief was observed in *Kandu*. Also *Raga* and *Utsanna Mandala* was significantly reduced just in 7 days. This may be because of *Ushna virya*, *Kaphaghna*, *Kandughna*, *Kushthaghna*, *Raktaprasadana* properties of medicines. *Raga* is due to *Pitta Prakopa*. *Pidika* are produced due to *Kapha-Pitta* dominance. *Kandu* is sign of *Kapha*. *Tridosha*, *Rasa- Rakta Dushti* is responsible for *Mandala*.

Probable actions of medicines**1) Aarogyavardhini Vati^[13]**

It is extensively used in skin diseases. This mainly contains *Kutaki* with other herbo-mineral compounds like *Triphala*, *Chitrak*, *Guggul*, *Nimb*, *Parad*, *Gandhak*, *Lauha Bhasma*, *Abhrak Bhasma*, *Shilajit*, *Tamra Bhasma*, are responsible for *Lekhan*, *Bhedan* of Dosha and *Vatanuloman*. *Aarogyavardhini* is a *Kushthaghna* formulation. But it also posses actions like *Pachana*, *Deepana*, *Malashodhana*, *Kshudha Pravartan*. So it is responsible for *Agnideepan*, *Doshashaman*, *Kushthanashan* and *Shodhan* up to some extent.

2) Gandhak Rasayana^[14]

It 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*.

3) Laghu Manjishthadi Kwatha^[15]

Laghu Manjishthadi Kwatha contains *Manjishtha*, *Triphala*, *Kutaki*, *Vacha*, *Daruharidra*, *Nimba*, *Haritaki*. They have properties like *Agnideepan*, *Raktashodhana*, *Anulomana*, *Kapha- Pittashamana*, *Kushthaghna*, etc. It is stated that it can be used in all types of *Kushtha*. But it is specially indicated in *Dadru* and *Pama*. It reduces *Kandu*, *Raga* and *Mandala* by correcting vitiation of *Kapha-Pitta* and *Raktaprasadana*.

4) Gandhak Malahar^[16]

According to modern medical science *Dadru* or *Tinea corporis* is an infection caused by distinct class of fungi. It is superficial fungal infection which doesn't invade the living epidermis. Hence hygiene and local application of medicine has major role in management. *Gandhak Malahar* is used for external application in skin diseases. It contains *Gandhak* (purified sulphur), *Siktha* (sesame oil – bee wax base), *Girisindur*, *Tankan Bhasma* (borax), *Karpur* (camphor). It is *Kushthaghna* and *Kapha-Pittahar*. So *Gandhak Malahar* acts locally by inhibiting growth of fungus. It also reduces *Rookshata* at the lesion.

CONCLUSION

Dadru, one of the *Kushtha* is a common skin disease which clinically simulates with *Tinea*. As it is a contagious disease, maintaining personal hygiene is very important. The present case study concludes that Ayurvedic medicines like *Aarogyavardhini Vati*, *Gandhak Rasayana*, *Laghu Manjishthadi Kwatha* and *Gandhak Malahar* with some dietary and lifestyle changes is highly effective in management of *Dadru Kushtha*.

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