



Research Article

A PRE TEST AND POST TEST DESIGN TO ASSESS THE EFFICACY OF *VIRECHANA* AND *ARDHAMATRIKA BASTI* IN GOUTY ARTHRITIS W S R TO *VATARAKTA*

Prashanth A S

Principal and Professor, P.G. Department of Kayachikitsa, Ayurveda Mahavidyalaya and Hospital, Hubballi, Karnataka, India.

KEYWORDS: *Vatarakta*, *Sanchita mala*, Serum uric Acid, *Ardhamatrika Niruha basti*, *Nimbamruthadi eranda Virechana*, Gouty arthritis.

ABSTRACT

The health of an individual depends on his diet and lifestyle. The rapid modernization, fast food culture, stressful and speedy life leads too many serious health issues. Among such health issues *Vatarakta* is one. A chronic disease or illness is defined as a condition which develops gradually through years because of frequent and continuous exposure to abnormal dietary, lifestyle or environmental factors. In *Vatarakta* these lifestyle changes causing inflammatory changes to joint leading to pain and swelling. *Vatarakta* in Ayurveda is considered as one of chronic illness which is commonly seen affecting nearly 14-17% of population every year. *Vatarakta* is more distressing and common metabolic disorder prevalent in present era. *Vatarakta* is correlated with gout in modern science. Gout is an abnormality of purine metabolism causes hyperuricemia and deposition of monosodium urate crystals in joints. Pain is predominant symptom of gout; it disturbs day-to-day life of the patient. *Shodhana Chikitsa* is considered as the best line of treatment. Treatment aims to eliminate the *Sanchita mala* (Serum uric Acid) and to bring back *Vata* and *Rakta* to its normalcy. Among the *Shodhana* procedures *Vasti* and *Virechana* are considered as the main line of treatment for *Vatarakta*. Here in this study 100 subjects are randomly selected and grouped in 2 groups A and B, in Group A *Ardhamatrika Niruha basti* and in Group B *Nimbamruthadi eranda Virechana* is done. Both the therapy shows significant results in patients of *Vatarakta*. But after statistical test and percentage wise results *Basti* group shows more improvement in uric acid levels and other symptoms.

*Address for correspondence

Dr Prashanth A S

Principal,
Professor, P.G. Department of
Kayachikitsa, Ayurveda
Mahavidyalaya and Hospital,
Hubballi, India.

Email:

drprashanthayurved@gmail.com

drprashanthas@gmail.com

Mob: 9448135575

INTRODUCTION

The health of an individual depends solely on his/her diet and lifestyle. The rapid modernization in India, fast food culture, stressful and speedy life, prevalent in urban areas is spreading its wings in remote villages too. Nowadays human beings are vulnerable to many disorders due to their altered life style and food habits. The resultant diseases may manifest itself in a gradual way. In the initial phase there may be absence of the symptoms. At later stage there may be complex manifestations involving more than one joint. The illness may become chronic or of a long standing nature. One such affliction is *Vatarakta* (Gouty Arthritis).

Vatarakta is caused by vitiation of *Vata* and *Rakta*.^[1] Aggravated *Vata* blocked by vitiated *Rakta*, in turn leading to further aggravation of *Vata*. Thus aggravated *Vata* vitiates the *Rakta* leading to condition *Vatarakta*.^[2] *Vatarakta* is a *Roga* related with *KhaVaigunya* of *Raktavaha Srotas* the vitiated *Rakta* gravitates and accumulates in the feet. In the initial stage, the hands and foot are affected. The illness then spreads all over the body like rat poison.^[3,4] Due to the fluidity, mobility and subtle nature of *Vata* and *Rakta* it moves all over the body, while they move through blood vessels, they get obstructed in the joints which further aggravates them and the morbid matter get lodged there. Both

the *Viruddha Ahara* and *Vihara* will lead to this condition. [5-7]

It has two stages i.e., *Uthana* and *Gambhira*. *Gambhira Vatarakta* mainly affects *Asthidhatu* and causes *Ruja* which spreads as *Aakhorvisha* (rat poison). [8,9] Intense painful condition, initial site of manifestation i.e. involvement of hands and feet, and other clinical features can be compared with gout described in modern medicine. The gout is also known as “disease of kings” and also “king of diseases” in modern medicine. Gout is a metabolic disorder and inflammatory response to monosodium urate crystals formed secondary to hyperuricemia. In 21st century, gout remains the most common inflammatory arthritis in men over 40 years old and in post-menopausal women, although more common in men (10:1). The number of cases rise with age, from 2/1000 in males aged 18 - 44 and 34/1000 in males of age 45-65 years.

Clinical varieties of *Vatarakta* are also elaborated according to the association of vitiated *Dosha* in the primary pathology of *Vata* and *Rakta* and are named as *Vatadhika Vatarakta*, *Pittadhika Vatarakta*, *Kaphadhika Vatarakta* and *Raktadhika Vatarakta*. All these symptoms of *Vatarakta* are much similar to that of gouty arthritis like swelling and pain which starts primarily on the big toe which spreads to other major and minor joints as like *Akhuvisha* /rat poison causing excessive pain, swelling, redness, deformity and finally affecting the mobility of an individual with the main underlying cause of increased Serum Uric Acid .

The treatment of *Vatarakta* - Gouty Arthritis with increased serum uric acid levels is well explained in Ayurveda including *Shodhana Chikitsa*, *Shamana Chikitsa* and *Rasayana Prayoga*. *Shodhana Chikitsa* is considered as the best line of treatment for as the main line of approach is to eliminate the *Sanchita mala* (Serum uric Acid) and to bring back *Vata* and *Rakta* to its normalcy. Among the *Shodhana* procedures *Vasti* and *Virechana* are is considered as the main line of treatment for *Vatarakta*. [10]

Hence for the present study it is planned to evaluate the efficacy of *Vasti* and *Virechana* in the management of Gouty Arthritis/ *Vatarakta*.

Showing Grading of Parameters: Subjective Parameters

Parameter	Finding	Points
<i>Sandhi Shula</i> (pain)	None	0
	Mild	1
	Moderate	2
	Severe	3
	Extreme	4
<i>Sandhi Graha</i> (Stiffness)	No stiffness	0

AIMS AND OBJECTIVES

1. To study *Vatarakta* and Gouty Arthritis in detail.
2. To evaluate and compare the efficacy of *Ardhamatrika Vasti* and *Virechana* in *Vatarakta*.
3. To assess the effect of *Vasti* and *Virechana* on raised uric acid level in gouty arthritis.
4. To assess the effect of *Kokilaksha Kashaya* on raised uric acid level.

MATERIALS AND METHODS

In this study, *Hareetakyadi Churna* was selected for *Ama Pachana* in both the groups. *Madhu*, *Saindhava Lavana*, *Balaguduchyadi taila*, *Sathahwa Kalka* and *Dasamula Kashaya* were used for *Ardhamatrika Nirooha Vasti* in *Kala Vasti* schedule in Group A, and *Panchatikta ghrita guggulu snehapana* followed by *Nimbamrithadi Eranda Thaila virechana* in Group B.

Inclusion criteria

- Subjects presenting with clinical features of *Vatarakta/ Gouty Arthritis*.
- Subjects with chronicity of disease more than 6 months and less than 5 yrs.
- Subjects of either sex between age group of 20-70 yrs.
- Subjects fit for *Basti Karma* and *Virechana karma*.
- Subject showing the uric acid level above 6mg/dl (Above Biological Range).

Exclusion Criteria

- Subjects with uncontrolled diabetes, systemic disorders and endocrine disorders.
- Subjects with autoimmune disease of joints.
- Subjects with infection and communicable diseases.
- Subjects not fit for *Basti Karma* and *Virechana karma*.

Parameters of the study

Subjective parameters

- *Sandhi Graha* (Stiffness of Joint)
- *Sandhi Shoola* (Joint Pain)
- *Shotha* (Inflammation)

Objective Parameters

- Serum Uric acid before and after treatment.
- *Vaivarnya* (Colour of affected joint).
- *Sparsha Asahatva* (Tenderness).
- McGill pain scale for pain assessment

	Stiffness occasional, relieved by its own	1
	Stiffness relieved by movements	2
	Stiffness relieved by medication	3
<i>Shotha</i> (swelling)	None	0
	Slight	1
	Moderate	2
	bulging beyond joint margins	3

Objective Parameters

<i>Vaivarnya</i> (Discolouration)	No discolouration	0
	Occasional, relieved by its own.	1
	Present, but relieved by relief in swelling	2
	Persistent, not relieved by medication	3
<i>Sparsha asahatva</i> (tenderness)	No tenderness	0
	patient complains of pain	1
	patient complains of pain and winces	2
	patient complains of pain, winces and withdrew joint	3

Serum Uric acid before and after treatment

Before treatment	After treatment

Amapachana

This is the first and foremost treatment before conducting any *Shodhana Karma*, as under the presence of *Ama*, *Shodhana* will not be proper. In this study *Hareetakyadi Churna* was taken, as it acts as *Deepana*, *Pachana* and *Vatanulomana*. It plays an important role in preparing the body for *Pradhana Karma*.

Abhyanga

Acharya Charaka quotes the *Sthana* of *Vayu* is *Sparshanedriya* and *Adhishtana* of *Sparshanedriya* is *Twacha*. Massage acts on three systems namely blood vascular system, lymphatic system and nervous system. The lymphatic system and blood vascular system are supplementary to each other. The lymphatic system offers an alternative route for the return of tissue fluid to the blood stream. By application of *Taila* in *Abhyanga* generates heat and thus stimulates lymphatic flow.

The *Veerya* of the drug used in *Taila* for *Abhyanga* enters skin under the influence of *Bhrajakagni*. This helps to penetrate into deeper *Dhatu*, and potency of the drugs enters into all *Srotas* and exhibits its action.

The properties of *Balaguduchyaditaila* used for *Abhyanga* in *Vatarakta*

It has the ability to reduce *Vata* thereby reducing *Shula*. Owing to its *Gunas* like *Snigdhasookshma* it penetrates deep there by reducing the *Vatadivikaras*, drugs like *Guduchi* will act as *Vatarakta hara*, drugs are having *Tikta*, *Kashaya Rasa*, so it is much beneficial in *Vatarakta*.

Swedana

Swedana Karma is a procedure by which a person is made to perspire. *Klinna Dosha* through the *Snehapana* will be liquefied by the *Swedana* therapy. The *Dravikarana* of the *Dosha* present in *Sukshma Srotas* takes place by *Swedana*. *Swedana* increases *Agni*, creates *Komalatha*, *Ruchi*, clears *Srotas*, and diminishes *Tandra*.

Swedana stimulates *Bhrajaka Pitta* and *Vyana Vata*. It also enhances circulation of blood, thus carries toxins lying in the tissues to excretory organ such as skin, bowel etc. Thus the toxins are driven out from the tissues and brought to the bowels naturally, from where they are subsequently evacuated by means of *Shodhana Karma*.

**Probable Mode of Action of *Vasti* Therapy Drugs
a) *Madhu* (Honey)**

It is considered as the best among the vehicles, as it contains various substances in it, which denotes its drug (potency of the drug) carrying capacity. Owing to its *Sukshma Guna* it reaches up to the micro channels, in turn carry the drug (potency of the drug) at the molecular level through the micro channels. Further it is *Tridosahara*.

In case of *Vatarakta* there is inflammation of joint and this inflammation is due to deposition of uric acid crystals. So use of *Madhu* in *Vasti* may reduce this inflammation as well as due to its *Lekhana* property. *Madhu* has property to stimulate the healing process and tissue regeneration.

b) Saindhava

Lavana in general are having the properties like *Vishyandi*, *Sukshma*, *Tikshna*, *Ushna* and *Vataghna* and promotes the evacuation of Bladder and Rectum.

Owing to the *Sukshma* property it helps the drug (potency of the drug) to reach in the Micro Channels, *Saindhava* mixed with *Madhu* is capable of liquefying the viscid *Kapha* and breaking it into minute particles for their easy elimination. Similarly it may liquefy the morbid *Dosha Sanghata* and breaks it into smaller particles by virtue of its *Ushna* and *Tikshna* property respectively and thus helps their elimination.

Because of *Sukshma* and *Vishyandi* properties it helps to pass the drug molecules in the systemic circulation through mucosa. It also helps in the elimination of *Vasti* due to its irritant property.

c) Sneha

Sneha gets mixed with *Madhu* and *Saindhava* and forms a uniform mixture. *Sneha* counterparts some of irritating properties of both *Madhu* and *Saindhava*. *Ghrta Kalpanas* exclusively intensifies *Vatapittahara* effect.

In *Balaguduchyaditaila*, *Bala* having *Vatahara* property, *Balya* and *Brumhana*, *Guduchi* has *Tiktha rasa* and *Ushnaveerya* so it is *Vata hara* but does not provokes *Pitta*, it is *Madhura vipaka* so it is *Vatahara*, *Balya*, *Brumhana* and *Rakta prasadhaka*.

Being a *Sneha* it can penetrate into micro-channels. Thus, *Balaguduchyaditaila* is acting at the level of *Rakta*, *Asthi* and *Majja Dhatu*.

d) Kalka

Kalka gives thickness to the *Vasti Dravya*. We can use the fresh drugs in the form of *Kalka*, which containing volatile properties. This is one of the ingredients mainly according to the disease.

Shatpushpa

Shatpushpa is common *Kalkadravya* in *Asthapana Vasti* drugs. *Kalka* helps to disintegrate the *Malas* by increasing the osmotic permeability of the solution. We can use the fresh drugs in the form of *Kalka*, those which we cannot use for the decoction. In this study *Shatahva* was used as *Kalka dravya* because of its *Katu rasa*, *Ushna Veerya*, and *Vatakaphahara* and *Deepana* properties.

e) Kashaya

This is the main content of *Vasti Dravya*. The drugs, which are water soluble we can use by this way. The *Kashaya* gives essential quantity to the

Vasti Dravya for administration during preparation it gets mixed with above mixture.

Dasamoola Kashaya: This was used as the *Kashayadravya* as it is generally *Vatahara*, *Sophahara*, *Balya*. It will act as *Vatakaphahara* and *Agnideepana*.

Probable Mode of Action of Vasti

As the *Vatarakta* is the *Madhyama rogamarga Vyadhi* and for the *Madhyama rogamargavyadhi Vasti* is the one of the best treatment modality. As, it has been explained in the classics that *Vasti* is considered as *Ardha Chikitsa*, whereas some Acharyas, have considered it as complete *Chikitsa*.

The *Asthapana* drugs selected by their virtue of their property act on the vitiated *Dosha* and *Dooshya* (*Dosha: Vata, pradhana Tridosha, Dooshya: Rasa, Rakta, Mamsa, Meda, Asthi, Majja*). *Vasti* can act as a purificative, curative and preventive measure. *Vasti* due to purification, eliminates the excess of deranged metabolic waste and it in turn clears the *Avarana* of *Vata* and normalize the functions of *Vyana* and *Apana*. Once the proper purification is done then the digestive power is going to become normal and the proper metabolism starts which in turns help to form the *Samyak Dhatu*.

Virechana

Nimbamritadi eranda thailam is one of the most effective *Sneha virechaneeya oushadhi* for rheumatological disease. It is *Vatanulomana*, *Srotovishodhana*, *Balakara*, *Adhobhaga doshahara*, *Deepana*, *Shothahara*. It is best used as a *Sneha virechaneeya oushadhi* in *Raktha/Pitta* involved *Vata vikaras* like *Vataraktha*. Here the oil due to its *Gunas* like *Teekshna*, *Sookshma*, *Sara*, *Kashaya rasa*, *Madhura vipakam* etc., pacifies *Vata* and *Raktha* and its *Virechaneeya* effect result in the elimination of *Sanchita mala*, that is serum uric acid in gouty arthritis.

Observations

General description of the subjects studied in the present series was as follows:

Age: Observations of this study were in accordance with the findings of Gouty Arthritis in middle age. *Vatarakta* is caused because of irregular and perverted dietetic habits influencing on *Jataragni*. The middle age is more prone for committing such habits which will vitiate *Jataragni* and produce related conditions.

Ahara: Subjects in the present study were more prone to take *Samishaahara* (more prone to non vegetarian diet). *Apathya Ahara Vihara* plays an important role in the pathogenesis of disease.

Intake of incompatible diet and sedentary life style may play an important role in the pathogenesis of *Vatarakta*. *Virudhahara* has been included in the *Nidanas* of *Vatarakta*.

Agni: Most of the subjects in this study were having *Mandagni*. *Mandagni* is the root cause of *Ama* formation and it is the *Ama* which is responsible for the manifestation of the disease *Vatarakta*. Next is

OBSERVATION ON DISEASE

Vishamagni which is due to vitiated *Vayu* that plays a vital role in the manifestation of *Vatarakta*.

Koshta: In present study maximum subjects were had *Krurakosta* and it is because of the *Vata*. *Krurakosta* leads to *Malabaddata* and *Vishamagni*, and may be cause for production of *Ama*. So *Krurakosta* may be the cause of *Vatarakta*.

Table 1: Symptoms (Lakshana) Wise Distribution of 100 Subjects of Vatarakta

Cardinal Symptoms	Group A	Group B	Total	%
<i>Sandhishoola</i>	50	50	100	100
<i>Sandhishotha</i>	50	50	100	100
<i>Sandhigraha</i>	40	46	86	86
<i>Sparshasahatva</i>	45	48	93	93
<i>Vaivarnata</i>	37	40	77	77

Table 2: Showing Serum Uric Acid Level of 100 Subjects of Vatarakta

S.Uric Acid	Group A	Group B	Total	%
6.1 to 7	04	02	06	06 %
7.1 to 8	17	16	33	33 %
8.1 to 9	15	18	33	33 %
9.1 to 10	12	08	20	20 %
10.1 to 11	02	06	08	08 %

Katu, Amla, Lavana causes *Rakta Dusti* and *Vata Vikruti*. Most of subjects were using excessive in the form fried items and pickles. In classics it is told that *Vatarakta* starts with *Pada* where as in gout also first it affect metatarsophalangeal joint of big toe. All the subjects (100%) presented with *Sandhi Shoola, Sandhi Shotha, Sandhi Graha, Sparshaasahitwa* and *Vaivarnyatha*. This shows that the disease has taken a gross appearance. Maximum number of subjects came with high uric acid levels

7- 10mg/dl which shows the high levels of uric acid level in patients showing symptoms of *Vatarakta*.

Results

In this study the effect of treatment was assessed on the basis of changes observed after the treatment in subjective and objective parameters. The results are discussed parameter wise as here under.

Table 3: Showing Effect of Therapy on Subjective Parameters in Group A

Parameter	No. Of Patients	Mean		Mean Diff	% relief	S.D.	S.E.	't'	P	Remarks
		BT	AT							
<i>Sandhi Graha</i>	50	2.64	0.66	1.98	75%	0.616	0.087	22.73	<0.001	S
<i>Sandhi Shoola</i>	50	2.22	0.32	1.9	99.85%	0.670	0.094	20.04	<0.001	S
<i>Sandhi shodha</i>	50	0.6	0.16	0.44	73.33%	0.803	0.113	3.869	<0.001	S

Table 4: Showing Effect of Therapy on Objective Parameters in Group A

Parameter	No. Of Patients	Mean		Mean Diff	% relief	S.D.	S.E.	't'	P	Remarks
		BT	AT							
Serum Uric acid	50	8.516	4.854	3.662	43%	1.0351	0.146	25.01	<0.001	S
Affected Joint Colour	50	1.18	0.16	1.02	86.44%	0.836	0.118	8.622	<0.001	S
<i>Sparsha Asahatva</i> (Tenderness)	50	1.82	0.18	1.64	90.10%	0.741	0.104	15.63	<0.001	S
MC Gill Pain Scale	50	3.21	0.92	2.2	71.34%	0.721	0.101	21.58	<0.001	S

Table 5: Showing Effect of Therapy on Subjective Parameters in Group B

Parameter	No. Of Patients	Mean		Mean Diff	% relief	S.D.	S.E.	't'	P	Remarks
		BT	AT							
<i>Sandhi Graha</i>	50	2.16	0.98	1.18	54.62%	0.589	0.083	14.21	<0.001	S
<i>Sandhi Shoola</i>	50	1.96	1	0.96	48.97%	0.527	0.074	12.86	<0.001	S

<i>Sandhi Shotha</i>	50	0.86	0.24	0.62	72.09%	0.718	0.101	6.12	<0.001	S
----------------------	----	------	------	------	--------	-------	-------	------	--------	---

Table 6: Showing Effect of Therapy on Objective Parameters in Group B

Parameter	No Of Patients	Mean		Mean%		S.D.	S.E.	't'	P	Remarks
		BT	AT	Diff	Relief					
Serum Uric acid	50	8.74	5.87	2.86	32.83%	1.017	0.143	19.87	<0.001	S
Affected Joint Colour	50	1.28	0.42	0.86	67.18%	0.632	0.089	9.60	<0.001	S
<i>Sparsha Asahatva</i> (Tenderness)	50	1.58	0.44	1.14	72.15%	0.721	0.102	11.17	<0.001	S
MC GILL PAIN SCALE	50	2.82	1.38	1.44	51.06%	0.875	0.123	11.63	<0.001	S

Table 7: Comparative Efficacy of Therapies on Subjective Parameters in Group A and Group B Using Unpaired Student's 'T' Test

Assessment Parameters	No. of Patients	Group A			Group B			Unpaired t Test (Group A vs Group B)		Remarks
		Mean	S.D.	S.E.	Mean	S.D.	S.E.	T	P	
			(+/-)	(+/-)		(+/-)	(+/-)			
<i>Sandhi Graha</i>	50	1.18	0.58	0.08	1.98	0.61	0.08	6.57	<0.05	S
<i>Sandhi Shoola</i>	50	0.96	0.52	0.07	1.9	0.67	0.09	7.71	<0.05	S
<i>Sandhi Shotha</i>	50	0.62	0.71	0.10	0.44	0.80	0.11	1.17	>0.05	NS

Table 8: Showing Comparative Efficacy of Therapies on Objective Parameters in Group A and Group B Using Unpaired Student's 'T' Test

Assessment Parameters	No. Of Patients	Group A			Group B			Unpaired t Test (Group A vs Group B)		Remarks
		Mean	S.D.	S.E.	Mean	S.D.	S.E.	T	P	
			(+/-)	(+/-)		(+/-)	(+/-)			
Serum Uric acid	50	3.66	1.03	0.14	2.86	1.01	0.14	3.85	<0.05	S
Affected Joint Colour	50	0.86	0.63	0.08	1.02	0.83	0.11	1.07	>0.05	NS
<i>Sparsha Asahatva</i> (Tenderness)	50	1.14	0.72	0.10	1.64	0.74	0.10	3.38	<0.05	S
Mc gill pain scale	50	2.2	0.72	0.10	1.44	0.87	0.12	4.69	<0.05	S

Table 9: Showing Total Effect Of Therapy On Different Parameters In Group A & B (In %)

Cardinal Features	Group A		%	Group B		%
	B.T.	A.F.		B.T.	A.F.	
<i>Sandhi Graha</i>	2.64	0.66	75%	2.16	0.98	54.62%
<i>Sandhi Shoola</i>	2.22	0.32	99.85%	1.96	1	48.97%
<i>Sandhi Shotha</i>	0.6	0.16	73.33%	0.86	0.24	72.09%
Serum Uric Acid	8.516	4.854	43%	8.74	5.87	32.83%
Affected Joint Colour	1.18	0.16	86.44%	1.28	0.42	67.18%
<i>Sparsha Asahatva</i> (Tenderness)	1.82	0.18	90.10%	1.58	0.44	72.15%
Mc gill pain scale	3.21	0.92	71.34%	2.82	1.38	51.06%

Effect of Therapies on Subjective Parameters

Sandhigraha: Therapies in both the group provided statistically highly significant result, Group A showed better result in percentage of improvement in this parameter which suggest that *Vasti* is more effective in the management of stiffness than *Virechana*. *Sandhigraha* is mainly due to vitiated *Vata Dosha* in *Vaarakta*. As *Vasti* is main line of treatment of *Vata* and as it spreads all over the body, does the *Vata Niyamana* (controls and maintains). In *Vasti* all the drugs are *Vata Anulomana* drugs which help in pacifying the vitiated *Vata* and it will reduce the *Sandhi Graha*.

Sandhishoola: Even though, therapies in both the group provided statistically highly significant result,

Group A showed better result in percentage of improvement in this parameter which suggest that *Vasti* is more effective in the management of pain than *Virechana*. *Sandhishula* is mainly caused by *Vata Dosha* in *Vatarakta*. In *Vasti* all the drugs are *Vata Anulomana* drugs which help in pacifying the vitiated *Vata*. Both *Dasamoolakwatha* and *Balaguduchyadi Taila* with the combined effect of *Vasti* has caused reduction in pain.

Sandhi Sotha: Even though, therapies in both the group provided statistically highly significant result, Group A showed better result in percentage of improvement in this parameter which suggest that *Vasti* is comparatively more effective in the

management of swelling than *Virechana*. The vitiated *Vata Dosha* and *Rakta Dhatu* are responsible for *Sandhi Shotha* in *Vatarakta*. In *Vasti* drugs like *Dasamoola* is *Shothahara* and are *Vata Anulomana* which pacifies the vitiated *Vata*. The administration of *Vasti* expels this vitiated *Vata Dosha* and so it is helpful in reducing *Sandhi Shotha*.

Effect of Therapies on Objective Parameters

Serum Uric Acid: The therapies in Group A and Group B provided **43%** and **32.83%** improvements respectively on this Serum Uric Acid level. Even though, therapies in both the group provided statistically highly significant result, Group A showed better result in percentage of improvement in this parameter which suggest that *Vasti* is more effective in the management of S.Uric Acid level than *Virechana*.

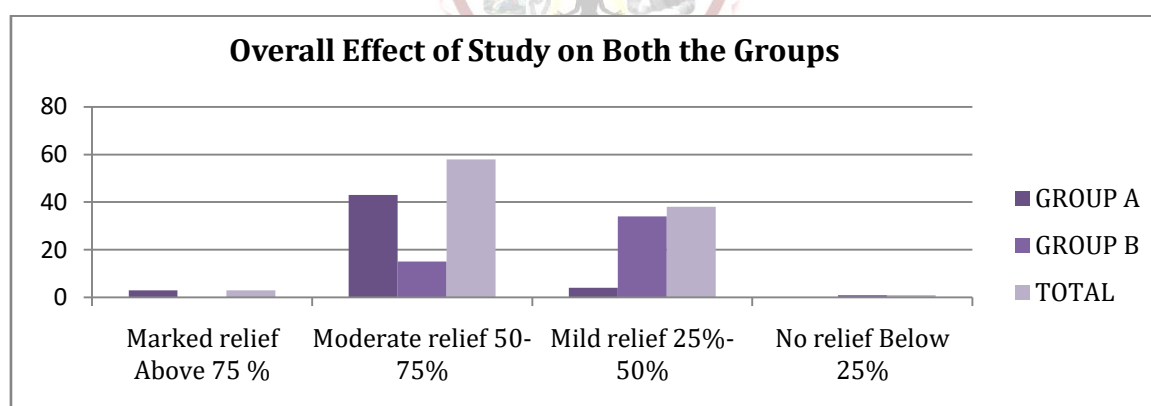
Affected Joint Colour: The therapies in Group A and Group B provided **86.44%** and **67.18%** improvements respectively on this symptom and which were statistically significant (P<0.01) in both

the groups. Even though, therapies in both the group provided statistically highly significant result, Group A showed better result in percentage of improvement in this parameter which suggest that *Vasti* is more effective in the management of Joint colour than *Virechana*.

Sparsha Asahatwa: The therapies in Group A and Group B provided 90.10% and 72.15% improvements respectively on this symptom. Even though, therapies in both the group provided statistically highly significant result, Group A showed better result in percentage of improvement in this parameter which suggest that *Vasti* is more effective in the management of *Sparshaasahatva* than *Virechana*. *Sparshaasahatva* is mainly caused by *Vata Dosha* along with *Rakta* in *Vatarakta*. In *Vasti* all the drugs used are *Vata Anulomana* and *raktasudhikara* drugs which help in pacifying the vitiated *Vata* and *Rakta*. *Vedanashamaka Dravyas* and the reduction in pain can be attributed to this property.

Table 10: Overall Effects of Study on Cardinal Symptoms in Both Groups

Remarks	Group A	Group B	Total	Percentage
Marked relief Above 75 %	3	0	3	03%
Moderate relief 50-75%	43	15	58	58%
Mild relief 25%-50%	4	34	38	38%
No relief Below 25%	0	1	1	01%



DISCUSSION

The main causative factors for *Vatarakta* are excessive use of alcohol, high purine diet, non-vegetarian diet, acidic and astringent foodstuffs, person leading sedentary life, excessive anger and emotional distress. Both *Vata* and *Rakta* play a major role in the pathogenesis of *Vatarakta*. Vitiated *Raktadhatu* obstructs the path of *Vridhhvayu*, in which the *Vayu* has to flow. *Vridhh* and obstructed *Vata* inturn vitiates the whole *Rakta* and this *Dosha-dushyasammurchhana* in joints manifests as *Vatarakta*. *Pathya* and *Apathya* are very important factors in the management of gout

like metabolic disorder. So along with medicine disease can be better controlled by avoiding all such precipitating factors.

CONCLUSION

The prevalence of life style disorders is rising rapidly. The best thing which can be done in current scenario is to prevent it rather than cure. Present day life style, dietary habits, social and environmental situations have given rise to the number of patients of Gouty Arthritis /*Vataraktha* in the society. Various *Vata hara* and *Rakta Prasadaka* remedies along with *Shodhana*

procedures is the main protocol of *Chikitsa*. Recurrence of *Vatarakta* is very common; so long term treatment is essential for cure of the disease. In present study as per the clinical data, *Vasti* and *Virechana* are definitely effective in the management of *Vatarakta*, but *Vasti* is more effective than *Virechana*.

ACKNOWLEDGEMENT

Advance Research Wing, Rajiv Gandhi University of Health Sciences, 4th T Block, Jayanagar, Bangalore - 560 041.

REFERENCE

1. SKD, Shabdhakalpadruma edited by Devaraja Radhakanta, Delhi, Naga Publisher, part II. Page no 25; Pp -142.
2. Charaka, Charaka Samhita. With. Deepika Teeka of Chakrapanidatta, edited by A.V.Sri Lalachandra Shastri Vaidya, Agnivesa's Charaka Samhita, with Ayurveda; Reprint Edition, Krishnadas Academy, Varanasi 2000, Page no 627 ; Pp -738.
3. Charaka, Charaka Samhita. With Deepika Teeka of Chakrapanidatta, edited by A.V. Sri Lalachandra Shastri Vaidya, Agnivesa's Charaka Samhita, with Ayurveda; Reprint Edition, Krishnadas Academy, Varanasi 2000, Sutrasthana Edition, Krishnadas Academy, Varanasi, 2000, Page no 627; Pp -738.
4. Madhavacharya M.Ni with (Md. Ks teeka) edited by Sri Sudarshana Shastry, Madhavakara's Madhava Nidanam with Madhukosha Commentary, 18th Edition, Chaukambha Sanskrit Samsthan, Varanasi, 1988, Page no 499 - 505 ; Pp - 568.
5. Vagbhata; Ashtanga Hridaya Acharya Hari Shastri Paradakara Vaidya, with commentary of Sarvangasundari of Arunadatta and Ayurveda Rasayana of Hemadri, 9th Edition, Chaukambha Orientalia Publishers, Varanasi, Uttara Pradesh, 2002, Page no 535;Pp - 956
6. Madhavakara's Madhava Nidanam by Sri Sudarshana Shastry with Madhukosha Commentary, 18th Edition, Chaukambha Sanskrit Samsthan, Varanasi, 1988, Page no 501; Pp - 568.
7. Yoga Ratnakara; Yoga Ratnakara , Indradev Tripathi, Laxmipathi Shastry's with Vaidhyaprabha Commentary, 1st Edition, Krishnadas Academy, Varanasi, 1998. Y.R.Vataraktadhikara Page no 623-635; Pp -672.
8. Charaka; Agnivesa's Charaka Samhita Sri Lalachandra Shastri Vaidya, with Ayurveda Deepika Teeka of Chakrapanidatta, Reprint Edition, Krishnadas Academy, Varanasi, 2000. Page no 630; Pp -738.
9. Vagabhata's, Ashtanga Hridaya ; Acharya Hari Shastri Paradakara Vaidya, , with commentary of Sarvangasundari of Arunadatta and Ayurveda Rasayana of Hemadri, 9th Edition, Chaukambha Orientalia Publishers, Varanasi, Uttara Pradesh, 2002, Page no 536;Pp - 956.
10. Charaka; Agnivesa's Charaka Samhita Sri Lalachandra Shastri Vaidya, with Ayurveda Deepika Teeka of Chakrapanidatta, Reprint Edition, Krishnadas Academy, Varanasi, 2000. Page no 630; Pp -738.

Cite this article as:

Prashanth A S. A Pre Test and Post Test Design to Assess the Efficacy of Virechana and Ardhamatrika Basti in Gouty Arthritis w s r to Vatarakta. AYUSHDHARA, 2019;6(2): 2120-2127.

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

Disclaimer: AYUSHDHARA is solely owned by Mahadev Publications - A non-profit publications, dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. AYUSHDHARA cannot accept any responsibility or liability for the articles content which are published. The views expressed in articles by our contributing authors are not necessarily those of AYUSHDHARA editor or editorial board members.