

## INTERNATIONAL AYURVEDIC MEDICAL JOURNAL



Impact Factor: 5.344

**Research Article** 

ISSN: 2320 5091

# CLINICAL EVALUATION OF ANUBHOOT YOGA IN THE MANAGEMENT OF VATARAKTA W.S.R. TO HYPERURICEMIA

Monika Gupta<sup>1</sup>, Shakshi Kangotra<sup>2</sup>

<sup>1</sup>Specialist (Ayu.), Govt. Ayurvedic Hospital, Jammu and Kashmir, India <sup>2</sup>PG Scholar, Dept. of Kayachikitsa, JIAR., Jammu and Kashmir, India

Corresponding Author: <a href="mailto:skangotra3209@gmail.com">skangotra3209@gmail.com</a>

https://doi.org/10.46607/iamj0408082020

(Published online: August 2020)

Open Access © International Ayurvedic Medical Journal, India 2020 Article Received: 11/07/2020 - Peer Reviewed: 01/08/2020 - Accepted for Publication: 01/08/2020

Check for updates

## ABSTRACT

*Vatarakta* is a *Vatavyadhi Prabheda*. The illness is considered to be the finest illustration of an *Avarana Vyadhi*, as an opening from the etiopathogenesis to the complications, the illness follows the characteristic presentation of *Avarana*. Compared with the other *Vatavyadhi*, *Vatarakta* possesses a special place in the literature, due to its high prevalence in the society, increased incidence as age advances, stepwise succession, and so on. From the overall view of the etiology, it is obvious and unambiguous that the precise etiological factors of *Vata Dosha* as well as *Rakta Dhatu* are accountable for the causation of illness. The etymology and symptomatology of *Vatarakta Dhatu* is the core pathology of the disease. In this single group study, 30 patients diagnosed of *Vatarakta* were selected randomly for an open trial of *Anubhoot Yoga* for a period of 60 days with life style modifications to provide safe ,effective and conservative treatment for *Vatarakta* w.s.r.to hyperuricemia. In the present study as per the clinical data, *Anubhoot yoga* is the reliable therapeutic treatment of *Vatarakta*.

Keywords: Vatarakta, Avarana, Rakta Dhatu, Vatavyadhi, Anubhoot Yoga, Hyperuricemia.

## INTRODUCTION

In Ayurveda, it has been explained elaborately to live a disease-free life by following Dincharya, Ritucharva, Achara Rasayan and Sadavritta. The health of an individual depends solely on diet and lifestyle. Nowadays, human beings are more vulnerable to metabolic disorders due to their improper dietary habits and lifestyle leading to functional impairment or crippling disorders. Among such metabolic disorders Vatarakta is one of them. The word Vatarakta is made up of two words Vata and Rakta. Vata being predominant among the Tridoshas, has the potential to cause more serious and long-term diseases than the other two. Rakta is also a very important Dhatu which gives nutrition to each and everybody tissue and maintains them normal by eliminating toxins-Malas (waste products) through the natural orifices of the body. The disease which is caused by excessively aggravated Vata and vitiated Rakta is called Vatarakta. It is a disease related with khavaigunya found in raktavaha srotas. The etymology and symptomatology of Vatarakta is very much similar to that of Hyperuricemia. It is a complex metabolic disorder of protein metabolism, where there is more conversion of uric acid from purines, leading to increased concentration of uric acid in blood. Uric acid is the end product of protein metabolism. If the condition is not treated, high uric acid in blood, results in the formation of monosodium urate monohydrate crystals in and around joints and the most widely manifestation of high uric acid is Gout. It is an inflammatory response to the Monosodium Urate Crystals formed secondary to hyper-uricaemia; characterised by pain, burning sensation and swelling of 1st Metatarsophalengeal joint initially followed by other joints with an abnormal elevation of uric acid in the blood either due to over production or under excretion or sometimes both. Sydenham's classic description lists the important clinical characteristics used to diagnose a typical attack of acute Gouty Arthritis. The attack is acute; it starts in the night; the joint and surrounding tissues are swollen, hot, red, shiny and extremely painful. There is a mild fever with chills. Gout is metabolic disorder having the incidence of 0.2 to 2.5 per 1000, with an overall prevalence of 2-26 per 1000. Gout is rare in children and pre-menopausal females in India. Out of the affected population males are more common while females of post-menopausal group are on more risk. Present management of hyperuricemia includes drugs like NSAID's, Colchicine, probenecid, Allopurinol and sometimes steroids to treat it symptomatically which have many adverse effects. The need of hour is to develop a satisfactory and safe Avurvedic regimen for the management of Vatarakta. There is definite need to explore more efficacious and radical cure to this illness. In classics of Ayurveda Shodhana, Shamana and Bahya chikitsa are described for Vatarakta. It is innovative approach, safe and time-tested treatment of Vatarakta. In this single group study, 30 patients diagnosed of Vatarakta were selected randomly for an open trial of Anubhoot Yoga for a period of 60 days with lifestyle modifications to provide safe, effective and conservative treatment for Vatarakta w.s.r.to hyperuricemia.

## Aim and Objectives

- 1. Conceptual and clinical study on *Vata Rakta* w.s.r.to hyperuricemia.
- 2. To clinically evaluate therapeutic effects of *Anubhoot yoga* in the management of *Vata Rakta* w.s.r. to Hyperuricemia.

## Materials and Methods

#### Source of the data

A single group study trial was performed on 30 patients, who were selected from the O.P.D and IPD of Jammu Institute of Ayurveda and Research, Department of Kayachikitsa. All the cases were selected on the basis of below mentioned diagnostic/inclusion and exclusion criteria. It was a single group study. All the patients were administered *Anubhoot Yoga* 500 mg bd daily after meals. Patients were monitored and observations were recorded before and after the drug schedule.

#### **Inclusion criteria**

- 1. Patients in the age group of 25-60 years of either sex were selected.
- 2. Clinically Diagnosed and confirmed patients of *Vatarakta* w.s.r. to hyperuricemia.

3. Chronicity - Less than 2 years.

## **Exclusion criteria**

**Subjective Criteria** 

- 1. Age below 25 years and above 60 years.
- 2. Patients of *Vata Rakta* (hyperuricemia) associated with any severe Arthritis condition such as: -Rheumatoid Arthritis, Osteoarthritis, Bursitis, Ankalosing Spondylitis, Amyloidosis were excluded.
- 3. Patients with chronicity of more than 2 years were excluded.
- 4. Patients of *Vata-Rakta* (hyperuricemia) associated with any systemic disorder which interfere with present study were excluded such as HTN, DM, were excluded.
- 5. Lactating and pregnant women were excluded.

**Diagnostic Criteria**: Patients with classical signs and symptoms of *Vata-Rakta* (hyperuricemia) with uric acid levels more than 7mg/dl in males and more than 6 mg /dl in females.

**Design**: It is a single blind clinical study with a pretest and post-test design. In this study 30 patients are diagnosed and were subjected for trial and clinical study.

**Intervention**: *Anubhoot yoga* was orally administered in a dose of 500 mg BD after meals for 60 days.

**Duration of Study**: 60 days

## **Assessment Criteria**

The state of disease is determined by adopting subjective, objective parameters and special investigation criteria, before and after the administration of drug. The result assessed and compared before and after treatment, statistical analysis, and percentage of Relief was used to find out the efficacy of drug. The state of disease is determined by adopting subjective, objective parameters and special investigation criteria, before and after the administration of drug. The result assessed and compared before and after treatment, statistical analysis, and percentage of relief was used to find out the efficacy of drug.

**Subjective parameters:** *Sandhi Shoola* (Pain in Joints), *Sandhi Graha* (Stiffness of Joint), *Vaivarnata* (Discoloration)

Parameter	Finding	Scoring
1.Sandhi Shoola	No Pain	0
	Occasional pain and can be managed without drug.	1
	Frequent pain and can be managed with mild pain killers.	2
	Persistent pain and unmanageable even with drugs.	3
2.Sandhi Graha	Stiffness lasting for 0-5 min	0
	Stiffness lasting for 5 min-2 hrs	1
	Stiffness lasting for 2 hrs -8 hrs	2
	Stiffness lasting for more than 8 hrs.	3
3.Vaivarnta	No Raga	0
	Raga during attack and persists for a week after attack.	1
	Raga very often without attack	2
	Raga always persisting	3

**Objective Parameters**: Serum Uric Acid, ESR, Serum uric acid levels before and after treatment was used to assess the effect of therapy., The statistical analysis of these values was done before the start of treatment and after the completion of treatment.

Assessment Criteria: For the assessment of changes in the clinical features of *Vata-rakta* (hyperuricemia) before and after treatment. The result will be categorized as: -

Complete Remission - 100% relief in subjective and objective Parameters

Marked Improvement - More than 76% relief. Moderate Improvement - 51-75% relief Mild Improvement - 26-50% relief Unchanged- Result below 25 % will be considered as unchanged

The information collected on the basis of observation made during the treatment were analysed on a statistical criteria in terms of mean score (x), Standard deviation (S.D), Standard error (S.E), Paired T-test, was carried at the level of 0.05, 0.01, 0.001, of P level. Thus, the obtained results were interpreted as: P> 0.05- Insignificant, P< 0.05 –Significant, P< 0.01-Significant, P< 0.001- Highly Significant

**Observations and Results:** 30 patients suffering from *Vatarakta* (hyperuricemia) were selected according to the inclusion and diagnostic criteria. The drug was administered for a period of two months with lifestyle modifications. The descriptive statistical analysis of the whole sample is divided in to two sections as demographic data and data related to disease stated as below

Age group	No. of patients	Percentage
31-40	3	10 %
41-50	15	50 %
51-60	12	40 %

In this study, among the total 30 patients maximum patients were in the age group of 41-50 (50%) and 51-60 (40%). In 31-40 years age group, there were 10% of patients.

#### Table 2: Showing distribution of patients according to sex

Sex	No. of patients	%age
Male	16	53.34%
Female	14	46.66%

Sex: In the present study, majority of patients i.e. 53.34% were males whereas 46.66% of patients were females.

#### **Table 3:** Distribution according to the Religion.

Religion	No. of patients	Percentage
Hindu	25	83.34%
Muslim	3	10%
Sikh	2	6.66%

Religion: As per this table shows maximum no. of patients i.e. 83.34% were from Hindu Community, 10.00% were from Muslim Community whereas 6.64% were from Sikh community.

**Table 4:** Distribution according to the socio-economic status.

Socio-economic status	No. of patients	Percentage
Poor	4	13.33%
Middle class	24	80 %
Upper	02	6.67%

Socio - Economic Status: The above table shows that maximum no. of patients i.e. 80% were belonging to middle class followed by patients of poor class 13.33%. 6.67% of patients belonged to upper class.

Occupation	No. of patients	Percentage
Agriculture	5	16 %
Business	10	33.33 %
Service	7	24%
Housewife	8	26.67%

#### **Table 5:** Distribution according to profession

The study reveals that maximum number of patients 33.33 % patients were of business class, 26.67 % patients were Housewives, 24 % patients were in service, and 16% patients were doing agriculture.

Table 6: Showing distribution according to the dietary habits.

0	6 7	
Dietary habits	No. of patients	Percentage
Vegetarian	12	40 %
Mixed	18	60 %

In this study, 60% of patients were having mixed diet and 40% of patients were vegetarians.

## **Clinical Results**

#### Table 7: Showing effect on Sandhi Shoola

Mean		M.D.	Mean%	S.D.	S.E	t value	p value	Sig.
BT	AT							
1.2667	0.3000	0.96667	59.9	0.55605	0.10152	9.522	0.049	S

The mean score of *Sandhi Shoola* was 1.7333 which came down to 0.6333 after the treatment. The improvement on average is found to be 60.1%. After, applying t test we found that the p<0.005 which indicate that during trial the drug is significant on *Sandhi Shoola*.

#### Table 8: Showing effect on Sandhi Graha

Mean		M.D.	Mean%	S.D.	S.E	t value	P value	Sig.
BT	AT							
1.7333	0.6333	1.1000	60.1	0.60743	0.11090	9.919	0.04	S

The mean score of *Sandhi Graha* was 1.2667 which came down to 0.3000after the treatment. The improvement on average is found to be 59.9%. After, applying t test we found that the p<0.005 which indicate that during trial the drug is significant on *Sandhi Graha*.

#### **Table 9:** Showing effect on Vaivarnata

Mean		M.D.	Mean%	S.D.	S.E	t value	p value	Sig.
BT	AT							BT
0.333	0.0667	0.2667	52.1	0.44978	0.8212	4.583	0.247	0.333

The mean score of *Vaivarnata* was 0.333 which came down to 0.0667after the treatment. The improvement on average is found to be 52.1%. After, applying t test we found that the p>0.005 which indicate that during trial the drug is non-significant on *Vaivarnata*.

Mean		M.D.	Mean%	S.D.	S.E	t value	p value	Sig.
BT	AT							
17.600	14.3667	3.2333	57.6	1.50134	0.27411	11.796	0.049	S

#### **Table 10:** Showing effect on ESR

The mean score of ESR was 17.600 which came down to 14.3667 after the treatment. The improvement on average is found to be 57.6%. After, applying t test we found that the p<0.005 which indicate that during trial the drug is significant on ESR.

#### Table 11: Showing effect on Serum Uric Acid

	U							
Mean		M.D.	Mean%	S.D.	S.E	t value	p value	Sig.
BT	AT							BT
7.5633	6.5067	1.05667	59.3	0.27378	0.04998	21.140	0.04	7.5633

The mean score of Serum uric acid was 7.5633 which came down to 6.5067a fter the treatment. The improvement on average is found to be 59.3%. After applying t test we found that the p<0.005 which indicate that during trial the drug is significant on Serum uric acid.

## DISCUSSION

Management of Vatarakta is a challenge as it is a disease of severe morbidity, chronicity and incurable to certain extent with associated complications. With certain lifestyle modifications like low protein diet etc. and certain Ayurveda modalities viz. Shodhana and Shamana Chikitsa its can be cured and prevented. Keeping all this in view Anubhoot voga was selected to evaluate its efficacy in Vatarakta which possesses Vedanasthapana, Pittasarka, Raktashodhaka, Shothhara, Yakriduttejaka and Mootrajanana properties. Vatarakta is a Madhvma Rogamarga Vvadhi which affects mainly asthi and sandhi. In ayurvedic texts various treatment modalities have been mentioned for Vatarakta like Raktamokshana, Virechana, Basti, Shodhana and Shamana chikitsa. In this single group study 30 patients were orally administered with 500mg of Anubhoot yoga twice a day after meals for a period of 60 days with lifestyle modifications. Obstruction in the Raktavaha Srotas causing hindrance to the normal movement of the Vata Dosha, is the root pathology behind the manifestation of the illness Vatarakta. Ingredients of Anubhoot voga are Amruta, Suranjan, Kokilaksha, Rasna, Eranda, Punarnava, Gokshura, Danti, Manjishtha and Guggulu. Most of the ingredients of Anubhoot yoga possesses qualities like Vedanasthapana, Pittasarka, Raktashodhaka, Shothhara, Yakriduttejaka and Mootrajanana. Amruta is the drug of choice in Vatarakta. It has Vedanasthapana properties. It is included in 'Dahaprashamangana' by Acharya Charka. It causes Raktaprasadana by Tikta and Kashaya Rasa. It acts as Vyadhipratyneeka and is a magnificent Rasayana. It removes toxins from rakta and act as best shamana aushadi by causing shamana of Vishama Doshas. It possesses Tridoshahara properties. Amruta is xanthine oxidase inhibitor and reduces the inflammation as well as its uricosuric action excretes excess amounts of uric acid from the body. Also, it has Antioxidant properties and immunomodulatory properties. Guggulu, Eranda and Rasna possesses Vatashamaka properties. Guggulu is responsible for remission of margavarna to a certain level. It possesses the properties of anti-inflammatory, antioxidant, Uricosuric, anti-rheumatoid that helps in breaking the pathophysiology of Gout. Guggulu is one extraordinary drug that possesses Anabhishyandhi and Sroto Shuhdhikaraka actions. It is considered as the best drug for the management of MedaAvruta Anila. It is the best drug that can be administered in this condition, as it is proved that it has an optimistic outcome in negating the incriminatory action of the morbid Kapha Dosha as well as the Medo Dhatu. Erandamoola has Madhura, Tikta rasa, Madhura vipaka and ushna veerya. All these properties are Vatashamaka. Eranda possesses Shothgana and

Shoolghana properties. Rasna is Shothahara, Sheethara and Vednashamaka due to Ushna Veerya and katu vipaka. It has analgesic and anti-inflammatory activity. Manjishtha has Pittahara properties. It is a Pittapacifying and blood purifying herb which helps in removing excessive of toxins from the body. It helps to manage discoloration and promotes the healing of damaged skin tissues. It is a blood purifying herb which detoxifies the blood, dissolves stagnant blood and obstructions in the blood flow. Gokshura and Punarnava possesses Madhura rasa and Madhura Vipaka. Also, the Guru, Snigdha guna of Gokshura and Ushna Veerya of Punarnava leads to Vatashamaka property by Rasa, Guna, Veerya, Vipaka which causes Vata Anulomna. Gokshura is found to be beneficial in diuresis. Potassium and rich number of nitrates present in plant are responsible for this activity. Punarnava has anti-inflammatory action and thus suppresses the symptoms of gout. It also has diuretic effect which decreases the amount of uric acid in blood. Danti possesses pitta kaphahara properties due to Teekshana, Ruksha and Guru guna. Also, it has specific action of Srotovishodhana. The antioxidant property of *Danti* helps in the rejuvenation of the joint along with breaking the pathology of the disease. Kokilaksha pacifies Vata Dosha due to Pichchila, Snigdha Guna and also pacifies pitta Dosha due to Madhura, Tikta rasa, Sheeta veerya and Madhura vipaka. It is used to increase elimination of uric acid from the body. It also has anti-inflammatory actions which help to reduce inflammation. Katuka balances Pitta Dosha due to Sheeta veerva and Tikta Rasa. It is a hepatoprotective agent and known for its antiinflammatory and antioxidant properties. Suranjan possesses Kaphavata Shamaka properties. It is very useful in relieving pain and inflammation caused due to gout. It purifies the blood and act as diuretic.

## CONCLUSION

Conclusions that were drawn after systematic open clinical trial on 30 patients are as Maximum number of patients of *Vatarakta* were reported in 4<sup>th</sup>-5<sup>th</sup> decade of life. Most of them were Males & maximum number of these male patients were having occupation of being businessmen. Vatarakta in Ayurveda is compared with that of Gouty arthritis (hyperuricemia). The similarity of Gouty arthritis with that of Vatarakta is very well cleared from the Nidana, Purvarupa, Rupa, Samprapti & the site of Vatarakta as described in our classics. Basically, being disorder of the musculoskeletal system the principal manifestations of Gouty arthritis (hyperuricemia) are pain & impairment of locomotor function. This is because of the pathological reaction of the joint or periarticular tissue to the presence of Monosodium urate crystals. Overall effect is that in 53.33% i.e. 16 out of 30 patients, moderate improvement was seen, 20% cases shown marked improvement, 10% cases shown mild improvement and 16.67% cases were having no change in their symptoms. In the present study as per the clinical data, "Anubhoot yoga is the reliable therapeutic treatment of Vatarakta".

## REFERENCES

- 1. Acharya Mishr Siddhinandan, Abhinava Bhaisajya Kalpana Vijnana Chaukhambha Surabharati Prakashan, Varanasi. Edition 2005.
- 2. Acharya Trikamji Jadavji, Sushruta Samhita with nibandh sangrah commentary of shri Dalhanacharya, Choukhambha orientalia, Varanasi, Edition 2005.
- 3. AYU (A Quarterly Peer Reviewed Journal of Research in Ayurveda); Jan-June 2007, Gujarat Ayurveda University, Jamnagar.
- 4. Baghel M S, Research in Ayurveda, Mridu Ayurvedic publications & sales, Jamnagar.1997.
- Chaudhuri K. Sujit, Concise Medical Physiology; New Central Book Agency (p) Ltd, Kolkata. Sixth Edition, Reprint 2008.
- Davidson's Principles and practice of Medicine, By Sir Stanley Davidson, Published by Churchill Livingstone, Elsevier. 20<sup>th</sup> Edition, 2006.
- De Gruchy's Clinical Haematology in Medical Practice, Published by Blackwell Science Ltd., France. reprint Edition 2008.
- 8. Dr. Dwivedi Laxmidhar and Bhishagratna Kunjalal Kaviraj, Sushruta samhita, Text with English translation, Chowkhamba Sanskrit Series office, Varanasi. Third Edition 2005.
- 9. Dr. Lochan Kanjiv, Sri GovindaDasji's Bhaisajyaratnavali, Commentry By Kaviraja Sri Ambikadatta

Shastri, with English translation, Chaukhambha Sanskrit Bhawan, Varanasi. Edition 2006.

- 10. Dr. Sharma R.K and Vaidya Das Bhagwan, Charak Samhita, Choukhambha Sanskrit, Edition 2004.
- 11. Dr. Sharma R.K. & Vaidya Dash Bhagwan, Charaka Samhita, Chowkhambha Sanskrit Series office, Varanasi, Edition 2004.
- 12. Dr. Shukla Vidyadhar, Kaya Chikitsa, Chowkhambha Surbharti Prakashan. Edition 2004.
- 13. Dr. Tripathi Brahmanand, Sharangadhar Samhita, Dipika Hindi Commentry, Chaukhambha Surabharati Prakashan, Varanasi. Edition 2001.
- Dr. Tripathi DevIndra, Rasa Ratna Samuchaya of Vagbhatacharya, Rasaprabha Hindi commentary, Chaukambha Sanskrit Bhawan, Varanasi. Edition 2003.
- 15. Dr. Tripathi Indradeo, Rajanighantu of Pt. Narahari, with Dravyagunaprakasika Hindi commentary, Krishnadas Academy, Varanasi. Edition 1998.
- 16. Dr. Tripathi Ravidutt and Dr. Shukla Vidyadhar, Ayurvedka Itihasa evam Parichaya, Chaukhambha Sanskrit Pratishthan, Delhi. Edition 2007.

## Source of Support: Nil Conflict of Interest: None Declared

How to cite this URL: Monika Gupta & Shakshi Kangotra: Clinical Evaluation Of Anubhoot Yoga In The Management Of Vatarakta W.S.R. To Hyperuricemia. International Ayurvedic Medical Journal {online} 2020 {cited August, 2020} Available from: http://www.iamj.in/posts/images/upload/4050 4057.pdf