

Management of *Dadru Kushta* (Tinea corporis) through Ayurveda– A Case Study

Case Report

Manish Hirasingh Chavhan^{1*}, Sadhana Misar Wajpeyi²

1. Post Graduate Scholar, 2. Head of Department, Department of Kayachikitsa, Mahatma Gandhi Ayurveda College, Hospital, Research Centre, Salod (H), Wardha, Maharashtra.

Abstract

Skin is the largest organ of human body. Its size and external location makes it susceptible to various disorders. Skin diseases are mostly caused by infections like bacteria, fungi etc. All the skin diseases in *Ayurveda* have been classified under the broad heading of '*Kushta*' which are further classified into *Mahakushta* and *Kshudrakushta*. *Dadru* is one amongst them. It is *Raktapradoshaja vyadhi* having *kapha*, *pitta* dominance. Due to similarity of all symptoms *Dadru* can be very well correlated with Tinea corporis which is a fungal infection especially caused due to poor hygienic conditions. In *Ayurveda Shodhan* and *Shaman chikitsa* is mainly indicated in *Kushta*. A 50 yrs old female came with complaints of round and reddish patches over abdominal region with severe itching for 20 days. She was treated with *Arogyavardhini vati*, *Gandhak rasayan*, *Gomutra siddha haritaki* internally and *Karanj* oil and *S-kin* powder externally for 14 days. After completion of treatment, significant improvement was observed in the parameters like *Kandu* (itching), *Raaga* (Erythema), *Pidika* (eruptions) and *Utsaana mandala* (elevated circular skin lesion). In *Samhita* repeated *shodhana* is indicated in *Kushta* hence *nityavirechana* in the form of *Gomutra siddha haritaki* was given. *Arogyavardhini vati*, *Gandhak rasayan*, *Karanj* oil and *S-kin* powder having *Kushtaghna*, *Kandughna* and *Krumighna* properties help in elimination of aggravated *doshaja* 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 kushta*.

Key Words: *Kushta*, *Kandughna*, *Kushtaghna*, *Dadru*, Tinea corporis.

Introduction:

Skin is the largest organ of human body. Its size and external location makes it susceptible to various disorders. In recent years, there has been a considerable increase in the incidence of skin problem in the tropical and developing countries like India. (1) All the skin diseases in *Ayurveda* have been classified under the broad heading of '*Kushta*' which are further classified into *Mahakushta* and *Kshudrakushta*. *Dadru* is one amongst them. (2) *Acharya Charak* has included *Dadru* in *Kshudrakushta*, (3) whereas *Acharya Sushruta* and *Acharya Vagbhata* have explained under *Mahakushta*. (4), (5) *Vishamashana* (Incompatible food), *vegavidharana* (suppression of natural urges), *diwaswapa* (daytime sleeping), intake of *atilavana*, *atitikshnaahar* (excessive salty or spicy food), intake of contaminated food, drinking cold water just after physical work or *atapsevana* (exposure to sunlight) are causative factors of *Kushta*. (6) The main *lakshanas* of

Dadru include *Kandu* (Itching), *Utsanna* (elevated circular lesions), *Mandala* (Circular Patches), *Raaga* (Erythema), and *Pidakas* (Papule). The *samprapti* of *Dadru* mainly involves vitiation of *Pitta-kapha doshas* and *dushti* of *rasa* and *raktavaha strotas*. (7) Due to similarity of symptoms *Dadru* can be correlated with Tinea corporis, which is a fungal skin infection. The related fungi are dermatophytes capable of causing skin changes of the type known as Tinea or ringworm or dermatophytosis or Mycosis. (8) 5 out of 1000 people are suffering from Tinea infection. (9) In modern medical science, it is managed with topical and systemic antifungal agents and use of corticosteroids. In *Ayurveda Shodhan*, *Shaman* and *Bahirparimarjan* (topical) *Chikitsa* is indicated for *Dadru*. (10, 11) All these treatment modalities are used in this case study. For *shodhana nitya virechana* with *Gomutra siddha haritaki* was given. In *Shamana chikitsa* formulations like *Arogyavardhini vati* and *Gandhaka Rasayana* having *Kushtaghna*, *Krumighna* and *Kandughna* properties were used. *Bahirparimarjana chikitsa* was given in the form of *lepa* of *S-kin* powder with *gomutra* and local application of *Karanj* oil.

* Corresponding Author:

Manish Chavhan

PG scholar, Department of Kayachikitsa, Mahatma Gandhi Ayurveda College, Hospital, Research Centre, Salod (H), Wardha, Maharashtra.

Email id - manishchavhan10@gmail.com

Case Report

50 years old female came to *Kayachikitsa* OPD of Mahatma Gandhi Ayurveda College Hospital & Research Centre, Salod (H) Wardha with Chief complaints of round and reddish patches over abdominal region with severe itching for 20 days.

History of present illness

Patient was well before 20 days, and then she gradually developed the round and reddish patches over abdominal region with severe itching. For that she had taken Allopathic treatment from local practitioner but didn't get satisfactory result so, she came to MGAC Hospital for management.

Past History

There was no any past history of Diabetes mellitus, Hypertension, Asthma & Hypothyroidism.

Family History

Husband had similar complaints.

Clinical Examination

Ashthavidh pariksha was within normal limit except patient had constipation. Patient had *madhyam akruti*.

Local examination - 4-5 circular erythematous, well demarcated patches with some vesicular eruption over abdominal area. No discharge from lesion.

Vital parameters- Vitals parameters were within normal limit.

Diagnosis

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

Table No 1: Treatment suggested

Sr. no.	Drug given	Dose /Anupan	Duration/ Time
1	<i>Arogyavardhini vati</i>	500mg twice a day with <i>koshna jala</i> (lukewarm water)	14 days / after food
2	<i>Gandhak rasayan</i>	500mg twice a day with <i>koshna jala</i> (lukewarm water)	14 days / after food
3	<i>Gomutra siddha Haritaki</i>	5gm at night with <i>koshna jala</i> (lukewarm water)	14 days / after food at night
4	<i>S-kin powder</i>	Local application with <i>Gomutra</i>	Before bath
5	<i>Karanja oil</i>	Local application	Twice a day

Follow up- After 7 days

Investigations

CBC and RBS were within normal limits

Assessment criteria

Assessment of patient was done on the basis of improvement in subjective parameters like *Kandu* (Itching), *Raaga* (Erythema), *Utsanna mandala* (Elevated circular skin, Lesion) and *Pidika* (Eruption) and photographs of lesion before, during and after treatment.

Table No 2: Gradation of Parameters

SN	Grade 0	Grade 1	Grade 2	Grade 3
<i>Kandu</i> (Itching)	Absent	Mild or Occasional Itching	Moderate or Frequent Itching	Severe Itching
<i>Utsanna mandala</i> (Elevated circular skin lesion)	Absent	Mild elevated lesion	Moderate elevated lesion	Severe elevated lesion
<i>Pidika</i> (Eruption)	Absent	1 - 3 eruptions	4 - 7 eruptions	> 7 eruptions
<i>Raaga</i> (Erythema)	Absent	Present		

Observation and Results

Table No 3: Assessment before, during and after treatment

Symptoms	On Day 0	On Day 7	On Day 14
<i>Kandu</i> (Itching)	3	2	0
<i>Utsanna mandala</i> (Elevated circular skin lesion)	3	1	0
<i>Pidika</i> (Eruptions)	3	2	0
<i>Raaga</i> (Erythema)	1	1	0

Before treatment Gradation of *Kandu* was 3 (Severe Itching) which reduced to 2 (Moderate or Frequent Itching) during first follow up and it was absent on day 14 that is after completion of treatment. Before treatment Gradation of *Utsanna mandala* was 3 (Severe elevated lesion) which reduced to 1 (Mild elevated lesion) during first follow up and it was absent on day 14 that is after completion of treatment.

Before treatment Gradation of *Pidika* was 3 (> 7 eruptions) which reduced to 2 (4-7 eruptions) during first follow up and it was absent on day 14 that is after completion of treatment

Before treatment *Raaga* (Erythema) was present that persists during first follow up and it was absent on day 14 that is after completion of treatment.

Thus complete improvement was observed in all parameters after completion of treatment. Same can be seen in following pictures taken before, during and after treatment.

Before Treatment: Figure-1- On day 0



First follow up : Figure-2- On day 7



Second follow up : Figure-3- On day 14



Discussion

All Kushta are Tridoshaj. But according to Acharya Charak and Vagbhata, Dadru is Pitta-Kapha dominance and according to Acharya Sushruta it is Kaphapradhan. There is involvement of Rasa and Rakta in the samprapti. In Samhita repeated Shodhana and Shamana drugs having Kushtaghna, Krumighna and Kandughna properties are described for Kushta. Along with this, for better result, Bahiparimarjana Chikitsa (local application of drugs) in the form of lepa and oil was also advised. In this case study the patient was treated with internally Gomutra siddha Haritaki Churna, Arogyavardhini vati and Gandhaka rasayana with external application of S-kin powder lepa with Gomutra and karanja oil for 14 days.

Probable mode of action of Arogyavardhini vati

Arogyavardhini vati is a herbomineral formulation mainly indicated in Kushta roga. The main ingredient of Arogyavardhini vati is Kutaki (*Picrorrhiza kurroa* Royle ex Benth). It also contains Haritaki (*Terminalia chebula* Retz.), Bibhitaka (*Terminalia bellerica* (Gaertn.) Roxb.), Amalaki (*Emblica officinalis* Gaertn.), Shilajatu Shuddha (*Asphaltum*), Guggulu Shuddha (*Commiphora wightii* Arn.), Eranda (*Ricinus communis* Linn.), and minerals like Shuddha Parada (purified mercury), Shuddha Gandhaka (purified sulfur), Lauha Bhasma (iron compound in ash form), Abhraka Bhasma (mica in ash form), and Tamra Bhasma (copper compounds in ash form) with bhavana of nimba (*Azadirachta indica* A.Juss) patra swarasa. Due to all these ingredients it possesses pitta virechan, tridosha shamak, deepan, pachan, kushthaghna, and kandughna properties. Due to these properties it helps in balancing tridosha, causes agnivardhana, bhedana, malashodhana and vatanulomana. (12) Kushtaghna and Kandughna properties help in relieving symptoms and breaking samprapti of disease.

Probable mode of action of Gandhak rasayan

Gandhak rasayan is a polyherbal drug prepared by giving 12 bhavanas of herbal drugs to Shuddha Gandhaka. It is mainly indicated in the management of Kushta Roga. (13) It possesses antibacterial and antifungal properties. It mainly acts on Rakta Dhātu and causes Rakta shodhan (purification of blood). It helps in reducing infection by its antifungal property. It also acts as Rasayana and helps in improving the digestion and skin complexion. Sulfur is used both internally and externally for treatment of diseases of skin. It reduces the Kandu, Pidika, Raaga and Daha by its Rakta shodhak, Vranaropak, Krumighna and Kushthaghna properties. (14)

Probable mode of action of Gomutra-siddha haritaki

Repeated shodhana is indicated in Kushta by all Acharyas. Haritaki has mrudu virechak property. Dadru is kapha-pitta pradhana vyadhi. So, Gomutra siddha haritaki is used for nitya Virechan which help in elimination of vitiated doshas. Bhavana of Gomutra enhances its potency and also helps in virechana. (15)

Probable mode of action of Karanja oil

According to Ayurveda, Karanj is anthelmintic, alexipharmic and useful in diseases of eye, vagina, skin. It is good for tumour, wounds, ulcers, itching, ascites, enlargement of spleen and abdomen, urinary discharges. It also cures biliousness, piles, head pains, leucoderma, skin diseases and wounds. According to Unani system of medicine, seeds are acrid and carminative, purify and enrich blood, relieves inflammations, cure earache, chest complaints, lumbago, chronic fever and hydrocele.

Karanja oil is described in Bhaishajya Ratnavali in Visarpa Chikitsa. Its main ingredients are Karanja (*Pongamia pinnata* (Linn) Merr.), Saptachada (*Alsonia scholaris* R.Br.), Langli (*Gloriosa superb* Linn.), Snuhi (*Euphorbia nerifolia* Linn.), Arka (*Calatropis procera* R.Br.), Anala (*Plumbago zeylanica* Linn.), Bhrigaraja (*Eclipta alba* Linn.), Nisha (*Curcuma longa* Linn), Gomutra (Cow urine), Visha (*Aconitum ferox* Wall. ex Ser.) in Murcchita sesame oil. (16) It has Krumighna (antifungal, antibacterial activity), Kandughna, Vranaropaka and Vranashodhaka properties. (17) These properties help in reducing symptoms. Local application is useful for fast absorption and also reduces roughness.

Probable mode of action of S-kin Powder

S-kin Powder contains fine powder of Manjistha (*Rubia cordifolia* Linn.), Amalaki (*Emblica officinalis* Gaertn.), Haridra (*Curcuma longa* Linn.), Bibhitaka (*Terminalia bellerica* (Gaertn.) Roxb.), Nagarmotha (*Cyperus rotundus* R.Br.) and Shudha Gandhaka (Purified Sulphur). All these drugs have Krumighna (antibacterial, antimicrobial, and antifungal), Raktashodhak (blood purifying) and Vranaropak (wound healing) properties. It is applied with Gomutra which enhances the absorption. Shodhit Gandhak is useful in the management of all types of skin disorders. Hence topical application of it helps in

reducing symptoms of Dadru like *Kandu*, *Raaga*, *Utsanna mandala* and *Pidikas*.

Conclusion

Dadru kushta is a type of *Kshudrakushta* according to *Acharya Charak* & *Mahakushta* according to *Acharya Sushruta* and *Acharya Vagbhata*. It can be correlated with *Tinea corporis* or dermatophytosis. As it is a contagious disease, personal hygiene is an important part in its management. From this case study it can be concluded that use of *Chikitsa upakramas* described in *Ayurveda* like *Shodhana* (*Nitya virechana* with *Gomutra siddha haritaki*), *Shamana* (formulations like *Arogyavardhini vati*, *Gandhak rasayan*) and *Bahiparimarjana* (*lepa* of *S-kin* powder in *gomutra* and local application of *Karanj* oil) are effective in the management of *Dadru kushta*.

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