



# A Comparative Clinical Study Of Shunthyadi Kwatha and Rasonadi Kwatha In The Management Of Amavata W.S.R. To Rheumatoid Arthritis

Dr Santoshkumar D Babar <sup>1</sup>, Dr Shivakumar C Sarvi <sup>2</sup>,

<sup>1</sup> MD Scholar, Department of Kayachikitsa, Rajiv Gandhi Education Society's Ayurvedic Medical College, Hospital and Research Center for PG & PhD Studies, Ron, Karnataka, India

<sup>2</sup> Professor, PG Guide, Department of Kayachikitsa, Rajiv Gandhi Education Society's Ayurvedic Medical College, Hospital and Research Center for PG & PhD Studies, Ron, Karnataka, India

## ABSTRACT:

Increased prevalence of the Rheumatoid Arthritis, temporary and reduced success rates in invasive contemporary treatment measures has drawn considerable attention towards alternative, effective, non-invasive treatment modalities. Amavata is described in Madhavanidana 25<sup>th</sup> chapter. Shunthyadi Kwatha is described in Yoga Ratnakara and Rasonadi Kwatha is described in Bhaisajya ratnavali 29<sup>th</sup> chapter. The main objective of the study was to compare the efficacy of Shunthyadi Kwatha and Rasonadi Kwatha in Amavata. A comparative clinical study with minimum of 40 patients, fulfilling diagnostic criteria belonging to either sex will be randomly selected from the OPD and IPD, divided into Group A administered with Shunthyadi Kwatha and Group B Rasonadi Kwatha for 30 days. The result is analyzed as per grading given to the patient before treatment, During treatment and after follow up. The result is drawn by applying paired and unpaired t test. Both Shunthyadi Kwatha and Rasonadi Kwatha were found to be statistically highly significant on all parameters in treating Amavata. Group B with Rasonadi Kwatha (50.91%) was more effective than Group B with Shunthyadi Kwatha (43.97%) in treating the Amavata.

**Key words:** Amavata, Shunthyadi Kwatha, Rasonadi Kwatha

## INTRODUCTION:

Amavata is a clinical condition where in Ama is stimulated by the aggravated vata dosha and Ama settles in trika sandhi's and is characterized by immense pain in joints with inflammation, fever and ultimately stiffness of the joints, causing the temporary or permanent disability of Joints and it hampers daily life activities. Vedas also mention about the various disorders which leads to impairment of movement. But Amavata, as a disease entity is not available even in Brihatrayees. This is first recognized and described in detail by Madhavakara in 9th century. He explained trika sandhi or bigger articular joints like knee, elbow etc as the most prone joints. Though no particular age group is mentioned in Ayurvedic texts, affliction of this disease is confined to children and young adults mostly.

Amavata can be compared to Rheumatoid arthritis which is a systemic chronic inflammatory joint disorder which affect predominantly to synovial joints. Cardiac involvement, symmetrical involvement of joints along with pain, stiffness and swelling with number of systemic complications resembles the disease Amavata. Allopathic system can manage this with its various potent remedies capable of suppressing or controlling the disease activity and gives relief to the patient. But none of them gives a permanent cure and lastly advices prolonged penicillin therapy instead. For Amavata also, Acharya Chakradutta has given emphasis on a therapeutic program in terms of chikitsa sutra instead of single therapy for complete cure, without reoccurrence or to manage this disease. That includes langhana, ama pachana followed by virechana, snehapana and kshara basti.

For this so many research works have been conducted in our science, still there is a great occurrence of patients in our area. The trail drugs for the present study are having properties of vatakaphahara, deepana, pachana, shoolahara, vedanasthapana. The ingredients are easily available, less cost and easily prepared. To contribute a good thing to the society, from my side, I have selected Rasonadi Kwath and Shunthyadi Kwath for my clinical research. 40 patients were selected for the clinical trial. Shunthyadi Kwatha is described in Yoga Ratnakara<sup>1</sup> and Rasonadi Kwatha is described in Bhaisajya ratnavali<sup>2</sup> 29<sup>th</sup> chapter.

## OBJECTIVES OF STUDY:

- ✓ To Evaluate the Efficacy of Shunthyadi Kwatha in the management of Amavata.
- ✓ To Evaluate the Efficacy of Rasonadi Kwatha in the management of Amavata.
- ✓ To Compare the Efficacy of Shunthyadi Kwatha and Rasonadi Kwatha in the management of Amavata.

## REVIEW OF LITERATURE:

Madhava Nidan while explaining the doshanubandha lakshana <sup>3</sup> he made 3 types whereas while expressing about the sadhyasadhayata of Amavata he made 7 types on the basis of involvement of the dosas <sup>4</sup>. By combining the above two points Amavata is of seven types on the basis of dosas they are as given below

1. Vata pradhana -- In this mainly predominance of sula will be present.

2. Pitta pradhana – Daha and Raga are present in the joints.
3. Kapha Pradhana – Staimitya, Gourava & kandhu are the main symptom of this variety.
4. Vata pitta paradhana – Combined symptoms of both pitta & vata.
5. Vata kapha pradhana -- Combined symptoms of both vata & kapha.
6. Pitta kapha pradhan -- Combined symptoms of both pitta & kapha.
7. Sannipatika -- Combined symptoms of both all dosas.

In Regarding with Amavata chakaradatta <sup>5</sup> has explained complete Amavata chikitsa in first time. The principles of treatment for Amvata are as follows

1. Langhana
2. Swedana
3. Tikta katu deepena drugs
4. Virechana
5. Snehapana
6. Anuvasana and Kshara abasti
7. Ruksha Upanaha <sup>6</sup>
- 8 Sankara sweda <sup>7</sup>

## MATERIALS AND METHODS

**Study design:** A Simple comparative clinical Prospective study and sampling technique is purposive or deliberate.

**Sample size and grouping:** 40 patients suffering from Amavata were selected and divided into 2 groups, 20 patients in each group.

**Group A-** 20 patients were administered with *Rasonadi kwatha* 48 ml twice daily before meal along with Ushna jala anupana for 30 days

**Group B-** 20 patients were administered with *Shunthyadi kwatha* 48 ml twice daily before meal along with Ushna jala anupana for 30 days

### Source of Data:

Patient suffering from Amavata were selected from Kayachikitsa **O.P.D** and **I.P.D.** of **R.G.E.S.A.M.C & Hospital Ron** after fulfilling the Inclusion and Exclusion criteria.

### Selection Criteria:

The cases were selected strictly as per the pre-set inclusion and exclusion criteria.

### Inclusion Criteria:

1. Presence of clinical features of Angamarda, Aruchi, Trushna, Alasya, Gourava, Jwara, Morning stiffness, Apaka etc.
2. Age group between 35 to 50 years

3. Patients irrespective of sex, religion, Socio –economic status and locality
4. Patients who had satisfied laid down by America Rheumatism Association were selected.
5. History of Amavata for more than 6 weeks and less than 2 years.

**Exclusion Criteria:**

1. Patient with other severe systemic and metabolic disorders like Diabetes Mellitus, Hyperthyroidism, Cardiac disease etc.
2. Pregnant and lactating mother.
3. Patients having the deformities like Swan neck deformities, ulnar deviation , ankylosis of wrist and elbow were excluded from study.

**Criteria for diagnosis:**

Diagnosis was established by clinical examination of signs and Symptoms of Amavata as follows:

- Angamarda
- aruchi
- Trishna
- Alasya
- Gourava
- Jwara
- Apaka
- Morning stiffness (>1 hour)
- Arthritis of hand joints
- Rheumatoid factors

**Investigations:** For Diagnostic purpose

- 1) R.A. test
- 2) C.R.P.
- 3) E.S.R.
- 4) Hb%
- 5) X Ray and Hematological investigations wherever necessary

## INTERVENTIONS

- **Group A**

<b>Sample size</b>	20
<b>Drug</b>	<i>Rasonadi kwatha</i>
<b>Dose</b>	48 ml twice daily before meal
<b>Anupana</b>	<i>Ushna jala</i> q.s. (if required)
<b>Duration of treatment</b>	30 days

- **Group B**

<b>Sample size</b>	20
<b>Drug</b>	<i>Shunthyadi kwatha</i>
<b>Dose</b>	48 ml twice daily before meal
<b>Anupana</b>	<i>Ushna jala</i> q.s. (if required)
<b>Duration of treatment</b>	30 days

**Follow up:** patients were followed up on 7<sup>th</sup>, 14<sup>th</sup>, 21<sup>st</sup> and 30<sup>th</sup> day to record the progress.

### ASSESSMENT OF THE RESULTS:

The subjective and objective parameters of base line data to post medication were compared for assessment of the results. All the result was analysed statistically for 'p' value using paired - t test and Anova

#### SUBJECTIVE PARAMETERS

**1. General symptoms** (Angamada, Aruchi, Trushna, Alasya, Gouravam, Jwara, Apaka)

	<b>- Score</b>
No Symptoms	<b>0</b>
Symptoms more than 3	<b>- 1</b>
Symptoms more than 5	<b>- 2</b>
All symptoms are present	<b>- 3</b>

**2. Sparsha Asahyata (Tenderness)**

No tenderness	-	0
Mild	-	1
Wincing of face only on pressure	-	2

Wincing of face on both pressure and withdrawal	-	3
---	---	---

### 3. Sandhi graha (stiffness)

No stiffness	-	0
--------------	---	---

1 hour to 4 hours	-	1
-------------------	---	---

4 hours to 8 hours	-	2
--------------------	---	---

More than 8 hours	-	3
-------------------	---	---

### 4. Number of Joints Involved

No Joints		0
-----------	--	---

0 to 3 joints involved		1
------------------------	--	---

3 to 5 joints involved		2
------------------------	--	---

More than 5 joints involved		3
-----------------------------	--	---

### OBJECTIVE PARAMETERS:

#### 1. Sandhi Shotha

No Swelling	-	0
-------------	---	---

Joint Swelling which may not be apparent on casual inspection	-	1
---	---	---

Swelling obvious on casual observation	-	2
--	---	---

Markedly abnormal swelling	-	3
----------------------------	---	---

### Assessment of Response to Treatment:

For subjective analysis gradation of cardinal symptoms are the Parameters. Every patient was observed **BT**-before treatment(Day 1), **AT**-After 2nd follow up (15th day), and **AF**-after last follow up(30th day) for clinical response.

**RESULTS:****Comparison Between Group A and Group B**

PARAMETER	GROUP	Mean	% of Improv.	T-Value	P-Value	Remarks
General Symptoms	A	0.8	45.71	1.16	>0.05	NS
	B	1	45.94			
Sparsha Asahyatva	A	0.65	44.82	1.92	>0.05	NS
	B	1	52.63			
Sandhi Graha	A	0.9	54.5	2.04	>0.05	NS
	B	1.2	52.17			
Number of Joints involved	A	0.95	45.23	0.71	>0.05	NS
	B	1.1	50			
Sandhi Shotha	A	0.35	29.6	2.10	<0.05	S
	B	0.7	53.84			

For comparison between Group A and Group B, Un paired t test is used. From the above table, out of 5 parameters we can observe that P-Values for 4 parameters are more than 0.05. Only the sandhi shotha parameter is having p value less than 0.05. Hence we conclude that statistically there is no significant difference between Group A and Group B in the management of Amavata.

Further we can observe that Average percentage of improvement of Group B is 50.91% which is greater than Average percentage of improvement of Group A- 43.97%. Hence we conclude that effect observed in Group B is more than Group A.

**DISCUSSION:****Probable Mode of Action****A. Sunthiyadi Kwatha:**

It is difficult for the patient to prepare fresh *kwath* daily as compare to other forms like *guti*, *vati*, *churna*,...etc. which is easily available in market. But in *kwath kalpana* the unnecessary cellulose part of the drug is excluded which makes the *kalpana* easily digestible than other form. Virtue of *agni sanskara* in the manufacturing process, the *kalpana* becomes *laghu* also due to its liquid form and administration in hot form the active ingredients reach faster and easily at the *srotasa*. Also due to *ushna guna kwatha* acts on *agni*, *vata* and *kapha* which are mainly involved in *Amvata*.

*Shunthi* is having well known *shothaghna* and *shulaghna* action. *Gokshura* is having *vedanashapak*, *shothahar* and *vatapittashamak*. The *yoga* is *katu madhura rasatmak*, *madhura vipaki*, *ushna viryatmaka* and *kapha vataghna* properties and these properties are useful in *samprapti vighatana* of *Amavata*.

### **B. Rasonadi Kwatha:**

The combination on the whole is *Katu pradhana Tikta rasa* and except *Amla* rasa all others *rasas* are present in small amounts. It is *pradhanataha Ruksha* and *Teekshna* in *guna*, *Ushna* in *veerya*, *pradhantah katu vipaka*, *Kapha-Vatahara* and *Deepana*.

The Dosage form of *Kwatha/Kashaya* (one among *Panchavidha Kashaya kalpana*) is *laghu* compared *Swarasa* and *Kalka*. The formulation *Rasonadi kwatha* is *Ruksha* and *Ushna* as discussed above and thus it is *Karshaka* in nature. It acts against the *Snigdha*, *Picchila pradhana Gunas* of *Ama*, and it reduces the *Sarvadaihika Ama lakshanas* which are nothing but *Samanya lakshanas* of *Amavata*. The formulation is potent enough to act at the level *Asthi Sandhi* which is a part of *Madhyama roga marga*.

Taking into consideration the incidence of the symptomatology and the efficacy of the trial drug *Rasonadi kwatha* in managing them, the probable mode of action can be analyzed based on *Dosha*, *Dushya* and *Agni dushti* in *samprapti* of the disease and role of the formulation in *Samprapti vighatana*.

*Shunthi* is *Deepaka* and *Bhedaka* in its action and is included under *Truptighna*, *Arshoghna*, *Deepaniya*, *Shoola prashamana* and *Trushna nigravana gana* of *Charaka*, which adds to the *Amapachaka*, *Agnideepaka* and *Karshaka* activity of the formulation on the whole. *Nirgundi* is included under *Vishaghna* and *Krimighna* ganas of *Charaka* and is having *Karmas* including *Chakshushya*, *Keshya*, *Krimighna* and *Vranaropana*. All these factors add to the overall action of the formulation in the form *Kashaya*.

*Rasona* though is *Katu*, *Ushna* and *Vata-Kaphahara*, it is attributed with *Karmas* including *Balya*, *Brimhana*, *Rasayana*, *Vrishya* and *Netrya*, which are all exactly opposite to the property of *Amapacahana*.



Due to its properties the formulation can act up to the level of *Rasa, Rakta, Asthi* and *Sandhi* also. At these levels it does *Amapachana* and *Agnideepana*. So the use of this formulation should be very well judged with keen regard to *Saama* and *Nirama avastha* of the *Vyadhi* and *Rogi*. Continuing intake of this medicine for prolonged period even after complete *Amapachana* would lead to *Rukshata* of the body and *Dhatu kshaya* resulting in *Vata prakopa*. Instead, this formulation should be withdrawn and next steps of treatment i.e. *Virechana, Snehapana* and *Basthi* as explained in *chikitsa siddhanta* should be followed

### CONCLUSION:

- Group A with Shunthyadi Kwatha was equally effective as that of Group B with Rasonadi Kwatha statistically in treating the Amavata. However the effect of Group B Shunthyadi Kwatha 50.91% was slightly more than Group A Rasonadi Kwatha 43.97%.
- Rasonadi Kwatha is highly effective in the management of Amavata.
- Shunthyadi Kwatha is highly effective in the management of Amavata.

### REFERENCES:

1. Brahmasankara sastri editor, Vaidya Sree Lakshmiapati Sastri commentator, Yogaratnakara, Chikitsa, Choukambha Prakashan, Varanasi, Reprint 2003, page number 673.
2. Shri Govind das, Bhaisajya ratnavali Vidyotini, Hindi Vyakhya, Chapter number 29th, Amavata Chikitsa prakarana, Shloka number-23, 16th edition, Choukambha sanskriti sansthana, 2002, page number- 434.
3. Sri Madhvakara, Madhavanidanam, edited by Yadunandana Upadhyaya, chapter 25, 11th sloka. Chaukhamba Sanskrit Sansthan; 1985 page no. 463.
4. Sri Madhvakara, Madhavanidanam, edited by Yadunandana Upadhyaya, chapter 25, 11th sloka. Chaukhamba Sanskrit Sansthan; 1985 page no. 464
5. Chakradatta, chapter 25, sloka 19-20. Edited by Jagadeeshwar Prasad Tripathi, 5th edn. Varanasi : Choukambha Sanskrit Office; 1983, p-229.
6. Bhavamishra, Bhavaprakasha, Edited by Bhashagrashro Bhramhashankara Mishreshastry, 5th edn. Varanasi : Choukambha Sanskrit Sansthan ;
7. Bhaishajyaratnavali, Edited by Ambikadatta Shastry, 15th edn. Varanasi : Choukambha Sanskrit Sansthan ; 2002, p-435.