ISSN: 2322 - 0902 (P)
ISSN: 2322 - 0910 (O)

International Journal of Ayurveda and Pharma Research

Research Article

A CLINICAL STUDY TO EVALUATE THE COMBINED EFFECT OF *VIRECHANA KARMA*, *ARDRAKA KHANDA* AND *AMRUTA RAJANYADI KASHAYA* IN THE MANAGEMENT OF *SHEETAPITTA* VIS-À-VIS CHRONIC URTICARIA

Chaithra HB[1]*, Mythrey R C[2], V Rajendra[3]

*[1]PG Scholar, [2]Professor, [3]Professor and Head, Department of PG studies in Kayachikitsa, Government Ayurveda Medical College, Mysuru, India.

ABSTRACT

Sheetapitta is a clinical condition caused due to vitiation of *Tridosha* mainly by the contact of *Sheetalavayu*. It is characterized by *Varati Damstravat Shotha* (wheals), *Kandu* (itching), *Daha* (burning sensation), *Toda* (pricking pain), *Jwara* (fever) and *Chardi* (vomiting). *Sheetapitta* analogous to urticaria of western medicine. Urticaria is a vascular reaction pattern characterized by transient, erythematous and edematous wheals or papules of varying sizes and shapes which are usually pruritic. Episodes lasting more than 6 weeks are regarded as chronic urticaria. Present study is a single group open clinical trial with pre and post-test design with a sample size of 33 subjects. The diagnosis was based on the signs and symptoms of *Sheetapitta* vis-à-vis chronic urticaria and the assessment was based on Urticaria Activity Score which includes wheals and itch as its parameter. Subjects were administered with *Virechana Karma* followed by *Ardraka Khanda*with *Amruta Rajanyadi Kashaya* as *Anupana* for 30 days after *Virechana Karma*. The result obtained after the completion of intervention showed statistically highly significant with the P value 0.001 and also overall clinical improvement showed significant result in reducing the signs and symptoms of *Sheetapitta* vis-à-vis chronic urticaria. *Sheetapitta* being *Tridoshajanya*, *Virechana Karma* helped in *Tridosha Nirharana* (expelling dosha). *Ardraka Khanda* being *Agnideepaka* (appetiser), *Sheeta Pittahara* (disease pacifying action) and *Rasayana* (rejuvinator) followed by *Amruta Rajanyadi Kashaya* which is *Kapha-Pitta Hara, Dahahara* (reducing burning sensation) and *Kanduhara* (anti-itch) properties pacified the signs and symptoms of *Sheetapitta*. In combination of both *Virechana Karma* and *Ardraka Khanda* with *Amruta- Rajanyadi Kashaya*, majority of the subjects attained pacification of urticarial wheals and itching.

KEYWORDS: *Sheetapitta*, *Virechanakarma, Ardraka Khanda, Amrutarajanyadi Kashaya,* Chronic urticaria, Urticaria Activity Score.

INTRODUCTION

Sheetapitta is a condition caused due to contact of *Sheetala Vayu*. This causes aggravation of *Vata Dosha* and *Kapha Dosha* and carry *Pitta Dosha* along with them and spreads externally to skin and internally to the *Koshta* leading to clinical manifestations. The clinical manifestations are *Varati Damstravat Shotha* (wheals), *Kandu* (itching), *Daha* (burning sensation), *Toda* (pricking pain), *Jwara* (fever) and *Chardi* (vomiting).[1] Urticaria is a vascular reaction of the skin characterized by the appearance of wheals, generally surrounded by a red halo or flare and associated with severe itching, stinging, or pricking sensations[2]. The lesion lasting longer than 6 weeks are considered as chronic urticaria[3]. Chronic urticaria is prevalent among 0.5-1% of the adult population with female predominance[4]. The frequency is more observed after with the highest incidence in the third decade of life[5]. The causes of urticaria includes food and food additives, drugs, emotional stress, insect bite, contact of plants, focal sepsis, intestinal worms, immune regulation defects and physical factors such as heat, cold, sun, exertion, pressure and vibrations[6]. The pathology of urticaria mainly includes activation of mast cells. The activated mast cells release mediators such as histamine, serotonin and bradykinin which causes capillary dilatation and leakage of plasma leading to formation of wheals[7]. The management of chronic urticaria includes anti-histamines, gluco-corticoids and immunoglobulin administration[8].

Management of *Sheetapitta* mentioned in ayurvedic classics are *Shodhana Chikitsa* includes *Vamana Karma* (emetic therapy), *Virechana Karma* (purgation therapy) and *Raktamokshana* (blood-letting therapy). *Shamana Chikitsa* includes *Abhyanga* with *KatuTaila* (mustard oil) followed by *UshnaJala Seka* (hot water bath), *Udwartana* (powder massage) and various internal medications. *Pathya* mentioned for *Sheetapitta* are, *Shushka Mulaka* (dried Radish), *Kulattha Rasa* (soup of horse-gram), *Lava* (common quail) and *Tittiri* (patridge) variety of *Mamsa Rasa*[9].

OBJECTIVE OF THE STUDY

To evaluate the combined effect of *Virechana Karma, Ardraka Khanda* and *Amrutarajanyadi Kashaya* in the management of *Sheetapitta* vis-à-vis chronic urticaria.

MATERIALS AND METHODS

Source of data

Subjects were selected from the OPD and IPD of Government Ayurveda Medical College and Hospital, Mysuru and Government Hi–tech Panchakarma Hospital, Mysuru.

Study design

Single group open clinical trial with pre and post-test design. Total 38 subjects were registered, there were 5 dropouts. The study was completed in 33 subjects.

Inclusion criteria

1. Subjects of all gender, between the age group of 18-60 years with the signs and symptoms of *Sheetapitta* vis-à-vis chronic urticaria were selected for the study.
2. Freshly detected cases and treated cases (with the flush out period of 7 days) of *Sheetapitta* vis-a-vis chronic urticaria were taken for the study.

Exclusion criteria

1. Subjects suffering from uncontrolled diabetes mellitus (>200mg/dl), uncontrolled hypertension (systolic>160mm Hg and diastolic > 90mmHg) and other systemic disorders which interfered with the course of intervention were excluded.
2. Subjects unfit for *Virechana Karma* were excluded.
3. Pregnant women and lactating mothers were excluded.

Diagnostic Criteria

The diagnosis was based on classical features of *Sheetapitta* vis-à-vis chronic urticaria.

1. *Varati Damshtravat Shotha*(wheals)
2. *Kandu* (itching)
3. *Toda* (pricking pain)
4. *Vidaha* (burning sensation)

With or without

5. *Chardi* (vomiting)
6. *Jwara* (fever)

Assessment criteria

Assessment was done based on following parameter.
Urticaria Activity Score[10] (UAS) – scoring 0-6.
Grading of Number of Wheals.

0 - None
1 – Mild (< 20 / 24hours)
2 – Moderate (21-50 / 24 hours)
3 – Intense (>50 / 24hour)

Grading of Severity of Itch –

0 - None
1 - Mild
2 - Moderate
3 – Intense / severe

Statistical methods

The results were analyzed statistically by using descriptive statistics and Cramer's V test using Service product for statistical solution (SPSS) for windows software

Intervention

Amapachana was done with *Ajamodadi Churna*[11] 15gm of the drug was administered in three equally divided doses after food with warm water as *Anupana* till *Nirama Lakshana* were observed. *Mahatiktaka Ghruta*[12] was administered in a dose depending upon the *Koshta* of the subject from the day of *Nirama Lakshana* in *Arohana Krama*, starting with *Hrasiyasi Matra* until *Samyak Snigdha Lakshana* were observed. *Katu Taila*[13] *Abhyanga* followed by *UshnaJala Snana*[14] for 3 days in *Vishrama Kala* was given. *TrivrutLehya*[15] was administered in the morning hours on empty stomach for the purpose of *Virechana*. Dose varied between 40-70gms, depending upon the *Koshta* of the subject. After *Atura Nireekshana, Samsarjana Krama* was advised according to *Shuddhi Prakara*. *Ardraka Khanda Avalehya*[16] 12gms in two equally divided doses along with 40ml of *Amruta Rajanyadi Kashaya*[17] in two equally divided doses as *Anupana* after food for the next 30 days was administered.

The assessment was done on the following three schedules

Pre-test assessment: Before the commencement of intervention.

Mid test assessment: After *Virechana Karma*

Post-test assessment: 31st day after *Shamana Aushadhi* administration.

OBSERVATIONS AND RESULTS

The data was collected from the subjects based on diagnostic criteria and UAS criteria. The results were analysed statistically using Cramer's V test.

Varati Damshtravat Shotha

Out of 33 subjects, all subjects presented with *Varati Damshtravat Shotha*. Before intervention, 14 (42.4%) subjects had grade 1 severity, 6 (18.2%) subjects had grade 2 severity and 13 (39.4%) subjects had grade 3 severity. After the completion of intervention, 18 (54.5%) subjects had grade 0 severity, 7 (21.2%) subjects had grade 1 severity, 7 (21.2%) subjects had grade 2 severity and 1 (3%) subject had grade 3 severity. The result obtained regarding the parameter- *Varati Damshtravat Shotha* showed statistically highly significant with P value 0.001.

Table 1: Showing the distribution and results on *Varati Damshtravat Shotha*

			Session			Total	Test statistics
			BT	M	AT		
Shota	.00	Count	0	15	18	33	
		% within Session	0.0%	45.5%	54.5%	33.3%	CV- 0.416 P=0.001
	1.00	Count	14	9	7	30	
		% within Session	42.4%	27.3%	21.2%	30.3%	
	2.00	Count	6	6	7	19	
		% within Session	18.2%	18.2%	21.2%	19.2%	
	3.00	Count	13	3	1	17	
		% within Session	39.4%	9.1%	3.0%	17.2%	
Total		Count	33	33	33	99	
		% within Session	100.0%	100.0%	100.0%	100.0%	

Kandu

Out of 33 subjects, all subjects presented with *Kandu*. Before intervention, 3 (9.1%) subjects had grade 1 severity, 19 (57.6%) subjects had grade 2 severity and 11 (33.3%) subjects had grade 3 severity. After the completion of intervention, 9 (27.3%) subjects had grade 0 severity, 16 (48.5%) subjects had grade 1 severity, 7 (21.2%) subjects had grade 2 severity and 1 (3%) subject had grade 3 severity. The result obtained regarding the parameter- *Kandu* showed statistically highly significant with P value 0.001.

Table 2: Showing the distribution and results on *Kandu*

			Session			Total	Test statistics
			BT	M	AT		
Kandu	.00	Count	0	7	9	16	
		% within Session	0.0%	21.2%	27.3%	16.2%	CV- 0.479 P=0.001
	1.00	Count	3	18	16	37	
		% within Session	9.1%	54.5%	48.5%	37.4%	
	2.00	Count	19	8	7	34	
		% within Session	57.6%	24.2%	21.2%	34.3%	
	3.00	Count	11	0	1	12	
		% within Session	33.3%	0.0%	3.0%	12.1%	
Total		Count	33	33	33	99	
		% within Session	100.0%	100.0%	100.0%	100.0%	

Daha

Out of 33 subjects, 21 subjects presented with *Daha*. Before intervention, 14 (42.4%) subjects had grade 1 severity, and 7 (21.2%) subjects had grade 2 severity. After the completion of intervention, 29 (87.9%) subjects had grade 0 severity and 4 (12.1%) subjects had grade 1 severity. The result obtained regarding the parameter- *Daha* showed statistically highly significant with P value 0.001.

Table 3: Showing the distribution and results on *Daha*

			Session			Total	Test statistics
			BT	M	AT		
Daha	.00	Count	12	24	29	65	
		% within Session	36.4%	72.7%	87.9%	65.7%	
	1.00	Count	14	9	4	27	
		% within Session	42.4%	27.3%	12.1%	27.3%	CV- 0.367 P=0.001
	2.00	Count	7	0	0	7	
		% within Session	21.2%	0.0%	0.0%	7.1%	
Total		Count	33	33	33	99	
		% within Session	100.0%	100.0%	100.0%	100.0%	

Toda

Out of 33 subjects, 26 subjects presented with *Toda*. Before intervention, 16 (48.5%) subjects had grade 1 severity, 9 (27.3%) subjects had grade 2 severity and 1 (3%) subject had grade 3 severity. After the completion of intervention, 26 (78.8%) subjects had grade 0 severity and 7 (21.2%) subjects had grade 1 severity. The result obtained regarding the parameter- *Toda* showed statistically highly significant with P value 0.001.

Table 4: Showing the distribution and results on *Toda*

			Session			Total	Test statistics
			BT	M	AT		
Toda	.00	Count	7	20	26	53	
		% within Session	21.2%	60.6%	78.8%	53.5%	CV-0.394 P=0.001
	1.00	Count	16	12	7	35	
		% within Session	48.5%	36.4%	21.2%	35.4%	
	2.00	Count	9	1	0	10	
		% within Session	27.3%	3.0%	0.0%	10.1%	
	3.00	Count	1	0	0	1	
		% within Session	3.0%	0.0%	0.0%	1.0%	
Total		Count	33	33	33	33	
		% within Session	100.0%	100.0%	100.0%	100.0%	

Urticaria Activity Score (UAS)

Table 5: Showing the distribution and results on Urticaria Activity Score

			Session			Total	Test statistics
			BT	M	AT		
UAS	.00	Count	0	4	8	12	
		% within Session	0.0%	12.1%	24.2%	12.1%	CV-714 P=0.001
	1.00	Count	0	9	8	17	
		% within Session	0.0%	27.3%	24.2%	17.2%	
	2.00	Count	1	13	9	23	
		% within Session	3.0%	39.4%	27.3%	23.2%	
	3.00	Count	9	0	1	10	
		% within Session	27.3%	0.0%	3.0%	10.1%	
	4.00	Count	11	6	5	22	
		% within Session	33.3%	18.2%	15.2%	22.2%	
	5.00	Count	5	1	2	8	
		% within Session	15.2%	3.0%	6.1%	8.1%	
	6.00	Count	7	0	0	7	
		% within Session	21.2%	0.0%	0.0%	7.1%	
Total		Count	33	33	33	99	
		% within Session	100.0%	100.0%	100.0%	100.0%	

Out of 33 subjects, Before intervention, 0 (0%) subject had grade 0 and grade 1 severity, 1 (3%) subject had grade 2 severity, 9 (27.3%) subjects had grade 3 severity, 11 (33.3%)subjects had grade 4 severity, 5 (15.2%) subjects had grade 5 severity and 7 (21.2%) subjects had grade 6 severity.

In mid assessment, 4 (12.1%)subjects had grade 0 severity, 9 (27.3%) subjects had grade 1 severity, 13 (39.4%) subjects had grade 2 severity, 0 (0%)subjects had grade 3 severity 6 (18.2%)subjects had grade 4 severity, 1 (3%) subject had grade 5 severity and 0 (0%)subject had grade 6 severity.

After the completion of intervention, 8 (24.2%) subjects had grade 0 severity, 8 (24.2%) subjects had grade 1 severity, 9 (27.3%) subjects had grade 2 severity, 1 (3%)subjects had grade 3 severity, 5 (15.2%) subjects had grade 4 severity, 2 subjects had grade 5 severity and 0 (0%)subject had grade 6 severity.

The result obtained regarding Urticaria Activity Score (UAS) showed statistically highly significant with P value 0.001.

Overall clinical improvement

The improvement was graded with following manner:

Marked improvement- 76-100% relief from reduction of signs and symptoms.

Moderate improvement- 51-75% relief from reduction of signs and symptoms.

Mild improvement- 26-50% relief from reduction of signs and symptoms.

No improvement- <25 % relief from reduction of signs and symptoms.

Table 6: Showing the overall clinical improvement of *Sheetapitta* vis-à-vis chronic urticaria

	Number of subjects	Percentage
Marked improvement	10	31.31%
Moderate improvement	13	39.39%
Mild improvement	5	15.15%
No improvement	5	15.15%
Total	33	100%

After the completion of the intervention, 10 (31.31%) subjects had marked relief, 13 (39.39%) subjects had moderate relief, 5 (15.15%) subjects had mild relief and 5 (15.15%) subjects had no relief.

DISCUSSION

Sheetapitta is a *Vata Pradhana Tridoshajavyadhi* caused by the contact of *Sheetalamaruta*. In the present clinical trial, *Sheetapitta* is considered with special reference to chronic urticaria. Hence, all the variants of *Sheetapitta* mentioned in the classics i.e. *Udarda* and *Kota* are also included in the study. Though the *Dosha* involvement and causative factors are different, the management adopted in the clinical trial is classical *Virechana Karma* followed by *Shamanoushadhi*. The *Ghruta* exerts its action on *Tridosha* by "*Samskarsaya Anuvartanat*" property i.e. it adopts the properties of those drugs which are processed with it without losing its original property. Main purpose of *Poorvakarma* is to bring *Dosha* from *Shakha* to *Koshta* which is achieved by means of *Vishyandana*, *Dosha Vriddi, Dosha Paka, Srotomukha Vishodhana* and *Vata Nirodha*[18]. *Swedana Karma* helps in reducing *Stambha, Sheeta* and *Gourava* by the virtue of its *Ushna, Laghu, Sara* and *Drava Guna. Sara* and *Drava Guna* of *Sweda* does *Dosha Vilayana* and helps to bring *Doshas* from *Shakha* to *Koshta*.

Vyavayi, Vikasi and *Sookshma Guna* of *Virechana Yoga* causes *Dravya* to reach minute channels. By virtue of *Ushna* and *Teekshna Guna*, it liquifies and separates the compacted morbid *Dosha*. By the effect of *Pruthvi* and *Jala Mahabhuta, Gati* of *Dravya* along with the *Dosha* will be towards *Adhobhaga*. In this way, *Virechana Dravya* consequently expels the *Mala* and *Dosha* from the body. *Virechana* expelled the aggravated *Dosha* especially *Pitta* and *Kapha*, which are the *Dosha* responsible for causing *Kandu* and *Shotha*. Here *Kandu* being the *Swalakshana* of both *Pitta* and *Kapha*, got relieved after the elimination of *Pitta* and *Kapha*[19]. *Ardraka Khanda* is being *Agnideepaka, Sheeta Pittahara*, and *Rasayana*[20]. Also, most of the individual drug of this yoga has *Kanduhara, Kushtahara, Krimihara* and *Deepaniya* properties which is similar with anti-histaminic, anti-inflammatory, anti-helminthic, digestive and carminative properties. The digestive and carminative properties helped in prevention of further *Ama* formation. Anti-histaminic activity might have counteracted the histamines which are released from the degranulation of mast cells. Anti-helminthic property might have helped in destruction of intestinal parasites (which is also one of the reasons in the development of urticarial lesions) causing disease. Anti-inflammatory and anti-oxidant properties helped in reducing the inflammation and free radical generation from autoimmune response.

The drugs of *Amruta Rajanyadi Kashaya*[21] are *Kapha-Pitta hara* by its *Tikta Rasa Pradhana*, by its *Vishahara* property it helped in detoxification of accumulated toxins in the form of histamines and leukotriens, by its *Krimighna* property acted as anti-parasitic agent, by its *Dahahara* and *Kanduhara* action it pacified the symptoms of itching and burning sensation produced by the nerve stimulation, *Kushta Prashamaka* and *Twak Mamsa Sthirakaraka* action helped in normalising the skin by reducing the urticarial lesions. In combination of both *Ardraka Khanda* and *Amruta-Rajanyadi Kashaya*, majority of the patient has attained *Twak Mamsa Sthireekarana* and total pacification of urticarial lesion.

CONCLUSION

Sheetapitta is a *Tridoshaja Vyadhi*, causing *Varati Damstravat Shotha, Kandu, Daha* and *Toda*. Chronic urticaria is a condition in which urticaria lasts longer than 6 weeks of duration. The special reference of *Sheetapitta* is taken as chronic urticaria due to its similarities in its clinical features. There is scope for ayurvedic management in chronic stage than in acute stage, as acute urticaria has specific cause and there are high chances of spontaneous resolving of the condition, whereas chronic urticaria needs to be managed accordingly. Hence the comprehensive study was selected which involved the combined affects of *Virechana Karma, Ardraka Khanda* and *Amruta Rajanyadi Kashaya*. The result obtained in *Sheetapitta* vis-à-vis chronic urticaria after the completion of intervention showed statistically highly significant with the P value- 0.001 and also overall improvement showed significant result in reducing the signs and symptoms of *Sheetapitta* vis-à-vis chronic urticaria. Hence *Sheetapitta* vis-à-vis chronic urticaria can be managed with present comprehensive ayurvedic management.

REFERENCES

1. Madhavakara, Madhava Nidana with Madhukosha Sanskrit Commentary and Vidyotini hindi commentary by Yadunandana Upadyaya, vol.-2, Chaukumbha Samskruta Pratistana, 2006,p. 201.
2. James, Berger, Elston, Andrews Diseases of the Skin, Clinical Dermatology 11th edition, Saunders Elsevier imprint, 2011, p. 147.
3. Walker, Colledge et al, Davidson's Principles and practice of Medicine, 22nd edition, Churchill living stone Elsevier, 2014, p.1290.
4. Weller, Altrichter, Ardelean et al, chronic urticaria. Prevalence, course, prognostic factors and impact, PubMed, 2010, 61(9):750-7.

5. Kasper etal Harrison's Principles of Internal Medicine, 19thEdition, McGraw Hill Education, volume 2, 2015, p. 2119.
6. Behl et al, Practice of Dermatology, 10th edition, CBS Publishers and distributors pvt. Ltd, 2014,p.-119.
7. Behl et al, Practice of Dermatology, 10th edition, CBS Publishers and distributors pvt. Ltd, 2014, p.-119.
8. Kasper et al Harrison's Principles of Internal Medicine, 19th Edition, volume 2, McGraw Hill Education, 2015, p. 2119-2120.
9. Chakrapanidatta, Chakradatta, Vaidyaprabha Hindi Commentry, Chowkambha Sanskrit Bhawan, Varanasi, 2015, p. 293-294.
10. Godse, Urticaria meter, Indian journal of dermatology, 2012, 57(5): 410-411.
11. Govindadasa, Bhaishajya Ratnavali, Siddhiprada Hindi Commentry, Chowkambha surabharati prakashana, Varanasi, p. 471.
12. Govindadasa, Bhaishajya Ratnavali, Vidyotini Hindi Commentry, Chowkambha Sanskrit Samsthana, Varanasi, p. 916.
13. Chakrapanidatta, Chakradatta, Vaidyaprabha Hindi Commentry, Chowkambha Sanskrit Bhawan, Varanasi, Reprint-2015, p. 263.
14. Chakrapanidatta, Chakradatta, Vaidyaprabha Hindi Commentry, Chowkambha Sanskrit Bhawan, Varanasi, Reprint-2015, p. 263.
15. Vagbhata, Astanga Hridaya (KalpaSthana), with commantaries Sarvanga Sundara of Arunadatta and Ayurveda Rasayana of hemadri; Published by Chaukhamba Surbharati Prakashan; Varanasi; 2010; p. 436.
16. Govindadasa, Bhaishajya Ratnavali, Vidyotini Hindi Commentry, Chowkambha Sanskrit Samsthana, Varanasi,2008,p. 916.
17. Govindadasa, Bhaishajya Ratnavali, Vidyotini Hindi Commentry, Chowkambha Sanskrit Samsthana, Varanasi, 2008,p. 916.
18. Agnivesha: Charaka Samhita (sutra stana) with Ayurveda Dipika commentary by Chakrapani Datta; Edited by Vaidya Jadavaji Trikamji Acharya; Chaukhamba Prakashan; Varanasi, 2011, p.180.
19. Agnivesha: Charaka Samhita (sutra stana) with Ayurveda Dipika commentary by Chakrapani Datta; Edited by Vaidya Jadavaji Trikamji Acharya; Chaukhamba Prakashan; Varanasi, 2011, p. 115.
20. Govindadasa, Bhaishajya Ratnavali, Vidyotini Hindi Commentry, Chowkambha Sanskrit Samsthana, Varanasi, 2008, p. 917.
21. Govindadasa, Bhaishajya Ratnavali, Vidyotini Hindi Commentry, Chowkambha Sanskrit Samsthana, Varanasi,2008,p. 916.

Cite this article as:
Chaithra HB, Mythrey R C, V Rajendra. A Clinical Study To Evaluate The Combined Effect of Virechana Karma, Ardraka Khanda and Amruta Rajanyadi Kashaya in The Management of Sheetapitta Vis-À-Vis Chronic Urticaria. International Journal of Ayurveda and Pharma Research. 2019;7(11):34-40.

Source of support: Nil, Conflict of interest: None Declared

***Address for correspondence**
Dr Chaithra HB
PG Scholar,
Department of Kayachikitsa,
Government Ayurveda Medical College, Mysuru.
ph. 8095496364,
E-mail: chaithra.hb5@gmail.com