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A STUDY ON AHARAJA HETUS OF KUSTHA WITH SPECIAL REFERENCE TO DERMATOPHYTE INFECTION

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ABSTRACT

Ayurveda, one of the world's oldest medicinal systems, emphasizes a natural approach to health. This study explores the Ayurvedic concept of Kustha Vyadhi, which encompasses various skin disorders, and investigates its relevance to dermatophyte infections. The research focuses on Assam, India, where the humid subtropical climate fosters fungal growth, leading to a higher prevalence of these infections.[1] According to the World Health Organization, about 25% of the global population suffers from superficial mycotic infections, with 60% experiencing recurrent issues.[1] Despite modern treatments, the recurrence of fungal skin diseases highlights the need for alternative approaches. The study examines the role of specific dietary factors, known as aharaja hetus in contributing to these infections which is mentioned in our Ayurvedic classics. Statistical analysis reveals a significant correlation between these aharaja hetus and dermatophyte infections. The study suggests that Ayurvedic dietary recommendations may play a role in managing and preventing dermatophyte infections, offering a complementary perspective to modern medical treatments.

KEYWORDS: dermatophyte infection, kustha, Ayurvedic.

INTRODUCTION

Ayurveda, one of the most comprehensive systems of medicine, originates from India and offers a holistic approach to health and wellness. It has garnered global recognition for its

emphasis on natural and integrative treatments, providing valuable insights into maintaining well-being in an ever-evolving world. The skin, or integumentary system, is the body's largest organ, playing a crucial role in protection against mechanical trauma, ultraviolet (UV) radiation, and infections.[2] Among the various skin disorders, fungal infections are notably prevalent.According to the World Health Organization, about 25% of the global population suffers from superficial mycotic infections, with 60% experiencing recurrent issues.

In humid subtropical climate with hot summers, intense monsoons, and moderate winters. These conditions provide an optimal environment for the growth of fungi, contributing to a higher prevalence of fungal diseases. Since, Assam a state of northeast India falls under these region there are many cases of fungal infection in these area. So, there is a need of alternative approach like Ayurveda to find out the preventive and management of these recurrent infection. In Ayurvedic medicine, all skin diseases fall under the category of Kustha Vyadhi. The term "Kustha" encompasses various skin conditions marked by discolored patches, loss of sensation, and, if untreated, chronic lesions. The word itself is derived from the Sanskrit "Kusnishkarsane," meaning "to destroy" or "to deform."[3] According to charak the nidan of Kustha is mainly divided into aharaja and viharaja nidan. Sushruta clearly described the Anuvansika (Hereditary) and Krimija (Infectious) Nidana as a causative factor.[4] Kushtha has also been included in list of Aupasargika Roga, which may spread from one person to the other. The aharaja nidan which has been included in the study are mentioned in charak Samhita nidan sthana these are atimatra use of Madhu, phanita, Matsya, Lakucha, Mulaka, Kakmachi, Haayanak, Yavak, dadhi, Kshira, takra, Kulattha, masa, kola, badar, urad dal, Kusumbha, Chilchim fish + milk.[5]

This study investigates the aharaja hetus linked to Kustha Vyadhi, by questionaries with a particular focus on their association with dermatophyte infections.

AIM AND OBJECTIVE

➢ To evaluate the specific aharaja hetus of kustha in dermatophyte infection.

MATERIAL AND METHOD

The study was conducted at Govt. Ayurvedic College & Hospital, Guwahati-14 A complete literary review was made before the study relevant to the subject.

A clinical study was conducted on cases of Dermatophyte infection at Govt. Ayurvedic College & Hospital, Guwahati.

Detailed history was taken in specially designed proforma prepared for the study incorporating all the points.

Inclusion criteria

1) All diagnosed case of dermatophyte infection by clinical & laboratory parameters irrespective of any age & sex was included under the study.
2) All patients having normal BMI range was included for study.

Exclusion criteria

1) All viharaja hetus of kustha was excluded from the study.
2) All skin disorder other then dermatophyte infection was excluded from the study.
3) Critically ill patient was excluded from the study.
4) All known patients having seropositive HIV, HbsAg, HCV etc. was excluded from the study.
5) All overweight and underweight patients was excluded from the study.

Sample size: The study will be performed over 100 patients of dermatophyte infections.

Assement criteria followed while assessing Aharaja Nidans was as follows

a) All the specific aharaja hetus of Kustha vyadhi mentioned as per charak Samhita nidan sthan were taken under consideration.

b) For assessment of excessive intake of specific food products, food frequency gradation for a period of seven days have been employed. Variation was done as follows

i) Frequecy of intake once in a month =0
ii) once in a week. =1
iii) 2-3 times in a week = 2
iv) 4 times in a week = 3
v) 5 times in a week = 4
vi) Everyday intake. = 5

c) For assessment of the aetiological factors mentioned in the classics, i.e. The Aharaja nidan has been put in a specially designed proforma in terms of modern day foods, those were usually consumed by the patients.

Gradation of 4 and 5 were considered to be excessive intake of specific food in the study. For different etiological factors some special categories were considered

i) Matsya - only fresh water fish present in lakes, river etc. were taken under consideration
ii) Dadhi - here intake of whole curd and various food taken with curd like dahivada, raita, dahi Bhalla etc. were taken under consideration.

RESULT

Table 1: Incidence of dietary habit of 100 patients (n= 100).

	No. of observation	Percentage
Non- vegetarian	80	80%
Vegetarian	20	20%
Total	100	100%

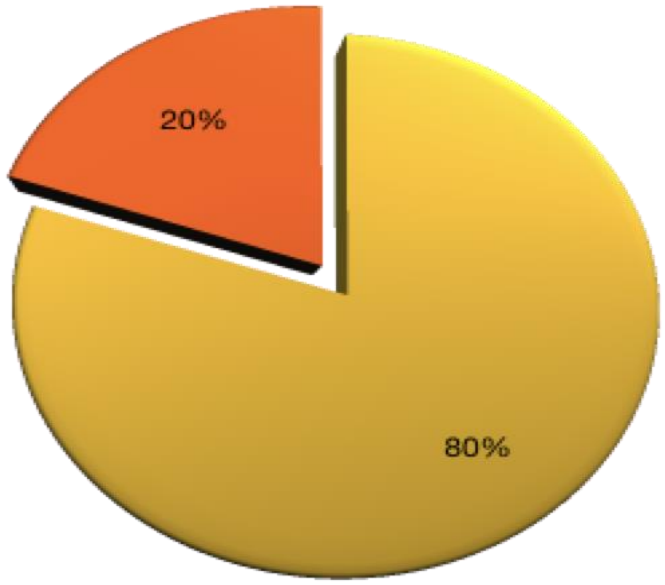

Fig. No. 1: Incidence of dietary habit of 100 patients.

Comment: The above table indicates that 20% patients were having veg diet habit and 80% patients were non - vegetarian.

Table 2: Prevalence of aharaja nidanas in the study (n=100).

	No. of observation	Percentage
Madhu	5	5%
Phanita	0	0
Matsya	70	70%
Lakucha	0	0
Mulaka	3	3%
Kakmachi	0	0
Haayanak	0	0

Yavak	0	0
Dadhi	52	52%
Kshira	37	37%
Takra	0	0
Kulattha	0	0
Masa	0	0
Badar	4	4%
Chilchim fish+ milk	0	0
Kusumbha	0	0
Total	100	100%

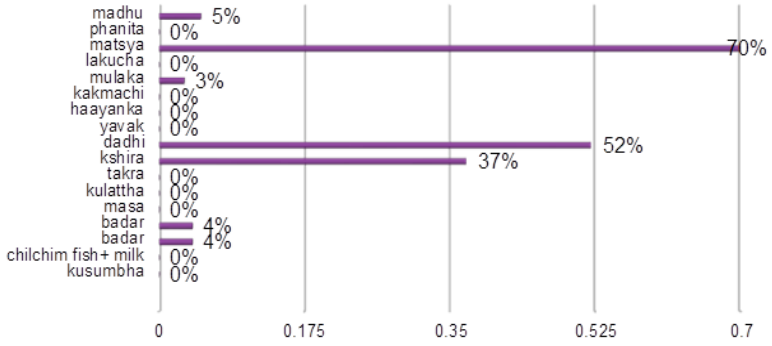

Fig. No. 2: Incidence of aharaja nidanas in the study.

Comment:- The study done on 100 patients shows prevalence of Matsya 70% followed by dadhi 52% as these two are the most prevalent aharaja hetus followed by Kshira 37%, Madhu 5%, Mulaka 3%.

DISCUSSION

Over 16 varieties of different food products were evaluated in a specially designed proforma to know the consumption rate of the same in a known case of fungal infection based on Ayurvedic parameters. Study shows consumption of fish (70%) with the highest incidence rate considered as significant and has been recorded in the study followed by dadhi(52%) which may be considered as weak significant with Dermatophyte infection. Rest of the items with an incidence rate below 50% are kshira(37%), Madhu (5%), badar(4%), Mulaka(3%), phanita(0%), Lakucha(0%), Kakmachi(0%), Haayanak(0%), Yavak(0%), takra(0%), Kulattha(0%), masa(0%), Kusumbha(0%) considered as insignificant and hence not recorded as predominant in the study. Here, the above dietary factors can be considered as viprakrista nidanas.

Here the excessive use of this food substance was considered as the food substance which were taken more then 5 days per week.

Analysis on matsya

Northeast India has various water bodies including the tributaries of the Brahmaputra and Barak river systems, wetlands, lakes and beels. These water bodies support the diversity of many fish species. The fish consumed are mostly fresh water fishes as sea fishes are rarely available in these localities. In context of guna, karma, dosa association with consumption of matsya. Matsya are Madhura rasa, Guru, Usna, Snigdha, Brimhana, and Bohudosakara. As we all know, guru guna is kaphavardhak, while snigdha and usna gunas are pittakarak.[6] Thus, the relationship of pitta and kapha dosas might be considered. Susruta mentions that matsya typically river water fishes as mahaabhisyandi which means they produce kleda in dosas, dhatu, mala, and srota.[7] In the context of dhatupradosaja vikaras, it is stated that guru and snigdha gunas are responsible for rasa, rakta, and mamsa dusti, whereas usna guna is directly related with rakta dusti. Thus, vitiation of pitta and kapha dosa, together with rasa, rakta, and mamsadusti, produces shithilta in the involved dhatus and causes sthanasamsraya and produce Kustha which can be considered from the increased consumption of fish in the study.

According to modern, Excessive intake of fish in diet plays a significant role in human fungal infection because of its nutrient composition and potential contamination intake of fish which is heavy in nature and it becomes difficult to digest and weakens the digestive metabolism which will ultimately hamper the immune system. Consumption of contaminated fish where toxic substances like mercury are present can pose health risk, immune suppression which may increase vulnerability to fungal infections.[8] In the study, food frequency gradation for more than 5 days per week was considered as significant hetu. Since, intake of fish attributes the highest of 70% from the above data. So, we can conclude that fish intake of more than 5 days per week may be considered as a specific hetu for Dermatophyte infection.

Analysis on dadhi: - According to Charak, it is vatanashak usna, deepan, balavardhak. Susruta considered it as maha abhisyandi it produces kleda in dosha, dhatu, mala and srotas. It has Snigdha Guna it causes Kapha, meda vridhi. The viatiated dosha involves with dhatu and produces sithilata as causes twak vyadhi.[9]

Curd also known as yogurt, plays an intriguing role in the context of fungal infection. It contains beneficial bacteria mainly from the lactobacillus species which positively impact the immune system. The circumstances which might contribute to fungal infection mainly is contamination of curd where it can harbour fungi or yeast leading to infection especially in immune compromised individuals[10] the study, food frequency gradation for more than 5 days per week was considered as significant hetu. Since, intake of dadhi attributes 52% from the above data. So, we can conclude that intake of more than 5 days per week may be considered as a specific hetu for Dermatophyte infection.

CONCLUSION

1) The specific aharaja hetus of Kustha in relation with Dermatophyte infection evaluates from the study are:

a) Fresh water fish intake of more than 5 days per week may be considered as specific hetu

b) Intake of curd or food mixed with curd (Dahivada, raita, dahibhalla etc) for more than 5 days per week may be considered as specific hetu.

For prevention, it is recommended that individuals avoid the excessive intake of these dietary items. Additionally, from a curative perspective, the avoidance of these etiological factors should be considered as part of an Ayurvedic treatment approach for dermatophyte infections.

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