

“Role of *Rasayana Dravyas* as immunomodulators in *Sheetapitta* w. s. r. to urticaria.”

Radha Anil Dabhade*¹, Vipul Kanani², Sapna Purohit³,

1. 3rd year P.G. Scholar,
2. Professor, & H.O.D Email id: vipulkanani@rediffmail.com
3. Associate Professor, Email id: upadhyaydrsapna@gmail.com

Rog Nidan Dept,
R.T. Ayurved Mahavidyalaya, Akola, Maharashtra, India
*Corresponding author: radha.ojaswi@gmail.com

ABSTRACT:

This study is a review type of study, we have acquired and evaluated information from the available Ayurvedic *samhitas* and few elementary text books and Research papers to suggest *rasayana dravyas* in the management and prevention of *Sheetapitta*. A *Rasayana dravya* nourishes body, boosts immunity, strength, resistance, quality and quantity of Ojas. Some *Rasayanas* are disease specific, which can be administered to enhance the tissue strength and disease-combating power so that faster and better relief may be provided and recurrences may be prevented. *Sheetapitta* is the condition that occurs due to the dominance of cold (existing in *kapha* and *vata* dosh) over *pitta* dosha. *Vata Dosh prakopa* due to etiological factors results in the successive vitiation of *pitta dosha* and *Rakta dushti*, further spreading extremities and leading

to the manifestation of wheals (maculopapular rash), hence the *Sheetapitta* can be correlated with Urticaria. In this review Study we tried to suggest the management and prevention of recurrence of Urticaria episodes by breaking the *samprapti* with the help of *Rasayana chikitsa* by strengthening One's Bala, Oja i.e. *Vyadhi Kshamatva*. We have suggested here *Katukarohini*, *Guduchi* and *Haridra* to use as *rasayana* and Disease specific immunomodulator drugs.

KEY WORDS: *Rasayana*, *Sheetapitta*, Urticaria, Immunomodulator, *Vyadhikshamatva*.

INTRODUCTION-

Rasayana is one of the comprehensive disciplines of Ayurveda, which comprises a specialized use of herbs, herbo-mineral formulations, food articles, and lifestyle

along with self-discipline with social etiquette to achieve the optimum state of tissues and systems of the body so that there is the least effect of etiological factors on the body. In other words, it can be stated that *Rasayana* is a way to achieve homeostasis and thus retarding the process of aging phenomenon and prevention of diseases. In healthy condition, *Rasayana* can be understood as nutritional dynamics for rejuvenation of body and psyche.

If we study from *CharakaSamhita* we get various forms like *Kuti-praveshika* and *Vatatpika*^[1]. many *Medhya Rasyana Dravyas*, *Shaman* and *Kamyas Rasayan Dravyas* like *Nagabalarasayanadi*, *Lavanyakara*, *Ayukamya*, *Naimittika* (*Vyadhihara*) and *Ajastrik* (*Ksheera*, *Ghrita*) etc.^[2]

Rasyana is defined as लाभो पायो ही शस्तानाम् रसादिनाम् रसायनम्^[3].

Acharya Chakrapani elaborated as यत् व्याधीमात्रहरम् नतद्रसायनम्, किन्तु शरीरसंयोग दाढ्यात्दीर्घायु कर्तृत्वसाधारणधर्म योगात् उपचरित व्याधीहरम् रसायनमिहोच्यत इति^[4]

Modern explanation regarding pharmacological activities of *rasayana* drugs as Anti-oxidant, Adaptogen and immunomodulators. *Rasayana* word is composed of two words Ras means Dhatu and Ayan means path.

रसादीनां शुक्रान्तानां धातुना यत् परं तेजस्तत् खल्वोजस्तदेव बलमित्युच्यते (सु. सू. 15/24)^[5] that means by maintaining *Dosha* and *Dhatu* Samya one can attain Bala i.e. *Vyadhikshamatva*.

One of the major uses of *Rasayana* drug is modulation of the immune response. Chronic stress has an immunosuppressive action which adversely affects the defence mechanism of the body. *Rasayana* are reported to have anti-oxidant action.

Urticaria: Urticaria and angioedema may appear separately or together as cutaneous manifestations of localized nonpitting edema; a similar process may occur at mucosal surfaces of the upper respiratory or gastrointestinal tract. Urticaria involves only the superficial portion of the dermis, presenting as well-circumscribed wheals with erythematous raised serpiginous borders with blanched centers that may coalesce to become giant wheal. Urticaria elicited by ingestion of fresh fruits, shellfish, fish, milk products, chocolate, legumes including peanuts, and various drugs that may elicit not only the anaphylactic syndrome with prominent gastrointestinal complaints but also chronic urticaria.^[6]

Sheetapitta: Is one of the disorders which causes by *Asatmya Ahara- Vihara*. It is comprised of two words - '*Sheet*' (cold) and '*pitta*'. The condition occurs due to the dominance of cold (existing in *kapha* and *vata dosh*) over *pitta dosha*. *Vata Dosh prakopa* due to etiological factors results in the successive vitiation of *pitta dosha* and *Rakta dushti*, further spreading extremities and leading to the manifestation of wheals (maculopapular rash), the *Sheetapitta*.^[7] Hence *Sheetapitta* can be correlated with Urticaria.

AIMS AND OBJECTIVES:

1. To study and understand the Etiopathology of urticaria in Ayurved and modern perspectives.
2. To analyze the Ayurvedic line of management to prevent recurrence of Urticaria episodes on the basis of *samprapti vighatana* of the disease by *Rasayana chikitsa*.

MATERIALS AND METHODS:

As this study is a review type of study, we have collected information from the available Ayurvedic *samhitas* and few elementary text books to get comprehensive knowledge about the *Sheetapitta* as well its line of management by *Rasayana dravyas* to prevent recurrent episodes.

The term *Rasayana* does not only refer to a drug or a therapy but to a comprehensive discipline. It is a multi-angled approach taking care of the body, mind and spirit, thus affecting total wellbeing of an individual. A *Rasayana Dravyas* nourishes body, boosts immunity, strength, resistance, quality and quantity of Ojas, which is the Saar of all Dhatus restore spirit, vitality and thereby attain the longevity. The tissue-specific *Rasayana* drugs can be administered along with the treatment of the underlying disease to enhance the tissue strength and disease-combating power so that faster and better relief may be provided and recurrences may be prevented. If we divide Etiology of *Sheetapitta* in two categories i. e. *Aharaj Hetu* and *Viharaj hetu*, The *Aharaj hetu* includes *Abhishyandi*, *Aamla*, *Katu PittaPrakopak - RaktaDushtikar* bhojan and *Viharaj Hetu -Vata* and *Kapha Prakopaka* and *Twak Vaigunyar Vihar* like *Shita Maruta Sparsha*, *Sheeta Rutu*, *Varsha Kala* etc.

शीत मारूत संस्पर्शात्प्रदूष्टौ कफमारुतौ |

पित्तेनसह संभुय बहिरन्त विसर्पतः||मा.नि.50/1.

If we analyse *Poorva Roopa* and *Roopa* of *Sheeta pitta- Udarda- Kotha* to find out the main factors of pathogenesis and *Sthana* ie. *Twak*. Then important factors of *Samprapti* can be enlisted as follows-

1)Tridoshas 2) *Rasa* and *Rakta dhaatu* 3) *Rasa* and *Rakta vaha strotas*, 4) *Sthana - Twak*. 5)*Poorvarupas: Aruchi, Hrillas, Anga gaurava* indicates involvement of *rasa dhatu* and *Dehasada* and *Raktalochanata* indicates involvement of *rakta dhatu*. 6)*Rupas:Jwara, Toda, Chhardi*, indicates involvement of *rasa dhatu* and *Varati danshta shotha, kandu, Vidaha* indicates involvement of *Rakta dhatu*.

To break the *Samprapti* we need to treat *Dushya* ie. *Rasa* and *Rakta*, *Agni* and To build immunity against *urticaria* we have to strengthen *Rasa-Rakta Dhatu, Agni* and *Bal* ie.*Oja*. Before starting *Rasayana* we need to clean the body by the *panchakarma* therapy and especially by doing *Virechan karma*. As *Acharya Vagbhata* emphasized in chapter 39 of *Uttarsthana*.

अविशुद्धे शरीरे हि युक्तो रासायनो विधिः । वाजीकरो वा मल्लिने वस्त्रे रङ्ग इवाफलः ॥ ४॥ A.H.U.39/4^[8]

From the *charak samhita* we can find many of the *rasayan dravyas* in *Rasayana* *adhaya* which works on *Rasa* and *Rakta dhatu, Agni* and *Doshas*.

Katuka rohini and **Guduchi** are the main ingredients in the *Chandrakala Ras* which acts on *Rasa* and *Rakta Dhatu Dushti* ^[9]and **Haridra** is described as *Varnya, Lekhaniya, Kushthaghni* and *Vishaghni*.

S r n o	Name of Rasyana	Rasa	Veer ya	Vipak	Karma	Latin Name	Chemical Composition

1	Katukrohini	Tikta	Sheeta	Katu	Kaphapittaghna	Picrorrhiza kurroa	Picrorrhizine, katukin, apocynin, alkanol, B sistesterol.
2	Guduchi	Tikta, katu, kashaya	Ushna	Madhura	Tridoshaghna	Tinospora cordifolia	Pesoline, berberin, saponin, cyclonoline, tetrahydroisoquinoline.
3	Haridra	Tikta - Madhur	Ushna	Katu	Kapha-Pittaghna	Curcuma longa	Curcumin

1. Katukrohini :

Katukrohini is lekhaniya and Bhedaniya Dravya. It Prevents Pittasmsarga and thereby does not allow spreading of wheals under the skin. Aqueous and ethanolic extracts of Picrorrhiza kurroa have been reported for stimulating humora; responses by various immune mechanisms which includes mediators releasing in hypersensitivity as well as tissue responses at the target site organ of these mediators. One of the Biopolymeric fraction from this plant RLJ-NE-205 also showed cell-mediated immune response by stimulating CD4+ and CD8+ T cells.^[10]

The extracts from roots and rhizomes of this plant has active constituent known as kutkin, which is a mixture of kutkoside and picroside while its other constituents are apocynin, andorsin, and cucurbitacin glycosides. The active constituent kutkin, picroside-1, and kutkoside demonstrated high antiinflammatory activity in a variety of test models. Among these constituents, apocynin was found to have NADPH oxidase inhibition ability, therefore inhibiting production of ROSs by

polymorphonuclear leukocytes (PMNs), thus acting as an antioxidant and antiinflammatory mediator. A study by Lafeber et al. (1999) showed that the potential of apocynin in the treatment of RA by pheriphertal blood mononuclear cells (PBMNC)-induced arthritis resulted in a decrease in IL-1 and TNF- α production by the MNC while IFN-gamma, IL-4, and T-cell-derived IL-10 were strongly diminished.^[11]

2. Guduchi: According to Charaka Samhita guduchi is the constituent of following Ganas^[12]. 1. Vayasthapan as it prevents ageing 2. Dahaprashaman as it decreases burning sensation. 3. Trushna Nigrahan as it decreases sense of profound thirst 4. Truptighna as it decreases Aruchi and Hrilas (anorexia and nausea). T.cordifolia has mast cell stabilizing effect as well as H1 antihistamine effect on allergic disorders. From all these observations of the study involving different models of allergic reactions with distinct mechanism of action, it can be said that effects of herbals drugs alone on allergic disorders is encouraging. Herbal drug treatment provides a unique

opportunity to develop a therapy to reduce the side effects of currently marketed antiallergenics and can achieve better management of patients suffering from allergic disorders. *T. cordifolia* has mast cell stabilizing effect as well as H1 antihistamine effect on allergic disorders. From all these observations of the study involving different models of allergic reactions with distinct mechanism of action, it can be said that effects of herbals drugs alone on allergic disorders is encouraging. Herbal drug treatment provides a unique opportunity to develop a therapy to reduce the side effects of currently marketed antiallergenics and can achieve better management of patients suffering from allergic disorders^[13]

3. Haridra: Haridra is the ingredient of Brahma Rasayan^[14]. It digests Rasa-gata Doshas by its Tikta Katu Rasa and causes Rasagni Deepan. Evidences witnessed by a large volume of In-vitro and In-vivo research

Studies in *Curcuma Longa*,^[15] we found that,

- i) Curcumin can interact with various innate immune cells such as mast cells, basophils, eosinophils, neutrophils, etc.
- ii) Curcumin effectively modulates innate immunity and inhibits the inflammatory immune responses, including the production of IL-1 β , TNF- α , IL-8, IL-6, eotaxin, histamine, and TSLP.
- iii) Curcumin is efficacious in restoring the TH1/TH2 imbalance and switching the immune responses from the TH2 profile towards the type 1 immune response mediated by TH1 cells. As a result of curcumin's modulatory action, the differentiation of the TH2 cell subtype and

IL-4, IL-5, and IL-13 production are hampered.

iv) Curcumin has been found to suppress TH17 subtype differentiation, thereby, having a high potency to inhibit the production of IL-17. The curcumin, as a natural immunomodulatory compound, could have beneficial effects by regulating and controlling defective immune responses in allergic reactions.

DISCUSSION:

Rasayana as immunomodulators are now considered as one of the most potent tools in the management of health and disease as objective of immune enhancement is achieved through the use of *Rasayana* drugs. To break the *samprapti* in *Shitapitta* we have to bring in harmony the involved *Dushya* i.e. *Rasa* and *Rakta*, *Agni* and to build immunity against *urticaria* we have to strengthen *rasa Dhatu*, *Agni* and *Bal* i.e. *Oja* and to improve *Vyadhi-Kshamatv*. Acharya Charaka mentioned various *Rasayana* remedies in *rasayana adhyaya*. We picked Three potent Drugs which Help to break *Samprapti* of *Sheet pitta*. *katukaRohini* breaks *samprapti* of *sheetpitta* by preventing *pitta sansarga*. It shows cell mediated immunity by stimulating CD4 and CD8+T cells. *Guduchi* is *Rasayana* that stops ageing and reduces the symptoms of *vidaha*, *pipasa*, *aruchi*, *hrullasa* in *sheetpitta*. Pharmacological study of *guduchi* shows that it has mast cell stabilising effect as well as H1 antihistaminic effects on allergic disorders. *Haridra* works on *Rasagni* and there by acts as *twak doshahar*. Curcumin interacts with innate immune cells such as mast cells, basophils, eosinophils, neutrophils etc. It also inhibits inflammatory response by

inhibiting production of IL- 1 beta, TNF-alpha, IL-8, and IL-6, histamine etc..The above mentioned *rasayana* Dravayas are Vayasthapana, Dhatwagni Vardhak,potent to stabilize mast cell reactions which in turn helpful in allergic disorders , helps preventing recurrence hence suggested in treatment, prevention and as an immunomodulatory Drugs in Urticaria.

CONCLUSION:

From the Above Discussion, It can be concluded that Above mentioned three *Rasayana dravyas* can be advised to prevent allergic conditions including Urticaria. Such *Rasayana* is called as Naimittika *Rasayana* which is the tissue-specific *Rasayana* drugs which can be administered along with the treatment of the underlying disease to enhance the tissue strength and disease-combating power so that faster and better relief may be provided and recurrences may be prevented. Hence this can be suggested as an immunomodulator therapy in the *Sheetapitta*.

REFERENCES-

- 1) Charaka Samhita edited by Acharya Priyawart Sharma , Vaidya Manorama Hindi Vyakhya , Acharya Vidyadhar Shuka- Prof Ravidutt Tripathi , Chokhamba Sanskrut Pratishthan , Delhi. cha.chi. 1/1/16, page no. 07.
- 2) Ayush: International Research Journal of Ayurveda Teachers association {AIRJATA} ; Role of *Rasayanas* as Immunomodulator and Antioxidant: A Conceptual Study Santosh N. Belavadi MD. Ph.D Professor & H.O.D Department of P.G Studies in

Kayachikitsa,D.G.M Ayurveda Medical College, Hospital & Postgraduate, Ph.D Studies and Research Centre Gadag-582103 Karnataka.

- 3) Charaka Samhita edited by Acharya Priyawart Sharma , Vaidya Manorama Hindi Vyakhya , Acharya Vidyadhar Shuka- Prof Ravidutt Tripathi , Chokhamba Sanskrut Pratishthan , Delhi. cha.chi. 1/1/8 , page no. 05.
- 4) Charaka Samhita ,Shri Chakrapani Dutta virachitaya Ayurveda Dipika Vyakhya sahita e Samhita https://niimh.nic.in .{cha chi. 1/1/5-6}
- 5) Sushrut Samhita ,edited with Ayurved Tatwa Sandipika hindi Vyakhya,by Kaviraj AmbikaDutta Shastri , Choukhambha Sanskrit Sansthan , Varanasi, Su .Su. 15/24, page no. 60
- 6) Tinsley Harrison, Dennis L. Kasper, Anthony S. Fauci(ed), Harrison'S principles of internal medicine, volume 2, 16 th edition, the McGraw-hill companies, Urticaria and Angioedema page no 1951
- 7) Madhavakara, Madhava nidanam with madhukosha - Vyakhya Vibhushitam - II part edited by Yadunandan Upadhyay, 31 st edition 2002, Choukhambha Sanskrit Bhavan Varanasi, P.P. 168-169
- 8) Ashtang Hrudayam, Dr Brahmanand Tripathi, Edited with Nirmala Hindi Commentary, Choukhambha Sanskrit Pratishthan , Delhi, Uttarsthan 39, page no. 1183

- 9) Ayurveda Saarsamgraha ,Baidyanath Ayurveda Bhavan Nagpur, Page no. 299
- 10) Katuki (Picrorhiza Kurroa) -A promising Ayurvedic Herb-Diksha Raina1, Sumit Raina2 and Brajeshwar Singh3*- Biomedical Journal of Scientific & Technical Research May, 2021, Volume 36, 1, pp 28238-28242)
- 11) Science Directs Nawarathne Kalka: Antiinflammatory Actions and Potential Usage for Arthritic Condition -Pathirage Kamal Perera, Diyathi Tharindhi Karunaratne, in Bioactive Food as Dietary Interventions for Arthritis and Related Inflammatory Diseases (Second Edition), 2019 Picrorhiza kurroa (S. Katukarosana)
- 12) Charaka Samhita,Dr Brahmanand Tripathi, Choukhamba Surabharati Prakashan Vranasi, Sutra Sthan Adhyaya 4/18, Page no.98
- 13) Pharmaceutical Biology, 2009; 47(11): 1096–1106RESEARCH

ARTICLE . The protective effect of Tinospora cordifolia on various mast cell mediated allergic reaction. Rishit Zalawadia, Chintan Gandhi, Vaibhav Patel, and Ramchandran Balaraman pharmacy Department, Faculty of Technology and Engineering, Kalabhavan, The Maharaja Sayajirao University of Baroda, Vadodara, Gujarat, India].

- 14) Charaka Samhita edited by Acharya Priyawart Sharma , Vaidya Manorama Hindi Vyakhya , Acharya Vidyadhar Shuka- Prof Ravidutt Tripathi , Chokhamba Sanskrit Pratishthan , Delhi. cha.chi. 1/1/49, page no. 10
- 15) Biomedicine and Pharmacotherapy 154(2022) 113646, ELSEVIER, research article. Therapeutic potency of curcumin for allergic diseases: A focus on immunomodulatory actions. Saeed Mohammadin Haftcheshmeh.

<i>Conflict of Interest: Non</i>	<i>Source of funding: Nil</i>
<i>Cite this article:</i>	
<i>“Role of Rasayana Dravyas as immunomodulators in Sheetapitta w. s. r. to urticaria.” Radha Anil Dabhade, Vipul Kanani, Sapna Purohit</i>	
Ayurline: International Journal of Research In Indian Medicine 2024; 8(4):01-07	