An exploratory analysis of probable role of Pathya and Apathya in skin disease

Amit Choudhary1, Minu Yadav2, Sunita Dudi3, Sachin Sharma4, Chandan Singh5, Manoj Kumar Adlakha6

1PhD Scholar, 2Professor, 6Associate Professor, PG Department of Dravyaguna, University College of Ayurveda, DSRAU, Jodhpur, Rajasthan, India.
2Assistant Professor, Department of Panchkarma, Shekhawati Ayurvedic Medical College, Pilani, Jhunjhunu, Rajasthan, India.
3PhD Scholar, PG Department of Rachana Sharir, University College of Ayurveda, DSRAU, Jodhpur, Rajasthan, India.
4Ayurvedic Medical Officer, District Ayurveda Hospital, Chamba, Himachal Pradesh, India.

ABSTRACT

Every living and non-living being in this universe is composed of five basic elements, the Pancha Mahabhuta. The Pancha Mahabhuta components of the ingested food nourishes their respective tissue elements in the body. Ahara is the best of all medicines and is considered one among the Trayopsthamba. The main idea of Pathya Ahara and Vihara serves as the foundation for both the preventive and therapeutic components of Ayurveda. Ayurveda places a strong emphasis on fundamental dietary principles, or Ashtavidha Ahara Vidhi Visheshayatana. Skin is given due importance since time immemorial owning to the aesthetic value conferred upon it. Skin diseases are mainly described under the spectrum of Kushtha. Dietary modifications have hitherto received little attention in dermatological therapy. However, recent studies have discovered a strong link between various dermatological conditions and food. Ayurveda describes a wide range of etiological factors for dermatological disorders. Consumption of Ahara such as Ati-Lavana, Ati-Amla, Viruddhahara, Guru-Snigdha Annapana, Ajeernahara plays a significant role in the development of skin disease. Excessive intake of food items like Dadhi, fish with milk, Masha, Mulaka, Tila, Madya further contribute to Kushtha. In this article an attempt is made to highlight the probable role of Apathya and emphasize the scope of Pathya Ahara in the management of skin disease.

Key words: Pathya, Apathya, Skin disease, Viruddhahara, Kushtha

INTRODUCTION

Every living and non-living beings in this universe is composed of five basic elements, the Pancha-Mahabhuta. Food that has been consumed nourishes the body’s many tissue constituents through the Pancha-Mahabhuta component. Ahara is the best of all medicines and is considered one among the Trayopsthamba. The Ahara and Vihara that are compatible with a person’s constitution and strength are referred to be Pathya or wholesome, while those that are not compatible are referred to as Apathya or unwholesome. The main idea of Pathya Ahara and Vihara serves as the foundation for both the preventive and therapeutic components of Ayurveda. The fundamental dietary principles of Ashtha Vidha Ahara Vidhi Visheshayatana - appropriate food, combinations of food, cooking techniques, storage, eating environment are stressed by Ayurveda.

Skin is given due importance since time immemorial owing to the aesthetic value conferred upon it. Skin diseases are mainly described under the spectrum of Kushtha. Dietary modifications have hitherto received little attention in dermatological therapy. However,
recent studies have discovered a strong link between various dermatological conditions and food.

**Prevalence**

In India in 2017, the number of years spent with a disability as a result of skin and subcutaneous illnesses was 4.02% of the total number of years. Between 1990 and 2017, the total number of age-standardized years with disability for all skin and subcutaneous illnesses increased by 53.7%. Dermatitis provided the most years lived with disability among skin and subcutaneous illnesses in 2017, followed by urticaria, with percentage increases of 48.9% and 45.7%, respectively.[1]

**AIMS AND OBJECTIVES**

The article aims at exploring and reviewing probable role of *Apathya* and scope of *Pathya Ahara* in skin disease.

**MATERIALS AND METHODS**

The data and review materials are taken from various Ayurvedic classical texts, other published papers and articles to get a better insight into the topic.

*Apathya* in Skin diseases

The Atharvaveda describes the *Twak Roga* under the name *Kilasa*, *Palita*, with a clinical picture of grey and white spots that typically originate from deeper layers of skin. *Kushta* is almost commonly divided into *Maha Kushta* and *Kshudra Kushta*, however there are disagreements over the number within each group.[8] Ayurveda describes a wide range of etiological factors for dermatological disorders. The causative factors of *Kushta* can be categorized under *Ahara Nidana, Viharaja Nidana* and *Acharaja Nidana*.

**Table 1:** Shows various etiological factors in the development of skin disease.

*Apathya* in Skin disease

<table>
<thead>
<tr>
<th>SN</th>
<th>Type of Intake</th>
<th>Subtype</th>
<th>Modern correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Atisevana (excessive intake)</td>
<td>Rasa</td>
<td>Excessive intake of Amla (sour), Lavana (salty) and Katu (pungent) Rasa</td>
</tr>
</tbody>
</table>

**Pathya Ahara in skin diseases**

*Nidana-Parivarjana* (avoiding causative factor) slows the pathogenesis of the disease in the body. Therefore, *Pathya* has a major role in each disease.
In diseases like dermatitis herpetiformis, dietary restrictions play a major role in treatment. Dietary habits also play some role in diseases such as atopic dermatitis, acne vulgaris, psoriasis vulgaris, pemphigus, and urticaria. Genetic and metabolic disorders such as phenylketonuria, tyrosinemia, homocystinuria, galactosemia, Refsum’s disease, glucose-6-phosphate dehydrogenase deficiency, xanthomas, gout, and porphyria also require dietary modifications.\(^\text{[9]}\)

Intake of low calories diets and gluten free diets have shown significant improvement in psoriasis.\(^\text{[4]}\)

The various Pathya include Laghu-Anna, Tikta-Shaka, Purana-Dhanya, Jangala Mamsa, Mudga, Patola, Nimba, Triphola, Shali, Shastika, Yava, Godhuma, Masura, Makshika, Pana- Pariseka- Avagaha of Khadirakasha, Bakuchi.

Single drugs useful in Kushttha

Manjishtha, Sariva, Khadira, Haridra, Bhallataka, Aragvadha, Karveera, Bakuchi, Vidanga, Jati, Haritaki.

**DISCUSSION**

**Role of Apathya**

Excessive consumption of Lavana Rasa provokes the Pitta, increases the blood volume, aggravates Rakta, aggravates the dermatic-lesion, depletion of the muscle tissue.\(^\text{[5]}\) Excess use of Lavana, Amla & Madhura Rasa leads to Kapha & Rakta Dushti finally leading to Kushttha. It also increases Doshika Lakshana of the disease e.g., Kandu, Rakta-Varnata, & increases Mandalotpatti. According to a study on electrolytes in psoriasis patients, salivary sodium levels were higher in psoriasis patients, while potassium levels were linked to the severity of the condition.\(^\text{[6]}\)

The Madhura Rasa diminishes Agni thereby hampering the digestion and leading to Ama production. It produces various Kapha disorders.\(^\text{[7]}\) The Madhura Rasa causes Ama and Ajirna. Intake of Phanita causes Abhisyandi, Tridosh-Prakopaka, Acchinoti i.e., it is the cause for Dosha Sanchaya.\(^\text{[8]}\)

Intake of Amla Rasa causes vitiation of Rakta Dhatu and loosening of Mamsa Dhatu. It also aggravates Pitta Dosha and results in suppuration of wounds.\(^\text{[9]}\)

Viruddhahara, excessive consumption of Dadhi etc. are the major causes of Kushttha.\(^\text{[10]}\) Unwholesome food, excessive consumptions of cold drinks, red meat, red chilli, hot spices, junk foods, oily foods, tomato, most acidic food etc acts as a triggering factor for psoriasis.\(^\text{[11]}\) Viruddhahara vitiates Agni leading to Agnimandya, does Srotodusti and produces Ama. It further produces Dushi Visha which tend to vitiate all the three Dosha.

Intake of excessive oily and Guru Ahara causes diminution of Agni and indigestion. Unwholesome food, excessive consumptions of cold drinks, red meat, red chilli, hot spices, junk foods, oily foods, tomato, most acidic food etc acts as a triggering factor for psoriasis.\(^\text{[12]}\) Body mass index (BMI) and psoriasis are strongly correlated, and weight reduction is suggested in obese patients. White bread, sugar, and rice are instances of foods with a high glycemic index that are quickly absorbed, increasing serum glucose levels and correspondingly elevating insulin levels. Insulin and IGF-1 have been demonstrated to promote factors such as sebum production, adrenal androgen synthesis, and androgen bioavailability which constitute factors in the pathophysiology of acne.\(^\text{[13]}\)

Madya or over consumption of alcohol has been stated as an important etiological factor in development of skin disease. Alcohol can alter the lipid composition of the epidermal barrier because it has an influence on the metabolism of lipids like triglycerides and cholesterol. It could be a component that both initiates and augments inflammation. It can influence both innate and adaptive immunity. Previous research has revealed that alcohol might increase the production of proinflammatory cytokines, such as tumour necrosis factor (TNF), from peripheral blood monocytes and macrophages, as well as the proliferation and activation of lymphocytes.\(^\text{[14]}\)

Overindulgence in Matsya brings about Bahudoshakara. Intake of meat of Anupa and Auodaka animals causes diminished Agni due to Guru, Snidgaha,\(^\text{[15]}\) Picchila, Abhisyandi Guna. Pisthanna develops Guruta in the body thereby hampering
various functions in the body. Excessive intake of *Tila does Pitta-Prokopaka* which further results in aggravating *Kushtha*. Over-consumption of *Guda* results in *Krimikara, Medakara, Agnimadyakara* and *Kaphakara*. New grains are *Kledakara* in nature and does *Vistambha* and *Abhishyandi*. Long term intake of *Dadhi* is said to be *Maha-Abhishyandi*, increases *Kapha* and also aggravates *Kushtha*.

**Action of Pathya**

The importance of *Pathya* (wholesome) in *Ayurveda* can be deduced from the fact that *Charak* had stated *Pathya* as a synonym for treatment. Diseases can be cured by following only *Pathya* without taking any medicine but if the person not following *Pathya* will not be cured instead taking hundreds of medicaments. The importance of diet can be understood with the fact that it has been called as *Mahabhaishajya* in the *Kashyapa Samhita*. Recent research has found a significant link between food and a variety of dermatological diseases. *Pathya* being the most fundamental is a crucial principle of Ayurveda. It tends to be effective and must be put into practice clinically in the contemporary world.

Intake of *Laghu Anna* has been beneficial in *Kushtha*. Some research found that low-energy diets and fasting periods reduced psoriasis symptoms. All of these diets alter the metabolism of polyunsaturated fatty acids and affect the eicosanoid profile, which decrease inflammatory processes. Some patients with psoriasis have increased gluten sensitivity. A gluten-free diet has been shown to relieve symptoms in people with IgA and/or IgG antigluten antibodies. The main factor is presumably a lack of intake of arachidonic acid (AA), which lowers leukotriene (LT) B4 production. Fasting results in a decrease in CD4+ T-cell activation and an increase in anti-inflammatory cytokines such interleukin (IL)-4. Another possibility could be that calorie restriction reduces oxidative stress, which appears to be linked to psoriasis.

According to the findings of a randomised trial involving 60 obese patients with psoriasis, those in the intervention group, who were assigned to a low-calorie diet, lost 15 kg more than the controls and also had a greater mean reduction in their PASI than controls (mean PASI reduction -2.3; p = 0.06).

The role of *Tikta Dravya* and *Shaka* has been highlighted in *Kushtha Chikitsa*. The food rich in bitter taste increases gut metabolism even when they cause *Aruchi* in itself. Due to its *Shodhana, Lekhana* action, *Laghu Gun* it clears microchannels thereby preventing accumulations of toxins. It is *Vishghna* in nature, prevents *Kushtha* and brings stability in skin tissues. Following oral ingestion or direct luminal administration, the presence of bitter chemicals in the Gl lumen triggers a series of intracellular processes that culminate with the production numerous gut hormones. A range of bitter substances appear to have potent stimulatory effects, particularly on CCK (Cholecystokinin) and GLP-1(Glucagon-like peptide-1), as well as ghrelin, in the models used.

It was discovered that psoriasis patients’ symptoms improved while they were following a vegetarian or vegan diet. This recovery was related to neutrophil activity returning to normal, which was extrapolated from lactoferrin levels in the serum. In comparison to omnivorous diets, vegetarian diets have been demonstrated to be related with higher anti-inflammatory to proinflammatory adipokine ratios, lower proinflammatory gene expression in the gut microbiota, and lower IgE expression levels. The advantages of a vegetarian diet have also been linked to the high potassium intake, which the body uses to make cortisol, a medication frequently used to treat psoriasis. In one randomised experiment, a Mediterranean-style diet was administered to the intervention group. Improvements in endothelial function scores, as well as lower serum concentrations of C-reactive protein and interleukin (IL-18), were linked to this. A diet high in fruits and vegetables, whole grains over processed grains, and omega-3 fatty acids over omega-6 fatty acids is now highly recommended by many doctors because it has been demonstrated that specific dietary habits can lower markers of vascular inflammation.
CONCLUSION

A proper role of Ahara can play a miraculous role in a better quality of life and disease prevention. In the past, Ahara as a kind of dermatological therapy have received insufficient attention. However, recent studies have discovered a strong link between various dermatological conditions and food. As with CVD and other systemic diseases linked to psoriasis or the use of systemic steroids, diet may also play a significant role in the prevention of associated systemic disorders.

REFERENCES


How to cite this article: Amit Choudhary, Minu Yadav, Sunita Dudi, Sachin Sharma, Chandan Singh, Manoj Kumar Adlakha. An exploratory analysis of probable role of Pathya and Apathya in skin disease. J Ayurveda Integr Med Sci 2023;05:179-184. http://dx.doi.org/10.21760/jaims.8.5.29

Source of Support: Nil, Conflict of Interest: None declared.