

WORLD JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.wjpmr.com

Research Article ISSN 2455-3301 WJPMR

A CLINICAL STUDY ON AGNIMANTHA CHURNA WITH GHRITA IN UDARDA (URTICARIA)

Dr. Adarsh Kallimath^{1*}, Dr. Muttappa Totad², Dr. Vasantha B.³ and Dr. Niveditha M. N.⁴

 *¹Post Graduate Scholar, Department of Kayachikitsa,
 *³Associate Professor, Department of Kayachikitsa,
 *⁴Post Graduate Scholar, Department of Kayachikitsa,
 Sri Dharmasthala Manjunatheshwara College of Ayurveda and Hospital, BM Road, Thanniruhalla, Hassan- 573201, Karnataka.



*Corresponding Author: Dr. Adarsh Kallimath

Post Graduate Scholar, Department of Kayachikitsa, Sri Dharmasthala Manjunatheshwara college of Ayurveda and Hospital, BM Road, Thanniruhalla, Hassan- 573201, Karnataka.

Article Received on 10/09/2023

Article Revised on 31/10/2023

Article Accepted on 20/11/2023

ABSTRACT

Background and Objective: Udarda is one among the Twak vikaras mentioned in Ayurveda. Udarda is a disease caused when patient is exposed to cold breeze. Features are Varati Damstravat shotha, Kandu, Toda, Daha, Chardi and Jwara. Urticaria is an inflammatory skin disorder that affects up to 20% of the world population at some point during their life and is the most frequent dermatologic disorder seen in the Emergency department (ED) that occurs in isolation or in association with angio-oedema and / or anaphylaxis. Agnimantha Curna is Sleshmaghna, Vatahara, Shothaghna and Sheetaprashamana and when taken with Ghrita is mentioned to cure Udarda in 7 days. Hence the study was taken to evaluate the effect of Agnimantha churna with Ghrita in Udarda. **Methodology:** Patients diagnosed with Udarda, with a history of less than 6 weeks were administered with Agnimantha moola churna 6 grams with 10 ml of Ghrita morning before food and night after food. **Result and conclusion:** There was statistically significant reduction in subjective parameters of Kandu and sautsanga mandala, and objective parameters of Urticaria Activity score (UAS) and Dermatology life quality index (DLQI). Hence Agnimantha moola churna with Ghrita was found effective in the management of Udarda (Urticaria).

KEYWORDS: Ayurveda, Twak vikara, Udarda, Urticaria, Agnimantha, Urticaria activity score.

INTRODUCTION

Udarda is one among the different types of Twak vikaras mentioned in Ayurveda. Due to similarities in Nidana, Poorvaroopa and Lakshanas, Udarda is mentioned along with Sheetapitta and Kotha. Udarda is a disease caused when patient is exposed to cold breeze.^[1] Due to this, there will be vitiation of Kapha and Vata. These two combine with Pitta and circulate both externally and internally to Twak and Raktadi dhatus respectively producing signs and symptoms of Udarda.^[1] Features are Varati Damstravat shotha and Kandu caused by Kapha, Shula caused by Vata and Daha caused by Pitta. It also causes symptoms of Chardi, Jwara and Vidaha.^[1]

Urticaria is a hypersensitivity reaction that occurs in isolation or in association with angio-oedema and / or anaphylaxis.^[2] Urticaria presents as well-circumscribed wheals with erythematous raised serpiginous borders and blanched centres that may coalesce to become giant wheals and involves only the superficial portion of the dermis.^[3] With associated pruritus, Urticaria lasts anywhere from 1 to 24 hours.^[4] The lesions are usually

symmetrically distributed and may be on any location of the body.^[4] Wheals are transient in nature. No mark is usually left behind when wheals resolve, and the lesions are usually pruritic and stinging and often preceded by pricking sensation.^[5] Around 20% of the population suffers from this condition once in their lifetime, and is common in young adults (female > male)^[5] with the highest incidence occurring in persons in the third decade of life.^[3]

Since Udarda has similar symptoms as that of Urticaria, a possible correlation has been made to understand the etiology and pathogenesis of the disease.

Different types of oral medications like Kwatha, Churna, Rasoushadhi's, Khanda preparation are explained in classics. Among them, Agnimantha churna taken with Ghrita is mentioned to cure Udarda in 7 days.^[6] Agnimantha Curna is Sleshmaghna, Vatahara, Shothaghna and Sheetaprashamana.^[7] Its Katu rasa is Udardahara.^[8] Agnimantha moola also has immunomodulatory action.^[9] Ghrita is Pittaghna.^[8] Hence this study is taken to evaluate the effect of Agnimantha moola churna with Ghrita in Udarda.

OBJECTIVE

To study the effect of Agnimantha moola churna with Ghrita in patients of Udarda (Urticaria).

MATERIALS AND METHODS

Source of Data: Patients attending OPD and IPD of Sri Dharmasthala Manjunatheshwara Ayurveda Hospital, Hassan.

Method of data collection: Data was collected using specially prepared case report form incorporating the diagnostic, inclusion-exclusion criteria and assessment parameters.

Diagnostic criteria: Atleast one lakshana of Udarda, keeping Kandu as compulsory symptom.

Inclusion criteria

- 1. Patients in between age of 16 to 70 years.
- 2. Chronicity of less than 6 weeks^[10]
- 3. Patients of either gender irrespective of caste, creed, occupation, religion and socio-economic status.
- 4. Subjects who are willing to participate and ready to sign the informed consent form.

Exclusion Criteria

- 1. Subjects presenting with Jwara and Chardi.
- 2. Subjects under treatment with Antihistamines and Corticosteroids.
- 3. Absolute eosinophil count >1500.
- 4. Uncontrolled Diabetes Mellitus and/or Hypertension.
- 5. Known cases of impaired cardiac, renal and hepatic function.
- 6. Known cases of neoplasm and infective diseases like HIV and Hepatitis B.
- 7. Pregnant woman and lactating mothers.

Treatment plan	
Drug	: Agnimantha churna and Ghrita ^[6]
Route of administration	: Oral
Dose	: Agnimantha churna (6 gms ^[11]) with Ghrita (10 ml ^[11])
Frequency of administration	: Twice daily
Time of administration	: Morning before food ^[11] and night after food ^[12]
Drug administration duration	: 7 days ^[6]
Total duration of study	: 7 days ^[6]
Follow up	: 8 th day
Assessment	1^{st} day and 8^{th} day

STUDY DESIGN

Study Type: Open label Single arm 2-tailed Prospective Clinical trialSampling technique: ConvenienceSample size: 30Statistical method: Wilcoxon Signed Rank test (Ordinal and Scale data)McNemar test (Nominal data)Ethical considerations: IECCTRI: CTRI/2022/06/043586

ASSESMENT PARAMETERS

- 1. Scoring based on lakshanas of Udarda
- 2. Urticaria activity score
- 3. Dermatology life quality index
- 4. Absolute eosinophil count

RESULTS

40 subjects were allocated and received intervention of which 30 subjects completed the course of treatment of 7 days and were assessed before and after treatment.

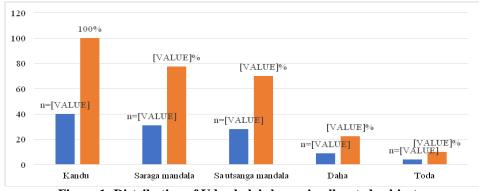


Figure 1: Distribution of Udarda lakshanas in allocated subjects.

- The effect of the drug was analysed by the help of scores given for each assessment parameter and applying suitable statistical tests.
- With 95% Confidence interval, p<0.05 is considered significant and p<0.01 as highly significant.

Negative ranks **Positive ranks** Ζ Significance Lakshana Ties Kandu 29 -5.303 0.001 0 1 22 Sa Utsanga mandala 0 8 -4.690 0.001 3 0 27 -1.732 0.083 Saragamandala 30 Toda 0 0 0.000 1.000 0.000 1.000 Daha 28 1 1 30 0.001 **Total Score/18** 0 0 -5.031 Wilcoxon signed rank test

Table 1: Analysis of scores based on Udarda lakshanas BT-AT.

Table 2: Urticaria activity score BT-AT.

Symptom	Negative ranks	Positive ranks	Ties	Z	Significance
Wheals	22	0	8	-4.690	0.001
Itch	29	0	1	-5.303	0.001
Total score/6	30	0	0	-4.977	0.001

Table 3: Dermatology Life Quality Index Total score/30 BT-AT.

DLQI Parameter	Negative ranks	Positive ranks	Ties	Z	Significance
Total score/30	26	0	4	-4.493	0.001
Wilcoxon signed rank tes	st				

Table 4: AEC Value BT-AT.

AEC Value BT	AEC Value AT			
	Normal (<450)	Mild Eosinophilia (450-1500)		
Normal (<450)	22	2		
Mild Eosinophilia (450-1500)	3	3		
Ν	30			
Significance	1.000			
McNemar Test – Binomial distribution used				

CHANGES OBSERVED PRE AND POST TREATMENT



Figure 2: Patient A day 0



Figure 4: Patient B Day 0



Figure 3: Patient A Day 8



Figure 5: Patient B Day 8

DISCUSSION

Statistically significant improvement was seen after treatment in Kandu (Itch) and Sa utsanga mandala (wheals) which are the core presenting symptoms of Udarda (Urticaria).

Kandu is due to Kapha, Sa utsanga mandala is due to combination of Kapha and Pitta. Agnimantha has Kashaya, Katu and Tikta rasa which are antagonisitic to Kapha dosha, and Katu rasa is specifically Udardahara.^[8] Ghrita helps in shamana of Pitta. Aushada sevana kala was selected morning before food as the vyadhi is Kapha pradhana and in Kapha udreka, sevana kala is Prathah and Ananna.^[8] Evening administration was after food as Udana vata is responsible for varna and requires Sandhya bhojane and bhojanoottaram^[12] as sevana kala.

Action on Kandu (itch): Subjective reduction in Kandu was seen in the form of reduction in frequency of appearance of Itch and reduction in duration of persistence of Itch. This action is probably due to Katu Tikta Kashaya rasa, Laghu Rooksha guna, and Ushna veerya of Agnimantha moola which is antagonistic to Kledata, Guru guna and Sheetata of Kapha dosha responsible for Kandu.

Action on Sa Utsanga mandala(wheals): Subjective reduction in symptom was seen in the form of reduction in number of wheals appearing with each episode of Urticaria and reduction in duration of persistence of wheals. This is probably due to shothahara karma of Agnimantha moola.^[7] Ghrita mainly due to its Pitta shamana karma^[7] might help reduce the intensity of wheals and duration of persistence of the same.

CONCLUSION

Kandu is the main complaint in Udarda which makes the patient visit a physician. In this study, there was significant reduction in Kandu in 29 subjects out of 30 and Sautsanga mandala was reduced in 22 out of 30 subjects. Agnimantha Churna due to its Sothahara, Rakta sodhaka, Vedanasthapana, Dipanapachana, Tvachya, Sitaprasamana and Vata-Kapha hara properties and Ghrita being Tridosha Samaka helps in reducing symptoms of Udarda.

Hence Agnimantha moola churna can be used where there is pradhanata of Kandu and Sa utsanga mandala for the management of Udarda.

REFERENCES

- Srikanthadatta V. Madhavanidanam of Madhavakara with Madhukosha Sanskrit commentary. Dr Brahmananda Tripathi, editor. Varanasi: Chaukhamba Surbharati Prakashan, 2003; (46; vol. 2).
- 2. Burge SM, Matin R, Wallis D. Oxford handbook of medical dermatology. Second edition. New York,

NY: Oxford University Press, 2016; 693 p. (Oxford medical publications).

- 3. Kasper, Fauci, Hauser, Longo, Loscalzo. Harrison's principles of internal medicine. 19th ed. Vol. 1. New York, NY: McGraw-Hill Education, 2015; 3985 p.
- Soutor C, Hordinsky MK. Clinical Dermatology. 1st ed. New York, NY: McGraw-Hill Education, 2013; 353 p.
- 5. Munjal YP, Association of Physicians of India, editors. API textbook of medicine. 9th ed. Mumbai: Association of Physicians of India, 2012; 2165 p.
- Priya Vrat sharma, editor. Cakradatta. 2nd ed. Varanasi: Chaukhamba Publishers, 1998; (17; vol. 1).
- 7. Dr. Krishnachandra Chunekar. Bhavaprakashanighantu of Bhavamishra. Dr. Gangasahaya Pandey, editor. Varanasi: Chaukhamba Bharati Academy, 2002; (28).
- 8. Dr Brahmananda Tripathi, editor. Astanga Hrdayam of Srimadvagbhata. Delhi: Chaukhamba Sanskrit Pratishthan, 2014; 386 p. (27; vol. 1).
- R.H. Gokani, S.K. Lahiri, D.D Santani, M.B. Shah. Evaluation of Immunomodulatory Activity of Clerodendrum phlomidis and Premna integrifolia Root. International Journal of Pharmacology, 3(4): 352–6.
- Kolkhir P, Giménez-Arnau AM, Kulthanan K, Peter J, Metz M, Maurer M. Urticaria - Nature Jornal. Nat Rev Dis Primers, 2022 Sep 15; 8(1): 61.
- 11. Sharangadhara Samhita By Sharangadharacharya. Lahore: Meherchand lakshmandas publishers, 1991.
- 12. Drdhabala C. Caraka Samhita by Agnivesha with Ayurveda Dipika commentary of Cakrapanidatta. Vaidya Jadavji Trikamji Acharya, editor. Varanasi: Chowkhamba Krishnadas Academy, 2015; 738 p. (66).