

COMPARATIVE PHASE 2 CLINICAL STUDY TO EVALUATE THE EFFICACY OF *ASHVATTHA TWAK KASHAY* AND *GUDUCHI KASHAY* IN *VATARAKTA* WITH SPECIAL REFERENCE TO GOUT

Ugale Suvarna¹,

Kulkarni Eknath²

¹PG Scholar, Dept.of Kayachikitsa, A.S.S.Ayurved Mahavidyalaya and Arogyashala Rugnalaya, Panchavati, Nashik Maharashtra, India- 422003.

²Associate Professor,Dept.of Kayachikitsa,A.S.S. Ayurved Mahavidyalaya and Arogyashala Rugnalaya,Panchavati,Nashik Maharashtra,India-422003.

ABSTRACT

Background-*Vatarakta* is said to be a lifestyle disorder which is caused due to consumption of junk food, high protein diet and sedentary lifestyle disturbing healthy environment of our society. *Vatarakta* is often compared with Gouty Arthritis in modern medicine due to its outstanding similarities in signs and symptoms of the disease. Gout is a disorder of purine metabolism and is an inflammatory response to the monosodium urate monohydrate crystals formed secondary to hyperuricaemia. The incidence of Gout varies in population from 0.2 to 3.5 per 1000 with overall prevalence 2 to 2.6 per 1000 in India. Worldwide its prevalence is increased. It affects 2.1 million people. So the need of hour is to develop a satisfactory and safe Ayurvedic regimen for the management of *Vatarakta*. **Aims&Objectives:** This study is done to control the progression of disease and to improve quality of life. **Material&Methods:** In this study 60 patients were selected randomly and divided 30 in each group. In trial group, patient was given *Ashvattha Twak Kashay* and in control group,*Guduchi Kashay* was given orally for 30 days. Observation was done on subjective parameters and objective parameter and analyzed statistically.

Conclusion : On the basis of applied statistical test of significance *Ashvattha Twak Kashay* was found equally effective as *Guduchi Kashay*.

Keywords: *Ashvattha Twak Kashay, Guduchi Kashay, Vatarakta.*

INTRODUCTION: The health of an individual depends solely on his/ her diet and lifestyle¹. Introduction of junk food & sedentary lifestyle disturbs the healthy state of an individual. Due to this individuals get prone to various diseases related to lifestyle known as lifestyle disorders. One of such lifestyle disorder is *Vatarakta*. In *Vatarakta*, pain is the predominant symptom disturbing day to day life of the patient². In *Vatarakta*, *Vata* and *Rakta* are afflicted by distinct etiological factors such as improper dietary habits, use of meat of aquatic and marshy animals, more consumption of high protein diet, less tendency to exercise, long term vehicle riding.

According to *Acharya Charaka*, vitiated *Vata dosha* circulates through the *Strotas* (body channels) and obstructs the path of vitiated *Rakta*. This vitiated *Rakta* then further agitates *Vata Dosha*. Vitiated *Vata* and *Rakta* together affect the joints and produces *Vatarakta*³. This vitiated *Rakta* causes obstruction and the vitiated *Vata* in such condition creates *Shool* (pain), *Shotha* (swelling), *Stambha* (stiffness), *Sparsh-asahatva* (tenderness) in the *Parv-Sandhi* (metatarsal joints). Thus the process of disease mostly initiates from metatarsophalangeal joints and spreads throughout the body. *Acharya Sushruta*

has described that it spreads like *Mushika Vish* (rat poison)⁴.

The disease *Vatarakta* has been described in *Ayurvedic* classics such as *Brihatrayi*, *Laghutrayi*, *Vangsenā*, *Chakradatta* and *Bhaishajya Ratnavali*, etc. which shows that the disease was prevalent widely in early era too⁵.

The status of *Vatarakta* is often compared with Gout/Gouty Arthritis described in the modern medicine. In previous research work Hyperuricaemia is observed as common feature of *Vatarakta*. Gout is a disorder of purine metabolism and is an inflammatory response to the monosodium urate monohydrate crystals formed secondary to hyperuricaemia. It affects mainly joints, synovial membrane, articular cartilages and tendon sheaths. It mostly initiates from great toe but it may sometime initiate from ankle, knee, finger, wrist, elbow, etc. In short, it is a recurrent attack of acute inflammatory arthritis (a red, tender, hot, swollen joint).

Gout is more common in men and it is found mostly in post menopausal women. The incidence of gout varies in population from 0.2 to 3.5 per 1000, with an overall prevalence of 2 to 2.6 per 1000⁵.

A medicine which is reliable, without side effects, simple, cost effective and gives early recovery is in high demand. The Father of medicine “*The Charaka*” has recommended *Ashvattha Twak Kashay* in *Vatarakta*⁶. *Ashvattha Twak Kashay* is *Kaphapitta shamaka*, (pacifies *Kapha* and *Pitta dosha*) *Vedanasthapana*, (reduces pain) *Shothhara* (reduces swelling) and *Raktashodhaka* (blood purifier). Having *Sheet Veerya* (cold efficacy) and *Madhura Rasa* (sweet taste) of *Ashvattha*, it corrects vitiation of *Pitta*. Similarly, *Madhur rasa* and *Guru guna* (heavy quality) of an *Ash-*

vattha will help in relieving vitiation of *Vata*. *Vatarakta* having *Samprapti* (pathogenesis) independently of vitiated *Rakta Dhatu*, (blood component) and according to *Ashraya Ashrayi bhava Pitta* is *Raktashrayi*. Hence vitiation of *Pitta* is directly correlated to the vitiation of *Rakta*. Thus *Ashvattha Twak Kashay* is likely to break the pathogenesis of *Vatarakta*. So the therapeutic effect of *Ashvattha Twak Kashay* (decoction) has been studied in comparison with *Guduchi Kashay* which is taken as control group, as *Guduchi* is mentioned as *Agrya* (foremost) for *Vatarakta*.

OBJECTIVES OF THE RESEARCH WORK :

Comparative study to evaluate the efficacy of *Ashvattha (Ficus Religiosa) Twak* (stem bark) *Kashay* (decoction) and *Guduchi (Tinospora Cordifolia) Kashay* orally in *Vatarakta* with special reference to Gout.

Place of study :

The study was conducted in Post Graduate (P.G.) department of *Kayachikitsa* of *Ayurved Seva Sangh, Arogyashala Rugnalaya Panchavati Nashik*.

MATERIAL AND METHODS :

The present study was Simple randomized controlled clinical study. The study was conducted on 60 patients of *Vatarakta* selected from OPD and IPD of *Arogyashala Rugnalaya Kayachikitsa Department Nashik*.

Criteria of Diagnosis:

Person with classical symptoms of *Vatarakta* were selected and as per inclusive criteria they were included in the study.

INCLUSIVE CRITERIA

1. Patients diagnosed as *Vatarakta* with symptoms such as *Sandhishool* (joint pain), *Sandhidaha* (burning sensation in joint), *Sparshasahatva* (tenderness at joint)

Sandhishoth(swelling of joint) and *Sandhivaivarnya* (discolouration at joint).

2. Patient of *Vatarakta* having raised Serum Uric Acid Level more than 7.0mg/dl in Male and more than 5.7 mg/dl in Female.
3. Age group between 20 -70 years.
4. Patient willing for trial and giving written consent.
5. Patient with all socio-economic status.
6. Patient with both sex Male and Female.

EXCLUSIVE CRITERIA:

1. Patients below 20 yrs. and above 70 years of age.
2. Patients with known case of major systemic disorder such as MI, Uncontrolled DM, Uncontrolled Hypertension, Renal disease, Hepatic disease.
3. Patients having arthritis other than Gouty Arthritis such as Rheumatoid Arthritis, Osteoarthritis, SLE. etc.
4. Patient not willing for trial.
5. Complicated cases of *Vatarakta* ie *up-dravas* of the disease, *Hikka* (hiccup), *Murchha* (fainting), *Moha* (unconsciousness), *Visarpa* (erysipelas), *Manskoth* (sloughing of muscle tissue) etc.
6. Pregnancy and Lactation.

METHOD OF STUDY:

Total 60 diagnosed patients of *Vatarakta* those fulfilling the inclusive & exclusive criteria were selected randomly for the study from OPD & IPD of Arogyashala Rughnala Nashik, The selected patients were then subjected for screening of the proposed study. These patients were further divided into 2 groups using Computer Generated Randomization Sheet.

Group A (Clinical trial group): Total 30 patients were selected and registered. They were administered *Ashvattha Twak Kashay* orally 40 ml BD with *Koshna jal* (40ml lukewarm water) for 30 days before food.

Group B (Control group): Total 30 patients were selected and registered. They were administered *Guduchi Kashay* orally 40 ml BD with *Koshna jal* (40ml) for 30 days before food.

Follow up: 0,7th, 15th, 30th day.

Preparation of Medicine -

• *Ashvattha Twak Kashay* :

The preparation of *Kashay* (decoction) was made taking one part of *Ashvattha churn* (powder) soaked in 16part of water, then it is boiled and reduced up to 1/8th part.

Table no.1 - Proportion of Ashvattha Twak :

Sr.No.	Name	Latin Name	Family	Part	Proportion
1	<i>Ashvattha</i>	<i>Ficus Religiosa</i>	<i>Moraceae</i>	<i>Twaka</i>	1
2	Water (<i>Jala</i>)				16

Guduchi Kashay :

The preparation of *Kashay* was made taking one part of *Guduchi churn*

soaked in 16 part of water, then it is boiled and reduced up to 1/8th part.

Table no.2 - Proportion of Guduchi :

Sr.No.	Name	Latin Name	Family	Part	Proportion
1	<i>Guduchi</i>	<i>Tinospora Cordifolia</i>	<i>Menispermaceae</i>	<i>Kanda</i> (stem)	1
2	Water (<i>Jala</i>)				16

CRITERIA FOR ASSESSMENT:

Criteria for assessment were designed on the basis of relief in the signs and symptoms of the disease *Vatarakta*.

SUBJECTIVE CRITERIA:

1. *Sandhishoth* (joint swelling)
2. *Sandhishool* (joint pain)
3. *Sparshasahatva* (tenderness of joint)

4. *Sandhidaha* (burning sensation at joint)
 5. *Sandhivaivarnya* (discolouration of joint)

1. Serum Uric Acid Level - Before Treatment & After Treatment.

Gradation of symptoms was done as follows:

OBJECTIVE CRITERIA -

Table no.3 - Sandhishoth (Swelling):

Grade-0	No swelling
Grade-1	Swelling involving only area over joint
Grade-2	Swelling involving area over joint and causing disfigurement of joint.
Grade-3	Swelling involving entire area over the joint and surrounding tissue.

Picture no.1 - Sandhishool (Pain) - Visual Analogue Scale:

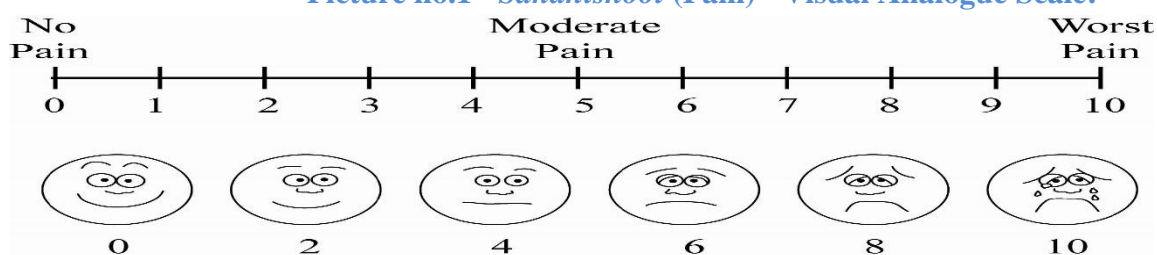


Table no.4 – Sparshasahatva (Tenderness):

Grade-0	No tenderness
Grade-1	Tenderness on pressure
Grade-2	Tenderness on touch
Grade-3	The patient will not allow the joint to be touched

Table no.5 -Sandhidaha (Burning sensation at joint):

Grade	Score	Daha
-	1	Absent
+	2	Present

Table no.6 - Sandhivaivarnya (Discolouration of Skin) :

Grade-0	No discolouration of skin
Grade-1	Mild discolouration of skin
Grade-2	Moderate discolouration of skin
Grade-3	Severe discolouration of skin

Table no.7- Serum Uric Acid level :

Sr.No	Objective Parameter	Before Treatment	After Treatment
1	Serum Uric Acid Level		

DATA COLLECTION AND STATISTICAL ANALYSIS:

To evaluate the effect of trial treatment, the data were collected on the basis of

demographic findings and patients clinical finding as follows.

A. Analysis of Demographic data :

Table no.8 - Age Wise Distribution:

Age Range	Group A	Group B	Total	Percentage
-----------	---------	---------	-------	------------

20-30 Years	2	4	6	10%
31-40 Years	6	5	11	18%
41-50 Years	11	6	17	28%
51-60 Years	8	11	19	32%
61-70 Years	3	4	7	12%
Total	30	30	60	100%

Table no.9- Prakruti Wise distribution:

	Group A	Group B	Total	Percentage
<i>Kapha Pitta</i>	3	3	6	10%
<i>Pitta Kapha</i>	11	9	20	33%
<i>Vata Pitta</i>	2	3	5	8%
<i>Pitta Vata</i>	9	10	19	32%
<i>Vata Kapha</i>	1	3	4	7%
<i>Kapha Vata</i>	4	2	6	10%
Total	30	30	60	100%

Table no.10 - Gender Wise Distribution :

Gender	Number of Subjects	Percentage
Male	29	48%
Female	31	52%
Total	60	100%

Table no.11 - Agni Wise distribution:

Type of Agni	Group A	Group B	Total	Percentage
<i>Tikshna</i>	5	3	8	13%
<i>Visham</i>	6	8	14	23%
<i>Mand</i>	15	10	25	42%
<i>Sama</i>	4	9	13	22%
Total	30	30	60	100%

Table no.12 - Koshtha Wise Distribution: -

Type of Koshtha	Group A	Group B	Total	Percentage
<i>Madhyam</i>	23	18	41	68%
<i>Krura</i>	7	11	18	30%
<i>Mrudu</i>	0	1	01	2%
Total	30	30	60	100%

Table no.13- Dietary Habit wise Distribution:

Type of Diet	Number of Subjects	Percentage
Veg	20	33%
Mixed	40	67%
Total	60	100%

Table no.14 - Occupation Wise Distribution:

Type of Occupation	Number of Subjects	Percentage
Housewife	18	30%
Job	17	28%
Business	23	39%
Retired	2	3%
Total	60	100%

B. Analysis of subjective parameters :

1. Analysis for Group A:

To Evaluate the Efficacy of *Ashvattha Twak Kashay and Guduchi Kashay* in the management of *Vatarakta* with special reference to Gout in male and female subjects between 20-70 years age,

paired t test is applied at 95% confidence level and 29 degrees of freedom using the recorded scores separately for each table for every parameter. The result obtained grading before treatment (B.T.) and after treatment (A.T.)

Table no.15 - Analysis of Group A;

Parameter (Group A)	Mean Score		S. D.		SE	t value	p value
	B.T.	A.T.	B.T.	A.T.			
1.Sparshasahatva	1.53	0.233	0.68	0.43	0.118	8.83	<0.05
2. Sandhishoth	1.3	0.3	0.79	0.46	0.117	8.515	<0.05
3.Sandhivaivarnya	0.633	0.3	0.66	0.46	0.099	2.24	<0.05
4. Sandhidaha	1.433	1.033	0.5.	0.18	0.909	4.397	<0.05
5.Sandhishool (VAS Scale)	7.4	0.533	1.54	0.89	0.259	25.67	<0.05

Table no.16 - Analysis for Group B :

Parameter (Group B)	Mean Score		S. D.		SE	t value	p value
	B.T.	A.T.	B.T.	A.T.			
1.Sparshasahatva	1.16	0.006	0.59	0.25	0.100	11	<0.05
2. Sandhishoth	1.33	0.1	0.57	0.30	0.1015	0.17	<0.05
3.Sandhivaivarnya	0.3	0.16	0.46	0.37	0.63	2.112	<0.05
4.Sandhidaha	1.33	1.066	0.47	0.25	0.621	3.247	<0.05
5.Sandhishool (VAS Scale)	7.133	0.8	1.008	0.9965	0.1938	32.68	<0.05

C. Analysis of objective parameter (Serum Uric Acid):

Table no.17- Analysis of Serum Uric Acid level:

Parameter	Mean Score		S. D.		SE	t value	p value
	B.T.	A.T.	B.T.	A.T.			
Group A	7.86	5.38	1.27	1.33	0.173	14.23	<0.05
Group B	7.82	5.24	0.95	1.20	0.1303	19.77	<0.05

D. Between group analysis:

Comparative analysis of subjective parameters and objective parameters were done using Unpaired t Test.

Table no.18 - Comparative Analysis of subjective parameters:

SR. No	Parameters	Mean Score		S. D.		T	p value
		Ashvattha Twak Kashay	Guduchi Kashay	Ashvattha Twak Kashay	Guduchi Kashay		
1.	Sparshasahatva	0.233	0.066	0.43	0.25	1.828	>0.05
2.	Sandhishoth	0.3	0.1	0.46	0.30	1.966	>0.05
3.	Sandhivaivarnya	0.33	0.166	0.46	0.379	1.216	>0.05
4.	Sandhdaha	1.033	1.066	0.1826	0.2537	0.5841	>0.05
5.	Sandhishool (VAS Scale)	0.533	0.8	0.89	0.99	1.088	>0.05
6.	Serum Uric Acid	5.38	5.24	1.33	1.27	0.428	>0.05

Table no.19 -Comparative Analysis of subjective parameters (percentage)

Symptoms	Percentage relief (Group A)	Percentage relief (Group B)	Difference in percentage
Sandhishool	76.66%	63.33%	13.33 %
Sandhidaha	92.30%	80%	12.30%
Sparshasahatva	75%	92.59%	17.59%
Sandhishotha	64%	88.88%	24.88 %
Sandhivaivarnya	43.75%	55.55%	11.80%

Table no.20 - Comparative Analysis of Serum Uric Acid percentagewise:

Parameter	Percentage Relief		Diif in %age
	Group A	Group B	
Serum Uric Acid	68.33%	66.58%	1.75%

OBSERVATIONS & RESULTS:

Peak age of the disease Vatarakta (Gout) is between 40 & 60 years in male and in female it is postmenopausal age⁷. This incidence is also found in this study (Table no.8).

The subjects having *Prakruti Pittapradhan Kapha* and *Pittapradhan Vata* were seen more susceptible to the disease Vatarakta (Table no.9). This con-

cludes the concept of causing *Nij Vyadhi* (diseases caused due to internal imbalance of *doshas*) to the person who has more predominance of particular *dosha* in his *Prakruti*. Incidence of Gout is more in male than in female⁸. This study is limited to 60 patients for a period of one and half years. In this study there may be chances of more female participation (Table no.10) but most of the female were in

postmenopausal age suffering from gout. Due to uricosuric effect of estrogen the incidence of disease is found more in post-menopausal females⁹.

Above data (Table no.11) concludes that 42% patients *Agni* (digestive fire) was *Mand* (slow) ie they were suffering from *Agnimandya* (slowness of digestion). *Acharya Charaka* has elaborated the fact that imbalance of *Jatharagni* (digestive fire) is the cause of all diseases¹⁰. As there is formation of *Ama* (undigested food). Due to this *Ama* there is improper formation of *Raktadhatu* leading to disease *Vatarakṭa*.

Above data (Table no.13) shows 67 % subjects taking veg & non veg diet were prone to disease. It indicates contribution of *Mansa Ahar* (non veg diet) as causative factor of *Vatarakṭa*¹¹.

This study also suggests higher incidence in housewives (Table no.14), it may be due to not taking proper nutritious diet, ignorance to health which cause agitation of *Vata*.

Effect of therapy on subjective and objective criteria:

From above statistical analysis it can be seen that there was significant difference observed in reducing the symptoms of *Vatarakṭa* which is statistically significant result i.e. $P < 0.05$ in both groups Group A and Group B (Table no.15&16). Both the group showed statistically significant result (Table no.17) in reducing Serum Uric Acid level with special reference to Gout ($P < 0.05$).

In intergroup comparison (Table no.18 &19) it shows that the effect of therapy on *Sandhi Shoola* was slightly better in Group A patients, with 13.33 % more relief than Group B. This difference was insignificant ($p > 0.05$).

Effect on *Sandhidaha* was slightly better in Group A patients with 12.30% more relief than Group B. This difference was statistically insignificant ($P > 0.05$).

The comparison in *Sandhivaivarnya* was 11.80% more, The comparison in *Sparshasahatva* was 17.59 % more and the comparison in *Sandhishoth* was 24.88 % more in Group B than Group A. This difference was statistically insignificant ($P > 0.05$).

Intergroup comparison showed slightly better results in reducing serum uric acid level in Group A than Group B. (Table no.20)

DISCUSSION:

The present study “Comparative phase 2 clinical study to evaluate the efficacy of *Ashvattha Twak Kashay* and *Guduchi Kashay* in *Vatarakṭa* with special reference to Gout.” has been conducted in Arogyashala Rugnalaya Panchavati Nashik.

The disease *Vatarakṭa* is described in Ayurved classics such as *Bruhatrayi* and *Laghutrayi*. In present study etiological factors such as consumption of improper diet, non veg diet, high protein diet, sedentary lifestyle were found to cause the disease *Vatarakṭa*. All these factors vitiate *Vata* and *Rakta*. Vitiating *Vata* and *Rakta* together lead to a complex effect on the joint and produces *Vatarakṭa*. These pathogenesis produces pain in joints with swelling, stiffness, tenderness, burning sensation in joints and discoloration of skin at joints specially in metatarsal and metacarpal joints. Knee, elbow, wrist and ankle joint were also involved.

The signs and symptoms of *Vatarakṭa* are similar to Gout. So uric acid level and clinical symptoms were considered to see the effect of drug.

Ashvattha (*Ficus religiosa*) possess properties such as *Kapha-pittashamak Vedanasthapan* (analgesic), *Shothhar* (anti-inflammatory) and *Raktashodhak* (blood purifier)¹². Due to the combination of these activities, *Ashvattha* is found highly effective for *Vatarakta* as it decreases inflammation and pain.

According to Raspanchaka- *Ashvattha* contains *Kashaya* and *Mathura*¹³ *Rasa*. *Madhura* and *Kashaya* (astringent) *Rasa* pacifies *Pitta*¹⁴. *Kashaya Rasa* has predominance of *Prithvi* and *Vayu mahabhoota*¹⁵. Both of these *Mahabhoota* helps in cleansing the body channels (*Srotovishodhana*) and also helps in absorbing undigested food. (*Amashoshna*). *Guru Guna* of *Ashvattha* helps in alleviating *Vata*.

Ashvattha has *sheet veerya* (cold efficacy) due to which it helps in pacifying *pitta dosha* and helps in relieving symptoms like *Sandhidaha* and *Sparshashtava*¹⁶. *Katu Vipaka* (bitter into a state of assimilation) of *Ashvattha* helps in digestion of *Ama*. So it will help in cleansing body channels and pacifying *Rakta-Dhatu*.

All of above properties of *Ashvattha* help in breaking down pathogenesis of *Vatarakta* and help in reducing symptoms.

Phytochemically *Ashvattha* contains terpenoids, flavonoids, tannins, glycosides and phenols. Due to its constituent there is inhibition of cyclo-oxygenases leading to the inhibition of prostaglandin synthesis, which reduces the pain and burning sensation significantly. Flavonoids present in *Ashvattha* has direct effect on xanthine oxidase activity so it is found effective in reducing serum uric acid level¹⁷.

Guduchi possess analgesic and anti-inflammatory properties. These properties

help in relieving symptoms of *Vata Rakta*. Due to its anti-oxidant activity it prevents further cell injury and promotes healing¹⁸.

According to Raspanchaka- *Guduchi* has *Tikta* (bitter) and *Katu Rasa* present in it. In *Tikta Rasa* there is predominance of *Vayu* and *Akaash Mahabhoota*¹⁹. Hence *Guduchi* possess *Deepana* (promotes digestion) and *Pachana* (digestive) properties. Other properties of *Guduchi* are *Rasayani* (rejuvenating), *Mutrajanan* (diuretic) and *Tridoshaghna* (it pacifies *Vata, Pitta, Kapha*)²⁰. *Tikta Rasa* helps in promoting digestive fire. *Tikta Rasa*'s other properties like *Lekhana* (scratching), *Shoshana* (absorbing) help in clearance of *Srotas Avarodha*. Thus also help in *Ama Pachana*. *Guduchi* has *ushna* (hot) *veerya* due to which it helps in pacifying *Vata dosha* and helps in relieving symptoms which are caused by vitiated *Vata*. *Madhur Vipaka* of *Guduchi* helps in pacifying *Pitta Dosha*. Overall *Guduchi* helps in relieving symptoms of *Vatarakta* effectively such as pain, swelling, burning sensation, redness and tenderness of joint. Phytochemically *Guduchi* contains alkaloids, diterpenoid, lactones, glycosides, berberine and polysaccharides²¹. These constituents have diuretic effect so *Guduchi* showed slightly better results in reducing swelling of joints. *Guduchi* contains alkaloid such as berberine which is said to be a xanthine oxidase inhibitor hence effective in reduction of serum uric acid²². From the statistical analysis of both groups, both drugs showed statistical significant result in reducing symptoms of *Vatarakta* and in reducing serum uric acid level. *Ashvattha Twak Kashay* found slightly better than *Guduchi Kashay* in reducing pain and burning sensation in joints.

Limitation of the study:

1. The present study was conducted on limited number of patients.
2. Limited period of assessment up to 30 days. To notice late complication long term follow up is necessary.

Side effect of drug:

During trial in the follow up period no adverse effects of the medicine was noted.

CONCLUSION:

It may be concluded from the present research work that consumption of high protein diet like non vegetarian diet, pulses, consumption of alcohol in excess amount, sedentary lifestyle, consumption of junk food, more vehicle riding, all these factors are responsible for occurrence of disease *Vatarakta* (Gout). So we can say that Gout is a lifestyle disorder in present era which is caused due to changes in dietary habits, changes in routine life style.

The trial drug we used in this study is *Ashvattha Twak Kashay* (Group A) and other drug we used in control group is *Guduchi Kashay* (Group B). On the basis of clinical study and the applied statistical tests of significance, it can be concluded that *Ashvattha Twak Kashay* (Trial drug) is equally effective as *Guduchi Kashay* (Control drug) in treating symptoms (subjective parameters) of *Vatarakta* and reducing Serum uric acid level (objective parameter) with special reference to Gout.

REFERENCES:

1. Shivaprasad Huded, et al, Evaluation of Guduchi yoga in the management of Vatarakta (Gouty Arthritis) :A clinical study, Int.J.res. Ayurveda Pharm.2013, Vol 4(5), P.688-692
2. Monika Gupta, Associate Professor, Clinical evaluation of Amritadi Guggulu in the management of Vatarakta

w.s.r. to Gouty Arthritis :IAMJ:Volume 7 March-2019, Issue 3, P. 300-308.

3. Tripathi Brahmanand, editor, Hindi Commentary Charaka-Chandrika on Charaka Samhita of Agnivesa, Chikitsasthana, Ch 29, verse 10, Varanasi, Chaukhamba Surbharati Prakashan 2019 ;P.984.

4. Shastri A, editor, Hindi commentary, Ayurveda-tattva-sandipika on Sushruta Samhita of Maharshi Sushruta, Nidansthana, Ch.1, verse 48, Varanasi, Chaukhamba Sanskrit

Sansthan, 2019; P.300.

5. Dr. Deepika Gupta, A clinical study to evaluate the efficacy of Patoladi Kwath (SU.CH.) with or without Rasnadi Pradeh (CH.SU.) in cases of Vataraka (W.S.R. to Gouty Arthritis) : JDDT.2019;(2-s):P. 98-110.

6. Tripathi Brahmanand, editor, Hindi Commentary Charaka-Chandrika on Charaka Samhita of Agnivesa, Chikitsasthana, Ch 29, verse 158, Varanasi, Chaukhamba Surbharati Prakashan 2019 ;P.1007.

7. Doherty M & S.H. Ralston, Davidson's Principals Practice of Medicine, Elsevier limited, 21st edition, Reprint 2010, Page no-1087.

8. Dr. Deepika Gupta, A clinical study to evaluate the efficacy of Patoladi Kwath (SU.CH.) with or without Rasnadi Pradeh (CH.SU.) in cases of Vataraka (W.S.R. to Gouty Arthritis) : JDDT.2019;(2-s):P. 98-110.

9. Jill McClory, Nuha Said, Medicine & Health/Rhode Island, Gout in Women, 2009-11-363 Pdf, Volume 92, P.363

10. Tripathi Brahmanand, editor, Hindi Commentary Charaka-Chandrika on Charaka Samhita of Ag-

nivesa, Chikitsasthana, Ch 15, verse 4, Varanasi, Chaukhamba Surbharati Prakashan 2019 ;P.550.

11. Tripathi Brahmanand, editor, Hindi Commentary Charaka-Chandrika on Charaka Samhita of Agnivesa, Chikitsasthana, Ch 29, verse, Varanasi, Chaukhamba Surbharati Prakashan 2019 ;P.984.

12. Thakur Ankita, Sharma Sakshi, et al, A Review Article on Bodhi Vruksha Kashaya and Guduchi Kashaya – Ayurvedic Formulations For Vatarakta, IJIRMP, Volume 6, Issue 4, 2018 P.679.

13. Chunekar, K.C., Pandey G.S. editor, Commentary on Bhavprakasa Nighantu of Sri Bhavmishra, Vatadivarga, verse 3, P.502.

14. Tripathi Brahmanand, editor, Hindi Commentary Charaka-Chandrika on Charaka Samhita of Agnivesa, Sutrasthana, Ch.26, Varanasi, Chaukhamba Surbharati Prakashan 2019 ;P.481-484.

15. Tripathi Brahmanand, editor, Hindi Commentary Charaka-Chandrika on Charaka Samhita of Agnivesa, Sutrasthana, Ch 26 verse 40, Varanasi, Chaukhamba Surbharati Prakashan 2019 ;P.480.

16. Thakur Ankita, Sharma Sakshi, et al, A Review Article on Bodhi Vruksha Kashaya and Guduchi Kashaya – Ayurvedic Formulations for Vatarakta, IJIRMP, Volume 6, Issue 4, 2018 P.682.

17. Prof Dr Ali Esmail Al-Snafi Pharmacology of Ficus religiosa- A review IOSR Journal Of Pharmacy, Volume 7, Issue 3 Version.1 (March 2017), P. 49-60.

18. Thakur Ankita, Sharma Sakshi, et al, A Review Article on Bodhi Vruksha Kashaya and Guduchi Kashaya – Ayurvedic

Formulations For Vatarakta, IJIRMP, Volume 6, Issue 4, 2018 P.681.

19. Tripathi Brahmanand, editor, Hindi Commentary Charaka-Chandrika on Charaka Samhita of Agnivesa, Sutrasthana, Ch 26 verse 40, Varanasi, Chaukhamba Surbharati Prakashan 2019 ;P.480.

20. Chunekar K.C., Pandey G.S. editor, Commentary on Bhavprakasa Nighantu of Sri Bhavmishra, Vatadivarga, verse 3, P.257-259.

21. Ren Xiang Tan, Jun Cai Meng & K. Hostettmann (2000) Phytochemical Investigation

Of Some Traditional Chinese Medicines And Endophyte Cultures, Pharmaceutical Biology, 38:sup1, DOI: 10.1076/phbi.38.6.25.5955, P.23-25.

22. Garish Joshi, Rajandeep Kaur. Tinospora Cordifolia: A Phytopharmacological Review: 10.13040/IJPSR. 0975-8232. 7 (3). P.890-897

Corresponding Author: Dr. Suwarna Ugale, PG Scholar, Dept. of Kayachikitsa, A.S.S. Ayurved Mahavidyalaya and Arogyashala Rugnalaya, Panchavati, Nashik Maharashtra, India- 422003.

Email: suwarnaugale83@gmail.com

Source of support: Nil Conflict of interest: None Declared

Cite this Article as : [Ugale Suwarna et al : Comparative Phase 2 Clinical Study to Evaluate the efficacy of Ashvattha Twak Kashay and Guduchi Kashay in Vatarakta with special reference to Gout] www.ijaar.in : IJAAR VOL V ISSUE X SEP-OCT 2022 Page No:785-795