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.

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 clears 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 Kaptha Dosha, moreover Kaptha. The treatment principle in such conditions is Shodhan Purificaton therapy along with Shaman (Pacificatory) 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
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 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 Kushtha.
- 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.

The following medications were used for the whole Vaman planned

For,

- Deepan-Pachan – Trikatu churma
- 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 Snehabana and Sedana. 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 Adhisthana relation. In every procedures of Panchakarma Purvakarma is the prior to be performed. By Snehana Sedana Dosha will get liquefy and will become mobile.

1. The patient was convinced for intake of Trikatu Chuma 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 Snehabana and Sedana. The Abhyantar Snehabana 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 Snehabana, such as Gatra Mardava (soft feeling of body parts), Agnideepi (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 Sedana by Dashmula Kwath Nadi Sweda on the rest day and on Vaman day.
5. Patient was advised to follow Abhyang and Sedan on day of Snehabana completed, gap day, and Vaman day.

### 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 Snehabana (oleation) and Sedana Karma (sudation therapy) as in Purvakarma (pre-treatment).
Table 2. Dose of snehapana

| DAYS  | QUANTITY |
|-------|----------|
| 1ST Day | 30 ml |
| 2ND Day | 60 ml |
| 3RD Day | 90 ml |
| 4TH Day | 120 ml |
| 5TH Day | 140 ml |
| 6TH Day | 160 ml |
| 7TH 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 Dosha.
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
- Upadra (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   | Purified Mercury    | Anti-Bacterial, Anti-Microbial|
| Suddha Gandhak | Purified Sulphur    | Anti-Bacterial, Anti-Microbial & Anti-Viral |
| Suddha Hartal  | Purified Orpiment   | Antipyretic, Anti-inflammatory, |
| Suddha Vatsnabha| Aconitum Ferox      | Antipyretic Anti-Inflammatory |
| Suddha Tankan  | Borax               | Anti-Inflammatory             |
| Marich         | Piper Nigrum        | Carminative Action, Anti-Inflammatory |
| Tamra Bhasma   | Incerated Coppe     | Antacid, Mild Laxative        |
| Sariva         | Hemidesmus Indicus  | Anti-Microbial Antioxidant antipyretic |
| Manjistha      | Rubia Cordifolia    | Anti-Bacterial Anti-Microbial  |
| Yastimadhu     | Glycyrrhiza Glabra  | Anti-Ulcer Anti-Inflammatory  |
| Jatamanssi     | Nardostachys Jatamanssi | Antifungal, Antimicrobial, Antioxidant |
| Nagkesar       | Mesua Ferrea        | Anti-Inflammatory             |
| Kababchini     | Piper Cubeba        | Anti-Inflammatory Anti-Helminth |
| Ashvanaghda    | Withania Somnifera  | Analgesic                     |
| Suddha Gugul   | Commiphora Mukul    | Anti-Inflammatory             |

### Table 5. Ingredients of Marichyadi Taila with their properties

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

### Table 6. Ingredients of Panchatikta Ghrita with their properties

| Dravma         | Botanical name      | Action                        |
|----------------|---------------------|-------------------------------|
| Nimba          | Azadirachta Indica  | Anti-Microbial, Antipyretic    |
| Patola         | Trichosanthes Dioica| Anti-Microbial, Blood Purifier |
| Kantakari      | Solanum Virginianum| Anthelmintic, Anti-Inflammatory |
| Guduchi        | Tinospora Cordifolia| Antipyretic, Anti-Microbial   |
| Vasa           | Adhatoda Vasika     | Analgesic, Anti-Inflammatory  |
| Haritaki       | Terminalia Chebula  | Antipyretic                    |
| Bibhitaka      | Terminalia Bellirica| Antipyretic                    |
| Amalaki        | Phyllanthus Emblica | Anti-Inflammatory             |
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 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 Sunti (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. Aybyanga and Swedan with Nadi Sweda by Dashmula Taila & Kwath respectively, as it is best in reduction of Vata Dosha 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 7. Ingredients of trichoderma cream with their properties

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

### 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.      | Disclouration     | +++              | +               |
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