



A CLINICAL STUDY TO EVALUATE THE EFFICACY OF VIRECHANA KARMA WITH KASHMARYADI KWATH IN THE MANAGEMENT OF VATARAKTA (GOUT)

Dr. Sunil Baloda

P.G. Scholar, Department of Panchakarma, PGIA, Jodhpur, Rajasthan, India.

Dr. Gyan Prakash Sharma

Head of Department, P.G. Department of Panchakarma, PGIA, Jodhpur, Rajasthan, India.

ABSTRACT

The disease, which is caused by excessively aggravated *Vata* and vitiated *Rakta*, is called *Vatarakta*^[1]. Aggravated *Vata* is blocked by vitiated *Rakta*, which in turn leads to further aggravation of *Vata*. Thus, aggravated *Vata* vitiates the whole *Rakta*, producing complex effects leading to the condition *Vatarakta*. *Vatarakta* is a disease of multiple causation i.e., metabolic or biochemical disturbance, the effects of stress and allergic states. The main target organs of *Vatarakta* belong to a particular group of organs, i.e., *Marmasthisandhis*. *Vatarakta* is better correlated with Gout in modern medical science. Gout is the most common inflammatory arthritis, caused by the deposition of monosodium urate monohydrate crystals in and around synovial joints or in soft tissues like cartilage or connective tissue at various sites. It is usually characterised by recurrent attacks of inflammatory arthritis - red, tender, hot and swollen joints. Gout typically affects the joint at the base of the big toe, but it can also affect other joints such as the ankles, knees, elbows, wrists and fingers^[2]. *Panchakarma* is believed to be an effective cleansing treatment. In the case of *Vatarakta*, to remove the accumulated excess *Doshas* from the body, *Virechana* (one of the major *Panchakarma* procedures) can be a fast-acting and effective remedy.

KEYWORDS : Gout, *Vatarakta*, *Virechana*, *Kashmaryadi Kwath*, *Guduchi Ghrita*

INTRODUCTION

Vatarakta is more distressing & common metabolic disorder prevalent in present era. It is a *Vata Pradhan Tridoshaja Vata Vyadhi*, where *Rakta* is main *Dushya*. *Vatarakta* is correlated with gout in modern science. Gout (gouty arthritis) is very well known amongst the different type of arthritis affecting people, it is an abnormality of purine metabolism which causes hyperuremia & deposition of monosodium urate crystals in joints. The current lifestyle involves consumption of unhealthy junk food along with improper sleep pattern. Gout is usually characterized by recurrent attacks of inflammatory arthritis - a red, tender, hot, & swollen joints. Pain typically comes on rapidly in less than twelve hours. The joint at the base of the big toe is affected in about half of cases. It may also result in tophi, kidney stones or urate nephropathy. The cause is a combination of diet & genetic factors. It occurs more commonly in those who eat a lot of meat, drink a lot of beer, or are overweight. The underlying mechanisms involve elevated levels of uric acid in the blood. When the uric acid crystallizes & the crystals deposit in joints, tendons & surrounding tissues an attack of gout occurs^[3]. The variety of drugs like uricosuric, NSAIDs are used to treat the Gouty Arthritis symptomatically, which have many potential adverse effects like vomiting, G.I. bleeding, hepato renal toxicity etc.

Panchakarma is believed to be an effective cleansing treatment. *Panchakarma* consists of five major procedures which detoxifies the human body vigorously. These detoxification techniques are beneficial for the management of diseases that cannot be controlled only by *Shamana Chikitsa*. *Virechana* is one of the most important *Chikitsa* among *Panchakarma*, which gives justified results in various chronic diseases. In case of *Vatarakta*, to remove the accumulated excess *Doshas* from the body, *Virechana* (one of the *Samshodhana Chikitsa*) can be a fast acting & effective remedy.

AIMS AND OBJECTIVES

- To study the conceptual and clinical aspect of the disease as per *Ayurved* and Contemporary Science.
- To evaluate the effect of *Virechana Karma* in the management of *Vatarakta* (Gout).

MATERIALS AND METHODS

Ethical Clearance & CTRI Registration

The clinical trial was started after the approval of Institutional

Ethics Committee (IEC NO. DSRRAU/UPGIAS&R/IEC/20-21/405 Date : 12/06/2022) and the research work has been registered in clinical trials registry of India – CTRI/2022/11/047191.

Selection Of Patients

All the patients were selected from the OPD/IPD of *Panchkarma* Department, PGIA, Jodhpur (Rajasthan). The patients were enrolled regardless of their religion, caste, sex only after getting informed consent. All the details of patient were filled in Case report format (CRF).

Inclusion Criteria

- a) Subjects presenting with clinical features of *Vatarakta*.
- b) Patient having chronicity less than 1 year.
- c) Subjects of both sex between the age group of 20 - 60 years.
- d) Patient having serum uric acid level above 6 mg/dl & presenting the sign & symptoms of *Vatarakta*.

Exclusion Criteria

- a) Subjects with uncontrolled metabolic disorders & other systemic disorders.
- b) Subjects with autoimmune diseases of joints.
- c) Chronicity for more than 1 years.

Investigations

For diagnostic and exclusion purpose – Bio-Chemical Examination – Serum Uric Acid.

Criteria For Withdrawal

- a) During the course of trial if any serious condition or any serious adverse effects occur which require urgent treatment.
- b) Patient himself/herself wants to withdraw from the clinical trial.
- c) Patient who developed hypersensitivity for any constituent of the selected formulations.

Follow Up Study

Follow up was done on 15th & 30th day after the completion of *Virechana Karma*.

Assessment Criteria

Assessment of patient was carried out before and after the completion of trial. The assessment was done based on subjective and objective parameter along with scoring pattern and specific laboratory testing.

• Subjective Parameters

Pain (Ruka) – VAS Scale

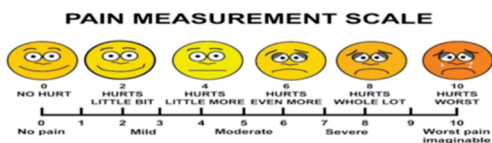


Table no. 3 Burning Sensation (Daha) Scoring

No Burning sensation	0
Mild Burning sensation	1
Moderate Burning sensation	2
Severe Burning sensation	3

Table no. 4 Malaise (Angmarda)

No Malaise	0
Mild Malaise	1
Moderate Malaise	2
Severe Malaise	3

Table No. 5 Local Colour Changes In The Skin

No Colour Change	0
Mild Colour Change	1
Moderate Swelling	2
Severe Swelling	3

• Objective Parameters

Table no. 6 Tenderness (Sparshasahyata) Scoring

No Tenderness	0
Patient complains of Pain	1
Patient complains of Pain & Wincing	2
Patient complains of Pain & Withdraws	3

Table no. 7 Edema (Shwayathu)

No Swelling	0
Slight Swelling	1
Moderate Swelling	2
Gross Swelling	3

Table no. 8 Walking Ability

Walks Easily	0
With Mild Difficulty	1
With Moderate Difficulty	2
With Marked Difficulty	3
Impossible	4

• Procedure Protocol

Procedure		Drug & Doses	Duration
Poorva Karma	Deepana & Pachana	Panchkola Churna - 3gm/2 times a day with warm water	3-5 Days
	Snehapana	Guduchi Ghrit (as per Koshtha & Agni)	3-7 Days
	Abhyanga	Tila Taila	3 Days
	Bashpaswedana	Plain water	
Pradhana Karma	Virecana	Kashmaryadi Kwath	1 Day
Pashchata Karma	Samsarjana Karma	Diet (as per Shuddhi)	3-7 Days

OBSERVATIONS

Total 33 patients were registered in the present study. Out of which 30 patients completed the treatment and 3 patients discontinued the treatment. So, the below observations are based on data from 30 patients.

Summary Of Demographic Data Is As Follows

Maximum no. of patients was in the age group of 51 - 60 years i.e., 13 (43.33%), No. of male patients was more i.e., 17 (56.67%), 100% of patients were Hindu, 21 patients i.e., 100%

were married and 70% of patients were from urban areas, maximum no. of patients i.e., 11 (36.67%) were graduate and data of the study showed that maximum no. of patients i.e., 10 (33.33%) were doing private jobs. Majority of the patients i.e., 27 (90%) had negative family history. Maximum i.e., 18 (60.00%) patients were having veg diet and 10 (33.33%) were having Vishamaagni. Majority of patients i.e., 16 (53.33%) and 15 (50.00%) were having Madhyama koshtha and Madhyama sharir. Maximum no. of patients 17 (56.67%) were from upper middle class. Majority patients 9 (30.00%) were addicted to tea. Maximum no. of patients i.e., 13 (43.33%) were reported of having Alpa Nidra. Maximum no. of patients i.e., 23 (76.67%) were having regular bowel habits.

11 (36.67%) patients were Vata pitta prakriti, 17 (56.67%) patients were Rajasika prakriti. Maximum no. of patients 13 (43.33%), 13 (43.33%), 21 (70.00%) were having Madhyama sara, Samhanana, satmya respectively. Majority of patients 14 (46.67%), 19 (63.33%), 20 (66.67%), 14 (46.67%) were having Madhyama satva, Madhyama ahara abhyavaharana shakti, Madhyama ahara jarana shakti and Madhyama vyayama shakti respectively.

RESULTS

Table No. 1 : Showing Effect Of Virechana Karma On Assessment Criteria Of Vatarakta (Gout) In 30 Patients

Subjective	Mean		Median		SD		Wilcoxon W	P-Value	% Effect	Result
	BT	AT	BT	AT	BT	AT				
Pain (Ruka)	2.37	0.50	2.00	0.50	0.49	0.51	-4.968 ^b	0.000007	78.87	Sig
Burning Sensation (Daha)	0.97	0.20	1.00	0.00	1.07	0.41	-3.758 ^b	0.000172	79.31	Sig
Malaise (Angmarda)	0.43	0.27	0.00	0.00	0.73	0.45	-2.236 ^b	0.0253473	38.46	Sig
Local Colour Changes in the Skin	1.07	0.30	1.00	0.00	0.94	0.53	-4.065 ^b	0.000481	71.88	Sig
Tenderness (Sparshasahyata)	1.10	0.40	0.00	0.00	1.27	0.56	-3.286 ^b	0.0010169	63.64	Sig
Edema (Shwayathu)	2.00	0.43	2.00	0.00	0.64	0.50	-4.842 ^b	0.000013	78.33	Sig
Difficulty in Walking	2.10	0.50	2.00	0.50	0.48	0.51	-4.949 ^b	0.000007	76.19	Sig

(BT: Before treatment, AT: After treatment, SD: Standard deviation, Sig: Significant)

Since observations are on ordinal scale (gradations), we have used Wilcoxon Signed Rank Test to test efficacy. From above table, we can observe that, P-Value for all parameters is less than 0.05. Hence, we conclude that, effect observed in all parameters is significant.

Paired t-test is carried out to test significance. From above table, we can observe that, P-Value is less than 0.05. Hence, we can conclude that there is significant change observed in serum uric acid.

Table No. 2 : Showing effect of Virechana Karma on Serum Uric Acid in patients of Vatarakta (Gout)

Serum Uric Acid	Mean	N	SD	SE	t-Value	P-Value	% Change	Result
BT	7.72	30	0.95	0.17	14.766	0.000	21.23	Sig
AT	6.08	30	1.16	0.21				

Table No. 3 : Showing the overall effect of Virechana Karma

Overall Effect	Frequency	Percentage
Marked Improvement (51%-75%)	15	50.00%
Moderate Improvement (26%-50%)	14	46.67%
Mild Improvement (0%-25%)	1	3.33%
No Improvement (0%)	0	0.00%
Total	30	100.00%

Out of 30 patients who completed the therapy, overall effect of therapy based on subjective and objective parameters reveals that 50% patients (15) show marked improvement, 46.67% patients (14) show moderate improvement and 3.33% patients (1) show mild improvement.

DISCUSSION

Probable Mode Of Action Of Virechana Karma

Vatarakta is the major example of Vatavyadhi, where Vata and Rakta is dominant. Virechana Karma as a Shodhana procedure is commonly used to treat metabolic disorders like obesity and diabetes mellitus. Hence, Virechana Karma can be found impressively effective in the treatment of Vatarakta. It treats the disease by acting over Dosha-Dushya-Sammurchana and mainly indicated for Prakupita Pitta Dosha, as Pitta and Rakta present in Ashraya-Aashrayi Bhavas, it acts over the Dushita Rakta.

The contents of Kashmaryadi Kwath^[4,5,6,7,8,9] have Ushna, Sukshma, bhedana, Rechana and Vataraktahar properties. In Guduchi Ghruta^[11,12,13,14,15,16,17,18,19,20], Guduchi also has Ushna and Vataraktahar properties.

Virechana Yoga, gets absorbed and due to Virya, it reaches to the Hridaya, then the Dhamani and thereafter it reaches to macro and micro channels of the body. The Vyavayi Guna of drug is responsible for quick absorption. The Vikasi Guna causes softening and loosening of the bond by Dhatu Shaithilya Karma. Due to Ushna Guna, the Dosha Sanghata is liquified. Action of Tikshna Guna is to break the Mala and Dosha in micro form. Due to Sukshma Guna by reaching in micro channels, disintegrates endogenic toxins, which are then excreted through micro channels. Mainly due to Prabhava, Prithvi & Jala constitution and presence of Sara Guna Virechana occurs.

The Vitiated Pitta, Vata and Rakta Dosha are expelled out through the mechanism of Virechana Karma and the disease process of Vatarakta is stopped.

REFERENCES

- Charak Samhita of Agnivesa, Edited by Acharya Vidyadhar Shukla & Prof. Ravi Dutt Tripathi, Chaukhamba Surbharati Prakashan, Varanasi, Vol. 2, Reprint edition 2004.
- API Text Book of Medicine, Dr. Siddharth N. Shah, 7th Ed., The Association of Physicians of India, 2003.
- Aspects of Vatarakta, Dr. Sunil Kumar Sharma & Dr. Kapil Sharma, Ram Ayurved Sanskrit Book Prakashan, Jaipur, Edition 2021, Page No. 2 & 3.
- Charak Samhita of Agnivesa, Edited by Acharya Vidyadhar Shukla & Prof. Ravi Dutt Tripathi, Chaukhamba Surbharati Prakashan, Varanasi, Vol. 2, Reprint edition 2004, Page No. 741.
- Database on Medicinal Plants used in Ayurveda, Publisher - Documentation & Publication Division, CCRAS, New Delhi, Reprint 2005, Vol. 3, 217.
- Database on Medicinal Plants used in Ayurveda, Publisher - CCRAS, New Delhi, Reprint 2002, Vol. 1, 462.
- Database on Medicinal Plants used in Ayurveda & Siddha, Publisher - CCRAS, New Delhi, Reprint 2008, Vol. 5, 43.
- Database on Medicinal Plants used in Ayurveda, Publisher - Documentation & Publication Division, CCRAS, New Delhi, Reprint 2005, Vol. 3, 11.
- Database on Medicinal Plants used in Ayurveda, Publisher - Documentation & Publication Division, CCRAS, New Delhi, Reprint 2005, Vol. 3, 282.
- Chakradatta of Shree Chakrapanidatta, Edited by Dr. Indradeva Tripathi, Chaukhambha Sanskrit Sansthan, Varanasi, Reprint edition 2005, Page No 160.

- Database on Medicinal Plants used in Ayurveda, Publisher - Documentation & Publication Division, CCRAS, New Delhi, Reprint 2005, Vol. 3, 256.
- The Ayurvedic Pharmacopoeia of India, Publisher - The Controller of Publications, Delhi, 1st Edition, 2009, Part 1, Vol. 6, 204 & 205.
- Charak Samhita of Agnivesa, Vaidyamanorama, Edited by Acharya Vidyadhar Shukla & Prof. Ravi Dutt Tripathi, Chaukhamba Sanskrit Prakashan, Delhi, Vol. I, Reprint Edition 2003, (Sutrasthana 27/231-232) Page No - 411.
- Sushruta Samhita of Maharsi Sushruta, Ayurveda Tattva Sandipika, Edited by Kaviraja Ambikadutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi, Part I, Reprint Edition 2005, (Sutrasthana 45/96) Page No - 177.
- Bhavaprakasa of Sri Bhavamishra, Edited by Sri Brahmasankara Misra & Sri Rupalalaji Vaisya, Chaukhamba Sanskrit Sansthan, Varanasi, Part I, 11th Edition 2004, (Nighantu Bhag/Ghrith Varg) Page No - 775.
- Charak Samhita of Agnivesa, Vaidyamanorama, Edited by Acharya Vidyadhar Shukla & Prof. Ravi Dutt Tripathi, Chaukhamba Sanskrit Prakashan, Delhi, Vol. I, Reprint Edition 2003, (Sutrasthana 27/217-218) Page No - 410.
- Sushruta Samhita of Maharsi Sushruta, Ayurveda Tattva Sandipika, Edited by Kaviraja Ambikadutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi, Part I, Reprint Edition 2005, (Sutrasthana 45/50) Page No - 173.
- Bhavaprakasa of Sri Bhavamishra, Edited by Sri Brahmasankara Misra & Sri Rupalalaji Vaisya, Chaukhamba Sanskrit Sansthan, Varanasi, Part I, 11th Edition 2004, (Nighantu Bhag/Dugdha Varg) Page No - 759.
- Bhaisaiya Ratnavali of Kaviraj Govind Das Sen, Siddhiprada, Edited by Prof. Siddhi Nandan Mishra, Chaukhamba Surbharati Prakashan, Varanasi, Edition 2019, (Chapter 5/1266) Page No - 206.
- Bhaisaiya Ratnavali of Kaviraj Govind Das Sen, Siddhiprada, Edited by Prof. Siddhi Nandan Mishra, Chaukhamba Surbharati Prakashan, Varanasi, Edition 2019, (Chapter 29/124) Page No - 584.