



Management of *dadru kushtha* (tinea corporis) through *ayurveda* : a case study

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Abstract

Skin is an extra ordinary structure and the largest structure of our body . Its 1.8 m² of barrier separates the potentially harmful environment from the body's vulnerable interior. In *Ayurveda* skin diseases are named under the heading of *Kushtha* it is further categorised into *Maha Kushtha* and *Kshudra Kushtha* . *Dadru* is one of them . *Acharya Charaka* has categorised *Dadru* in *Kshudra Kushtha* while *Acharya Sushruta* has kept *Dadru* in *Maha Kushtha*. A 35 years old male came with complaints of round and reddish patches behind ear and neck region with severe itching from last 2 months. He was treated with *Brihat Manjisthadi Kwath*, *Ksharagad Churna*, *Panchtikta Ghrita Guggul*, *Khadiraristam* internally and cutis powder externally for 14 days. After completion of treatment, improvement was observed in the parameters like *Kandu* (itching), *Raaga* (erythema), *Pidika* (eruptions) and *Utsaana Mandala* (elevated circular skin lesion). *Brihat Manjisthadi Kwath*, *Ksharagad Churna*, *Panchtikta Ghrita Guggul*, *Khadiraristam*, *Avipatkar Churna* have *Kushtaghna*, *Kandughana* and *Krimighna* properties which helps in elimination of aggravated *Dosha*'s thus breaks the *Samprapti* of the *Vyadhi*. From this case study it can be concluded that *Ayurvedic* formulations are effective in the management of *Dadru Kushtha*.

Key words : – *Dadru*, *Kshudra Kushtha*, *Maha Kushtha*, *Kshudra Kushtha*, *Raaga*, *Pidika*, *Utsaana Mandala*, *Twacha*, *Rakta*, *Mamsa*.

Introduction:

Skin is the outermost covering of the body because of its size and being the outermost it is susceptible to a wide variety of disorders. Surface area 1.8 m² of skin makes it the largest organ of body and making up about 16% of body weight. It has many functions, the most important of which it acts as a barrier to protect the body from noxious external factors and keep the internal systems intact.¹

In *Ayurveda* skin diseases are named under the heading of *Kushtha* it is further categorised into *Maha Kushtha* and *Kshudra Kushtha*.² *Kushtha* is also considered as one of the *Asthamahagada*(eight dreadful disease)³. *Dadru*

is one of the type of *Kushtha*. *Acharya Charaka* has mentioned *Dadru* in *Kshudra Kushtha*.⁴ While *Acharya Susrutha* has mentioned *Dadru* in *Maha Kushtha*.⁵

Acharya Charaka has told that *Saptko Dravya Sangrah* (group of seven factors) is responsible for causing *Kushtha*. Group of seven factors include three *Doshas* – *Vata*, *Pitta*, *Kapha* and four *Dushya's* – *Twacha*, *Rakta*, *Mamsa* and *Lasika*.⁶

Susrutha and *Laghu Vagbhatta* have mentioned it as *Kapha Dosha* dominant *vyadhi*. They further had explained about the *Lakshanas* of *Dadru* Like *Tamra Varna*, *Atasipushpa Varna* ⁷while *Acharya Charaka* and *Vridha Vagbhatta* has mentioned it as *Pitta-Kapha Dosha* predominance *Vyadhi*. The classical symptoms of *Dadru* are *Kandu* (itching), *Utsanna Mandala* (elevated circular lesions), *Raaga* (erythema), and *Pidikas* (papule).⁸

Due to similarity of symptoms *Dadru* can be correlated with *tinea corporis*, which is a fungal skin infection. Ringworm (dermatophytosis) are fungal skin illnesses that can be brought on by dermatophytes. Dermatophytes are fungi that invade and multiply within keratinized tissue like skin, hair and nails and causes infection. In allopathic medical science, topical and systemic antifungal agents and corticosteroids are used to manage fungal infection. But it has been observed in nowadays that there is increased resistance to antifungal drugs, *tinea* infection don't respond to routine antifungal medicines. For few days symptoms of *tinea* infection regresses but again it has tendency to flare up.⁹ So, there is scope of intervention of ayurvedic medicine which can control and irradiate *tinea* infection and prevents relapses.

In *Ayurveda Shodhan*, *Shaman* and *Bahirparimarjan* (topical) *Chikitsa* is indicated for *Dadru*.^(10, 11) In this case for *Shaman Chikitsa Brihat Manjisthadi Kwath*, *Ksharagad Churna*, *Panchtikta Ghrita Guggul*, *Khadiraristam* having *Kushtaghna*, *Krumighna* and *Kandughna* properties were used. For *Bahirparimarjan* (topical) *Chikitsa* *cutis* powder was given.

Case report

A 35 years old male came to *Agadtantra and Vidhivadiyak* OPD NO. 2 of *Rishikul Ayurveda* College and Hospital, Haridwar having registration no. 775/31111 with chief complaints of round and reddish patches behind ear and neck region with severe itching for 2 months.

History of present illness

Patient gradually developed the round and reddish patches behind ear and neck region with severe itching. He had taken allopathic treatment from local practitioner but didn't get any satisfactory result before visiting *Rishikul Ayurveda* College Hospital, Haridwar for management.

history of past illness

Patient have past history of hypertension but don't have any past history of diabetes mellitus, asthma & hypothyroidism.

Family history

No family members have similar complaints.

Personal history

Table no 1: Personal history of patient

Diet	Mixed diet
Micturition	7-8 times in a day , 0-2 times in night
Appetite	Moderate
Sleep	Normal
Addiction	No any
Bowel habit	Irregular

Clinical examination

Ashthavidh Pariksha was within normal limit except patient has constipation. *Akruti* of patient was *Madhyam Akruti*.

Table no. 2: *Ashtavidha Pariksha* of patient

<i>Nadi</i> (pulse)	68 / min
<i>Mala</i> (stool)	1-2 times a day; feeling of incomplete evacuation.
<i>Mutra</i> (urine)	7-8 times in day,0-2 times in night
<i>Jihva</i> (tongue)	<i>Sama</i> (coated)
<i>Shabda</i> (speech)	<i>Spashta</i> (normal)
<i>Sparsha</i> (touch)	<i>Snighdha</i>
<i>Drika</i> (eyes)	<i>Samanya</i> (normal)
<i>Akruti</i> (built)	<i>Madhyama</i>

local examination - 4-5 circular erythematous, well demarcated patches with some vesicular eruption over ear and neck region . No discharge from lesion.

Vital parameters- vitals parameters were under normal limit.

Diagnosis

From clinical features it was diagnosed as *Dadru* (tinea corporis).

Table no 3. Treatment given to the patient

Sr.no	Drug	Dose	Time
1.	Bhrihat manjisthadi Kwath	50 ml twice a day	For 21 days before meal
2.	<i>Ksharagad Churna</i>	3 gm twice a day	For 21 days after meal
3.	<i>Panchtikta Ghrita Guggul</i>	2 tab twice a day	For 21 days after meal
4.	<i>Khadiraristam</i>	40 ml twice a day	For 21 days after meal
5.	<i>Avipatkar Churna</i>	3 gm once a day at night	For 21 days after meal

Follow up- after 7 days

Assessment criteria

On the basis of improvement in subjective parameters *Kandu* (itching), *Raaga* (erythema), *Utsanna Mandala* (elevated circular skin lesion) and *Pidika* (eruption) and photographs of lesion before, during and after treatment assessment of patient was done .

Table no 4 : Gradation of parameters for Dadru Kushtha

Sn	Grade 0	Grade 1	Grade 2	Grade 3
<i>Kandu</i> (itching)	<i>No Kandu</i>	Mild and occasional Itching	Moderate and tolerable itching	Severe itching disturbing sleep and other activities
<i>Utsanna Mandala</i> (elevated circular skin lesions)	Absent	Mild elevated lesion	Moderate elevated lesion	Severe elevated lesion

<i>Pidika</i> (eruption)	<i>No Pidika</i>	<i>1-3 Pidika</i>	<i>4-6 Pidika</i>	<i>>7 Pidika</i>
<i>Raga</i> (erythema)	Normal Colour	Fade and near to normal Colour	Blenching red Colour	Red colour

Observation and results

Table no 5: Assessment criteria for *Dadru Kushtha* before, during and after treatment

Symptoms	Day 0	Day 7	Day 14
<i>Kandu</i> (itching)	3	2	0
<i>Utsanna mandala</i> (elevated circular skin lesion)	3	0	0
<i>Pidika</i> (eruption)	3	0	0
<i>Raga</i> (erythema)	3	1	0

Before treatment *Kandu* (itching) was present, graded as 3 i.e. severe itching was present and on 1st follow up (after 7 days of treatment) patient was complaining of moderate itching graded as 2 and on 2nd follow up (after 14 days of treatment) no history of itching was present that was graded as 0. Before treatment gradation of *Utsanna Manadala* (elevated circular skin lesion) was 3 i.e. severe elevated circular skin lesion which turned absent in 1st follow up. Similarly before treatment gradation of *Pidika* (eruption) was 3 and on 1st follow up no *Pidika* was absent. Before treatment *Raaga* (erythema) was present on first follow up and it was mild and graded as 1 and was absent on day 14 that is after completion of treatment.

Therefore there was complete improvement in all the parameters after completion of treatment . Complete improvement can be seen in photographs taken before, during and after treatment.

First Assessment : figure 1: on day 0



First follow up : figure 2: on day 7

Second follow up : figure 3: on day 14



Discussion :

- In above case study patient got satisfactory relief from symptoms of tinea infection (*Dadru Kushtha*) . In this case study use of *Bhrihat manjisthadai Kwath*, *Ksharagada Churna* , *Panchtikta Ghrita Guggul*, *Khadiraristam* helps to remove the pathogen along with the dead skin debris by stimulating basal layer of skin to proliferate by replacing it with new healthy skin cells.

- Probable mode of action of drug *Ksharagada Churna* :

Ksharagada Churna consists of *Palas* , *Hardidra* , *Daruharidra* , *Sunthi* ,*Maricha*, *Pipali*, *Kustha*, *Laksha*, *Garika*, *Saindhav*, *Harenu*, *Surasmanjari*, *Hingu*, *Krishna Sariva*, *Shweta Sariva*, *Jatamansi*, *Madhuka*. Due to all these ingredients it possesses, *Kushthaghan*, and *Krimighan*, *Shothhar*, *Kandughna*, *Twachya*, *Tridosahar* properties will help in relieving symptoms and breaking *Samprapti* of the disease.¹²

- Probable mode of action of drug *Bhrihatmanjisthadai Kwath*.

Manjistha, *Musta*, *Kutaja*, *Guduchi*, *Kushta*, *Nagara*, *Bharngi*, *Vacha*, *Nimba*, *Haridra*, *Daruharidra*, *Haritaki*, *Bhibhitaki*, *Amalaki*, *Patola*, *Katuka*, *Murva*, *Vidanga*, *Asana*, *Chitraka*, *Shatavri*, *Trayamana*, *Krishna*, *Indrayava*, *Vasaka*, *Bhringaraja*, *Patha*, *Khadira*, *Chandana*, *Trivrit*, *Varuna*, *Kiratatikta*, *Bakuchi*, *Kritamalaka*, *Ativisha*, *Indravaruni*, *Ananta*, *Parpata*. It contains maximum drugs with abundance of *Tikta Rasa*, which makes it suitable for *Kapha-Pittaghna* action. Thus, by the virtue of the above properties it acts on diseases like *Kushtha*, *Jwara* And *Vatarakta* which has dominancy of *Pitta Dosha* and *Rakta* as *Dushya*. Along with this, it also possesses the property of *Rakta Prasadana*, *Vishaghna*, *Kushthaghna*, *Kandughna* and *Daha Prashamana*. Thus makes this *Kwath* useful in pacifying *Raktaja* disorders, hence proving its necessity to be used in the present case.

- Probable mode of action of drug *Panchtikta Ghrita Guggul*

Panchtikta Ghrita Guggul consists of *Nimba, Guduchi, Vasa, Patola, Kantakari, Ghrita (Go Ghrita), Patha, Vidanga, Suradaru (Devadaru), Gajapippali, Yavakshara, Sarjikshara, Shunti, Haridra, Mishi, Chavya, Kushta, Tejovati, Maricha, Kutaja, Dipyaka, Chitraka, Katuka, Bhallataka Suddha, Vacha, Pippalimool, Manjishta, Ativisa, Yavani, Shudda -Guggulu* all contents have *Tikta Rasa abundance, Laghu & Ruksh Guna*, so it acts as anti-itching property, *Kled & Vikrut Meda Upashoshan, Vranashodhak* . It mainly acts on body *kleda, Meda, Lasika, Rakta, Pitta, Swed & Shleshma* .It possesses *Tridoshaghna* (pacification of alleviated *Tridosha*) and *Krimighna* (wormicidal) property and antimicrobial property. *Ghrita's* lipophilicity makes it easier for drugs to enter cells .Likewise it helps in re-establishing the typical surface to skin. Therefore, all of these properties work primarily at the cellular level of the skin, reducing keratinization of the cell layer and thereby enhancing the cell cycle. As a result, symptoms like itching, skewed complexion, excessive sweating, white or red patches, and normal skin texture are reduced.¹⁴

- Probable mode of action of drug *Khadiraristam* :

Khadiraristam consists of *Khadira Sar, Devdaru, Bakuchi, Daru Haridra, Haritaki, Bhibhitaki, Amalaki* so it possesses *Kushtha Ghan* properties and it has antifungal activity against dematophytes.¹⁵

- Probable mode of action of drug *Avipatkar Churna*

Avipatkar Churna Consists Of *Haritaki, Bhibhitaki, Amalakai, Pippali, Maricha, Sunthi, Musta, Vida Lavana, Vidang, Ela, Patra, Lavanga, Trivrit, Sarkara*, so it helps in the digestion of the food and prevents bloating and flatulence. It supports the growth of healthy microbial flora, which helps in boosting digestive functions. *Avipattikar Churna* helps in treating other digestive ailments like constipation, and indigestion.¹⁶

Conclusion :

In this case study, marked improvement was seen in patient of *Dadru Kustha*. The treatment was helpful in *Kandushaman, Rakta Prasadana, Shaman* of vitiated *Kapha Pitta Dosha* as it increased skin immunity against microbes . However it also increase gut microbiota . Hence the treatment was found effective to relieve the symptoms quite significantly. So large scale , multicentred trial can be carried out to ascertain the efficacy of above ayurvedic drug on *Dadru* (tinea corporis infection).

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