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EXPLORING THE EFFICACY OF AMRITARAJANYADI KASHAYA IN SHEETAPITTA W.S.R TO URTICARIA- A REVIEW

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ABSTRACT:

Due to heavy industrialization and pollution, one constantly comes into contact with various pollutants. The intoxicated beverages, spicy and fast food, along with the repeated consumption of incompatible food, causes sensitivity towards allergens, leading to the release of antibodies and various types of allergic skin reactions like Urticaria. *Sheetapitta* share similar symptomatology as Urticaria. The incompatible diet and lifestyles lead to the production of toxic substances in the body and causes the imbalance of *dosha* and even cause impaired *agni*. This may result in hyper sensitivity of body's immune system, and triggers the allergic attacks. *Sahasrayoga* has mentioned *Amritarajanyadi Kashaya* in treating *Sheetapitta*. The information related to the ingredients, *rasapanchaka*, etc of *Amritarajanyadi Kashaya* and phatho-physiology of *Sheetapitta* and Urticaria is collected from various Ayurvedic classic literature, Modern literature and digital database. This formulation contains properties like *kandughna*, *kushtaghna*, *dahaprasamana*, *jvaraghana* and even *Deepana*, *Pachana* properties and has pharmacological action like anti-inflammatory, anti-allergic, analgesic activities, etc. This review explores the probable mechanisms of *Amritarajanyadi Kashaya* in managing

Sheetapitta, with an emphasis on its anti-histamine effects, such as inhibiting histamine release, blocking histamine receptors, and modulating pro-inflammatory cytokines.

KEYWORDS: Amritarajanyadi Kashaya, anti-histamine effect, Sheetapitta, Urticaria

INTRODUCTION:

In the present era, due to constant exposure to pollution there is a new emerging disorder like allergies. Previously the main clinical complaint patient visits the clinic is mainly fever and pain, with the increasing pollution in the environment even allergies has been a rising case. The allergies maybe of respiratory or skin allergies.

The skin condition urticaria can be closely compared to *Sheetapitta* in Ayurveda due to their similar symptomology. Both conditions are characterized by raised, red, itchy welts or hives, accompanied by swelling and inflammation of the skin. In contemporary medicine, the primary treatment for urticaria focuses on blocking the effects of histamine using antihistamines, which help alleviate symptoms such as itching and swelling. On the other hand, in Ayurvedic practice, Amritarajanyadi Kashaya has been found to be particularly effective in treating *Sheetapitta* by addressing the root cause of the condition. This Ayurvedic formulation works through its anti-inflammatory, immune-modulatory, and detoxifying properties, reduce inflammation, and promote skin healing, thereby offering a holistic approach to managing the condition. Amritarajanyadi Kashaya is a polyherbal preparation which have been explained in *Yogaratnara* and *Sahasrayoga*.

In Sahasrayoga composition includes Guduchi, Haridra, Nimba, Dhanvayasa, Aragwada, Mustaka, Hareetaki, Amalaki and Vasa in equal quantity [1]. In Yogaratnaka, [2] the termed Amritarajanyadi Kashaya is not mentioned but has ingredients similar in that of Sahasrayoga text it contains Amrutha, Rajani, Nimba and Dhanvayasa. In both the reference it mentioned the indication in Sitapitta.

MATERIALS AND METHODS:

The information related to Ingredients of Amritarajanyadi Kashaya and their scientific name, family, part used and ayurvedic pharmacological properties (rasapanchaka), method of preparation and probable mode of action, patho-physiology of sheetapitta has been collected from the Ayurveda classic literatures include Madhava Nidana, Yoga Ratnakar and Bhaishajya Ratnavali, Modern literature, relevant contemporary literature and research works and digital databases like google scholar, PubMed, Scopus.

Table 1: Ingredients of *Amritarajanyadi Kashaya* and their scientific name, Family and Part used

Ingredients	Botanical name	Family	Parts used	
Guduchi	Tinospora cordifolia	Menispermaceae	Stems	
Haridra	Curcuma longa	Scitaminaceae	Rhizome	
Nimba	Azadirachta indica	Meliaceae	All parts	
Dhanvayasa	Fagonia cretica	Zygophyllaceae	Whole plant	
Aragwada	Cassia fistula	Caesalpiniaceae	Whole plant	
Musta	Cyperus rotundus	Cyperaceae	Rhizome	
Hareetaki	Terminalia chebula	Combretaceae	Fruits	
Amalaki	Emblica officinalis	Euphorbiaceae	Fruits	
Vasa	Adathoda vasica	Acanthaceae	Whole plant	

Table 2: Ayurvedic Pharmacological properties (Rasa Panchaka) of ingredients

Ingredients	Rasa	Guna	Veerya	Vipaka	Doshagna	Karma
Guduchi [3]	Tikta, Kashaya	Guru, Snighdha	Ushna	Madhura	Tridosasamaka	Rasayana, jvaraghna, dahaprasamana, kushtaghna, Deepana, pacana, etc
Haridra ^[4]	Tikta, Katu	Laghu, Ruksha	Ushna	Katu	Kapha-Vata samaka	Kushtaghna, kandughna, tvagdoshahara, amapachana, vishaghna, etc.
Nimba ^[5]	Tikta, Kashaya	Laghu, Ruksha	Sheeta	Katu	Kapha-Pittahara	Rasayana, kandughna- kushtaghna, dahaprasamana, krimighna, amapacana, visaghna, jvaraghna, etc.
Dhanvayasa ^[6]	Madhura, Tikta, Kashaya	Laghu, Ruksha	Sheeta	Katu	Kapha-Pitta samaka	Tvagdoshara, jvaraghna, chardighna, dahaprasamana, raktastambhana- raktaprasadana, etc.
Aragwada ^[7]	Madhura, Tikta	Mrudu, Guru, Snighdha	Sheeta	Madhura -	Vata-Pitta shamaka	Kushtaghna- kandughna- raktasodhaka, dahaprasamana, amapacaka-

						pittasamaka, jvaraghna, sulaprasamana, etc.
Musta ^[8]	Katu, Tikta,	Laghu,	Sheeta	Katu	Kapha-Pitta	Pacana-amapacana,
	Kashaya	Ruksha	JE		samaka	Deepana-pacana, krimighna, raktaprasadana, tvagdoshahara- kandughna, kushtaghna, lekhana, etc.
Hareetaki ^[9]	Madhura,	Laghu,	Ushna	Madhura	Tridoshahara,	Rasayana, Deepana, pachana,
	Amla, Tikta, Katu, Kashaya	Ruksha			vatasamaka	Anuloma, krimighna, chardinigrahana, jvarnaghna, varnya-tvacya, etc.
Amalaki ^[10]	Madhura, Amla, Tikta, Katu, Kashaya	Laghu, Ruksha	Sheeta	Madhura	Tridosahara, pittashamaka	Rasayana,ropana, Deepana, kushtaghna,kandughna, tvacya, jvaraghna, dahaprasamana, sulaprasamana.
Vasa ^[11]	Tikta, Kashaya	Laghu, Ruksha	Sheeta	Katu	Kapha-Pittahara	Kasaghna, jvaraghna, Raktadoshnashak, Varnya

Table 3: Sum of Assessment of Rasa-panchaka of Amritarajanyadi Kashaya

Rasa	Guna	Virya	Vipaka	Karma
Tikta- 9	Guru- 2	Ushna-3	Madhura- 4	Vata- 5
Kashaya- 7	Snigdha- 2	Sheeta- 6	Katu- 5	Pitta- 8
Madhura- 4	Laghu- 7			Kapha- 8
Katu- 3	Ruksha- 7			
Amla- 2	Mridu- 1			

Table 4: Rasa-panchaka of Amritarajanyadi Kashaya:

Rasa-panchaka	Rasapanchaka of Amritarajanyadi Kashaya
Rasa	Tikta, Kashaya
Guna	Laghu, Ruksha
Virya	Sheeta
Vipaka	Katu
Doshaghnata	Tridoshaghna, kaphapitta samaka

Method of preparation of *Amritarajanyadi Kashaya*: All the ingredients are taking in equal quantity and pounded to make a coarse powder. One part of coarse powder is taken with 16 parts of water is added and it is boiled in fire and reduced to ½ part, *Kashaya* is then filtered and stored as per the classical reference.^[12]

Sheetapitta: Sheetapitta is characterized by Varatidamshavat shotha, Kandu, Toda, Chardi, Jvara, and Daha, with all three doshas being involved, although Vata dosha is predominantly vitiated^[13]. Although Sheetapitta and Udarda are described as distinct conditions in classical texts, there is a significant overlap in their clinical presentation, making it difficult to differentiate them in practice.

The *Nidana* (causative factors) of *Sheetapitta* include exposure to cold winds, which initially vitiates *Kapha* and *Vata doshas*. Subsequently, along with the aggravated *Pitta dosha*, these doshas travel externally, leading to the appearance of edematous lesions on the skin, and internally, they spread to other tissues such as *rakta* (blood) and *mamsa* (muscle). This process ultimately results in the manifestation of *Sheetapitta*^[14].

Aaharaja Hetu (Dietary Factors): Excessive intake of Santarpana (nourishing foods), atilavana (excessive salt), atyaamla (excess sour foods), katu (pungent), kshara (alkaline),

tikshna madya (strong alcoholic drinks), viruddha aahara (incompatible foods), adhyasana (eating in excess), guru dravya (heavy foods), snigdha bhojana (oily foods), dadhi (curd), and visha-yukta annapana (foods contaminated with toxins). [15]

Viharaja Hetu (Lifestyle Factors): Exposure to sheeta maruta sparsha (cold winds), vishyuktajal snana (bathing in contaminated or cold water), abhyanga (oil massage), udvartana (dry powder massage), wearing inappropriate vastra (clothes) or aabhushana (jewelry), keeta damsha (insect bites), bahya krimi (external parasites), chhardi nigraha (suppression of vomiting), excessive diwaswap (daytime sleep), and shishir ritu, varshakala (cold seasonal factors).¹⁵

Nidanaarthakara Roga (Associated Diseases): Sannipatika, pittaja, and kaphaja jwara (fever due to the vitiation of Pitta and Kapha), unmarda, and adhoga amlapitta (upward movement of digestive fire) can also contribute to the development of Sheetapitta.^[15]

Chikitsa Mithya Yoga (Improper Treatment): Inadequate administration of vamana and virechana (therapeutic vomiting and purgation) can exacerbate the condition [14]

Poorvarupa Lakshana (Prodromal Symptoms): Early symptoms include *pipasa* (thirst), aruchi (loss of appetite), hrillasa (nausea), deha saada (body weakness), anga gauravam (heaviness of the limbs), and rakta lochaka (redness in the eyes).^[16]

Rupa Lakshana (Clinical Manifestations): Varatidamshavat shotha and Kandu (swelling and itching) are caused by Kapha vitiation, while Toda (heaviness) is associated with Vata dosha involvement. Daha (burning sensation) and Jvara (fever) arise due to Pitta vitiation. ¹⁶

Samprapti (Pathophysiology): Due to the consumption of inappropriate foods and weakened Agni (digestive fire), Ama (toxins) form in the body. The vitiated Tridoshas lead to the spread of these toxins throughout the body, eventually localizing in the Twak (skin). Since Agni Mandya (digestive impairment) is a primary causative factor, treatments should focus on Deepana (stimulation of digestion) and Pachana (digestion).

Probable mode of action: In *Sheetpitta Mandagni* leads to *amotpatti* and *rasa* and *raktavaha* shrotodusti. The ingredients of *Amritarajanyadi kashaya* have properties like *Deepana*, pachana due to the tikta rasa of the drugs. It has visahara^[17] property and it helps in detoxification of accumulated toxins which are in the form of histamines. Most of the

ingredients also has kandughna, kushtaghna, dahaprasamana, jvaraghna, sulaprasamana, chardighna, pittasamaka and kaphaghna which counter act the symptoms of Sheetapitta. The pharmacological action like anti-inflammatory, immune-modulatory, anti-oxidant activities. Anti-pyretic activity present in *Guduchi*^[18] and *Dhanvayasa*^[19]. Anti-allergic activity in Dhanvayasa^[20], Musta^[21] and Vasa^[22]. Some of the ingredients also has analgesic which will reduce the Toda lakshana. Musta has Anti- inflammatory and analgesic activity^[23] due to the ethanolic extract, and Anti allergic activity^[24] due to the present of sesquiterpenes which is a bioactive compound that reduce mast cell degranulation. Hareetaki due to present of flavonoids^[25] it has Anti-oxidant and anti-inflammatory activities. Amalaki is Antiinflammatory and anti-pyretic due to tannin, alkaloids, phenolic compounds, amino-acid and carbohydrates and has Anti-oxidant activity due to present of vitamin C[26]. Vasa has Antitussive, Expectorant, Bronchodilator which is helpful even in respiratory issues.^[27]

Several of the herbs have anti-allergic activity that exhibit anti-histaminic effects, which contribute to their ability to manage allergic reactions, inflammation, and skin conditions. The anti-histaminic action primarily occurs through the inhibition of histamine release or the blocking of histamine receptors, particularly H1 receptors, which are involved in allergic responses.

Mechanisms of anti-histaminic action of *Amritarajanyadi Kashaya* in *Sheetapitta* include:

- 1. Histamine Release Inhibition: Herbs like Vasa (Adhatoda vasica) contain active compounds such as vasicine^[28], which have been shown to inhibit the release of histamine from mast cells. By preventing the release of histamine, these herbs reduce allergic symptoms such as itching, swelling, and inflammation.
- 2. **Histamine Receptor Blockade:** Some herbs, such as *Guduchi (Tinospora cordifolia)* and Vasa, may have compounds that act on H₁ receptors, effectively blocking histamine's action at the receptor sites. This prevents the typical allergic cascade, including itching, redness, and swelling.
- 3. Modulation of Pro-inflammatory Cytokines: In addition to directly targeting histamine pathways, several herbs, such as Haridra [29] (Curcuma longa) and Nimba [30] (Azadirachta indica), modulate the production of pro-inflammatory cytokines like TNF-alpha and IL-4, which are involved in the histamine-mediated allergic response.

By reducing these cytokines, these herbs help in diminishing histamine release and the subsequent inflammatory responses.

- 4. **Reduction of Mast Cell Activity:** Some herbs, including *Mustaka* [31] (*Cyperus rotundus*), contain bioactive compounds that reduce mast cell degranulation, further inhibiting histamine release and helping to alleviate allergic reactions.
- 5. **Anti-inflammatory and Immunomodulatory Effects:** Many of the herbs, such as *Guduchi, Haridra, Nimba*, and *Dhanvayasa*, exert their effects by inhibiting pro-inflammatory mediators modulating immune cell function, and reducing systemic inflammation. These actions are beneficial in treating conditions like skin diseases and even improve the immunity.

These herbs likely exert their anti-histaminic action through a combination of inhibiting histamine release, blocking histamine receptors, and modulating the inflammatory processes that contribute to allergic reactions. This makes them valuable in treating a range of conditions, including allergies, skin rashes, respiratory issues like asthma, and inflammatory skin disorders. By targeting multiple pathways in the allergic response, these herbs offer a holistic approach to managing histamine-related symptoms and promoting overall immune balance.

DISCUSSION

The rise in allergic conditions, including skin allergies such as urticaria, can be attributed to environmental changes, particularly increased pollution and modern lifestyle factors. In response to these rising concerns, both conventional and alternative medical treatments are being explored. Ayurvedic formulations like *Amritarajanyadi Kashaya* offer an alternative and holistic approach, especially for conditions like *Sheetapitta*, which has a clinical presentation similar to urticaria. Both conditions present with symptoms like raised, itchy hives, swelling, and inflammation of the skin.

Ayurveda takes a comprehensive approach by addressing the root causes of these conditions. *Amritarajanyadi Kashaya* acts on the inflammation, immune response, and detoxification processes, helping to manage allergic reactions and promote skin healing. This formulation works on a deeper level by targeting the balance of *Tridoshas* (*Vata*, *Pitta*, and *Kapha*) and addressing the impaired *Agni* (digestive fire), which is essential for the overall healing process.

The polyherbal nature of *Amritarajanyadi Kashaya* is key to its effectiveness. Ingredients such as *Guduchi, Haridra, Nimba*, and *Musta* work synergistically to provide relief from symptoms by reducing inflammation and modulating immune responses. *Vasa (Adhatoda vasica)* contains vasicine, which inhibits histamine release, while *Musta* has bioactive compounds that prevent mast cell degranulation, which plays a crucial role in allergic responses. Additionally, *Haridra (Curcuma longa)* and *Nimba (Azadirachta indica)* have anti-inflammatory and immune-modulatory effects that support the body's defense mechanisms and help reduce inflammation caused by allergies.

This formulation goes beyond just providing symptomatic relief by addressing the body's internal imbalances. It focuses on improving digestive health, restoring *Agni*, and eliminating *Ama* (toxins) from the body, which are fundamental to Ayurvedic healing. As a result, *Amritarajanyadi Kashaya* offers a holistic solution, not only managing symptoms but also promoting overall health and immune system resilience. This makes it a powerful remedy in managing *Sheetapitta* and similar allergic skin conditions.

CONCLUSION:

The increasing prevalence of allergic conditions such as urticaria necessitates the exploration of holistic treatment options. *Amritarajanyadi Kashaya*, with its polyherbal composition, presents a viable alternative to conventional treatments by addressing the underlying causes of skin conditions like *Sheetapitta*. Its anti-inflammatory, anti-allergic, immune-modulatory, and detoxifying properties make it an effective remedy for managing symptoms of urticaria and similar skin conditions.

By targeting multiple pathways involved in the allergic response, including histamine release, mast cell activity, and pro-inflammatory cytokine production, this Ayurvedic formulation offers a comprehensive approach to managing allergic reactions. Furthermore, its focus on digestive health and toxin elimination provides a long-term solution that goes beyond symptom relief, promoting overall immune balance and well-being. Thus, *Amritarajanyadi Kashaya* exemplifies the potential of Ayurveda to offer a balanced and effective treatment for modern allergic conditions, highlighting the relevance of traditional knowledge in contemporary health care.

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