



## AYURVEDIC APPROACH TO THE MANAGEMENT OF DADRU KUSHTHA (TINEA CORPORIS) - A CLINICAL CASE STUDY

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### ABSTRACT :

#### Background

The science of "whole health & healing" is Ayurveda. The aim of Ayurveda is to treat illness-related issues and safeguard the health of healthy individuals. These days, skin conditions are really common. All skin conditions fall under the category of kushtha in Ayurveda, which is further divided into mahakushtha and kshudrakushtha. According to a contemporary viewpoint, Dadru falls within the most prevalent dermatological manifestation, "superficial fungal infections of the skin." Dermatophytes from one of the three genera—Trichophyton, Microsporum or Epidermophyton—are the most frequent cause of tinea corporis. According to Charaka Samhita and Sushruta Samhita respectively, Dadru is regarded as belonging to both Kushtha groupings (Kshudra and Maha). Even though both Kushthas are curable, they should only be treated for a moderate amount of time because relapses are prevalent. Long term results are achieved by using Ayurveda's treatment for the problem.

#### Case

A 50 years old male patient approached to Dravyaguna OPD (NIA, Jaipur) in November 2024 with complaints of reddish lesions with raised borders and itching on 'nape of the neck' for two weeks having disturbed sleep. After examination he was advised for Shamana chikitsa (palliative care).

#### Results

The Gradation Score was 12 before treatment, after 30 days it was 0. The patient in this case study experienced relief in the symptoms.

#### Conclusions

The patient obtained better results by Shamana chikitsa.

Keywords - *Dadru kushta*, Tinea corporis, *Shamana*, *kushta*, skin disorders.

## INTRODUCTION

Ayurveda is science of "whole health & healing." Ayurveda's goal is to protect healthy people's health and treat disease-related problems. Skin diseases are now fairly prevalent. Though skin diseases are common at any age of the individual but they are particularly frequent in the elderly. Normal 10-15% of the General Practitioners work is with skin disorder (Roxburgh's Common Skin disease).

All skin conditions fall under the category of kushtha in Ayurveda, which is further divided into mahakushtha and kshudrakushtha. According to Charaka Samhita and Sushruta Samhita, respectively, Dadru is regarded as belonging to both Kushtha groupings (Kshudra and Maha). Even though both Kushthas are curable, they should only be treated for a moderate amount of time because relapses are prevalent. According to Ayurveda, every kind of Kushtha is a manifestation of Tridoshaja. None the less, the prevalence of Dosha in the samprapti can be used to prove their Doshik identity.

*Dadru* is one of the *kshudrakushtha*<sup>i</sup> according to *charak* & *mahakushtha*<sup>ii</sup> according to *Sushruta*. Intense itching over and encircling patches, burning feeling (*daha*), eruption (*pidika*), redness around lesion (*raga*) and circular patches with elevated margin (*mandala*) are all signs of *pitta kapha* predominance. According to a modern viewpoint, *Dadru* belongs within the most prevalent dermatological manifestation, "superficial fungal infections of the skin." "Ringworm", another name for tinea corporis, is a superficial dermatophyte infection of the skin, other than on the hands (*tinea manuum*), feet (*tinea pedis*), scalp (*tinea capitis*), bearded areas (*tinea barbae*), face (*tinea faciei*), groin (*tinea cruris*) and nails (*onychomycosis* or *tinea unguium*).<sup>iii</sup> Dermatophytes from one of the three genera—Trichophyton, which causes infections on the skin, hair, and nails; Microsporum, which causes infections on the skin and hair; and Epidermophyton, which causes infections on the skin and nails—are most frequently responsible for tinea corporis.

Similar to *Dadru kushtha*, Ringworm (*Tinea corporis*) on the body typically manifests as a somewhat itchy, asymmetrical, scaly, elevated edge. Usually round, the lesions have an active border made up of scaling and vesicles. Depending on the body part affected, dermatophytosis has been referred to by a variety of clinical terminology, such as *tinea corporis*, *tinea cruris*, *tinea unguium*, etc. Any portion of the body, including the face, hands, and feet, may be impacted, although the groin, lower trunk, buttocks, and underarms are frequently afflicted. Itching, burning, scaling, redness and a slow spread to nearby and distant body parts are all signs of a fungal infection.<sup>iv</sup> In modern medical practice, corticosteroids and topical and systemic antifungal drugs are used to treat it. *Ayurvedic* treatments for *Dadru* include *Shodhan*, *Shaman* and *Bahirparimarjan* (topical) *Chikitsa*.<sup>v</sup>

### Prevalence

20-25 % of people worldwide have a superficial fungal skin infection.<sup>vi</sup> The most prevalent agents are dermatophytes. Infections with *tinea corporis* and *tinea cruris* are highly prevalent in the general population. *Tinea corporis* is a somewhat common condition that occurs worldwide, although it is more common in tropical and subtropical regions. Up to 88% of cases in India are caused by *tinea corporis*. Direct or indirect contact with an infected person's or animal's skin and scalp lesions can result in infection.<sup>vii</sup> Fungal infections are observed to impact 1–12 people out of every 1,000 in India.<sup>viii</sup>

### Case report

A 50-years man came with complaints of reddish lesions with raised borders and itching on nape of the neck for two weeks and having disturbed sleep because of itching. The patient was symptomless before two weeks. The patient sought *Ayurvedic* treatment at *Dravyaguna* OPD, NIA, Jaipur. He was recommended to get palliative treatment, or *Shamana chikitsa*, following an examination. The patient has no noteworthy prior medical history. Vital signs such as blood pressure, temperature, heart rate and respiration rate were all within normal ranges during the assessment.

### History of present illness

Before two weeks, the patient was OK, but then he acquired round and reddish spots on nape of the neck, accompanied by acute itching. He came to NIA Hospital for care. Hypertension, bronchial asthma, hypothyroidism, or diabetes mellitus/insipidus were not present. Additionally, there was no relevant family history. *Ashtavidh pariksha* was within normal ranges, with the exception of the patient's constipation. Upon local inspection, the patient, who had a *Madhyam Akruti*/medium body build, had several circular, erythematous, well-defined spots on the nape of the neck with vesicular eruption. The lesions don't discharge at all. The vital signs were within normal limits. Clinical features were used to identify *Dadru* (*Tinea corporis*).

### Personal history

*Ahar* (diet) is mostly mixed (veg-non veg), *nidra* (sleep) is disturbed due to itching, patient has no bad habits, occupation of the patient is shopkeeper.

### Ashtavidha Pariksha

1. *Nadi*/pulse – 77/min
  2. *Mala*/ bowel movement – *Saam*/bowel with undigested toxins
  3. *Mutra*/micturition – *Samyak*/appropriate
  4. *Jivha*/tongue – *Saam*/coated
  5. *Shabda*/speech – *Spashta*/clear
  6. *Sparsha*/temperature on touch – *Khara*/rough
  7. *Druka*/eyes – *Prakruta*/normal with no pallor or icterus
  8. *Akruti*/body build – *Madhyam*/average
- Agni* (digestive fire) = *Agnimandya*/poor  
*Bala*/strength = *Madhyam*/average  
*Raktadaaba* (Blood pressure) = 120/90 mm Hg.

### Skin examination

#### 1. Inspection

- Size shape – Annular lesions
- Color – Reddish lesions
- Lesions – Scaly patches

#### 2. Palpation

- Moisture – Dryness
- Temperature – Warmth of the skin
- Texture – Rough

### Laboratory investigation

Blood routine – Normal

*Samprapti Ghataka*<sup>ix</sup>

- *Dosha*/bodily humors – *Tridosha*/dominance of three bodily humors

- *Dushya*/elements affected by bodily humors – *twaka, rakta, mamsa, lasika*
- *Ama* (undigested food particle) – *Jatharagnijanya Ama*/Undigested toxins linked to digestive fire
- *Agni* (digestive fire) – *Jatharagni*
- *Srotas* (inner transport system of the body) – *Rasavaha, Raktavaha*
- *Srotodushti prakara*/type of imbalance in inner transport system – *Sanga*/obstruction
- *Rogmarga* (path of disease) – *Bahya*/external
- *Udhabhavasthana* (site of location) – *Amashaya*/stomach
- *Vyaktasthana* – *twacha*/skin
- *Rogaswabhava* – *chirakari*/long-term
- *Sadhyasadhyaata* – *Sadhya*/curable

### Samprapti (Pathogenesis)

↓  
*Nidan* (causative factor) *sevana* like *Aharaja-Viharaja-Manasika* (irregular food habits, non veg diet, consumption of alcohol), *Ativyayam* (excessive exercise), *Atichinta* (excess worry), *Ratrijagarana* (awakening at night) etc.

↓  
*Tridosha Prakopa* (Vitiation of all three elements)

↓  
*Twaka, Rakta, Mamsa, Lasika (Dushya)*

↓  
*Sthanasamshraya* in *Twacha* (localized in skin)

↓  
*Rukshapidika*/dry lesion with *kandu*/itching

↓  
*Dadru kushtha*/Tinea corporis

### Timeline

*Dadru Kushtha* was assessed during the initial visit and weekly intermittent monitoring was conducted. The patient was contacted for a follow-up after 15 days. The trial lasted for one month in total.

## MATERIALS & METHODS

The patient complained of reddish patches when he arrived at the NIA Dravyaguna OPD. Before beginning conservative treatment, the patient gave written informed consent, and all of his personal information was kept private.

### Therapeutic intervention

*Shamana chikitsa* (Pacifying treatment) for 15 days comprising *Kaishore guggulu*<sup>x</sup>, *Khadirarishta*<sup>xi</sup> and *Sarivadyasava*<sup>xii</sup> which is to be given orally and *Kasmarda moola churna lepa*<sup>xiii</sup> with lukewarm water for local application (Table 1). After 15 days patient was called for follow up. All medicines were continued for next 15 days.

**Table 1.** Showing Therapeutic intervention

S.no.	Drug	Dose	Root of administration
1.	<i>Kaishore guggulu</i>	500 mg, twice a day, with lukewarm water before meal	Orally
2.	<i>Khadirarishta</i>	20 ml, with equal quantity of lukewarm water, twice a day after meal	Orally
3.	<i>Sarivadyasava</i>	20 ml, with equal quantity of lukewarm water, twice a day after meal	Orally
4.	<i>Kasmarda moola churna lepa</i>	Twice a day, As per affected area	External application

**Pathya-Apathya****Table 2.** Showing *pathya-apatya*

Pathya	Apathya
Ahara	Ahara
Laghu, Ruksha, Tikta Rasa Pradhana Moong Masoor Dal Wheat and Yava, Purana Ghritha, Gomutra, Dadima, Nimba, Patola, Karela Shak etc.	Tila, Virudhahara (Milk and Matsaya), Navanna, Pishtanna, Vidahi, Abhishyandi, Madya, Mulanki, Dadhi Urada, Gudda etc.
Vihara	Vihara
Laghu Vyayam, Snana (Sidharthaka Snana) etc.	Divaswapna, Vega Dharna, Ati Vyayam, Ati Sweda etc.

**Precautions advised to be taken :**

- ✓ Don't share sheets, towels, sports gear or clothes.
- ✓ Wash garments in hot water after possible ringworm exposure.
- ✓ Avoid contacting pets that have bald areas because they are frequently carriers of the fungus.
- ✓ To assist clean your environment, wash your clothes and bedding every day while you're infected.
- ✓ Wear loose clothing in the afflicted places to prevent excessive perspiration.
- ✓ Stay out of humid environments.
- ✓ Treat any diseased locations to prevent the infection from spreading to other body parts.

**Assessment criteria**

Improvements in subjective criteria including *Kandu* (itchiness), *Raga* (erythema), *Utsanna mandala* (elevated circular skin, lesion) and *Pidika* (eruption) as well as pictures of the lesion before and after treatment were used to evaluate the patient. As a result, all indicators completely improved after treatment. The pictures below, which were taken both before and after therapy, show the same thing.

**OBSERVATIONS**

The patient's symptoms decreased after 15 days of treatment, while some persisted. *Shamana Chikitsa* was so carried on. Following *Shamana Chikitsa*, the patient was evaluated using the *Lakshana of Dadru* gradation, which includes *Utsanna Mandala*, *Raga*, *Pidikas*, and *Kandu*, as indicated in Table 3. After 30 days of treatment, the patient was grade 0, as indicated in Table 4. Additionally, the patient's symptoms improved (Figure 1).

**Table 3.** Showing gradations

S.no.	Clinical features	Grade 0	Grade 1	Grade 2	Grade 3
1.	<i>Utsanna mandala</i>	Absent	Mild elevated lesion	Moderate elevated lesion	Severe elevated lesion
2.	<i>Raga</i>	Normal skin colour	Faint Normal	Blanching + Red Colour	Red Colour
3.	<i>Pidikas</i>	Absent	1-3 eruptions	4-6 eruptions	>6 eruptions
4.	<i>Kandu</i>	Absent	Mild or occasional itching	Moderate or frequent itching	Severe itching

**Table 4.** Evaluation performed before, during and after therapy.

S.no.	Clinical features	Day 0	Day 15	Day 30
1.	<i>Utsanna mandala</i>	3	2	0
2.	<i>Raga</i>	3	1	0
3.	<i>Pidikas</i>	3	1	0
4.	<i>Kandu</i>	3	1	0



Fig. 1. Before and after treatment images of patient diagnosed with Dadru/Tinea corporis.

## RESULTS

The treatment of *Dadru kushtha* through *Ayurvedic* approach is incredible and results are significant. Changes in signs and symptoms during follow-up (after 15th day) are mentioned in Table 4.

## DISCUSSION

*Ayurveda* uses the term "*Kushtha*" to refer to a wide range of skin conditions, including *Tinea* and all other major skin symptoms. *Tinea corporis* symptoms are similar to those of "*Dadru Kushtha*," which is referenced in the *Ayurvedic Samhita*. One's personal quality of life is negatively impacted by this skin issue. *Ayurveda* offers a viable medication for *Tinea corporis*.

### Mode of action of *Kaishore guggulu*

The main focus of *Kaishore guggulu* is *Tikta Rasa*, which balances *Pitta Dosha*. *Tikta Rasa* is also *Deepan*, which enhances *Agni*, and *Pachana Karma* aids in *Ama Pachana*. Additionally, the *Kled Guna* of *Rakta*, *Kapha*, and *Ama* is diminished by *Tikta* and *Kashaya Rasa*. It possesses qualities like *Lekhan* and *Shoshan* that aid in removing obstacles brought on by *Ama Dosha*. *Laghu* and *Ruksha* in *Guna* are the main constituents of *Kaishore guggulu*; they aid in the removal of *Srotas avrodha*, which intensifies the effects of medications. *Mala* and *Ama* absorption is aided by *Ruksha Guna*. Since *Kaishore guggulu's* *pradhan Virya* is *Ushna*, it possesses *vata-kaphahar* quality and takes on the roles of *Deepana* and *Pachana*. In order to bring *Shakagata Dosha* closer to *Koshtha*, it also aids in the *Vilayan* of *Doshas*.

It is *Vata-pittashamak* because *Madhura Vipaka* makes up the majority of its substance. *Purish Virechan* and *Mutra Virechan Karma* are also present in *Madhura Vipaka*. It aids in *Utrotra Dhatu Pushti* as well. Formulations of *Madhura Vipaka* aid in rejuvenation and function similarly to *Rasayana*.

In addition to *Rasayana Karma*, *Kaishore guggulu* generally possesses *Tridosh Shamak* and *Rakta Shodhak* qualities.

### Mode of action of *Khadirarishta*

In addition to being the greatest medication for easing *Kushtha*, *Khadira* is stated under *Kushthaghna Gana*. Along with *Pitta*, the majority of the constituents in *Khadirarishta* are *Tikta*, *Katu* (pungent) *rasa* and *Katu vipak*, which calm the *Kapha*. It possesses antioxidant qualities. Studies have also shown that it has antifungal properties against dermatophytosis.

### Mode of action of *Sarivadyasava*

*Sariva*, *Nagarmotha*, *Lodhra*, *Shati*, *Ananta*, *Pippali*, and others are included. Due to *Ashrayashrayee bhava* (the relationship between the body's regulatory function and tissue element), vitiated *Pitta-Kapha Dosha* in *Dadru kushtha* also vitiates the *Rakta Dhatu*. *Tikta* (bitter), *Kashaya* (astringent), *Rasa*, *Shita virya* (cold potency) and *Katu vipaka* make up the majority of *Sarivadyasava's* constituents. These substances soothe the vitiated *Pitta*, which in turn pacifies the vitiated *Rakta*. By soothing *Pitta*, it has qualities like *Sheeta virya* (cold potency), *Dipanam* (digestion and metabolism) and *Pachanam* (improving digestion) that lower *Daha* and *Raga*. The *Raktashodhaka* (blood cleanser) properties of *Sariva*, *Lodhra*, and other plants also calm vitiated blood.

### Mode of action of *Kasmarda moola churna lepa*

Along with *Raktashodhaka* (blood cleansing) and *Vranaropaka* (wound healing) qualities, *Kasmarda* (*Cassia occidentalis* L.) contains antifungal and antibacterial qualities. The finest palliative method for treating such problems is *Bahiparimarjana Chikitsa* because of its direct contact and quick response.

*Acharya Charak* defines *Dadru* as *Pitta-Kapha* dominance, while *Acharya Sushruta* defines it as *Vagbhata* and *Kaphapradhan*. The *samprapti* involves both *Rasa* and *Rakta*. According to *Samhita*, *Kushtha* is marked by recurring *Shamana* and *Shodhana* medicines that have *Kandughna*, *Krumighna*, and *Kushthaghna* properties. *Lasika* and *Tvak* are *dushyas* in *Dadru*, but *Pitta* and *Kapha* are the most vitiated *Doshas* with *Rasa* and *Rakta Dhatu*.<sup>xiv</sup> The first phase of *Dadru* management is considered to be "*Nidana Parivarjana*." Depending on *Nidana's* engagement, body disarray, sharing of clothing (towels), and other such behaviours should be avoided.<sup>xv</sup> Because itching and other symptoms last all day, *Dadru*, in both its acute and chronic forms, creates physical and mental anguish in people. Using both internal and exterior medicine, *Ayurvedic* medicine offers long-lasting treatments. Patients with *Dadru* may benefit from the safe and effective treatment provided by the attributes of *Kushthaghna*, *Kandughna*, and *Krimighna*.<sup>xvi</sup> One of the

most contagious *Kaphapitta Pradhana Tridoshaja Aupasargika Rogas* is *Dadru Kushtha*. Despite being treated, *Dadru* is obstinate. Treatment should begin as soon as possible because remission and relapses are prevalent if the course of treatment is not carefully managed. In order to achieve *Dhatu Samya*, *Ayurvedic* treatment emphasises avoiding etiological factors (*Nidana Parivarjanam*) and dismantling pathology (*Samprapti Vighatana*).<sup>xvii</sup>

## CONCLUSION

The signs and symptoms of *Dadru Kushtha* are linked to *tinea corporis*. Depending on the severity of *Roga*, *Chikitsa* is scheduled in *Kushtharoga*. The usage of *Ayurvedic Chikitsa upakramas*, such as *Shamana* (formulations including *Kaishore guggulu*, *Khadirarishta*, and *Sarivadyasava*) and *Bahiparimarjana chikitsa* (*lepa* of *Kasmarda moola churna*), is useful in treating *Dadru Kushtha*, according to this case study. Long-term use of the chosen treatment approach has yielded notable results and is both safe and economical. This opens the door to further research in this area and implies that *Ayurvedic* treatment is helpful in controlling delayed hypersensitivity infection.

## Consent

Written informed consent for publication of their clinical details and/or clinical images was obtained from the patient.

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