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AN INTEGRATIVE APPROACH COMBINING AYURVEDA FOR THE MANAGEMENT OF DERMATOPHYTOSIS: A CASE REPORT

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ABSTRACT

Dermatophytosis infections are quite common in day-to-day practice. The growing concern of chronic and recurrent dermatophytosis in India has emerged as a significant challenge for dermatologists. It attributes the use of over-the-counter steroid-based combination creams, inadequate patient adherence to therapy, and the absence of standardized, evidence-based treatment guidelines. It is characterized by well-defined, erythematous, and scaly plaques typically associated with dermatophyte infections. In Ayurveda, this condition closely correlates with *Dadru Kuṣṭha*. Classified under *Kṣudra Kuṣṭha*, it is considered a *Tridoṣaja Vyadhi* with predominance of Pitta and Kapha doṣhas. The classical features include *Utsanna Maṇḍala* (raised circular skin lesions), *Kandu* (itching), *Raga* (erythema), and *Piḍaka* (eruptions). In this case report, a 54-year-old male patient suffering from tinea corporis on and off for 3 months was treated effectively with an integrative approach. Significant changes were observed in the skin lesion and in the patient's symptoms after 42 days of regular treatment. Post-treatment follow-up did not reveal any

signs of recurrence of lesions. The integrative medicine approach offers an effective approach to managing tinea corporis.

KEYWORDS: Ayurvedic intervention, Dadru kustha, Dermatophytosis, Kshudra kustha, Case Report.

1. INTRODUCTION

A superficial fungus infection of keratinized tissue is called dermatophytosis, usually referred to as Tinea. The term "dermatophytes" refers to keratophilic organisms that infiltrate the skin, hair, and nails. Dermatophytes are a group of fungi that invade the skin, hair, and nails, primarily belonging to the genera *Trichophyton, Microsporum, and Epidermophyton.* The infection caused by dermatophytes is termed tinea, with the name further specified according to the affected body site.[1] When involving the skin, it is commonly known as ringworm. Dermatophyte infections are widespread across the globe and occur with high frequency. Transmission typically takes place through direct person-to-person contact or indirectly via contaminated fomites. These infections are reported more often in males than in females. The distinctive ring-shaped cutaneous lesion results from the centrifugal outward growth of dermatophytes within the stratum corneum.[2] Tinea infections can attain epidemic proportions in regions characterized by high humidity, dense populations, and inadequate hygiene.[3] Dermatophytes thrive in keratinized tissues, particularly the stratum corneum. Their production of mycotoxins—secondary metabolites—induces inflammation in the host, thereby weakening local defenses and facilitating further fungal proliferation.

Dermatophytic infections demonstrate a close correlation with the Ayurvedic description of *Dadru Kushta*, as evidenced by congruent clinical features such as *utsanna mandala* (elevated circular plaques), *raga* (erythematous discoloration), *daha* (subjective burning sensation), *pidaka* (papular or pustular eruptions), and *kandu* (intense pruritus).[4] *Dadru Kuṣṭha* is described as presenting with a coppery hue or resembling the color of the linseed flower, characterized by a serpiginous pattern and multiple eruptions.[5] In *Ayurveda text, Dadru* is described as a *kshudra kustha* by *Acharya Charaka* and a *Maha kustha* by *Acharya Sushruta* and *Acharya Vagbhatta*. It is a *chirkalaja*[6] (chronic) *vyadhi* with predominant vitiation of pitta and *kapha dosha*.[7] These clinical features of *Dadru kustha* described in Ayurveda are more common in fungal infection (tinea), and it spreads easily to other parts of the body.

2. CASE REPORT

Patient Information

A 54-year-old male, living in Petlad, Gujarat, presented in the Outpatient Department (OPD) of Khemdas Hospital, Gujarat, India (OPD No. 25020982) on 19/07/25 with complaints of red circular plaque on the Right axillary region and in the inguinal region with severe itching for 3 months. The presenting complaints have been recurring intermittently for approximately three months, including a recurrence 1 month before the OPD visit. Previous history revealed that doctors had examined the affected area of skin and made a diagnosis of tinea corporis infection, for which he had received lobate cream (Clobetasol propionate) for topical application 1 month back. The patient got symptomatic relief for a few days, but skin rashes reappeared along with the recurrence of other symptoms.

On examination, his *prakriti* (body constitution) was *vata-pittaj*, his *agni bala* (digestive power) was *madhyam* (medium), and *sharir bala* (physique) was madhyama (medium). Routine haematological investigations were within normal limits. The rashes were initially erythematous small lesions which increased gradually and later on formed circumscribed plaques with elevated margins (Fig. 1, Fig. 2, Fig. 3). On local examination, he was found to have circumscribed plaques with central clearing of varying sizes seen symmetrically over the inguinal region and Right axillary region (Fig. 1). Based on these findings diagnosis of *Dadru (*Dermatophytosis) was made.

3. PAST HISTORY

There is no specific history of any major illness, drug allergy, autoimmune illness, or previous surgery, and there is a positive family history showing the same complaints of erythematous plaques with itching in his wife.

4. CLINICAL FINDINGS

General and Systemic Examination

Personal history revealed that appetite is good; bowel movements are irregular, occurring once every 2 days; and the bladder is regular. Sleep is disturbed due to itching. There is no specific history of addiction. On general examination, pallor, icterus, clubbing, cyanosis, and lymphadenopathy are absent, and blood pressure, respiratory rate, and temperature are within the normal limits. Other Systemic examination did not reveal any abnormality.

Dermatological Examination

On dermatological examination, multiple circular blackish red and reddish erythematous plaques (*Mandala*) over the inguinal region (5–10 cm in diameter), and the right axillary region (12–15 cm in diameter), were found, having slightly raised reddened demarked edges with central clearing. These lesions were associated with the symptoms of severe itching (*Kandu*)

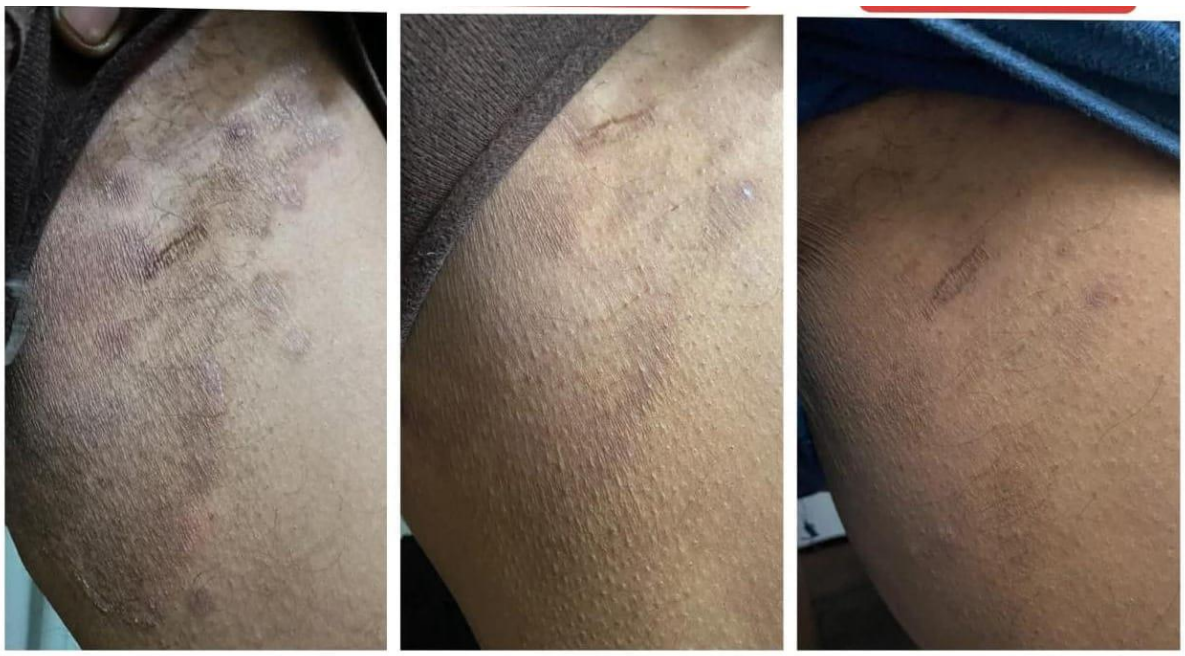
Asthavidha Pariksha and Dashavidha Pariksha

Table 1: *Asthasthana Pariksha.*

Sr. No.	***Asthasthana Pariksha***
1.	*Nadi: Vata-Pittaja, 78/min*
2.	*Mutra: Samyaka*
3.	*Mala: Asamyaka, Vibandha (constipation)*
4.	*Jivha: Saam*
5.	*Shabda: Spashta*
6.	*Sparsha: Samashitoshna*
7.	*Drika: Prakruta*
8.	*Akriti: Madhyama*

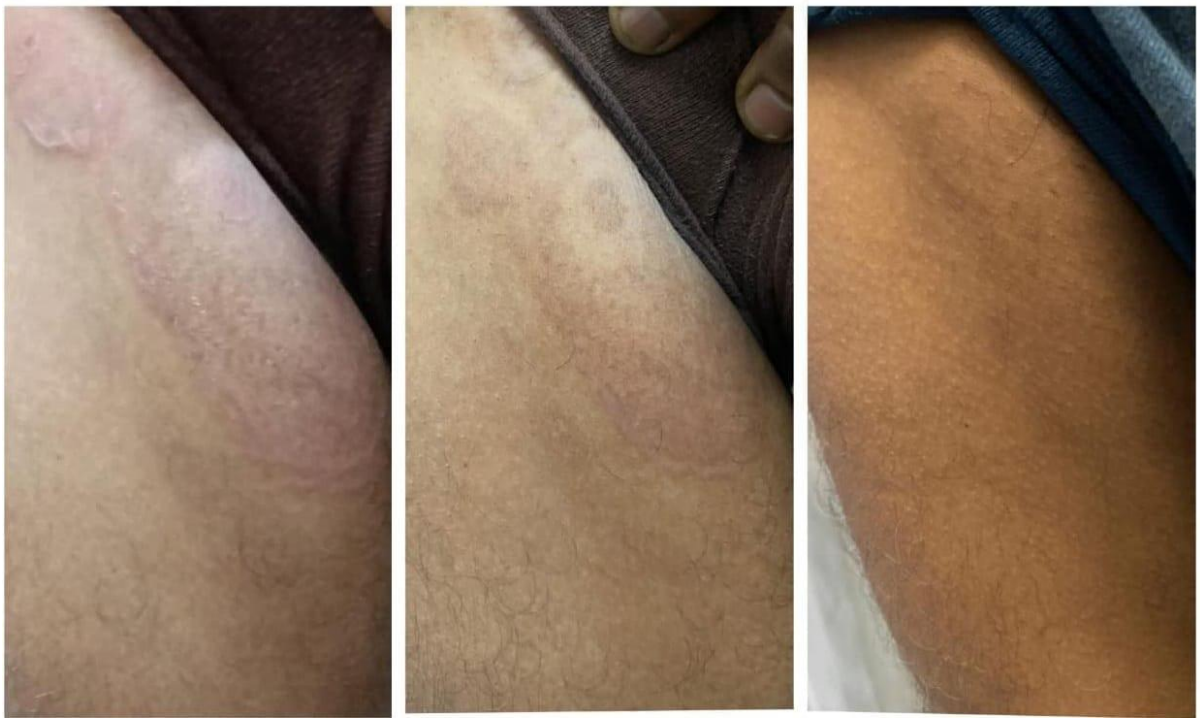
Table 2: *Dashavidha Pariksha.*

1.	***Prakriti: Vata Pittaja***
2.	*Vikriti: Pitta-Kaphaja*
3.	*Saar: Madhyama*
4.	*Samhanana: Madhyama*
5.	*Pramana: Madhyama*
6.	*Satmya: Madhyama*
7.	*Satva: Madhyama*
8.	*Aharshakti: Madhyama*
9.	*Jaranshakti: Madhyam*
10.	*Vyayamsahkti: Madhyam*
11.	*Vaya: Madhyam*



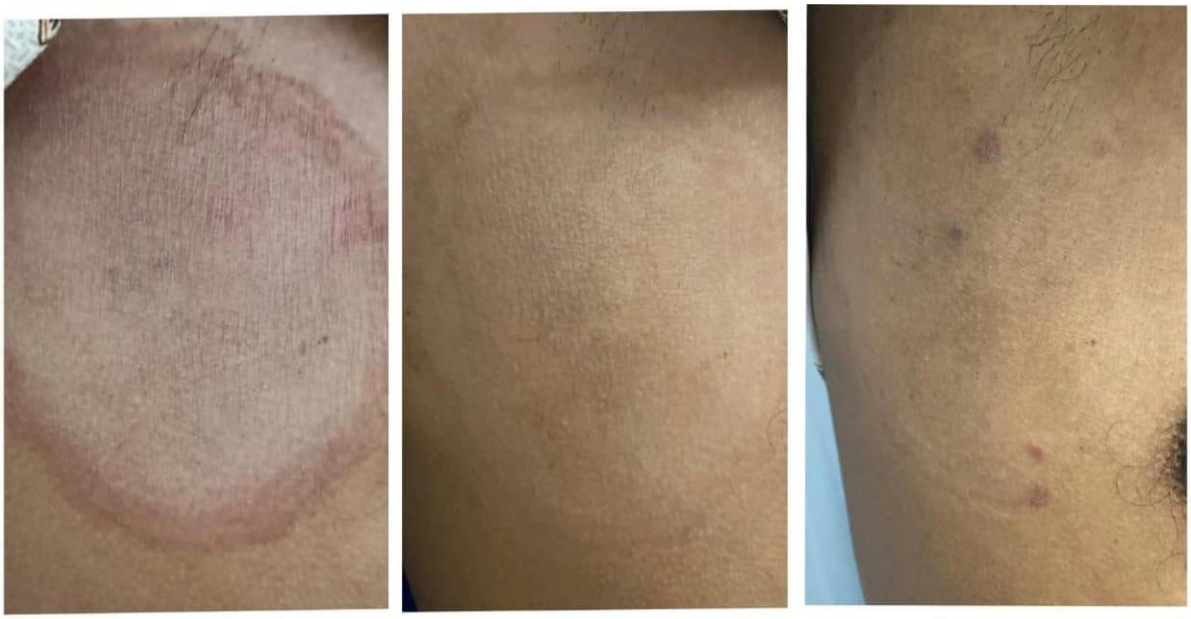
A **B** **C**

Fig. 1: A. Left side of Inguinal Region - before treatment. B. Left side of Inguinal Region - in between treatment. C. Left side of Inguinal Region - after treatment.



A **B** **C**

Fig. 2: A. Right side of Inguinal Region - before treatment. B. Right side of Inguinal Region - in between treatment. C. Right side of Inguinal Region - after treatment.



A **B** **C**

Fig. 3: A. Right side of Axillary Region - before treatment. B. Right side of Axillary Region - in between treatment. C. Right side of Axillary Region - after treatment.

Considering the history, clinical examination, and investigation, the treatment summarized in Table 1 was prescribed. The patient assessment was done before treatment, intermittently, after treatment, and after follow-up.

5. TIMELINE OF CASE

Table 3: Timeline of the case.

Date and day of visit	Patient summary from initial and F/U visit, and description of skin patches	Interventions
19/07/25 (Day 0)	Itchy, erythematous, circumscribed plaque with elevated margins, varying size approximately. 2–3 cm in diameter present symmetrically over the right axillary region and the inguinal region.	1. Gandhak Rasayan-250 mg twice daily with lukewarm water after food 2. Avipattikar churna- 2 Teaspoon at night with lukewarm water 3. Krumikuthar Ras- 250 mg twice a day with lukewarm water after food 4. Cutis Cream + Lulicanazole 1% cream- mixed in equal quantity for local application and applied twice daily 5. Cutis Soap- for bathing twice a day 6. Tab. Atarax 10mg- 1 tab at night with lukewarm water
02/08/25 (Day 14)	Moderate relief in itching, mild reduction in erythema and in area of patches	Gandhak Rasayan+Avipattikar churna + Krumikuthar Ras + (Cutis Cream + Lulicanazole 1% cream- mixed in 2:1 ratio) + Cutis Soap in prescribed dosage.
16/08/25 (Day 28)	Significant relief in itching, Significant reduction in erythema and in area of patches	Gandhak Rasayan+Krumikuthar Ras+Cutis Cream + Cutis Soap in prescribed dosage.

30/08/25 (Day 42)	No itching with complete reduction of patches	Gandhak Rasayan+Krumikuthar Ras+Cutis Cream + Cutis Soap in prescribed dosage.
17/09/25 (Day 60)	skin lesion have not seen. No itching, no other associated complaints.	No medications
29/09/25 (Day 72)	Recurrences of skin lesion have not seen. No other associated complaints	No medications

Picture of the affected skin was taken at the time of initiation of the treatment and subsequently on every visit [Fig. 1, Fig. 2, Fig. 3]. The subsequent observations are summarized in Table 1. The consecutive photographs were taken after each follow-up visit, when compared with the before treatment status, were able to exhibit the changes in the skin patches [Fig. 1, Fig. 2, Fig. 3]. This shows a considerable improvement in the area of patches following the therapy to the before treatment status [See Fig. 1, Fig. 2, Fig. 3]. Along with treatment, the patient was advised of dietary restrictions. The patient was directed to avoid and restrict the usage of sour, spicy, salty, junk food, tinned food, soft drinks, and milk products such as paneer and curd during the treatment period, and the patient was advised to wear loose-fitting, clean clothes and to wash clothes in warm water and dry in the sunlight.[8]

6. ASSESSMENT CRITERIA

The assessment criteria were based on the clinical characteristics of Dadru Kushtha [Table 2].[9]

Table 4: Gradation parameters for signs and symptoms.

S. No.	Clinical Features	Grade 0	Grade 1	Grade 2	Grade 3
1	Kandu (Itching)	Absent	Occasional, does not disturb routine activity and sleep; duration 4–6 min; frequency: recurs 1–2 times in 12 h	Frequent, disturbs routine activity but not sleep; duration 7–9 min; frequency: recurs 3–4 times in 12 h	Intense and constant, disturbs sleep and routine activity; duration 10–12 min; frequency: recurs 8–10 times in 12 h
2	Raga (Erythema)	Absent	Brownish (faint black)	Blackish (dark black)	Red (bright red or reddish black)
3	Daha (Burning Sensation)	Absent	Mild (occasional burning)	Moderate (often burning)	Severe (persistent burning, disturbing sleep and activities)

4	Number of Maṇḍala	No Maṇḍala	1–5 Maṇḍala	6–10 Maṇḍala	>10 Maṇḍala
5	Size of Maṇḍala (cm)	0	<5 cm	5–10 cm	>10 cm

7. OBSERVATION AND RESULT

The symptoms were assessed on the basis of the scoring pattern as mentioned in [Table 2]. After 20 days of treatment, a considerable result was found in Kandu, Raga, Daha, and Mandala. Further, he was advised to continue the treatment [Figure 4]. After 42 days, a complete relief was observed in all the parameters. The medicines were stopped after this period, and the patient was advised for dietary restrictions. The patient was further followed up. After the follow-up period, no sign of recurrence was seen. Bowel movement was also regular and all the symptoms of Vibandha (constipation) subsided.

Table 3: Changes in parameters after Integrative management.

Sr. No.	Clinical Features	Before Treatment (Day 0)	First IM (Day 14)	First IM (Day 28)	After Treatment (Day 42)	After Follow up
1	Kandu	3	2	1	0	0
2	Raaga	3	2	1	0	0
3	Daha	0	0	0	0	0
4	Number of mandala	2	2	1	0	0
5	Size of mandala	3	3	1	0	0
IM- Intermittent monitoring						

8. DISCUSSION

From an *Ayurvedic* standpoint, the case manifested with pruritus, erythema, and circular lesions. The predominance of *Kapha dosha* is reflected in the itching (*Kandu*) and raised circular patches, while the aggravation of *Pitta doṣa* is evident through erythema (*Raga*) and burning sensation (*Daha*). Based on the clinical features, the condition can be correlated with *Kapha-Pitta Kuṣṭha*. The initial *Kapha duṣṭi* presented as itchy, circular patches localized on the knee joints, face, and wrist joints—sites typically governed by *Kapha doṣa*. Involvement of *Kapha doṣa in Rasa Dhatu* resulted in *Kandu* and elevated plaques, whereas *Pitta doṣa* vitiating *Rakta Dhatu* manifested as erythema.

The treatment was planned based on the predominance of dosha and dhatu (body tissues) and srotas (macro- and microcirculatory channels) involvement [Table 1].

Gandhaka Rasayana is an important formulation in the treatment of *Kuṣṭha Roga* (skin diseases). It specifically highlights its utility in chronic dermatoses, including *Dadru*

(ringworm/dermatophytosis), *Kandu* (itching), and *Pama*. The text describes its preparation process (purified *Shuddha Gandhaka* triturated repeatedly with herbal juices *like Guduchi, Bhringaraja, Chitraka,* etc.) until it achieves *Rasayana properties*.[10] *Gandhaka* has *rasayana, dipana, pachana vatakaphahar, kusthahar, and krimihar* properties.[11] It also has anti-fungal, anti-bacterial, and keratolytic properties.[12]

Trivrutta (Operculina turpethum Silva Manso) is the main drug of the *Avipattikar churna. Trivrutta has Virechana* (purgative) property, which helps to pacify the symptoms of *Vibandha*.[13] It has *Pitta-Kapha shamaka* and *Kushthghna* property which helps in pacifying the *Dadru Kushtha. Shunthi (Zingiber officinale Roscoe), Pippali (Piper longum Linn.), Maricha (Piper nigrum Linn.) act as Dipana and Pachana* to resolve the *Ama* produced as a result of *Vibandha, Aruchi* (tastelessness).

Krumikuthar Ras mainly contains *Karpura, Indrayava, Ajmoda, Vidanga, Shuddha hingula, Shuddha vatsnabh*, etc. These are all *Ushna, Tikshna* it contains *Krumihar properties.*[14] It has anthelmintic, antimicrobial, and digestive properties.[15] Krumikuthar Rasa is a potent Krimighna Yoga (anthelmintic and antimicrobial formulation), directly addressing toxic by-products of parasitic infestation, which aligns it with Vishaghna dravyas used in Agadatantra.[16]

Cutis cream contain *Nimba(Vishaghna (antitoxic), Krimighna (antimicrobial). Detoxifies Krimi-Visha, reduces Kandu (itching) & Rāga (erythema))*[17], *Karanj(Krimighna, & Vishaghna; used in skin disorders with toxic/parasitic origin. Reduces itching, scaling, and fungal proliferation),*[18] *and Gandhak*. These are the drugs beneficial in skin diseases and allergic conditions, hence help to cure lesions of Tinea corporis.

Tab Atarax 10 mg contains Hydroxyzine**.** Hydroxyzine is a first-generation antihistamine that is used mostly to treat itching and nausea. Although it lacks direct antifungal activity, hydroxyzine is frequently prescribed as an adjunctive therapy in dermatophytosis to relieve intense itching, which is one of the hallmark symptoms of tinea infections. Controlling pruritus helps reduce scratching, thereby minimizing the risk of excoriation and secondary bacterial infection. Moreover, its sedative properties improve patient comfort and sleep quality, which are often disturbed due to nocturnal itching.[19]

Luliconazole 1% cream- Luliconazole is an imidazole antifungal agent that acts by inhibiting the enzyme lanosterol 14-α-demethylase, thereby disrupting ergosterol synthesis and impairing fungal cell membrane integrity. It is highly effective against dermatophytes, the causative organisms of tinea infections.[20-21]

9. CONCLUSION

Clinical manifestation of *Dadru Kushtha* closely resembles dermatophytosis infection. This infection has a substantial recurrence rate, necessitating long-term treatment, and modern medicine has its own long-term limits. The adopted treatment method is safe and cost-effective and has produced a significant outcome when used for a long time. No adverse effect pertaining to the prescribed drug was reported. *Ayurvedic* medicines offer a good approach to manage *Dadru.*

CONSENT

The authors certify that they have obtained all necessary consent forms from the patient. Informed consent for the publication of case report was obtained from the patient before submission of manuscript. Identity of patient is not revealed in this article.

AUTHOR CONTRIBUTIONS

1. Dr. Darshika Takle—Conceptualization, Software, Validation, Formal analysis, Investigation, Data curation, Writing— original draft, Writing—review and editing, visualization, supervision, project administration.
2. Dr. Adishree Bhat M.G—Conceptualization, Validation, Formal Analysis, Writing—original draft, Writing—Review and Editing,
3. Dr. Suhel Shaikh —Conceptualization, Validation, Formal Analysis, Writing—original draft, Visualization.

DECLARATION OF GENERATIVE AI IN SCIENTIFIC WRITING

Generative AI and AI-assisted technologies were not used in writing this manuscript.

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CONFLICTS OF INTEREST

There are no conflicts of interest.

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REFRENCES

1. Neena Khanna, Sourabh Singh, Bhutani color atlas of Dermatology, Ch. 7-dermatitis and eczema, (6th ed.), Japee Brother Medical Publisher Ltd., 2015; 115, View at publisher Cross ref Google Scholar
2. L. Kasper, A.S. Fauci, S.L. Hauser, D. Longo, J.L.J. Jameson, J. Loscalzo, Harrison's principles of internal medicine, Volume 2, Ch. 243 (19th ed.), McGraw-Hill Education, Newyork, 2015; 1357. Google Scholar
3. Irene Weitzman, Richard C. Summerbell, The dermatophytes, Clin. Microbiol. Rev., 1995 April; 8(2): 240-259.
4. Sharma, R.K., and Dash, V.B., Agnivesh's Charaka Samhita, Texts with English translation & Critical exposition based on Chakrapani Datta's Ayurveda Dipika, Chaukhambha Sanskrit Series Office, Varanasi, 2012; Chikitsasthan-7/23.
5. D. Singhal, Sushruta Samhita.Part 1, Ch 4, kusthanidan adhyaya, Nidansthana ver. 8, Delhi: Chowkhamba Sanskrit pratisthan (2nd ed.), 2007; 537.
6. Uapadhyaya Yadunandan, atrideva gupta, Ashtanga Hridya with vidyotini Hindi commentatory Ch. 14, Kusthaswitrakriminidan adhyaya, Nidansthana Ver. 24 (7th ed.), Chowkhamba Sanskrit Sansthan, Varanasi, 273.
7. R.K. Sharma, B. Dash, Charaka Samhita, vol 3, Chikitsasthanam. Ch. 7, ver. 30, Chowkhamba Sanskrit Series Office, Varanasi., 2016; 326.
8. Panda AK, Kar S. Role of Pathya-Apathya in Kushtha with special reference to skin diseases. AYU., 2011; 32(2): 209–213.
9. Lakkawar, Medha C.; Gaikwad, Pratima R.; More, Anand B.; Rai, Shalini. Ayurved management of a case of intensive Dadru (dermatophytosis)—A case report. Journal of Indian System of Medicine, Jul–Sep 2022; 10(3): 205-210. | DOI: 10.4103/jism.jism_46_22
10. Sen GD. Bhaishajya Ratnavali. Chikitsa Sthana, Kushtha Chikitsa Adhyaya, 54/305–310. Varanasi: Chaukhamba Surbharati Prakashan, 2018.
11. Ayurvedic Pharmacopeia of India. Part 1, 1st ed., vol. 7, Ministry of Health and Family Welfare, Govt. of India, 2008; 8-10.

12. D.N. Sauder, R. miller, D. Gratton, W. Danby, C. Griffithur, S.B. Philips, *et al.* The treatment of rosacea: the safety and efficacy of Na salfacetamide and sulphur 5% lotion (Novacet) is demonstrated in double blind study . Dermatol Treat, 1997; 8: 79-85.
13. Chunekar K. Guduchyadivarga verse 193 Bhavaprakasha Nighantu. 2020 Varanasi Chaukhambha Sanskrit Sansthan, 383.
14. Gopal Krushna, Rasa Tantra Sar and Siddha Prayog Sangraha, Pratham Khand, Yog no 60, Ajmer, Krushna Gopal Ayurved Bhavan, sixteenth ed., 2014; 206.
15. Patgiri B, Prajapati P, Shukla VJ, Ravishankar B. Pharmaceutical standardization of Krumikuthar Rasa. AYU., 2009; 30(3): 382–387.
16. Sharma R, Prajapati PK, Harisha CR, Shukla VJ. Safety and efficacy of some herbo-mineral formulations of Ayurveda – A review. Indian J Tradit Knowl., 2011; 10(3): 550–560.
17. Sharma PV. Dravyaguna Vijnana, Vol II. Varanasi: Chaukhamba Bharati Academy; 2015. Biswas K, et al. Curr Sci., 2002; 82(11): 1336–1345.
18. Sharma PV. Dravyaguna Vijnana, Vol II. Varanasi: Chaukhamba Bharati Academy; 2015. Prabhu KH, John S. J Adv Pharm Technol Res., 2010; 1(4): 360–364.
19. Gupta AK, Lyons DCA. The rise and fall of oral antihistamines in the treatment of dermatophytosis. Mycoses., 2015; 58(Suppl 1): 25-32.
20. Elewski BE, Tosti A, Tavakkol A. Safety and efficacy of luliconazole cream 1% in the treatment of tinea pedis: a phase 3 randomized, double-blind, vehicle-controlled, multicenter study. *J Drugs Dermatol*., 2013; 12(2): 163–168.
21. Gupta AK, Lyons DCA. Efficacy of topical antifungal agents in tinea corporis and tinea cruris: a systematic review. *Mycoses*., 2015; 58(Suppl 1): 19–24.