

A CLINICAL EVALUATION OF THE EFFECT OF THE RASONADI KWATHA IN THE MANAGEMENT OF AMAVATA

Suse Sandip Bhausheb^{1*}, Shewale Yogesh Kashinath² and
Khedkar Ankush Dattatraya³

¹Associate Professor, Dept. of Kayachikitsa, SVNHT's Ayurved Mahavidyalaya,
Shrishivajinagar, Tal. Rahuri.

²Assistant Professor, Dept. of Kriya Sharira, SVNHT's Ayurved Mahavidyalaya,
Shrishivajinagar, Tal. Rahuri.

³Assistant Professor, Dept. of Rachana Sharira, SVNHT's Ayurved Mahavidyalaya,
Shrishivajinagar, Tal. Rahuri.

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*Corresponding Author

Suse Sandip Bhausheb

Associate Professor, Dept.
of Kayachikitsa, SVNHT's
Ayurved Mahavidyalaya,
Shrishivajinagar, Tal.
Rahuri.

ABSTRACT

Aamvata is one of the major diseases of *Annavaha and Rasavaha srotas* in which the improperly formed *Aahar Rasa* is *Aam* and it causes vitiation of *Vata*. & produces troublesome symptoms like *Angamarda, Aruchi, Trushna, Aalasya, Gaurav, Jwara, Apaka* etc. In later stage it represents the symptoms related to joints like Pain, Tenderness, Swelling and restriction of movements of affected joint. Pain is so severe that it resembles with scorpion sting. Present study aimed to evaluate efficacy of *Rasonadi Kwathaa* in management of *Aamvata*. Open randomized study in which 30 patients having classical symptoms of *Aamvata* were selected and randomly divided into two groups. All patients were assessed before and after treatment of full

course of 28 days. Patients were assessed by subjective parameters i.e. symptoms of *Aamvata* like *Aruchi, Gauravata, Sandhishool, Sparshasahatva, Restriction of movements and Sandhi Shotha*. Statistical analysis of score done for each criterion separately as well as overall effect was calculated. Results of the study were very promising to prove that *Rasonadi Kwatha* is effective in management of *Aamvata*.

KEYWORDS: *Rasonadi Kwatha, Aamvata, Rheumatoid Arthritis.*

1. INTRODUCTION

Rheumatoid Arthritis (RA) is a chronic multisystem disease of unknown cause. Rheumatoid Arthritis is a chronic autoimmune disease that primarily involves the joints. According to department of medicine All Indian Institute of Medical Sciences, (AIIMS) New Delhi the prevalence rate of RA in the adult Indian population is 0.75% projected to the whole population this would give a total of about 7 million patients in India. Women are affected approximately 3 times more often than men. RA is seen through the world and affects all races.^[1]

Aamvata as a disease entity, in organized form was recognized much later in Ayurvedic literature. It was recognized as a separate disease only in 9th cent AD when Madhavakara described the *Nidana*, *Lakshan*, and *Samprapti* for it and coined the term *Aamvata*.^[2]

The vitiated *Vata Dosha* associated with *Aam* is termed *Amavata*. *Aamvata* is one of the major diseases of *Annavaha*, *Rasavaha* and *Asthivaha srotas*. The basic pathophysiology of *Amavata* primarily involves *Aam* and *Vata*. *Agnimandya* is the root cause of all diseases.^[3] Same is true to the *Aamvata*. The clinical presentation of *Aamvata* is characterized by *Angamarda*, *Aruchi*, *Trishna*, *Alasya*, *Gaurav*, *Jvara*, *Apak* etc^[4] and symptoms related to joints like Pain, Tenderness, Swelling and restriction of movements of affected joint, which can be correlated with various symptoms of RA.

According to Ayurvedic texts, *Aamvata* disease arise in person who indulge in foods and activities which are incompatible (unaccustomed, harmful to the body) who have poor digestive fire, who do not do any physical activity, who consume fatty foods (daily) and do not exercises, *Aam* (undigested / improperly cooked essence of food) runs through the *dhamanis* (Veins), propelled by *Vata* fills into the seats of *Kapha*; this essence of food vitiated greatly by *doshas*, being very slimy and of many colours produces more moistness inside the *srotas* (Channels and consequent obstruction in them) gives rise to weakness of digestive fire, feeling to heaviness of the heart, this *Aam* become the nidus (Cause of origin).^[5] In contemporary system of medicine, the treatment of RA, comprises NSAIDS, Analgesic drugs, Intra muscular or Intra Articular steroids and adjustment of DMARDS etc. It is observed that NSAIDS and steroids will not yield long term relief; while as DMARDS known to cause multiple side effects.^[6] On the other hand, in Ayurveda the treatment of *Amavata* mainly emphasis in treating *Ama* and *Vata*.

Considering *chikitsa siddhanta* of *Aamvata*, '*Rasonadi Kwatha*'^[7] found to have properties *Tikta, Katu Rasa, Katu vipaka*, and *Ushna virya*. Hence it is selected for study.

2. MATERIAL AND METHODS

2.1. Objectives

- To study the *Samprati* and *Samprapti ghataka* of *Aamvata*.
- To study all ingredients and mode of action of *Rasonadi Kwatha*.
- To study role of *Rasonadi Kwatha* in *Aamvata*.

2.2. Ethical Clearance

Ethical clearance certificate was taken from the Institutional Ethical Committee of our Institute.

2.3. Materials

Rasonadi Kwatha given to patients has ingredients *Rason*^[8], *Nirgundi*^[9] and *Shunthi*^[10] each 1 part.

Preparation of *Rasonadi Kwatha* was made by using standard procedure of *Kwatha Kalpana* in *Sharangadhara Samhita*.^[11]



Rason



Nirgundi



Shunthi



Rasonadi Kwatha

Fig 1: Ingredients of *Rasonadi Kwatha*.

2.4. METHODOLOGY

In this Open Randomized Study, Patients were randomly selected attending OPD or IPD department of *Kayachikitsa* according to following inclusion and exclusion criteria.

2.5. Criteria for selection of the patients

Inclusion criteria

- 1) Patients in the age group 16 to 60 yr age.
- 2) Clinically diagnosed patients of *Aamvata*.
- 3) Patients were selected irrespective of gender, occupation, socio-economic status, religion etc.

Exclusion criteria

- 1) Patients below the age of 16 yrs and above 60 yrs were excluded.
- 2) Patients with complications like SLE, Endocarditis etc.
- 3) Patients with Hypertension, *Hridrog* (Cardiac disorders), Diabetes Mellitus and major systemic diseases.

Total 30 patients fulfilling selection criteria were selected for the study with fully informed consent.

Table No. 1: Details of Administration of drugs.

Sr. No.	Parameters	Details
1.	Number of Patients	30
2.	Drug Name	<i>Rasonadi Kwatha</i>
3.	Route of Administration	Oral
4.	Dose	30 ml
5.	<i>Aushadh-sevan Kala</i>	<i>Adhobhakta</i>
6.	<i>Anupana</i>	<i>Koshnajala</i>
7.	Duration of Treatment	28 days
8.	Follow-ups	7 th , 14 th , 21 th , 28 th day

2.6. Criteria for Assessment

Subjective parameters

Cardinal sign and symptoms of the disease were noted and were used for assessment of the effect of treatments. Gradation of the symptoms were explained in table no 2.

Table No. 2: Gradations of symptoms.

Sr. No.	Symptom	Description	Grade
1.	<i>Aruchi</i>	Normal desire for food	0
		Eating timely without much desire	1
		Desire for food only after long intervals	2
		No desire for food at all	3
2.	<i>Gauravata</i>	No feeling of heaviness	0
		Occasional, Not disturbing the routine work	1
		Continuous, disturbing the routine work	2
3.	<i>Sandhi Shool (Pain)</i>	Very troublesome, does not allow to work	3
		No Pain	0
		Sometimes, Not disturbing the routine work	1
4.	<i>Sparshasahatva (Tenderness)</i>	Continuous, disturbing the routine work	2
		Very troublesome, does not allow to work	3
		No tenderness	0
5.	Restriction of Movements	Wincing of face on pressure	1
		Wincing of face on pressure, withdrawal of part	2
		Resist to tough	3
		No Restriction of joint movements	0
6.	<i>Sandhi Shotha (Swelling)</i>	Movement restriction only in morning, Relieved by exercise	1
		Slight restriction, joint movement causing pain	2
		No movement of affected joint	3
		No swelling	0
		Slight swelling around joint, doesn't notice easily	1
		Swelling easily noticed by examiner	2
		Large Pitting edema extending to adjacent parts	3

2.7. Overall Assessment of Therapy

The effect of Therapy was assessed as follows.

High Improvement	-	75 to 100%
Moderate Improvement	-	50 to 75%
Mild Improvement	-	25 to 50%
No relief	-	below 25%

3. OBSERVATIONS AND RESULTS

3.1. General Observations

All collected data was classified and presented in the form of tables and analyzed to draw interferences. Age group i.e. 41-50 years patients were found more 17 (56.67%). The sedentary life style 17 (56.67%), having mixed diet 22 (73.33%), lower economical class 14 (46.67%) and *Kapha-Vata Prakruti* patients 19 (63.33%) were found more.

3.2. Statistical Analysis

Finally, results were analyzed statistically using Wilcoxon sign rank test at level of 5% significance. In case of symptoms Aruchi, Gaurav, Pain, Tenderness and Swelling value of P was less than 0.05 (Table No. 3). As per statistical analysis it was concluded that, *Rasonadi Kwatha* is significantly effective to reduce symptoms score of Aruchi, Gaurav, Pain, Tenderness and Swelling in *Aamvata*.

In case of symptoms Restriction of movements value of P was more than 0.05 (Table No. 3). As per statistical analysis it was concluded that, *Rasonadi Kwatha* is not significantly effective to reduce symptoms score of Restriction of movements in *Aamvata*.

Table No. 3: Statistical analysis by Wilcoxon Matched Pairs Signed Ranks Test.

Sr. No.	Symptom		Mean	SD	W	P	Significance
1.	<i>Aruchi</i>	BT	1.7	0.702	378	<0.0001	Significant
		AT	0.466	0.628			
2.	<i>Gauravata</i>	BT	1.533	0.730	378	<0.0001	Significant
		AT	0.566	0.678			
3.	Pain	BT	1.6	0.770	105	0.0001	Significant
		AT	1.1	0.661			
4.	Tenderness	BT	1.367	0.808	253	<0.0001	Significant
		AT	0.433	0.626			
5.	Restriction of Movements	BT	1.6	0.894	68	0.1089	Not Significant
		AT	1.333	0.844			
6.	Swelling	BT	1.8	0.961	177	0.0022	Significant
		AT	1.2	0.961			

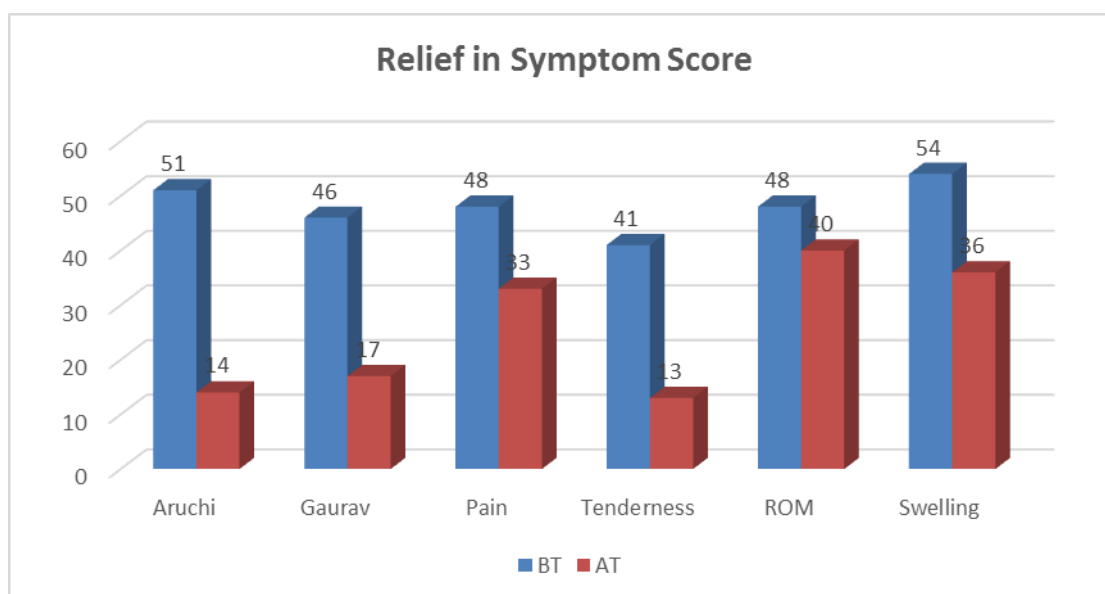


Fig 2: Relief in symptoms score.

3.3. Total effect of therapy

Out of 30 patients in study, 3 patients were highly improved, 7 patients were having moderate relief and 17 patients was mildly improved while 3 patients have no relief. No aggravations of symptoms were observed in any patient. (Table No. 4).

Table No 4: Total Effect of Therapy.

Sr. No.	Improvement	Criteria	No of Patients
1	High Improvement	75% to 100%	3
2	Moderate Improvement	50% to 75%	7
3	Mild Improvement	25% to 50%	17
4	No Relief	00% to 25%	3

4. DISCUSSION

4.1. General Observations

Incidences of *Aamvata* found more in elderly patients. Lower economical class patients found more that may be because locality around study center is majorly lower economical class. Labour worker and serviceman affected less in comparison with those having sedentary life style. It can be said that sedentary life style is one of the causative factors. *Aamvata* is found more prevalent in *Kapha-Vata Prakruti* individuals in present study.

4.2. Statistical Analysis

Statistically using Wilcoxon sign rank test for before and after symptoms score, it was found that in reducing symptoms Aruchi, Gaurav, Pain, Tenderness and Swelling *Rasonadi Kwatha* is significantly effective.

4.3. Mode of action of *Rasonadi Kwatha*

Table No. 5: Contents and therapeutic properties of *Rasonadi Kwatha*.

Sr. No.	Name of Drug	Rasa	Virya	Vipaka	Guna	Karma
1.	<i>Rason</i>	<i>Amlavarjit Pancharasa</i>	<i>Ushna</i>	<i>Katu</i>	<i>Snigdha, Tikshna, Picchil, Guru, Sara</i>	<i>Kapha-Vata Shamaka</i>
2	<i>Nirgundi</i>	<i>Tikta, Kashaya, Katu</i>	<i>Ushna</i>	<i>Katu</i>	<i>Laghu, Ruksha</i>	<i>Kapha-Vata Shamaka</i>
3	<i>Shunthi</i>	<i>Katu</i>	<i>Ushna</i>	<i>Madhur</i>	<i>Laghu Snigdha</i>	<i>Vata-Kapha Shamak</i>

Rasonadi Kwatha contains three ingredients namely *Rason*, *Nirgundi* and *Shunthi* in equal proportions. It has properties of *Katu*, *Tikta rasa*, *Katu vipaka*, *ushna virya* and *Laghu guna* which are having potent *Kaphaghna* & *Vataghna* properties.

With properties of *Tikta Katu Rasa*, *Ushna Virya* & *Katu Vipaka* it acts as *Aampachana* and reduces the *Aamjanya* symptoms of *Aamvata*. i.e. *Aruchi*, *Gaurav* etc. *Rasonadi Kwatha* acts as *Vata* and *Kapha shamak*. Due to *Laghu guna* kwath is *sukshmastrotasanugami*. *Rasona* due to its *Rasayana* properties helps in rejuvenation of body tissues. Also due to *sara guna* of *Rasonadi kwath* helps in relieving symptoms of *Aamvata*.

Aamvata vyadhi is caused by *Aam* and *Vata*, which vitiates *Rasa dhatu* and *Aba dhatu*. There is also *Annava*, *Rasava* and *Asthivaha Srotodushti*. As '*Aamvata*' is a result of '*Agni dushti*', '*Aamotpatti*', '*Rasava srotodushti*', '*Vata dushti*' the treatment given should be '*Kapha-Vataghna*', '*Ushna*' and '*Vatanulomana*'.

With properties of *Katu*, *Tikta Rasa*, *Katu Vipaka* & *Ushna Virya*, '*Rasonadi Kwatha*' promotes *Agni-Deepana*, *Vata Shamana*, *Vatanuloman* actions. These all actions finally lead to *Aamvatahara* effect.

5. CONCLUSION

- *Rasonadi Kwatha* is an effective treatment of *Aamvata*. It relieves symptoms like *Aruchi*, *Gaurav*, Pain, Tenderness and Swelling.
- *Rasonadi Kwatha* ingredients are easily available and is easy to prepare.
- There is no adverse effect observed in any patient therefore *Rasonadi Kwatha* is safe treatment for *Aamvata*.

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