

Research Article

EPIDEMIOLOGICAL STUDY OF DADRU IN CONTEXT TO UNHYGIENIC DIET AND REGIMEN (MITHYA AHARA AND VIHARA)

Manisha Talekar^{1*}, Sisir Kumar Mandal², Reetu Sharma³

- 1. PG Scholar, Dept. of Roganidana evam vikriti vijnana, National Institute of Ayurveda, Jaipur, Rajasthan, India.
- 2. Assistant professor, Dept. of Roganidana evam vikriti vijnana, National Institute of Ayurveda, Jaipur, Rajasthan, India.
- 3. Lecturer, Dept. of Roganidana evam vikriti vijnana, National Institute of Ayurveda, Jaipur, Rajasthan, India.

Received: 19-06-2015; Revised: 30-08-2015; Accepted: 31-08-2015

Abstract

Today the food and food habits are changing according to changing life-style of present inhabitants. Any aberration in diet and in their preparation style leads to ill-health. The main aim of this study is to conduct a survey study on types of Viruddha Ahara (incompatible diet) and unhygienic diet and regimen (Mithya Ahara & Vihara) in Dadru Kustha (Dermatophytoses). For survey study, total 320 Dadru patients were selected. Survey was carried on the basis of specially prepared questionnaires. The study reveals that, all patients of Dadru were consuming Viruddha Ahara. Out of 320 patients, 100% patients were taking Samskara Viruddha Ahara (incompatibility of homologation), Matra Viruddha Ahara (incompatibility of quantity of food), Avastha, Viruddha Ahara (incompatibility of state of health) & Hrdaya Viruddha Ahara (incompatibility of palatability). 66.87% patients were living in unhygienic condition (Mithya Vihara). As a result it was concluded that, most important etiological factor of Dadru Kustha is incompatible food, unhygienic living condition and hence these factors should be avoided.

Keywords: Viruddha Ahara; Dadru; Dermatophytoses.

*Address for correspondence:

Dr. Manisha Talekar,

PG Scholar, Dept. of Roganidana evam vikriti vijnana,

National Institute of Ayurveda,

Jaipur, Rajasthan, India – 302 002

E-mail- dr.mani21jan@gmail.com

Cite This Article

Manisha Talekar, Sisir Kumar Mandal, Reetu Sharma. Epidemiological study of Dadru in context to unhygienic diet and regimen (mithya ahara and vihara). Ayurpharm Int J Ayur Alli Sci. 2015;4(9):176-182.



INTRODUCTION

In Ayurveda the term Kustha covers almost all the skin diseases. Kustha is produced invariably by the vitiation of the seven factors i.e. 3 Doshas & 4 Dushyas and further categorized in to Maha kushta & Kshudra kushta. Dadru Kustha is a type of Kustha that comes under both due to its quick invading nature. In broad sense Kustha is the one. which causes vitiation as well as discoloration of the skin.^[1] Acharya Caraka has depicted Dadru as a Kshudra kushta. As per the definition, the reddish coloured Pidaka (lesion) in the form of Mandala (rounded lesion) with elevated borders and itching is known as Dadru. [2] Dadru is very tenacious in nature & relapses are also very common. On the basis of presenting symptomatology, Dadru can be simulated with Dermatophytes are related fungi^{[3][4]} capable of causing skin changes of the type known as ringworm or dermatophytosis.

The main causative factors of Kushtha are Mithya Ahara and Mithya Vihara ^[5] (unhygienic diet and regimen) and Viruddha Ahara (incompatible diet). ^[6]

Mithya Ahara and Mithya Achara mean improper diet and improper living condition. According to Dalhana, the diet opposite to "Ashta Ahara Vidhi Vishesayatanani" is designated as Mithya Ahara. [7] Caraka has described eight factors determining the utility of food called as "Ashtavidha Ahara Vidhi Vishesayatanani". They are Prakruti (quality), Karana (preparation) Samyoga (combination) Rashi (quantum) Desha (place) Kala (time) Upayoga Samstha (use) and Upayokta (user). [8] These eight factors give rise to beneficial effects. Habitual intake of things in proper way may be more useful but in improper way they are always harmful. So they should be avoided.

Next causative factor is Viruddha Ahara means incompatible diet. Viruddha or Vairodhika is the Sanskrit term for incompatible or antagonistic. The substances which act as antagonist to normal Dhatu of the body should be regarded as Viruddha. These substances change the normal configuration of the Dhatus and leave them susceptible to the disease. Viruddha Dravyas has a propensity to provoke the Doshas only and not to expel them out. [9] And these dislodged and provoked Doshas, then interfere with the normal physiology of the body and cause various disorders.

In Ayurveda, Acharyas have given the greater importance on Nidana Parivarjanam. Nidana Parivarjanam means to abstain from aetiological factors. It stops the further progression of the disease by restricting vitiation of Doshas. Hence, to understand the Viruddha Ahara (incompatible diet) and Mithya Ahara & Achara as a Nidana (cause) in Dadru Kustha and to know its relevance in the present era, this present study is selected.

AIMS AND OBJECTIVES

The main aims and objectives of this Study is to conduct a survey on types of incompatible diet and unhygienic diet and regimen in Dadru Kustha (Dermatophytoses).

MATERIAL AND METHODS

Total 320 patients of Dadru (Dermatophytoses) having signs and symptoms viz. reddish coloured round lesions (Mandala) with elevated borders and Severe itching (Kandu) were selected after the informed consent, irrespective of their age, sex, occupation, religion etc.

Survey was carried on the basis of specially prepared questionnaires. As described in Caraka Samhita Sutrasthana^[10] and other Samhitas, the questions of survey were based on examples of 18 types of Viruddha Ahara and Mithya Ahara & Vihara.



OBSERVATIONS

Out of 320 patients, it was found that, maximum patients (71.87%) were found in the age group of 20-35 years. In case of gender, 76.56% of patients were male followed by 23.44% were female. Marital status shows that 68.43% patients were unmarried. Maximum patients (86.87%) were from Hindu community. Maximum patients (45.62%) had passed H.SC. and 26.56% were graduates. Maximum patients of study (50%) were student followed by 27.81% patients were labours. 64.06% patients were vegetarian. (Graph 1)

On considering the data of Sharirika Prakruti, maximum i.e. 53.12% patients had Vata- Pitta Prakruti followed by 34.37% patients were of Vata Kapha Prakruti. 87.50% patients were having Avara Vyayama shakti. On analyzing the Agni of the patients it was found that, 85.31% patients were having Mandagni (poor digestive capacity). In case of bowel habit, 66.56% patients had satisfied regular bowel evacuation. Constipation was reported in rest of the patients. In case of dominant Rasa Sevana (taste), predominance of Madhura Rasa (sweet taste) was observed in 81.25% patients followed by Amla (sour) (89.37%) & Lavana Rasa (salty) (87.18%). Dietary habit shows that, maximum number of patients i.e. 66.56% were habituated to Adhyasana (excess intake of food). (Graph 2)

The data of Nidra (sleep) shows that maximum number of patients i.e. 63.43% was taking Divasvapna (day sleep). On history, onset of disease shows that, most of the patients i.e. 66.87% had gradual onset. Most of the patients (77.81%) had the disease since long. Aggravating factor shows that, maximum no of patients (66.56%) did not report the aggravation of the diseases with regard to season. However 20.93% patient reported monsoon while 12.50% patients reported winter as an aggravating factor. (Graph 3)

All patients (100%) were found of Viruddha Ahara and Mithya Aharacara consumer.

On considering data of Viruddha Ahara and Mithy Aharacara consumer in 320 patients of Dadru, all patients (100%) were taking Hot and boiled curd (Kadhi / gatte ki sabji) in their regularly. 59.06% patients consuming honey along with hot water which comes under Samskara Viruddha Ahara (incompatibility of mode of preparation). 92.81% patients were taking of sweet food / fatty food after sleep or drowsiness and 66.87% patients were taking sleep after having meal which comes under Avastha Viruddha Ahara (incompatibility of state of health). patients taking food items 93.12% unhygienic place and 61.56% were consuming Unpleasant (dislikes) food. This type of Viruddha Ahara comes under Hrdava Viruddha Ahara (incompatibility palatability). Intake of Lavana like pickle, papad, namkeen, spicy and salty food items in excessive quantity were found in 100% patients. 91.87% patients were consuming Snigdha (unctuous) like butter / Guru (Udada, buffalo milk) in excessive quantity which is Matra Viruddha Ahara (incompatibility of quantity). 66.87% patients were living in unhygienic condition (Mithya Vihara). (Table 1)

DISCUSSION

Age

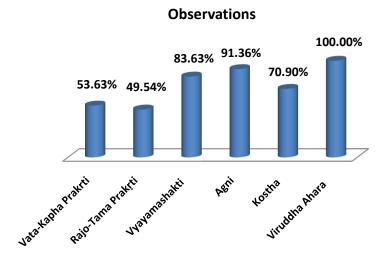
In this study, maximum patients (71.87%) were found in the age group of 20-35 years. This is the age group when the individual is more active, enthusiastic and enjoys the various Nidanas of Kustha.

Gender

In case gender, Male predominance 76.56% was evident. No direct reference is available about the relation between the gender and Dadru (dermatophytoses).



Graph 1: Graph depicting the age group, gender, marital status, religion, education, occupation, diet pattern of total study patients (n=320)



Graph 2: Graph depicting the sharirika prakruti, vyayama shakti, agni, koshtaha, bowel habits, of total study patients (n=320)

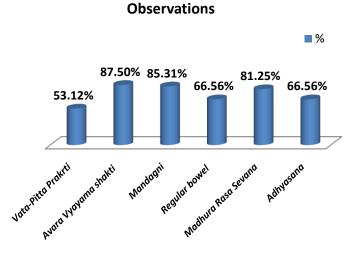


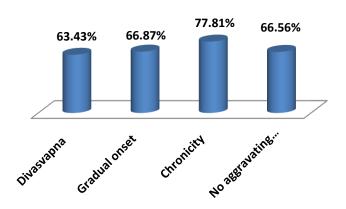
Table 1: Prevalence of Nidana (Cause)

Availability of Nidana	No. of patients	%
Hot & boiled curd - Kadhi / gatte ki sabji	320	100%
Honey along with hot water	189	59.06%
Intake of sweet food / fatty food after sleep or drowsiness.	297	92.81%
Taking sleep after having meal	214	66.87%
Food items which have taken at unhygienic place	298	93.12%
Unpleasant (dislikes) food	197	61.56%
Intake of Lavana like pickle, papad, namkeen, spicy and salty food items in excessive quantity	320	100%
Snigdha like butter / Guru (Udada, buffalo milk) in excessive quantity	294	91.87%
Living in unhygienic condition (improper Achara)	214	66.87%



Graph 3: Depicting the nidra, gradual onset, duration, aggravating factor of total study patients (n=320)

Observations



Marital status

Marital status shows that 68.43% patients were unmarried. Probably, most of the patients were students so this result was found.

Religion

Maximum patients (86.87%) were from Hindu community. This may be due to the area where the study performed.

Occupation

Maximum patients of study (50%) were student followed by 27.81% patients were labours. It may be due to communicable nature of Dadru among teenagers & the susceptibility of labour class to the infections is due to carelessness about hygienic norms & lack of knowledge regarding the proper dietary practice.

Diet pattern

In survey study, 64.06% patients were vegetarian. It may be due to general religious principle of Hindu especially in this area.

Sharirika Prakruti

On considering the data of Sharirika Prakruti, maximum i.e. 53.12% patients had Vata- Pitta Prakruti followed by 34.37% patients were of Vata Kapha Prakruti. As the disease are having Pitta- Kapha dominancy.

Vyayama Shakti

87.50% patients were having Avara Vyayama Shakti. Caraka has very rightly stated that one who does exercise daily remains unaffected by Viruddha Ahara. So patients having Avara Vyayama Shakti cannot overcome the harmful effect of incompatible diet. [11]

Agni

On analyzing the Agni of the patients it was found that, 85.31% patients were having Mandagni leading to the formation of Amavisha which forms one of the prominent factors in Samprapti.

Bowel habit

In case of bowel habit, 66.56% patients had satisfied regular bowel evacuation. Constipation was reported in rest of the



patients. From this observation, it reveals that Constipation might be one of causative factors of Kustha as leads to improper Sara Kitta Vibhajana function. Due to this, waste material accumulates in skin and disturbs the physiological function of skin. [12]

Dominant Rasa Sevana

In case of dominant Rasa Sevana, there was predominance of Madhura Rasa among the patients (81.25%) followed by Amla (89.37%) & Lavana Rasa (87.18%). As mentioned in Samhitas, Madhura, Amla and Lavana Rasa may causes vitiation of Kapha. Amla and Lavana Rasa may provoke Pitta and Rakta Dushti [13] which are main culprits of Dadru.

Dietary habits

Dietary habit shows that, maximum no. of patients i.e. 66.56% were habituated to Adhyasana. Adhyasana means intake of food before the digestion of previous meal which produces Amavisha. This factor is also cause of Rakta Dushti. [14]

Nidra

Sleeping Habit shows that maximum number of patients i.e. 63.43% were taking Divasvapna (day sleep). Divasvapna increases Kapha dosha resulting in Agni Dushti by mask the Parinama (transformation) of Agni. Divasvapna is direct cause of Rakta Dushti.

Onset

On history, it was found that, Most of the patients i.e. 66.87% had gradual onset which indicates its Cirakari (slow) nature.

Duration

Most of the patients (77.81%) had the disease since 3-4 years. It may be due to continuous consumption of incompatible diet &

negligence of the patients about disease results in its chronic nature.

Aggravating factors

Aggravating factor shows that, Maximum no of patients (66.56%) did not report the aggravation of the diseases with regard to season. However 20.93% patient reported monsoon while 12.50% patients reported winter as an aggravating factor. This indicated its more incidence rate of seasonal variation of fungal infections of the skin with respect to monsoon & winter season which supported by modern science. [16]

Viruddha Ahara (incompatible diet) & Mithya Aharachara (unhygienic diet & regimen) consumer

Observations of etiological factors found in patients showed that, all patients (100%) were consuming incompatible diet & unhygienic diet & regimen. Nidanas (causes) which have been found in variety of patients can cause Samprapti of Dadru Kustha in various ways, most of them cause Rakta Dushti along with Pitta Dushti some causes direct vitiation of Agni.

Furthermore, in recent years the number of fungi recognized as human pathogens has risen, caused partly by an increasing population of debilitated and immunecompromised patients.^[17] After the analysis of data regarding incidence of Dadru Kustha and Viruddha Ahara (incompatible diet) & Mithya Aharachara (unhygienic diet & regimen), it is observed that as mentioned in Susruta Samhita.^[18] On observation of survey study, it is hypothesized that, Agni mostly gets vitiated by incompatible diet and unhygienic diet & which is responsible for causing regimen 'Mandagni' and ultimately producing 'Ama' which having properties like 'Visha' (poison). Amavisha (undigested food toxin) which is intensely toxic, may endanger life. As Visha which possesses qualities are antagonistic to 'Ojas' (essence of the body),



its production leads eventually to the breakdown of immune system due to which body becomes vulnerable to produce diseases.

The concept of Mithya Ahara & Achara is much more applicable in context to Dadru. The types, availability of the food articles and nature (especially age) of the consumers supported that the articles are obviously outlet junk foods- where the both personal and hygiene of the food articles are affected and the consumer waited for a long in heat and humid. So unhygienic food intake, along with wearing of moist, dirt garments may be the enhancing factor for the disease Dadru.

CONCLUSION

The present study reveals that incompatible diet and unhygienic condition is main culprits for formulation of pathogenesis of Dadru Kustha. Hence if people avoid these faulty dietary intakes, then production of Dadru Kustha (Dermatophytoses) will be controlled up to some extent.

REFERENCES

- Vagbhata. Ashtanga Hridaya. Brahmanand Tripathi, editor. 1st ed. Varanasi: Chaukhamba Sanskrit Sansthan; 2009. Nidanasthana, 14/3. p. 527.
- Charaka. Charaka Samhita. Vidyadhara Shukla, Ravi Dutt Tripathi, editors. 1st ed. Varanasi: Chaukhamba Sanskrit Sansthan; 2007. Chikitsa Sthana, 7/23. p. 184.
- 3. Makimura K, Tamura Y, Mochizuki T *et al.* Phylogenetic classification and species identification of dermatophyte strains based on DNA sequences of Nuclear Ribosomal Internal Transcribed Spacer 1 regions. J Clin Microbiol 1999; 37: 920-924.
- 4. Lui D, Coloe S, Baird R *et al.* Application of PCR to the identification of dermatophyte fungi. J Med Microbiol 2000; 49: 493–7.
- Sushruta. Sushruta Samhita, Part I. Kaviraj Ambikadutta Shastri, editor. 1st ed. Varanasi: Chaukhamba Sanskrit Sansthan; 2011. Nidanasthana, 5/3. p.319.

- Charaka. Charaka Samhita. Vidyadhara Shukla, Ravi Dutt Tripathi, editor. 1st ed. Varanasi: Chaukhamba Sanskrit Sansthan; 2007. Chikitsa Sthana, 7/4-8. p. 181.
- 7. Sushruta. Sushruta Samhita (Nibandhasangraha Sanskrit Dalhana commentary). Yadavji Trikamji, editor. Varanasi: Chaukhamba Sanskrit Sansthan; 2008. Nidanasthana, 5/3. p. 282-283.
- Charaka. Charaka Samhita. Kashinath Sastri, Gorakhanath Chaturvedi, editors. 1st ed. Varanasi: Chaukhamba Sanskrit Sansthan; 2005. Vimanasthana, 1/21. p. 680.
- Charaka. Charaka Samhita. Kashinath Sastri, Gorakhanath Chaturvedi, editors. 1st ed. Varanasi: Chaukhamba Sanskrit Sansthan; 2005. Sutrasthana, 26/85. p. 521.
- Charaka, Charaka Samhita. Kashinath Sastri, Gorakhanath Chaturvedi, editors. 1st ed. Varanasi: Chaukhamba Sanskrit Sansthan; 2005. Sutrasthana, 26/81-101. p. 517-523.
- Charaka, Charaka Samhita. Kashinath Sastri, Gorakhanath Chaturvedi, editors. 1st ed. Varanasi: Chaukhamba Sanskrit Sansthan; 2005. Sutrasthana, 26/106. p. 524.
- Charaka. Charaka Samhita. Kashinath Sastri, Gorakhanath Chaturvedi, 1st ed. Varanasi: Chaukhambha Sanskrit Sansthana; 2005. Sutra Sthana, Vividhashitapitiyadhyaya, 28/4.p. 569.
- Charaka. Charaka Samhita. Kashinath Sastri, Gorakhanath Chaturvedi, 1st ed. Varanasi: Chaukhambha Sanskrit Sansthana; 2005. Sutra Sthana, Vidhishonitiyadhyaya, 24/5-10. p. 443-444.
- Charaka. Charaka Samhita. Kashinath Sastri, Gorakhanath Chaturvedi, editors. 1st ed. Varanasi: Chaukhamba Sanskrit Sansthan; 2005. Sutrasthana, 24/10. p. 444.
- Charaka. Charaka Samhita. Kashinath Sastri, Gorakhanath Chaturvedi, editors. 1st ed. Varanasi: Chaukhamba Sanskrit Sansthan; 2005. Sutrasthana, 24/8. p. 444.
- 16. Paul K Buxton. Fungal and yeast infections. ABC of Dermatology. 4th ed. London: BMJ Publishing Group Ltd., BMA House, Tavistock Square; 2003. p.101.
- Burns DA, Breathnach SM, Cox NH, CEM Griffiths. Mycology, Rook's Textbook of Dermatology. 8th ed. UK: Blackwell Publishing Ltd; 2010. p.1034.
- 18. Sushruta. Sushruta Samhita (Nibandhasangraha Sanskrit Dalhana commentary). Yadavji Trikamji, editor. 1st ed. Varanasi: Chaukhamba Sanskrit Sansthan; 2008. Nidanasthana, 5/3.p.282-283.

Source of Support: Nil Conflict of Interest: None Declared