



A Case Study on Management of Tinea Cruris with Classical Vaman Karma

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/JPRI/2021/v33i33B31811

Editor(s):

(1) Dr. Paola Angelini, University of Perugia, Italy.

Reviewers:

(1) Vijay Mohan Soni, Lovely Professional University, India.

(2) Sagar M. Bhide, India.

Complete Peer review History: <http://www.sdiarticle4.com/review-history/70537>

Case Study

Received 20 April 2021

Accepted 28 June 2021

Published 30 June 2021

ABSTRACT

Tinea Cruris is the disease of fungal infection of groin by dermatophyte fungi. It is commonly seen in men, and also called as Jock Itch as the other name. It is the condition which shows characteristics of disease as erythema, itching, burning sensation, cracked skin, skin rashes which worsen by exercise, skin discoloration and important symptom like rashes does not clear but increases due to antifungal creams. The management of the condition can be done in Ayurvedic perspective. According to Ayurveda all the classified disease of skin are considered as in *Kushta Roga* (skin disease), where the conditions of fungal infections are correlated with the *Dadru Kshudra Kushta* (Tinea). Due the clinical features of itch, redness, circular patches. The disease having exaggerated state of *Pitta* and *Kapha Dosha*, moreover *Kapha*. The treatment principle in such conditions is *Shodhan* Purification therapy along with *Shaman* (Pacifactory) therapy, as both therapies are considered best in *Kushta Roga* according to Acharyas. This case report is of the female patient suffered from itching over left thigh region along with redness, pimples, and round patches since 3 months, the patient finds the relief after following the Ayurvedic treatment as

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Shodhan Karma and *Shaman Karma* with lifestyle changes. The symptoms were diminished by *Vaman Karma* (emesis). She got 80-90% relief after *Shodhan Karma* as if one can consider the best treatment for tinea cruris.

Keywords: *Kshudra kushtaroga*; tinea cruris; *dadru*; *shaman karma*; *shodhan karma*; *vaman*

1. INTRODUCTION

Tinea Cruris is a fungal infection caused by fungi. These fungi are present in atmosphere, plants and over human skin. There have been numbers of fungus species explained in the modern which are capable to make one ill also causing different clinical appearance in the skin in different parts of body, out of which one of the infection is Tinea Cruris causing symptoms like redness, itching, patches over the thigh region and can be unilateral or bilateral. Tinea Cruris is a fungal infection caused due to dermatophyte type of fungus affecting thigh region and synonymic as Jock-Itch. It has raised red bordered ring like appearance which spread in inner thigh and mostly itchy. It has been also mentioned that different country of world have differs in causative species of fungus causing Tinea Cruris, likewise as *Trichophyton rubrum* and *Epidermophyton floccosum* in New Zealand as a common cause. The infection is not sexually transmitted disease but can be spread through skin to skin contact.

In *Ayurveda* the diseases of skin are considered under the *Kushta Roga*, which further classified into *Maha kushta* (Major skin disease) are 7 in no. and *Kshudra kushta* (Minor skin disease) are 11 in no.. According to Charak Acharya, mentioned About The *Kushta* as *Tridosha* (Bio-elements), vitiate the *Twacha* (Skin), *Mamsa* (Muscles), *Ambu* (Plasma), *Rakta* (Blood) all together responsible for *Kushta Roga* [1] As the clinical features of *Dadru* and Tinea resembles similar type of skin changes are known of tinea or ringworm. Tinea Cruris is correlated with the *Dadru Kshudra Kushta* in *Ayurveda*. Acharya Charak has considered *Dadru Kushta* under *Kshudra Kushta* [2] Acharya Sushrut mentioned under *Maha Kushta* [3] The clinical features of the *Dadru Kushta* is *Sa Kandu* (Itching), *Raga* (Erythema), *Mandala Udgatam* (Circular Patches), *Pidaka* (Skin Eruption/ Pimples) [4] Having predominance of *Pitta* and *Kapha*, especially *Kapha* out of *Tridoshas* (bio-elements) [4] the causative factors of *Kushta* is intake classified in *Aharaj* (Dietic Regimen), *Viharaj* (lifestyle) *Nidan* (cause/etiological factor) like suppression of natural urges, intake of

incompatible food items, indigestion, unhygienic condition (*Krimi*) [5,6] cause the disease like *Dadru*. The *Samprapti* (pathogenesis) of *Dadru* is similar to that of tinea differ in stage of pathogenesis tinea, the *Krimi* (worm) which are developed due to unhygienic condition get lodged in in *Twak* (skin) as to the stage to penetration in tinea which directly minimise the immunity power by lowering lymphocytes, neutrophils, monocytes [7].

1.2 Classification

Tinea and *Dadru* are subdivided. Tinea is divided into superficial and deep mycosis (fungal infection), where superficial is further classified into depending areas like

- Tinea Capitis (Scalp And Hair),
- Tinea Barbae (Beard And Moustache),
- Tinea Corporis (Thorax And Extremities),
- Tinea Mannum (Palms),
- Tinea Pedis (Soles)
- Tinea Cruris (Groins And Buttocks),
- Tinea Ungium (Nails),
- Tinea Facie (Face)

Dadru is divided into *Sita* and *Asita*

2. AIMS AND OBJECTIVES

2.1 Aim

To evaluate effectiveness of classical *Vaman Karma* in treatment of Tinea Cruris.

2.2 Objectives

- Precise study of Tinea Cruris
- Precise study of *Dadru Kshudra Kushta*.
- Precise study of *Vaman Karma* in treatment of Tinea Cruris

3. MATERIALS AND METHODS

In classical text, many indication of *Vaman Karma* have been mentioned out of which *Kushta* is also indicated for *Vaman Karma*. As *Kushta Roga* is of 18 types which differ by predominant *Doshas* in it. Individual *Doshas* carry there

different symptoms along with the treatment principles. As *Dadru* is of *Pitta-Kapha* predominant *Dosha*, predominantly *Kapha* as mentioned in texts. By relating *Dadru* with *tinea* and the *Dosha*, *Vaman* karma was planned. According to Ayurveda management of disease *Vaman Karma* is considered as the prime line of treatment for *Kaphaj* disorders followed by *Shaman Chikitsa* (pacifying treatment).

4. CASE REPORT

A 25yr female patient came to clinic on (16/01/2020) with the complaints of erythema, boils, itching, discolouration and round patches over left inner thigh. The patient also suffered from frequent bowel movements. The complaints appear progressively one after another and aggravated even by medication. After examination she diagnosed with *Tinea Cruris*.

On examination, it was seen erythema, skin rashes, and circular patches over left inner thigh region.

4.1 Past History

The patient has the history of itching, redness, and pimples, over the left inner thigh. She took allopathic treatment by using antifungal medications like cream but complaint increased over site even after having medications, even though she does not found relief and she planned for taking Ayurvedic treatment.

Table 1. Asthavidha pariksha

STHANA	LAKSHANA
Nadi	72/Min (Manda Gati)
Mala	Vibandha
Mutra	Samyak
Jivha	Niram
Shabda	Spashta
Sparsha	Anushnasheeta
Drik	Normal
Akriti	Madhyam

Shodhan Karma

By assessing the *Koshta* (abdomen) of patient, dominant *Dosha* of disease, and the bowel habits of patient *Vaman* was planned. The patient was acknowledged about the procedure, medicaments, diet, and also about *Snehapana* (oleation) and *Swedan Karma* (sudation therapy) as in *Purvakarma* (pre-treatment).

The following medications were used for the whole *Vaman* planned

For,

- ✓ *Deepan-Pachan – Trikatu churna*
- ✓ *Vamanopaga Dravya – Ikshu Rasa, Yashtimadhu Phanta*
- ✓ *Vaman Dravya- Madanphala Churna*

The procedure is performed in mainly 3 divisions such as, *Purvakarma* (before procedure), *Pradhan Karma* (at the time of procedure), and *Pashchat Karma* (after procedure).

• *Purvakarma*

The stage deals with the *Deepan* and *Pachan Karma* because *Shodhan* medicine if administered in *Ajirna* state it will cause complications [8]. Along with the *Snehapana* and *Swedana*. As every disorders are manifested by diminished digestive fire, the *Doshas* become aggravated which further expand all over the body and lodges in sites by promoting symptoms by their *Dosha-Dushya Adhithana* relation. In every procedures of *Panchakarma Purvakarma* is the prior to be performed. By *Snehana Swedana Dosha* will get liquefy and will become mobile.

1. The patient was convinced for intake of *Trikatu Churna* 5gm with warm water, taken 30 minutes before meal and is continued for 3 days. 1-3 as for *Deepen-Pachan*.
2. After following the *Deepen-Pachan* for 3 days, the patient was advised to follow *Snehana* and *Swedana*. The *Abhyantar Snehana* was done with *Panchatikta Ghruta* for 7 days. Started with 30ml/day which keeps increasing dose up to 7 days. shown in Table 2
3. By assessing the *Samyak Siddhi Lakshana* of *Snehapana*, such as *Gatra Mardava* (soft feeling of body parts), *Agnideepti* (increased digestive fire), *Asamhata Varcha* (loose stool), *Vatanulomana* (passage of flatus), *Snigdha Twacha* (oily skin).
4. After the *Lakshana* appeared, the patient was advised for rest on 11th day, *Abhyanga* by *Marichadi tail* and *Swedana* by *Dashmula Kwath Nadi Sweda* on the rest day and on *Vaman* day.
5. Patient was advised to follow *Abhyang* and *Swedan* on day of *Snehapan* completed, gap day, and *Vaman* day.

Table 2. Dose of snehapana

DAYS	QUANTITY
1 ST Day	30 ml
2 ND Day	60 ml
3 RD Day	90 ml
4 TH Day	120 ml
5 TH Day	140 ml
6 TH Day	160 ml
7 TH Day	180 ml

Table 3. Shaman aushadhi

Sr. No	Drugs	Dose	Time	Route	Duration
1.	Cap. Finbid	2 caps.	Twice a day	Oral	15 days
2.	Psora churna	-	Before bath	Local	15 days
3.	Marichyadi taila	-	At night	Local	15 days
4.	Panchatikta ghruta	1 tsf.	Twice a day	Oral	15 days
5.	Trichoderma cream	-	After bath	Local	15 days

- **Pradhan Karma**

1. On the day of *Vaman*, the patient was brought to *Vaman* room after examining the previous meal digestion, sound sleep, pulse, blood pressure, with proper *Abhyang* and *Swedan* done.
2. Patient was acknowledged about the procedure of *Vaman*. *Vaman* was carried out at morning 7:00 am due to naturally aggravation of *Kapha Dosh*.
3. Patient was asked to intake *Akanthapana Ikshu rasa*, followed by *Vamak Dravya*, *Madanphalpippali* and *Vamanopaga Kwath*.
4. After intake of *Vaman Dravya* the patient was observed for the *vaman* symptoms like *Kala Pravritti* (Onset of Vega), *Swayam Avasthan* (Stops by Itself), *Murdha Shuddhi* (Lightness in Head), *Laghuta* (Lightness).
5. Patient was also observed for *Sweda Pradurbhav* (Sweating), *Kukshi Adhman* Abdominal Discomfort), *Praseka* (Nausea) due the *Vaman* procedure.

6. *Vaman Vega* was observed also *Samyak Vaman Lakshanas*, such as lightness in body, lightness in head, and clarity of sense.

- **Paschat Karma**

1. After the completion of *Vaman Karma* vital parameters were recorded.
2. Was advised with *Samsarjan Karma*, which include about the diet, behaviour changes.
3. Was given medicated Smoke (*Dhumpana*), which helps in removing adherent *Doshas* present in the body.
4. *Samsarjan Karma* was followed for 7 days after the *Vaman Karma* following *Shaman Chikitsa*.

4.2 Observation

- ✓ *Vaman vega* – 10 vega
- ✓ *Antiki vaman dosha* – *pitta dosha*
- ✓ *Upadrava* (Complications) – No any complications

Shamana Chikitsa

After completing *Shodhan*, patient was advised to follow *Shaman Chikitsa*.

Table 4. Ingredients of capsule finbid with their properties

Dravdravya	Botanical name	Action
Suddha Parad	<i>Purified Mercury</i>	Anti-Bacterial, Anti-Microbial
Suddha Gandhak	<i>Purified Sulphur</i>	Anti-Bacterial, Anti-Microbial & Anti-Viral
Suddha Hartal	<i>Purified Orpiment</i>	Antipyretic, Anti-inflammatory,
Suddha Vatsnabha	<i>Aconitum Ferox</i>	Antipyretic Anti-Inflammatory
Suddha Tankan	<i>Borax</i>	Anti-Inflammatory
Marich	<i>Piper Nigrum</i>	Carminative Action, Anti-Inflammatory
Tamra Bhasma	<i>Incinerated Coppe</i>	Antacid, Mild Laxative
Sariva	<i>Hemidesmus Indicus</i>	Anti-Microbial Antioxidant antipyretic
Manjistha	<i>Rubia Cordifolia</i>	Anti-Bacterial Anti-Microbial
Yastimadhu	<i>Glycyrrhiza Glabra</i>	Anti-Ulcer Anti-Inflammatory
Jatamansi	<i>Nardostachys Jatamansi</i>	Antifungal, Antimicrobial, Antioxidant
Nagkesar	<i>Mesua Ferrea</i>	Anti-Inflammatory
Kababchini	<i>Piper Cubeba</i>	Anti-Inflammatory Anti-Helminthic
Ashvanaghda	<i>Withania Somnifera</i>	Anti-Septic
Suddha Gugul	<i>Commiphora Mukul</i>	Analgesic Anti-Inflammatory

Table 5. Ingredients of Marichyadi Taila with their properties

Dravya	Botanical name	Action
Marich	<i>Piper Nigrum</i>	Carminative Action, Anti-Inflammatory
Hartala	<i>Purified Orpiment</i>	Antipyretic, Antinflammatory
Trivrit	<i>Operculina Terpentum</i>	Analgesic, Anti-Inflammatory
Raktachandan	<i>Pterocarpus Santalinus</i>	Blood Purification
Mushta	<i>Cyperus Rotundus</i>	Anti-Helminthic
Manashila	<i>Purified Realgar</i>	Anti-Inflammatory Antipyretic
Mamsi	<i>Nardostachys Jatamansi</i>	Antifungal, Antimicrobial, Antioxidant
Haridra	<i>Curcuma Longa</i>	Anti-Helminthic, Anti-Bacterial
Daruharidra	<i>Berberis Aristata</i>	Anti-Bacterial, Anti-Fungal
Devadaru	<i>Cedrus Deodara</i>	Anti-Helminthic
Vishala	<i>Citrullus Colocynthis</i>	Anti-Oxidant
Kushta	<i>Saussurea Lappa</i>	Anti-Ageing, Anti-Inflammatory
Arka	<i>Calatropis Procera</i>	Antifungal
Gomayarasa	<i>Cow Dung Water</i>	Anti-Microbial
Katutaila	<i>Brassia Juncea</i>	Anti-Oxidant
Gomutra	<i>Cow Urine</i>	Anti-Microbial, Anti-Helminthic

Table 6. Ingredients of Panchatikta Ghrita with their properties

Dravya	Botanical name	Action
Nimba	<i>Azadirachta Indica</i>	Anti-Microbial, Antipyretic
Patola	<i>Trichosanthes Dioica</i>	Anti-Microbial, Blood Purifier
Kantakari	<i>Solanum Virginianum</i>	Anthelmintic, Anti-Inflammatory,
Guduchi	<i>Tinospora Cordifolia</i>	Antipyretic, Anti-Microbial
Vasa	<i>Adhatoda Vasika</i>	Analgesic, Anti-Inflammatory
Haritaki	<i>Terminalia Chebula</i>	Antipyretic
Bibhitaka	<i>Terminalia Bellirica</i>	Antipyretic
Amalaki	<i>Phyllanthus Emblica</i>	Anti-Inflammatory

Table 7. Ingredients of trichoderma cream with their properties

Dravya	Botanical name	Action
Nimba	<i>Azadirachta Indica</i>	Anti-Microbial, Antipyretic
Jati	<i>Tectona Grandis</i>	Analgesic
Chakramarda	<i>Cassia Tora</i>	Anti-Microbial, Anti-Allergic, Anti-Inflammatory
Shuddha gandhak	<i>Purified Sulphur</i>	Anti-Bacterial, Anti-Microbial & Anti-Viral

5. RESULTS

The patient's *Vaman* result to *Avara Shuddhi* followed by *Shaman Chikitsa*, the symptoms like erythema, cracks, itching etc. were relieved. The patient got adequate treatment. Result shown in Table 8.

6. DISCUSSION

According to classical literature, Tinea/Ringworm is related with the *Dadru Kshudra Kushta*. Tinea Cruris, and fungal infection of groin region in any gender, more often occurs in males it cause itching and burning sensation in the groin area, thigh area skin folds, and anus. It also involves the inner thighs and genital areas, and also extends towards back to the perineal and perianal areas. The Affected areas appear red, or brown, with cracking skin in text by *Acharya Ghanekar*, and *Acharya Sushruta* it is mentioned about the 7 layers of skin [9,10] out of 7 layers, 4th layer named *Tamra* is the site of *Dadru Kushta* formation, the same was also described by *Acharya Charak* [11]. *Kshudrakusta* is the type of *Kushta Roga*, *Kushta* has the predominance of all three *Doshas* along with *Dushya* like *Rasa*, *Rakta*, *Mamsa Dhatu* [12,13]. By *Acharya Chakrapani*, he has mentioned the Pacification of *Doshas* in *Kushta Roga* is done by *Shodhana* purposely and repeatedly [14].

In present study, after taking proper history and examination as shown in Table 1 the patient was prior undergone for *Deepen-Pachan* karma by *Sunti Churna*. A *Sunthi* (*zingiber officinale*) dry ginger is *Ushna Viryatmak* (potency) it minimise the *Vata-Kapha* due to their *Sheet Guna* and

increase *Pitta* due to similar *Ushna Guna*. Due to its hot potency it act as digestive and carminative, it helps in for *Aam pachana*. After that the patient was advised for *Snehapana* with *Panchatikta Ghrita* in increasing dose as given in Table 2. It is an herbal *Ghruta* used most often in skin disorders and has a best result in skin diseases. It contains five *Tikta Rasa Dravya* as shown in Table 6. This improves digestion by its sharp and penetrates action which clarifies perception of skin. It moreover reduces *Kapha* and aggravates *Pitta*. It is considered as best for all skin diseases as mentioned in *Bhaisajya Ratnavali Kushta Adhikara*. The *senhapana* is then followed by *Snehana* i.e. *Abhyanga* and *Swedan* with *Nadi Sweda* by *Dashmula Taila* & *Kwath* respectively, as it is best in reduction of *Vata Dosh* and treats nervous system related disorders. The *Kushta* of *Kapha-Pitta* predominant are *Krucchasadya* (difficult to cure) [15] after this, Panchakarma procedure [16] the planned *Vaman Karma* [17,18] was performed. In *Shaman Chikitsa* as described in Table 3, the patient was advised capsule Finbid which is effective in fungal infections by increasing immune response, ingredients in capsule are mostly anti-inflammatory & anti-allergic as shown in Table 4 which controls itching, skin scaling, and skin infections and also helps to rejuvenate the skin cells, which replaces the infected destroyed cells with the healthy on which helps in deduction of the skin disorder symptoms. Another medication is *Marichyadi Taila* contains *Maricha* and other drugs as given in Table 5 is used for local application over the infected site. It has the anti-fungal and anti-septic properties used widely in reliving skin diseases. It has the

Table 8. difference in appearance of clinical features before & after treatment

Sr. No.	Clinical features	Before treatment	After treatment
1.	Itching	+++	No itching
2.	Pimples	+++	No pimples/boil
3.	Circular patches	+++	+
4.	Erythema	+++	No redness
5.	Discolouration	+++	+



Fig. 1. Pictures of tinea cruris before and after treatment

property of pacifying pitta and *Kapha-Kleda* reduction action, it is commonly used in conditions like itching, and redness likewise Trichoderma cream, containing drugs as shown in Table 7 having anti-fungal effect of ingredients. It helps in reducing cell wall permeability of membrane in fungi which helps in decreasing the symptoms of fungal infection and suggest a satisfactory relief from symptoms.

7. CONCLUSION

After Acknowledge the fact about the satisfactory relief from *Vaman Karma* in Tinea Cruris patient, followed by *Shaman Chikitsa*. The disorder is of *Tridosha* and can be treated by balancing the *Doshas* by *Shodhan Karma* and *Shaman Chikitsa*. The present study is about the management of Tinea Cruris by classical *Vaman* mentioned in Ayurveda text followed by Oral administration of some polyherbal medication which gives better result in decreasing symptoms of disease as shown in Table 8. So, it can be said that by following *Panchakarma* one can have a healthy life.

CONSENT

It is not applicable.

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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Peer-review history:
The peer review history for this paper can be accessed here:
<http://www.sdiarticle4.com/review-history/70537>