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"AYURVEDIC MANAGEMENT OF DADRU KUSHTA W.S.R TINEA CORPORIS": A CASE SERIES

Dr. Bokhare Nilesh Rajendra[*1], Dr. Fareeda Begum Shaikh[2], Dr. Janaki Y. S.[3]

[*1]Final year PG scholar, Department of PG Studies in Kayachikitsa, TGAMC, Ballari.

[2]Professor, Department of PG Studies in Kayachikitsa, GAMC, Mysuru.

[3]Professor and HOD, Department of PG Studies in Kayachikitsa, TGAMC, Ballari.

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***Corresponding Author**

Dr. Bokhare Nilesh Rajendra

Final year PG scholar, Department of PG Studies in Kayachikitsa, TGAMC, Ballari.

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ABSTRACT

Background: *Kushta* is described by Acharya Charaka among the *Ashtomahagada* and encompasses a broad spectrum of dermatological disorders. *Dadru*, a subtype of *Kshudra Kushta* characterized predominantly by *Kandu* (itching), *Raga* (erythema), *Piḍaka* (papules) and *Mandala* (annular lesions). Its clinical presentation shows considerable correlation with tinea corporis, a superficial dermatophytic infection characterized by annular, erythematous, scaly and pruritic lesions. *Dadru Kushta* is predominantly *Kapha Pitta Doṣa* in presentation, with involvement of Rasa, *Rakta, Kleda, Ama* as important *Duṣhya*. **Objective:** To evaluate the efficacy of *Virechanottara Edgajadi lepa along with Shamana aushadhi* in managing *Dadru kushta* (Tinea corporis). **Methodology:** Prospective, open-label, uncontrolled, incidental case series study. 5 subjects diagnosed with *Dadru kushta* (Tinea corporis) were treated with *Deepana pachana* with *Trikatu churna, Virechana* with *Trivruttdai yoga, shamana Aushadhi* includes *Edagajadi lepa, Vidangadi yoga and Allum soup* **Result:** The intervention demonstrated significant improvement in all assessed subjective parameters (*Kandu, Raga, Pidaka* and *Mandala*). **Conclusion:** The combination of *Vidangadi yoga* and *Edagajadi Lepa* demonstrated significant therapeutic efficacy in the management of *Dadru kushta* (Tinea Corporis).

KEYWORDS: *Dadru kushta*, Tinea Corporis, *Virechana, Vidangadi yoga, Edagajadi lepa, Sphatika.*

INTRODUCTION

The skin is the largest organ of the human body and acts as a protective interface between the body and its external environment. The incidence of skin disorders is increasing in tropical and developing countries like India, owing to factors such as poor hygiene, inadequate sanitation, pollution, and socioeconomic conditions.[1]

Tinea corporis may be caused by Epidermophyton Floccosum, Microsporum or Trichophyton species. It may be spread onto glabrous skin from the scalp or in the case of T. rubrum, from the feet and groin. Tinea corporis is also contracted from animals including cattle, horses, puppies, kittens and small rodents kept as pets. T. imbricata, an anthropophilic dermatophyte found in southeast Asia and parts of the Southern Americas, produces a rather distinctive concentric pattern.[2]

The fungus tends to grow outwards. Therefore, the margin is most active. It is well-defined slightly raised, red and scaly, itchy ring shaped rash and if the source is an animal, may be quite inflamed and even pustular. Centrally, there is a tendency to healing and postinflammatory hyperpigmentation. The patches may be single or multiple are scattered asymmetrically and may occur anywhere on the body but particularly on the trunk and limb.[3]

In Ayurvedic science, skin diseases are classified under broad heading of Kushta. 18 types of Kushta have been mentioned in classics which are classified into Mahakushta and Kshudrakushta[4]. All kushta have tridosha dushti and rasa, rakta, mamsa lasika as a dushya. Dadru is a kaphapitta dosha predominant kushta[5] and have Rasa, Rakta dhatu dushti with involvement of ama and kleda. It is characterised by Kandu (severe itching), Raaga (erythema), (burning sensation) and Pidaka (discoid lesions), with Utssana mandal (elevated borders).[6]

In Ayurveda, *Kushta* is described as a *Rakta Pradoshaja Vikara*[7] and *Virechana* followed by *Shamana Aushadhi* and *Lepa* containing *Kushtahara Dravyas* According to involvement of dosha-dushya is an established therapeutic approach.

Because of poor hygienic condition, improper medication over the counter like antifungal, steroidal creams fungal infection become resistant and become incognito with high recurrency which is difficult to treat. Through Ayurvedic line of treatment dosha-dushya samurchana break result on complete remission of disease

AIM

To explore the Ayurvedic interpretation of *Dadru kushta* and thereby adopt the Ayurvedic way of healing in the management of Tinea Corporis.

OBJECTIVES OF THE STUDY

To evaluate the efficacy *of Virechanottara Vidangadi yoga, Edagajadi lepa and pana* in the management of *Dadru kushta* (Tinea Corporis).

MATERIALS AND METHODS

Source of drug: Khalvaichya Ayurvedalaya Ballari and Kajarekar Pharmacy Belgavi.

Sample size - Total number of subjects – 5.

1) INCLUSION CRITERIA

- Patients fulfilling the criteria of diagnosis of *Dadru kushta* (tinea Corporis) with no restrictions of gender and religion
- Patients between the age group of 18-70 years.
- Patients who are fit for *virechana*.
- Patient who sign the informed consent form.

2) EXCLUSION CRITERIA

- Lactating and pregnant women**.**
- Subject suffering from chronic systemic diseases.

3) DIAGNOSTIC CRITERIA

Patients present with classical signs and symptoms of Dadru kushta (Tinea corporis).

Case details

Case report 1: A 46-year-old married female patient presented to the Kayachikitsa OPD of Taranath Government Ayurveda Medical College and Hospital Ballari, with complaints of large, reddish-pink lesions over the buttocks and thigh along with a circular, ring-shaped lesion on the left thigh. The lesions were associated with severe itching and a burning

sensation, particularly after scratching, which disturbed her sleep at night. The lesions had elevated margins with *pidaka* (papules) at the periphery and had been present for the past six months.

Case report 2: A 24-year-old unmarried female patient presented to the Kayachikitsa OPD of Taranath Government Ayurveda Medical College and Hospital Ballari, with complaints of large, reddish-pink lesion over the buttocks and thighs, associated with severe itching and a burning sensation, particularly after scratching. These symptoms disturbed her sleep at night. The lesions were characterized by elevated margins and *pidaka* (papules) at the periphery and had been present for the past three months.

Case report 3: A 35-year-old unmarried male patient presented to the Kayachikitsa OPD of Taranath Government Ayurveda Medical College and Hospital Ballari, with complaints of large, reddish-brown, mildly scaly lesions over the groin, thighs, lower abdomen and buttocks. Pinkish-red lesions were also observed on the dorsal surface of the hand. The lesions were elevated with irregular margins and associated papules. The patient reported severe itching and a burning sensation, particularly after scratching, which disturbed his sleep at night and had been present for the past one year.

Case report 4: A 22-year-old unmarried male patient presented to the Kayachikitsa OPD of Taranath Government Ayurveda Medical College and Hospital Ballari, with complaints of large, blackish-brown lesion over the groin, thighs, lower abdomen and buttocks. The lesions were mildly elevated, with irregular margins and associated papules. The patient reported severe itching that disturbed his sleep at night. The lesions had been present for the past two years.

Case report 5: A 30-year-old unmarried male patient presented to the Kayachikitsa OPD of Taranath Government Ayurveda Medical College and Hospital Ballari, with complaints of a reddish-brown, mildly scaly lesion over the lower abdomen. The lesion was elevated with irregular margins and associated papules. The patient reported moderate itching and the lesion had been present for the past four months.

INTERVENTION

Table no.1 showing intervention.

TREATMENT	MEDICINE	DOSAGE	DURATION
DEEPANA PACHANA	Trikatu churna.[8]	1 gm with ushnodaka BD before food	For 5 days 1st day to 5thday
SNEHAPANA	Pannchatiktaka.[9] ghrita	30ml (test dose)6th day then in Arohan krama for next 5days with sukhoshna jala anupana till samyaka Sneha siddhi lakshana.	For 6 days 6th day to 11th day
ABHYANGA & SWEDANA	Sarvanga abhyanga with Murchita tila taila for 30 minutes followed by Mrudu Bashpa Sweda for 15 minutes		For 3 days 12th day to 14th day
VIRECHANA KARMA	Trivruttadi churna.[10] with thriphala Kashaya at morning (7 am) on empty stomach	Trivrutta 3 gm + Danti moola churna 3 gm with 100ml thriphala Kashaya	15th day
Shamana Aushadhi	Vidangadi yoga: (Vidanga.[11] + Bakuchi.[12]+ Chakramarda beeja.[13]+ Guduchi.[14] + Amalaki.[15] each drug 50 gm + Yashada Bhasma.[16] 10 gm) for 45 days dose.	3 gm BD with ushnodaka after food.	For 45 days 16th day to 60th day
LEPA	Edagajadi lepa.[17]: Chakramarda beeja Haridra Daruharidra Aragwadhamoola Pippali Kushta Vidanga	Once a day Thickness as Pradeha.[18] Application at Morning Duration- removed from the place of application before dry up.	For 45 days 16th day to 60th day
PANA	Edagajadi Phanta.[17]	500 ml over a day	For 45 days 16th day to 60th day
SOAP	Alum soap (Sphatika)	Applied after bath over affected area	For 45 days

ASSESMENT CRITERIA

Subjective parameters

Subjective parameters were graded and score was given Accordingly.

- Kandu (itching)
- Pidaka (eruption
- Raaga (erythema)
- Daha (burning sensation)
- Udgata mandala (elevated circular lesion)

Objective Parameter

- Size of mandala
- Number of lesions

Table No 2: Showing Grading for Subjective Parameters and Objective parameter.

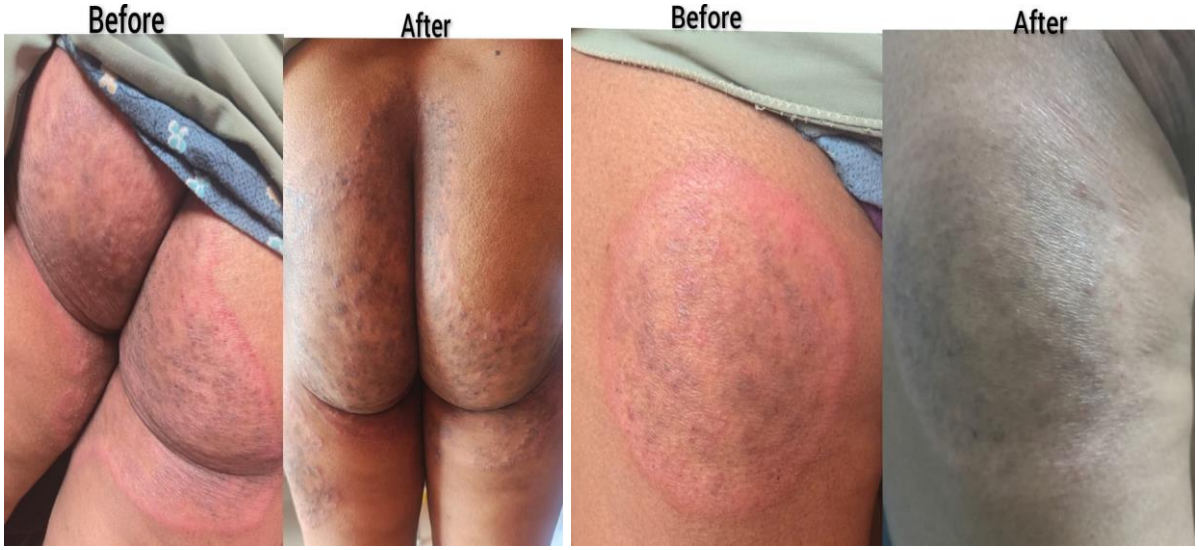
SL. NO	SYMPTOM	PARAMETERS	GRADE
1.	Kandu (itching)	No itching	0
		Mild itching not affecting daily activity	1
		Moderate itching affecting daily activity but do not disturb sleep	2
		Severe itching/ very severe itching disturbing sleep and other activities	3
2.	Pidaka (eruption)	No eruption/pidaka	0
		Pidaka disappears but discoloration persist	1
		Pidaka < 3 sq.cm in whole affected area	2
		Pidaka > 3 sq.cm in whole affected area	3
3.	Raaga (erythema)	Normal skin colour	0
		Faint red or near to normal skin colour	1
		Red colour/ Brown	2
		Brownish, pink - Red colour/ brownish black	3
4.	Daha (burning sensation)	Absent	0
		Mild burning sensation after itching	1
		Moderate burning sensation (No disturbance in sleep)	2
		Severe burning sensation (disrupts sleep)	3
5	Utsanna mandala (elevated margins)	No elevation	0
		Slight elevation that cannot felt	1
		Elevation can be felt	2
		Elevation in all lesions but soft	3
6	Mandala (size of lesion)	0 cm	0
		Less than 5 cm	1
		5-10 cm	2
		Size > 10 cm	3
7	Number of lesions	Nil	0
		1 to 3	1
		4 to 6	2
		>6	3

RESULTS

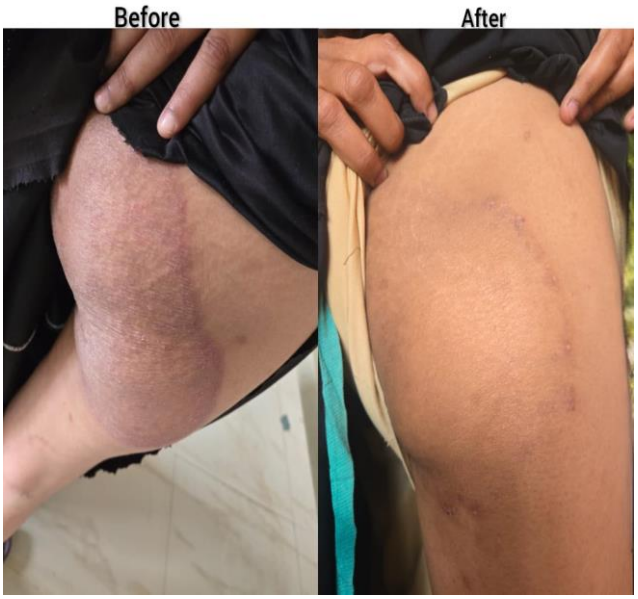
Table no.3 showing result of intervention on subjective and objective parameter.

Subjective and Objective Parameter	Case report 1		Case report 2		Case report 3		Case report 4		Case report 5	
	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT
KANDU	3	0	3	0	3	1	3	0	2	0
PIDAKA	3	1	3	0	3	1	3	1	3	1
RAAGA	3	0	3	0	3	0	3	0	2	1
DAHA	3	0	3	0	2	0	2	0	1	0
UTSANNA MANDALA	2	0	2	0	3	0	2	0	2	0
SIZE OF LESION	3	0	3	0	3	0	3	0	3	1
NO. OF LESIONS	1	0	1	0	3	1	1	0	1	1

CASE REPORT 1



CASE REPORT 2



CASE REPORT 3







CASE REPORT 4





CASE REPORT 5



DISCUSSION

The prevalence of fungal skin infections has been rising steadily while the emergence of antifungal resistance and the increasing occurrence of chronic, recurrent, treatment-resistant and widespread dermatophytosis have become significant challenges in clinical practice.

Acharya Charaka classified *Dadru* (dermatophytosis) as a disorder predominantly involving *Pitta* and *Kapha Doshas*, whereas *Acharya Sushruta* attributed its pathogenesis primarily to *Pitta Dosha*. The manifestations of *Dadru*, including *Kandu* (pruritus) and *Utsanna Mandala* (elevated circular lesions), are indicative of *Kapha Dosha* involvement, while *Raga*

(erythema) and Daha (burning sensation) are associated with *Pitta Dosha* vitiation. Thus, the clinical presentation of *Dadru* varies according to the predominance and interaction of the implicated Doshas. Accordingly, therapeutic interventions possessing *Pitta-Kaphahara* properties are considered appropriate for managing this condition.

Excessive intake of foods characterized by *Madhura Rasa* (sweet taste), *Snigdha Guna* (unctuous quality) and *Ushna Virya* (hot potency) may contribute to the vitiation of *Kapha* and *Pitta Doshas*, resulting in increased *Kleda* (moisture) accumulation within the body. The combined influence of *Snigdha* and *Ushna* properties may also affect *Rakta Dhatu* (blood tissue), potentially contributing to the manifestation of various skin disorders. An increased accumulation of *Kleda*, along with excessive perspiration, may create favourable conditions for the growth of dermatophytes and thereby contribute to the development of dermatophytosis.

Acharya Sushruta described *Krimi* as one of the etiological factors associated with *Kushta*. Tinea infections are caused by dermatophytes belonging to the genera *Epidermophyton*, *Microsporum*, and *Trichophyton*, which can invade keratinized tissues when the skin barrier is compromised. From an Ayurvedic perspective, impaired *Ojas* may be considered a contributing factor to *Krimi Utpatti* (the development or proliferation of pathogenic organisms).

The Ayurvedic management of skin disorders adopts a multidimensional approach encompassing Samana (palliative therapy), Krimighna (antimicrobial therapy), Shodhana (purificatory therapy), and Rasayana (rejuvenative therapy). The treatment modalities include both internal medications and external applications, such as Lepa (topical formulations) and medicated oils, to facilitate effective disease management. The systematic implementation of an appropriate Ayurvedic treatment protocol may offer potential benefits in the management of dermatophytosis, particularly in chronic, recurrent, and treatment-resistant cases

Mode of Action

TRIKATU CHURNA

Trikatu Churna possesses predominantly Katu Rasa (pungent taste), Laghu and Ruksha Guna (light and dry qualities), Ushna Virya (hot potency), and Katu Vipaka. These properties contribute to its Deepana (stimulation of Agni), Pachana (digestion of Ama), and Kaphahara actions. Its Ushna Virya and Ruksha Guna may help regulate Kapha Dosha and excessive

Kleda (moisture), while its Deepana-Pachana effects support the correction of impaired Agni and the reduction of Ama. Trikatu Churna, through its Deepana, Pachana, Kledahara, and Amahara actions, improves Jatharagni and prepares the body for Snehapana.

VIRECHANA

In *Kushta Samprapti*, aggravated *Doshas* undergo *Vimargagamana* from *Koshtha* to *Shakha* and become lodged in *Rasa*, *Rakta*, *Mamsa*, *Laseeka* and *Swedavaha Srotas*, where they attain *Leenatva* and produce *Srotorodha*. Hence, repeated *Shodhana* is advocated in *Sushruta Samhita* to eliminate the *Leena Dosha* and restore *Srotas* integrity.

Virechana primarily eliminates aggravated *Pitta* through *Adhobhaga* and facilitates *Vatanulomana*. Due to the *Ashraya–Ashrayi Bhava* between *Pitta and Rakta*, it also contributes to the correction of *Raktadushti*. By addressing *Dosha Sanga*, *Ama and Kleda*, *Virechana* helps interrupt the *Dosha-Dushya* interaction and supports restoration of *Agni* and *Srotas*.

Snehapana: an essential *Poorvakarma* before *Virechana* performed with ***Panchatiktaka ghrita***.

Snehapana is an important *Purvakarma* of *Shodhana Chikitsa* that facilitates *Dosha Utkleshana* and mobilizes vitiated *Doshas* from the *Shakha* towards the *Koshtha*. It imparts *Snigdhata* to the body and prepares the *Doshas* for elimination through *Vamana* or *Virechana*.

Panchatikta Ghrita, comprising Patola (*Trichosanthes dioica*), Saptaparna (*Alstonia scholaris*), Nimba (*Azadirachta indica*), Vasa (*Adhatoda vasica*), and Guduchi (*Tinospora cordifolia*), is a classical Ayurvedic formulation employed in the management of Kushta. The predominance of Tikta Rasa in its constituent drugs is traditionally associated with Pitta-Kapha Shamaka and Rakta Prasadana properties, rendering the formulation relevant to the management of Dosha involvement in Dadru Kushta. The Ruksha, Laghu, and Vishada Gunas of the Tikta Rasa-dominant drugs are considered beneficial in conditions characterized by Kapha predominance and excessive Kleda. Conversely, the Snigdha and Mridu properties of Ghrita facilitate internal oleation, imparting Snigdhata to the Dhatus and promoting Dosha Utkleshana. During Snehapana, Ghrita facilitates the mobilization of vitiated Doshas from the Shakha towards the Koshtha, thereby preparing them for elimination through the subsequent Shodhana procedure. In Dadru Kushta, where manifestations such as Kandu, Raga, and

Utsanna Mandala reflect the involvement of Kapha and Pitta, Panchatikta Ghrita may be selected for Snehapana based on the patient's Dosha predominance and clinical presentation.

Abhyanga and swedana: after snepana siddhi lakshana observed, sarvanga abhyanga with Murchit tila taila and bashpa sweda was advised for 3 days. Its *Sukshma, Ushna, Sara, Vyavayi, Drava, and Snigdha Gunas* facilitate deep penetration into the *Srotas* and mobilization of *Leena Doshas*.

Trivruttadi yoga: *Trivruttadi yoga* contains *Trivrutta* and *Danti* as a main dravya and *Triphala kashaya* as *Anupana*. this *yoga* is used for the purpose of *virechana*. in ayurvedic classic this yoga is mentioned specifically for kushta.

Trivrutta is *Kaphapittahara, Sukhavirechaka, Kushta-shophavinashani* and *Danti* is *Tikshna, Kaphavatahara, Bhedani, Rechana, Meho-udaropam*. in combination of both *dravya* acts *tridoshahara, kledahara* removes *utkleshita dosha* through *Adhoamarga*. *Triphala kashaya* acts as a *virechanopaga*.

VIDANGADI YOGA

This is *Anubhuta yoga* comprising the combination of *Vidanga, Bakuchi, Chakramarda, Amalaki, Guduchi* and *Yashada Bhasma.*

Vidanga has *Katu Rasa* with *Laghu, Ruksha* and *Tikshna Guna* which helps to pacify *Kapha*. It is characterized by *Krimighna, Kandughna, Kushthaghna, Vishaghna, Varnya,* and *Rasayana* properties. Its major bioactive constituent embelin exhibits anti-inflammatory, antioxidant and antimicrobial activities thereby supporting skin health, reducing irritation and the risk of secondary microbial infection.

Bakuchi have *Katu* and *Tikta Rasa* with *Ushna, Laghu,* and *Ruksha Guna*, which helps to pacify *Kapha Dosha*. It is described as *Twachya, Kushthaghna, Shothahara, Krimighna,* and *Rasayana*. bioactive compounds such as psoralen, isopsoralene and bakuchiol which have demonstrated potential antimicrobial activity in experimental studies. Psoralen primarily exhibits photosensitizing activity upon UVA exposure, while bakuchiol has shown antimicrobial and anti-inflammatory effects.

Chakramarda (*Senna tora*, syn. *Cassia tora*) is traditionally indicated in *Ayurveda* for the management of *Dadru Kushta* and other skin disorders. It possesses *Katu Rasa, Ushna Virya*

and *Kapha-Vata Shamaka, Kushtaghna* action. Its bioactive constituents particularly anthraquinones such as chrysophanol and emodin have demonstrated potential antifungal and antimicrobial activities in experimental studies. These compounds may contribute to its traditional application in fungal skin infections.

Amalaki (*Phyllanthus emblica*) possesses predominantly *Amla Rasa, Madhura Vipaka* and *Sheeta Virya* with *Rasayana* and *Tridoshahara* properties. It is rich in bioactive compounds, particularly ascorbic acid, tannins and polyphenols, which exhibit antioxidant and anti-inflammatory activities and may support skin health. *Guduchi* (*Tinospora cordifolia*) possesses *Tikta* and *Kashaya Rasa, Ushna Virya* and *Madhura Vipaka* with *Rasayana, Tridoshahara* and anti-inflammatory properties. Its bioactive constituents including berberine, magnoflorine, and tinosporaside, have demonstrated potential antioxidant, immunomodulatory and antimicrobial activitie.

Yashada Bhasma is *Kashaya, katu, sheeta, kaphapittahara, bala-veerya-bidhi vardhanam, Nishaswedanirharanam* (reduce night sweat in rajayakshma), *vranastrava rodhaka*. it reduces *kleda strava* from *pidaka and sweda*. It is a traditional Ayurvedic preparation of zinc and modern physicochemical studies have reported zinc oxide (ZnO) as a major constituent in some preparations. Zinc plays an essential role in skin-barrier maintenance, epithelial repair, and immune function. Zinc oxide is widely used in topical formulations for its skin-protective, soothing, and mild astringent properties, which may help alleviate irritation and protect affected skin.

Experimental research has reported antimicrobial and antioxidant activity for specific Yashada Bhasma preparations.

EDAGAJADI CHURNA FOR LEPA AND PANA

This classical formulation comprises *Chakramarda Beeja, Haridra, Daruharidra, Aragvadha Moola, Pippali, Kushta, and Vidanga*. It is administered externally once daily and internally in the form of *Phanta*, consumed throughout the day as prescribed. which are traditionally recognized for their *Kushtaghna* (beneficial in skin disorders), *Kandughna* (relieving itching), and *Krimighna* (antimicrobial) properties. *Chakramarda* is particularly indicated in *Dadru Kushta* while *Haridra* and *Daruharidra* are valued for their anti-inflammatory and skin-supportive actions. *Vidanga* is traditionally associated with *Krimighna* activity whereas

Pippali possesses *Deepana* and *Kapha-Vata Shamaka* properties. External application as *Lepa* may help alleviate itching and local irritation.

Upon internal administration as *Phanta*, the formulation may help regulate *Kapha* and *Pitta Doshas*, which are implicated in the *Samprapti* of *Dadru Kushta*. Its *Tikta* and *Katu Rasa*-dominant ingredients are traditionally considered beneficial in addressing *Kapha* related *Kandu* and excessive *Kleda*, *Pippali* supports *Agni* through its *Deepana* property

Alum soap (Sphatika)

Sphatika (alum) possesses Kashaya Rasa and is traditionally valued for its Stambhana (astringent) and antiseptic properties. In modern terms, alum may exert an astringent effect by precipitating surface proteins, potentially reducing superficial moisture and helping maintain skin hygiene.

CONCLUSION

The present study demonstrated improvement in the clinical features of Dadru Kushta (Tinea corporis) following an integrated Ayurvedic treatment protocol comprising Deepana-Pachana, Snehapana, Virechana, Vidangadi Yoga, Edagajadi Lepa, Edagajadi Phanta, and Sphatika soap. All five participants showed varying degrees of improvement in itching, erythema, burning sensation, papules, and lesion characteristics. These findings suggest the potential benefits of this combined therapeutic approach.

REFERENCES

1. Khopker U, editor. Skin Diseases and Sexually Transmitted Infection. 2nd ed. Pune: Balani Book Depot Publication, 14.
2. du Vivier A. Atlas of Clinical Dermatology. 4th ed. London:Elsevier saunders; 2013; 15: 344.
3. Du Vivier A. Atlas of Clinical Dermatology. 4th ed. London:Elsevier saunders, 2013; 15: 344-345.
4. Agnivesha, Charaka Samhita with Ayurveda Dipika Commentary edited by Vaidya Yadavji Trikamji Acharya; Chaukambha Orientalia, Varanasi- 2004, Nidanasthana, 5(4): 512.
5. Murthy Srikantha K.R, Astanga Hridaya; second edition Varanasi: Chaukamba Sanskrit Sansthana; Nidanasthana, 14th 1995; 9: 204.
6. Dr. Bramhanand Tripathi, Charaka Samhita Chikitsa Sthana, Varanasi: Chaukamba

Surbharti Prakashan; Reprint, 2005; 7: 305.

7. Acharya Agnivesha, Charakasamhita, Ayurveda deepika commentary by Chakrapanidatta, Edited by Vaidya yadavaji Trikamji,Varanasi, Chaukhamba surbharati prakashan, 2005; Sutra sthana, 24th, 18: 125.
8. Bhavamishra. Bhavaprakasha Nighantu. Pandey GS, editor; Chunekar KC, commentator. Varanasi: Chaukhambha Bharati Academy; 2024. Haritakyadi Varga, 62–63. 18.
9. Govinda Dasji. Bhaishajya Ratnavali. Vol. 3. Mishra BS, editor; Shastri AK, commentator. Lochan K, translator. Choudhary AK, technical reviewer. Varanasi: Chaukhambha Sanskrit Sansthan, 2009; shloka -20 152.
10. Kaviraj shri govindadas sen, Bhaishajya ratnavali edited by prof Siddhinandana Mishra, Varanasi, Chaukhamba surabharati prakashan, 2005; 5: shloka 1286, 206.
11. Hegde PL, Harini A. A text book of dravyaguna vijnana. Vol. 2. New Delhi: Chaukhambha Publications; 2019; 101: 887.
12. Hegde PL, Harini A. A text book of dravyaguna vijnana. Vol. 2. New Delhi: Chaukhambha Publications; 2019; chapter 13: 117.
13. Bhavamishra. bhavaprakasha Nighantu ,commentary by K.C chunekar, edited by G.S pandey chapter karpuradi varga shloka 38-41 Varanasi, chaukamba Bharati academy, 2002; 121-122.
14. Hegde PL, Harini A. A text book of dravyaguna vijnana. Vol. 2. New Delhi: Chaukhambha Publications; 2019. chapter 33, 309.
15. Dr J.L.N. Sastry, Dravyaguna Vignana (Study Of Essential Medicinal Plants In Ayurveda), Vol 2, Published by Chowkambha Orientalia, Varanasi, Reprint edition, 2014; 220.
16. Sharma S. *Rasatarangini*. 11th ed. Shastri K, editor. Delhi: Motilal Banarsidass Publications; 2009. Taranga 19, Shlokas, 104–117, 476–478.
17. Agnivesha. Charaka Samhita, ayurveda Deepika commentary by chakrapanidutta , edited by Harishchandra kushavaha 2022. Varanasi, Chaukamba Sanskrit sanstana, 2, chikitsa sthana, chapter 8, shloka no, 161-216.
18. Acharya Sushruta,sushruta Samhita English translation by K.R.Shrikantha Murthy, Chaukhamba Orientalia Publication Reprint edition 2022, Vol-1, Sutra sthan, chapter 18, shloka 6, 128-129.