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"A *pharmaco*-therapeutic study on *ashwath* and *guduchi* w. s. r. to *vatarakta* (gout)"

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ABSTRACT:

Metabolic diseases are the most common problems nowadays, because our diet & lifestyle both are distorted completely. It is one caused by a disruption of normal metabolic pathway. Gout is a metabolic disorder in which abnormal metabolism of uric acid occurs, resulting in crystals of uric acid form in tissues of the body. Gout is characterized by an overload of uric acid in the body and recurring attacks of joint inflammation (arthritis). Gouty arthritis is usually an extremely painful attack with a rapid onset of joint inflammation. The resulting inflammation causes pain, heat, and redness of the joint. Both lifestyle changes and medications can decrease uric acid levels. The literature enlists formulation of *Ashwath* & *Guduchi* in the management of *Vatarakta* (Gout). The use of *Ashwath* & *Guduchi* as shaman *Aushadhas* is a perfect selection in the management of *Vatarakta*. I assessed the therapeutic effect of the treatment on specific subjective & objective parameters.

Keywords: *Vatarakta*, Gout, *Ashwath* & *Guduchi*.

INTRODUCTION:

Vatarakta is a problem of high socio-economic society. Despite marked advancements in field of modern medicine, humankind is still suffering from many different diseases. *Vatarakta* is one of them; and is a disease, which is very distressing due to its chronic relapsing and remittent nature. Description of *Vatarakta* based on etiological factors, clinical features and prognosis is similar to Gout as described in modern medicine. Recurrent attacks of agonizing pain, inflammation and restricted movements make the sufferer's life miserable. Multifactor efforts have been made to get rid of the problem, but still it remains a challenge for modern medicine to find some safe and sure cure for this disease. Even course of the disease has not changed with available remedies. Major contributory factors like protein rich diet, consumption of alcohol and sedentary life style have become a part of normal routine.

Acharya Charaka has also called it as *Adhyavata* i.e. disease affects mostly the people from higher economics groups. Long list of drugs have been

recommended for the management and some of them are practically being used, but permanent cure has not been sorted out so far. *Vata shamaka* drugs relieve pain and swelling whereas, *Rakta shodhaka* drugs purify blood and eliminate retained metabolic wastes, thus lower the serum uric acid level. Some of the drugs have shown anti-inflammatory, analgesic and anti arthritic properties in experimental models. For the present study, drugs chosen for different patients are *Ashwath kasaya*, *Guduchi kasaya* and *Ashwath Guduchi kasaya*. Therapeutic effects of the formulations were studied on the patients suffering from *Vatarakta*. *Ashwath* & *Guduchi* used in *Vatarakta* by ancient physicians from Samhita period, the reference of both plants are present in Charaka, Susruta Samhita and different Nighantu.

The present work is an attempt to compile an up-to-date and comprehensive review of *F. religiosa* and *Tinospora cordifolia*.

AIMS AND OBJECTIVES:

- To study the etiology, pathogenesis and *symptomatology* of *Vatarakta*.
- To assess the efficacy of the *Ashwath*, *Guduchi* and *Ashwath Guduchi* combination.
- To find out whether the drug possesses any side effect or not.

MATERIALS AND METHODS:

Selection of Patients:

For the present study, the patients fulfilling the clinical criteria for diagnosis of *Vatarakta* were randomly selected irrespectively of their age, sex, religion etc. from O.P.D. & I.P.D. of

Govt. Ayurvedic College & Hospital, Patna.

Criteria for Inclusion

Patients having a sign and symptoms of the *Vatarakta* according to Ayurveda as well as modern medical science. Patients were selected between 11 to 70 years of age either of sex, religion etc. The state of *Agni bala*, *Dosha bala*, *Satva*, *Saatmya*, etc were assessed in all the patients.

Criteria for Exclusion

- Patient was not selected below the 11 and above the 70 years of age.
- The patients were suffering from other systemic disease i.e. Cardiac disease were excluded from the study.
- Patients having a characteristic deformity including flexion contracture of the small joints, *subluxation* of the joints, etc. were also excluded from the study.
- Chronic more than 5 years.

Criteria for Diagnosis:

- 1) Classical signs & symptoms of *Vatarakta* according to Ayurveda.
- 2) A pro-forma was prepared incorporating all the signs & symptoms of *Vatarakta*. On the basis of the pro-forma, all the patients of the present study were examined in detail.

Investigations:

Routine *haematological* investigations like TLC, DLC, *Hb%*, E.S.R., Uric acid, Blood Sugar, S. *Creatinine*, R. A. Factor, B. Urea, were carried out before and after the treatment.

Management of the patients:

In total, 68 patients of *Vatarakta* fulfilling the diagnostic criteria were selected for present study, out of them, 10 patients discontinued the treatment because of lack of consistency and faith. After diagnosis the patients were randomly categorized into the following three groups.

Group 1 : Ashwath Kasaya:

Total 22 patients were registered under this group. Among them 03 patients discontinued the treatment. In this group, the patients were given *Ashwath Kasaya*-40ml. daily in two divided doses

Group 2 : Guduchi Kasaya

Total 22 patients were registered under this group. Among them 05 patients discontinued the treatment. In this group, the patients were given *Guduchi Kasaya*-40ml. daily in two divided doses.

Group 3: A. G. Kasaya (Combined Group)

Total 24 patients were registered under this group. Among them 02 patients discontinued the treatment. In this group, the patients were given *Ashwath Guduchi Kasaya*-40ml. daily in two divided doses.

Duration:

Duration of the study was fixed as 90 days.

Diet & Restrictions:

Patients were advised to follow the *Pathyapathya* available in *Ayurvedic* literature on *Vatarakta*. They were also advised to use less quantity of protein in their diet.

Criteria of Assessment:

To assess the effect of the therapy following criteria was adopted.

Subjective criteria:

These criteria included the assessment of presence or absence of sign & symptoms after the treatment. For this purpose, a score system was adopted.

Pain Index:

Pain is the major presenting complaint of patients suffering from *Vatarakta*. It is an entirely subjective feature, that can only be measured by the patient himself. Therefore a scale was designed with numerical values to be used by the patients to describe the status of the symptoms. Similar scale was designed and used for assessment of other features as follows.

Objective Criteria

To assess the effect of therapy on objective parameters, Serum Uric acid level was assessed every follow up & finally after completion of treatment.

CRITERIA FOR ASSESSMENT OF TOTAL EFFECT OF THE THERAPIES:

After completion of the trial, therapeutic effects of treatment were studied as per subjective & objective criteria & were recorded.

STATISTICAL ANALYSIS:

All the observations made on various parameters were subjected to statistical analysis in terms of Mean (x), Standard Deviation (S.D.), Standard Error (S.E.), paired "t" test, were carried out at $p < 0.05$, $p < 0.01$ and $p < 0.001$. The obtained results were interpreted as:

Significant	Highly Significant
p <0.05, p <0.01	p <0.001

OBSERVATIONS & RESULTS

Observation of study in 58 patients of *Vatarakta*

Observation	Max Observation	Max no.	%
Sex	Female	38	65.51
Age group	31-40	22	37.93
Diet	Non Vegetarian	43	74.13
<i>Sharira Prakriti</i>	<i>Kapha-Pitta</i>	29	50
<i>Jarana Shakti</i>	<i>Heen</i>	33	56.89
<i>Dosha Lakshana</i>	<i>Pitta Dosha</i>	30	51.72

Distribution of Sign & Symptoms observed in 58 patients of *Vatarakta*.

Signs & Symptoms	No. of Patients			Total	Percentage
	Group 1	Group 2	Group 3		
Pain in joint	19	17	22	58	100
Swelling in joint	15	10	13	38	65.51
Joint tenderness	08	06	15	29	50
Burning sensation in affected joint	06	11	19	35	60.34
<i>Sankoch</i>	13	07	08	21	27.58
Skin rashes	12	12	10	34	58.62
Tingling sensation	10	09	14	33	56.89

It can be observed from the table that Pain in joint was found in every patient i.e. 100%, followed by Swelling in joint 65.51%, Burning sensation in affected

joint 60.34%, Skin rashes 58.62%, Tingling sensation 56.89%, Joint tenderness 50%, & *Sankoch* in 27.58% Patient.

Effect of *Ashwath Kasaya* in various sign & symptoms of 19 patients of *Vatarakta*

Signs & Symptoms	<i>Ashwath Kasaya</i>			<i>Guduchi Kasaya</i>			<i>Ashwath Guduchi Kasaya</i>		
	S.D. □ □□S.E.	't' Value	'p' Value	S.D. □ □□S.E.	't' Value	'p' Value	S.D. □ □□S.E.	't' Value	'p' Value
Pain in joint	0.567 □□□□	6.87	<0.001	0.50 □□□□	3.34	<0.01	0.85 □□□□	4.5	<0.001
Swelling in joint	0.58 □□□□	2.36	<0.05	0.46 □□0.12	2.58	<0.05	0.56 □□□□	2.62	<0.05

Tingling sensation	Skin rashes	Sankoch	Burning sensation in affected joint	Joint tenderness
0.75 □□□□□□ □	0.47 □□□□□□ □□	0.51 □□□□□□ □□	0.47 □□□□□□□□	0.60 □□□□□□□□
3.98	2.88	4.02	2.88	3.02
<0.01	<0.05	<0.01	<0.05	<0.05
0.49 □□□□□□	0.71 □□□□□□	0.49 □□□□□□	0.49 □□□□□□	0.46 □□□□□□
2.95	2.70	2.95	5.41	2.58
<0.01	<0.05	<0.05	<0.001	<0.05
0.59 □□□□□□	0.73 □□□□□□ □	0.45 □□□□□□	0.59 □□□□□□	0.59 □□□□□□
3.92	2.88	2.80	4.29	3.25
<0.01	<0.05	<0.05	<0.001	<0.01

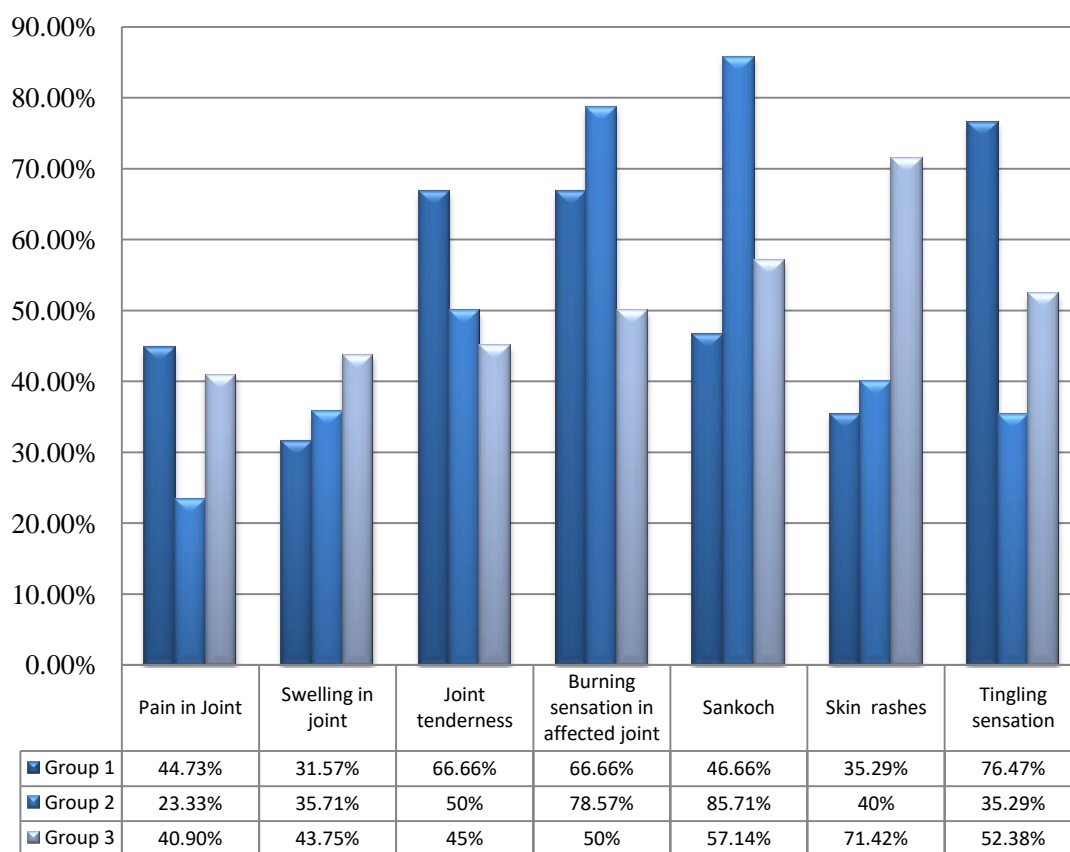
Total effect on *Haematological* value of 19 patients of *Ashwath Kasaya*.

Hae. Value	Ashwath Kasaya			Guduchi Kasaya			Ashwath Guduchi Kasaya		
	S.D. □ □□S. E.	't' Value	'P' Value	S.D. □ □□S. E.	't' Value	'P' Value	S.D. □ □□S. E.	't' Value	'P' Value
Hb%	0.37 □□0. 08	2.10	<0.05	0.38 □□0. 92	2.60	<0.05	0.96 □□0. 0	1.69	>0.05
TLC	1461.6 9 □□33 5.33	2.11	<0.05	1351.6 1 □□327. 81	1.84	>0.05	1447.3 4 □□308. 57	2.15	<0.05
Neutro	7.21 □□1. 65	0.41	>0.05	5.36 □□1.30	0.31	>0.05	3.93 □□0.83	-0.64	>0.05
Lympho	7.48 □□1.7 1	-0.85	>0.05	4.65 □□1.12	-0.88	>0.05	3.42 □□0.73	-0.18	>0.05
Eosino	1.68 □□0. 38	0.54	>0.05	0.93 □□0.2 2	2.58	<0.05	2.13 □□0.4 5	1.30	>0.05
ESR	10.19 □□2 .33	5.96	<0.01	15.85 □□3.7 3	4.07	<0.01	15.89 □□3.3 8	2.78	<0.01

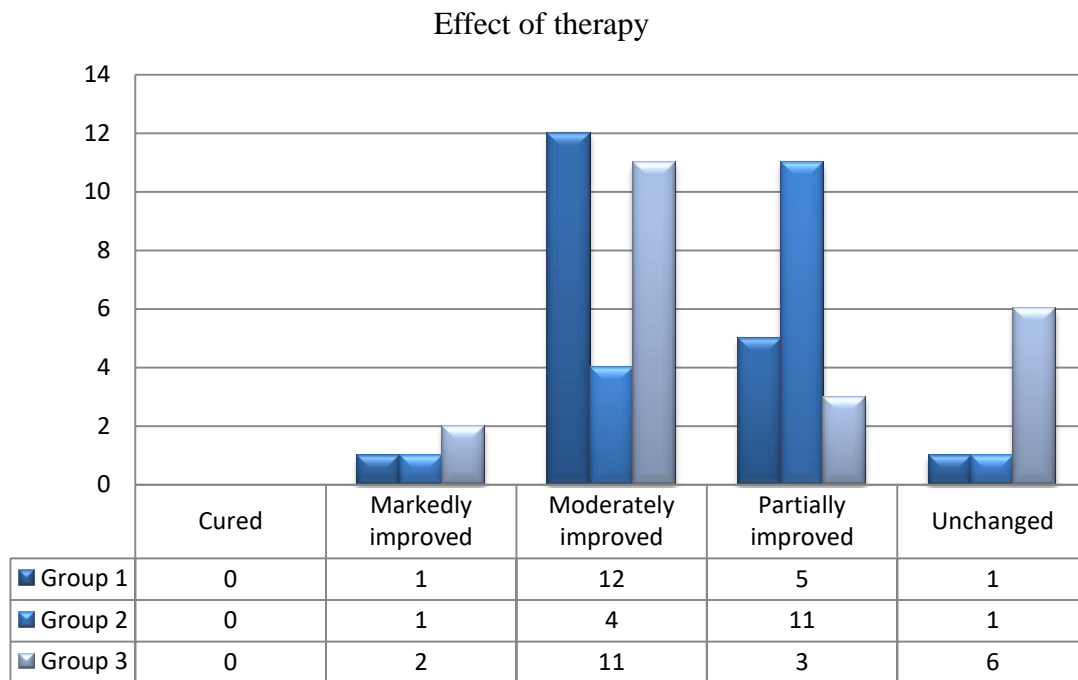
Uric Acid	0.59 □□0.13	4.21	<0.0 01	0.32 □0.077	5.96	<0.0 01	0.718 □0.15	4.09	<0.0 01
Blood urea	06.94 □□1.59	2.83	<0.0 5	4.69 □1.10	3.41	<0.0 5	4.93 □1.05	3.32	<0.0 1
S.C	0.09 □□0.02	4.13	<0.0 01	0.10 □0.02	4.44	<0.0 01	0.12 □0.02	4.47	<0.0 01
BSF	7.46 □□1.71	3.13	<0.0 1	2.12 □0.49	2.88	<0.0 5	5.10 □1.08	2.42	<0.0 5
BSP	7.14 □□1.63	2.50	<0.0 5	3.94 □0.92	2.51	<0.0 5	8.51 □1.81	2.10	<0.0 5

Comparative effect of trial drug on *Vatarakta* after treatment:

Percentage relief



Total effect of therapy



DISCUSSION:

The overall improvement in various clinical parameters according to Ayurveda might be a result of elimination of vitiated *Vata dosha* and *Rakta dosha*. The fundamentals of Ayurvedic pharmacology are capable to give a better scientific lead in mode of drug action. Pharmacology of Ayurveda is based on the theory of *Rasa*, *Guna*, *Virya*, *Vipaka* and *Prabhava* which were the simplest parameters in those days to ascertain the action of the drug. ***Samprapti vighatana*** is said to be the treatment. Therefore the action of a drug means to dismantle the *Samprapti Ghatakas* of the disease. Hence to explain the mode of action of a drug means to establish a relationship between the *Samprapti Ghatakas* of the disease and penta fold principles of *Rasa*, *Guna*, *Virya*, *Vipaka* and *Prabhava* of a drug.

After seeing the *Vishistha Samprapti* of *Vatarakta*, we got the

Kapha and Pitta is also associated with agitated Vata and Rakta. *Ashwath* due to its Ruksha guna and Kasaya rasa acts as kapha shamaka dravya and due to Madhura rasa and Shita Virya it has Pitta shamaka property. *Pitta* and *Rakta* has similar property so, *Ashwath* suppresses both Rakta and Pitta as well as *Kapha*. After suppression of these three *Doshas margavarodha* of Vata is clear and relieve the sign and symptoms of *Vatarakta*.

Guduchi due to its *Laghu guna* and *Katu*, *Tikta*, *Kasaya rasa* acts as *Kaphahara dravya* and due to *Tikta*, *Kasaya rasa* it has *Pitta nashaka* property. Besides this due to its *Ushna Virya* *Guduchi* becomes *Vatahara dravya*. So according to *Bhavaprakasha Nighantu* this drug seems to be *tridoshaghna* and its able to relieve the dosha of *Vatarakta*.

So in this way the *Ras panchaka* of the *Ashwath* and *Guduchi* normalizes the

vitiated *Vata* and *Rakta* and Destroys the Samprapti.

CONCLUSION:

On the basis of this pilot study I can say that administration of formulation of *Ashwath* and *Guduchi* is an effective medicine in reduction of pain, swelling, joint tenderness, burning sensation, *sankoch*, skin rashes and tingling sensation without any noxious effect which is very important.

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