



## Case Report

## Ayurveda panchakarma treatment success in a case of chronic spontaneous urticaria non-responding to conventional medicine—A case study

Krishna Rao S<sup>a,\*</sup>, A.K. Panda<sup>a</sup>, Binitha P<sup>a</sup>, Bikash Ranjan Kar<sup>b</sup>, Indu S<sup>a</sup><sup>a</sup> Central Ayurveda Research Institute for Hepatobiliary Disorders, Bhubaneswar, Odisha, India<sup>b</sup> Dept of Dermatology Venereology and Leprosy (DVL), IMS &SH, Bhubaneswar, Odisha, India

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## ABSTRACT

This is a case study of a 34-year-old male patient of Chronic Spontaneous Urticaria (CSU) with severe generalised itching and rashes all over the body since 17 years. The patient has no significant relief with conventional antihistamine therapies, AST (Autologous serum therapy) and Omalizumab (OMA). He was clinically assessed and managed with Ayurvedic Panchakarma procedures like *Snehapana* (therapeutic administration of unctuous formulation like ghee, oil), *Vamana*, *Virechana* and internal medication in line of *Seethapitta Chikitsa*. The patient was asked to monitor hives and itching daily for one week using a validated weekly Urticaria Activity Score (UAS7) at the baseline, after *Vamana*, after *Virechana* and after follow up. The Quality of life was assessed at the baseline and after follow-up using Chronic Urticaria Quality of Life Questionnaire (CU-Q<sub>2</sub>oL). The assessment showed complete remission in disease activity and improvement in Quality of life as per the scores. The hematological and biochemical investigations reflect the safety and efficacy of Ayurveda in management of CSU.

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## 1. Introduction

Chronic spontaneous urticaria (CSU) is defined as the spontaneous recurrent episodes of wheals (hives), angioedema, or both, occurring at least twice a week lasting for six weeks or more with no specific known trigger [1]. The exact incidence and prevalence of chronic urticaria are not known, although it occurs in at least 0.1% and possibly up to 3% of the population, females are more commonly affected than males. Unpredictability and severity of attacks, reduced sleep quality due to itching and associated fatigue negatively affects overall quality of life (QoL). At present second-generation nonsedating H1-antihistamines are used as the first-line treatment for CSU. In nonresponding cases, the treatment options including steroids, AST (Autologous serum therapy), modern biologics such as Omalizumab are used [2].

OMA is a recombinant, humanized, a monoclonal antibody against human immunoglobulin E (IgE) for the treatment of urticaria in patients who do not sufficiently respond to standard therapy [3,4]. Urticaria Activity Score (UAS 7) is a widely accepted and validated easy-to-use tool to help patients quantify urticaria and itching on a daily basis [5]. CSU can be annoying and debilitating to the extent that it interferes with subjective well-being and daily life. So a disease-specific scale to assess Quality of life i.e. Chronic Urticaria Quality of Life Questionnaire (CU-Q<sub>2</sub>oL) is used to assess the impact of CSU [6].

The symptomatology and causative factors of CSU can be compared with the spectrum of *Sheetapitta-Udarda-Kotha* described in classic Ayurvedic texts [7]. It is a spectrum involving all the three *Doshas* in the pathogenesis with the predominance of *Pitta* with *Vayu* (the combination of two bodily humours) along with *Rasadhathu* and *Rakthadhathu* (two affected body tissues) as the main *Dushyas*. *Sheetapitta* (a types of allergic condition similar to urticaria) is a *Vata* predominant condition while *Udarda* is a *Kapha* dominant one. Various conditions like *Asatmya Ahara* (unwholesome food), *Virudhahara* (incompatible food), and *Dushivisha* (a type of internal toxin) are common etiological factors for these diseases which can be correlated

\* Corresponding author.

E-mail: [krdkrishnarao@yahoo.com](mailto:krdkrishnarao@yahoo.com)

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with various allergic conditions [8]. In *Ayurveda*, this condition is primarily managed at the outpatient level with oral medications and in case of nonresponding cases, it is managed as an inpatient by administering suitable *Panchakarma* (five bio-purification procedures) depending upon the severity, chronicity, patient strength, basic constitution, etc. *Panchakarma* therapy reduces the time of treatment, drug consumption, expenses and improves the quality of life associated with chronic diseases such as skin diseases [9].

## 2. Patient information

### 2.1. Presenting complaints

A 34-year-old married, non-smoking, non-alcoholic male patient was presented to OPD (Out-patient department of Central Ayurveda Research Institute for hepatobiliary disorders) (1665/2019) with complaints of severe itching with reddish rashes lasting for 3–4 days, in all parts of the body (Fig. 1a–d). The patient reported that the rashes usually aggravates during the hot climates since 17 years.

### 2.2. Past medical history

The case was non responsive to antihistamine therapies, Autologous serum therapy (AST) and OMA. He continued to develop severe itching almost daily. The past medical history of the patients was suggestive of CSU (Table 1).

### 2.3. Investigations

On examination, the Blood pressure was found to be 100/70 mmHg. Hematological investigations were conducted on April 3, 2019, that revealed hemoglobin (Hb) 15.1%, Neutrophils 62%, Lymphocytes 26%; Eosinophils 12%; Platelet count 1.84 lakh/mm<sup>3</sup>. The Total Ig E testing was previously done on October 10, 2018, that reported IgE value 1293.3 iUA/L. The liver function, renal function and blood lipids levels were within normal limits. The UAS 7 score for the past week prior to admission was 42 and CU-Q<sub>2</sub>oL was 103.

### 2.4. Clinical findings

Ayurvedic parameters assessed using *Astasthanapariksha* (eight fold examination) were *Nadi* (pulse)-*Sarpagati*, *Mutra* (Urine)



Fig. 1. Visual assessment of Pre and Post treatment Outcome.

**Table 1**  
Timeline of the case.

Year	Clinical events and Interventions
2002	The complaints started as mild itching which lasted for 2–3 h. Took treatment from a general physician and the complaints subsided.
2005	Recurrence of similar symptoms and took self-medication and got relief
2009	Severe recurrence of the symptoms so he took conventional medications (Mizolastin –10 mg) for 6 months and got relief.
2012	The complaints reduced after 1 month of taking medication.
2016	The complaints subsided after 3 months of medication.
2018	In May triggered by hot climate, the symptoms recurred in a severe manner. Took oral conventional antihistamine drug from different hospitals but the condition was not responding.
26/10/18	Total I g E –1293.3 iUA/L;
15/12/18	Underwent AST first sitting along with antihistamine tablets and hydrocortisone cream as external application.
05/01/19	Underwent AST second sitting along with antihistamine tablets and hydrocortisone cream as external application but the complaints were not getting controlled.
2/02/19	Took the first dose of OMA and T. Dazit M for 30 days. Symptomatic relief for the first 15 days, then gradually symptoms aggravated
9/03/19	Took the second dose of OMA along with T.Dazit M and T. Xyzal 5 mg for 30 days, but there was no relief in the symptoms
16/03/19	Patient came to the OPD with Urticarial rashes all over the body after getting no relief with conventional medications.
16/03/19–3/04/19	Oral medications like <i>Arogyavardhini Vati</i> , <i>Dhatri Lauha</i> , <i>Triphala Choorna</i> , <i>Nisamalaki Choorna</i> were given initially but got only mild relief.
3/04/19	The patient was admitted in IPD as the symptoms persist and Haematological investigations were done (N –62, E –12; AEC –708; Others within normal limits). (UAS -7: 42) (CU-Q <sub>2</sub> oL: 103)
04/04/19–05/04/19	<i>Rukshana</i> and <i>Deepana-Pachana</i> with <i>Vaiswanara Choorna</i> in <i>Takra</i>
06/04/19–11/04/19	<i>Snehapana</i> with <i>Mahathikthaka Ghrtha</i>
12/04/19–13/04/19	External <i>Snehana</i> and <i>Svedana</i>
14/04/19	<i>Vamana</i> (7 Vegas)
15/04/19	Patient discharged and advised <i>Samsarjana</i> for 3 days
	Hematological parameters reinvestigated (N- 45; E-16; AEC -800 Others within normal limits)
	Medication <i>Haridra khanda</i> and <i>Mahathikthaka Ghrtha</i> to continue and advised <i>Virechana</i> after 15 days.(UAS -7:0)
15/04/19–26/04/19	The patient was asymptomatic and not reported.
27/04/19–10/05/19	Symptoms reoccurred and took Ayurvedic medicines by self.
11/05/16–25/05/19	Asymptomatic without any medications. Visited the OPD and advised admission for <i>Virechana</i> .Till then oral medications <i>Manjistadi Kwatha</i> and <i>Arogyavardhini Vati</i> was advised (AEC- 260)
31/05/19	Mild itching without any rashes, wheals or discoloration at Night which subsided by its own.
1/06/19–3/06/19	Readmitted in IPD for <i>Sadyovirechana</i> on 2/06/19 with <i>Avipathy choorna</i> in <i>Triphala Kwatha</i> (Vegas –2 nos) (UAS -7: 4)
18/06/19	The patient is asymptomatic. History of mild itching and reddish discoloration 5 days back but no need to take conventional medication
	Advised to continue the medication and added <i>Saribadyasava</i> . (UAS -7:0) (CU-Q <sub>2</sub> oL: 31)

-*Avilavarna*, *Mala* (stool)-*Samanya* (Normal), *Jivha* (tongue)-*Anu-palepa* (clear), *Sabda* (sound) -*Samanya* (normal), *Sparsa* (touch)-*Ushna* (warm), *Druk* (appearance)-*Samanya* (Normal), *Akruti* (physical constitution)-*Samanya* (Normal). The patient was found to be *Vatapittaprakruthi* (constitution).

### 2.5. Time line

The details of the case, treatment and followup are presented in [Table 1](#).

### 3. Diagnostic focus and therapeutic intervention

The primary focus of *Ayurveda* is a personalized approach to *Sheethapitta* on the basis of age of the patient, degree of *Dosha* vitiation, duration of illness, the severity of of the disease and strength of the patient. The treatment outcome was evaluated using UAS 7 and the QoL was assessed using CU-Q<sub>2</sub>OL.

During the first visit the patient was requested to monitor hives and itching daily for one week using a validated weekly UAS7 and CU-Q<sub>2</sub>OL. The scores were 42 and 103 respectively suggestive of severe disease activity and poor QoL. Oral medication was administered during the first visit which led to slight improvement in the symptoms and QoL. Considering the chronic and non-responsive nature of patient's condition to conventional treatment strategies and oral *Ayurvedic* medications, the primary focus was to detoxify and rejuvenate the body for disease cure and prevention of autoimmune responses, auto-allergy and mast cell activation. The

patient was hospitalized for the administration of *Vamana* (therapeutic emesis) as itching and rashes were the predominant symptoms. As a preparatory step for *Vamana*, *Deepana-Pachana* (therapeutic enhancement of digestive capacity), was conducted for 2 days with *Vaiswanara Choorna* (a powder formulation for improving digestive power). The patient reported lightness of the body, good appetite and sufficient energy levels after two days. It was followed by *Snehapana* (therapeutic administration of unctuous formulation like ghee, oil) with *Mahathikthaka Ghrtha* (a medicated ghee preparation used in management of skin diseases) till the signs of oleation were observed. The signs of oleation were sticky bowel with the presence of ghee, soft and oily skin, aversion to ghee, nausea and tiredness. The complaints started to reduce from the 5th day of *Snehapana* and completely subsided after *Vamana*. The itching and hives subsided completely and the patient was then discharged with medicine prescription and was asked to monitor hives and itching daily for one week.

Re-admission was advised after 15 days for *Sadyovirechana* (therapeutic purgation without planned oleation and sudation) as *Ayurveda* advised repeated purificatory therapies in the management of chronic skin diseases. The patient visited OPD for the treatment after 28 days and reported a reoccurrence of symptoms which could be managed through administration of prescribed medications. He was re-hospitalized for *Sadyovirechana* for one day and discharged with oral medications. He was advised to monitor hives and itching daily for one week with UAS 7 score and to report them during follow-up after 15 days. The OPD and IPD interventions are enlisted in [Table 2](#).

**Table 2**  
Ayurvedic Treatment plan with duration.

	OPD Intervention	Dose	Time/Frequency of Administration	Duration
1st Visit	<i>Arogya VardhiniVati</i> [10] <i>Tab.DhathriLauha</i> [11] <i>TriphalaChoorna</i> [12]	500mgTwice daily AF 250Twice daily AF 5gmBedtime		15 Days
2nd Visit	<i>Arogya VardhiniVati</i> <i>NisamalakiChoorna</i> [13] <i>TriphalaChoorna</i>	500mgTwice daily AF 5gmTwice daily AF 5gmBedtime		5 Days
	<b>Panchakarma Procedure</b>	<b>Dose and method of administration</b>		<b>Duration</b>
	<i>Deepanapachana</i>	<i>Vaiswanara Choorna</i> [14]5 gm choorna + Q.S taken thrice daily AF		2 Days
	<i>Snehapana</i> (Supplementary file-Table 1)	<i>Mahathikthaka Ghrtha</i> [15]in increasing dose at morning 6 am in empty stomach with hot water to sip in between.		6 Days
	Abhyanga + Hot water bath	<i>Marichadi Thaila</i> external massage followed by hot water bath		2 Days
	<i>Vamana</i> (Supplementary file-Table 2)	Morning 6 am (7Vegas)		1 Days
	<i>Samsarjana</i>	<i>Manda.Peya, Vilepi</i> were given for 2 food timing respectively, graduallythen shifted to Rice with less oil and spice diet from 3rd day		3 Days
	Discharge Medicine	5 gm twice daily AF		
	<i>Haridra Khanda</i> [16]	5 gm at bedtime		15 Days
	<i>Mahathikthaka Ghrtha</i>			
	OPD Visit	<i>Manjistadi Kwatha</i> -15ml + 30 ml luke warm water with <i>Arogyavardhini Vati</i> -500mgTwice daily AF		
	<i>Sadyovirechana</i>	30 gm <i>Avipathy Choorna</i> [17]+100 ml <i>Triphala Kwatha</i> at Morning 6.30 am (2 Vegas)		1 Day
	Review	On Discharge advised oral Medications		
	Medicines	<i>Haridra Khanda</i> 5 gm twice daily BF <i>Arogyavardhini Vati</i> 500 mg twice daily AF <i>Saribadyasava</i> [18] 20 ml twice daily AF		

(AF: After food; BF: Before food)

#### 4. Follow-up and outcome

Soon after *Vamana* the UAS 7 score reduced to zero from the maximum score of 42 at the time of admission, which was increased to 4 after *Virechana* and reduced to zero after the follow-up (Supplementary file-Table 3). The patient remained in remission till 160 day follow-up. Over telephone, as reported by the patient there was no remission since past 30 months. Chronic Urticaria Quality of life score was assessed at the time of admission and after follow-up which was 103 and 31 respectively indicating significant improvement in the quality of life. On visual assessment the patient was found to have no signs of hives and wheals (Fig. 1e–h). The biochemical and haematological variables before and after different treatments were found to be normal which indicated the safety of the prescribed treatment (Supplementary file-Table 4).

#### 5. Discussion

Considering the chronic and non responsive nature of the disease to conventional management such as antihistamine therapy, AST and OMA, as well as oral Ayurvedic medications a deep-seated pathology was assumed to be associated with it. Considering the disease chronic and severe disease symptoms in-patient *Panchakarma* treatment-*Vamana* was administered after *Snehapana* (administering oleaginous preparation through oral route) with *Mahathikthaka Ghrtha*. *Vamana* was carried out for eliminating the accumulated toxins that are *kapha* predominant and *Mahathikthaka Ghrtha* was selected as it is indicated in *Kusta* (a group of skin diseases) especially associated with *Pitta* predominance. *Haridra khanda* is given for prevention of recurrence as it is indicated in *Seethapitta*. It has *Haridra* (*Curcuma longa* L) as the main ingredient that has been proven to have anti-inflammatory and anti-allergic properties by inhibiting Immunoglobulin E-mediated Mast Cells activation [19]. As the patient had allergic skin lesion with itching along with reddish discoloration, the involvement of rakta was inferred. *Manjistadi kwatha* indicated for *Rakta* involvement and

reddish discoloration. By virtue of ingredients it is a *Thikthakashaya* (bitter and astringent taste) predominant formulation that further prevents *Kapha dosha* aggravation. *Arogyavardhini Vati* advised in the treatment of skin diseases was administered along with it as it contains *Katuki* (*Picrorhiza kurrooa* Royle) which helps in maintaining mild laxation during the treatment.

*Ayurveda* advises frequent purificatory procedures to avert the recurrence of chronic skin maladies. So a *Sadyovirechana* was scheduled with *Avipathy choorna* which has *Trivrt* (*Operculinaturpethum* (L.) Silva Manso) as the main ingredient, mixed with decoction of *Triphala*. The combination is advised in the treatment of *Visarpa* (a type of skin disease) for purgation in all skin diseases [20]. As the patient is in remission during the follow up with an improvement in the Quality of life, *Saribadyasava* was also added to prevent any exacerbation due to hot weather as the formulation is also indicated in condition where *Vata* along with *Rakta* is vitiated. Also, *Sariba* (*Hemidesmus indicus* (L.) R. Br. ex Schult.) containing drugs are usually indicated in *Ayurveda* in skin diseases and conditions where *Pitta dosha* is involved. At present, the patient is under continuous observation and oral treatment. The quality of life of the patient has significantly improved. Till date (23/08/19), not only there is no exacerbation of symptoms in the patient but also the improvement in Quality of life was reported. There was also complete absence of adverse events reported during the course of treatment. This is an important finding with respect to the disease severity, prognosis, and non-response to established conventional therapies.

#### 6. Conclusion

*Panchakarma* procedures along with oral medication are safe and effective in the management of CSU that is unresponsive to standard treatments including OMA injection. It can also prevent the recurrence of chronic diseases like CSU. Further studies with larger sample size in different settings are recommended for validation.

## 7. Patient perspective

The patient was very happy with the response he got from Ayurvedic panchakarma procedures in a short duration of time. Since 2018 he opted for different types of conventional treatments for the same with no significant relief. It was affecting his work and mood to the extent that he used to take frequent leave from his workplace. The treatment helped in gaining confidence, improve the quality of life and he was able to take almost all types of food. As reported by the patient he is asymptomatic since last 1 ½ years subsequent to treatment and happy with the outcome.

## 8. Patient consent

Written permission for publication of this case study had been obtained from the patient.

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## Conflict of interest

None.

## Authors contribution

**Krishna Rao S:** Managed the case and Prepared Original Draft. **Indu S:** Writing - Review & Editing, Methodology. **A.K. Panda:** Management of the case, Conceptualization and editing. **Binitha P:** Review & Editing, **Bikash Ranjan Kar:** Diagnosis, conceptualization and editing the manuscript.

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## Appendix A. Supplementary data

Supplementary data related to this article can be found at <https://doi.org/10.1016/j.jaim.2022.100549>.

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