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# A Compartive Clinical Study of therapeautic effect of Rambana Rasa with and without Eranda Sneha in Amavata w.s.r. Rheumatoid Arthritis

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#### ABSTRACT

Amavata is the most challenging disease for the medical science, as it causes severe intolerable pain and severe deformities making the patient disable and bed ridden. As it is the disease of Rasavaha Srotas and having several features similar to Rheumatoid Arthritis, Amavata can be co-related with Rheumatoid Arthritis (RA). Ama and vitiated Vata play dominant role, though all Dosha take part in the causation of the disease, Amavata is the outcome of Agnidushti, Amotpatti and Sandhivikruti, with the passage of the time most of the dietary habits, changing lifestyle and environment have been contributing to the disease, the risk factor include age, gender, genetics and environmental exposure. Worldwide, the annual incidence of RA is approximately 1%, increasing with age and peaking between the age of 35 and 50 years. So, patients are continuously looking for the treatment from Ayurveda to overcome this challenge. Ramban Rasa is unique formulation which is favorable in the management of the Amavata, as mentioned by Yogratnakar, Bhaishajya Ratnawali, Bhav Prakash and other classical text.

Key words: Ramaban Rasa, Amavata, Rheumatoid Arthritis, Eranda Sneha.

#### **INTRODUCTION**

The terminology of Ayurveda itself explains that, it is a vast literature on living a healthy life and how to prevent one form of disease prevailing in society, due to modernization of lifestyle. In this world, one cannot find even a single substance which is devoid of pharmacological action and can be used for benefit of living organism on the basis of their properties. Through its miraculous remedies, it has offered

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shelter to the ailing mankind, under its huge wings in the past as well as present.

The present study is aimed at finding out an effective remedy for *Amavata*, which is a well known affecting masses. For this, we delved into the sea of Ayurveda and selected *Rambana Rasa* as *Ama Pachak* and *Dosha Shamaka* for treatment. *Amavata* is such a disease not deals with important in ancient classics. It is well described in 7<sup>th</sup> century by *Madhavnidan*. *Madhavkar* being 1<sup>st</sup> described *Amavata* as independent disease along with its etiology pathogenesis, sign, symptoms, prognoses and Chakradatta has 1<sup>st</sup> described line of treatment with Ayurvedic herbs.

Amavata is disease of Madhyam Rogamarga, as Ama and Vata which vitiates Tridosha. The disease affects Sandhimarma which leads to morbidities and which inturn many cause death. The clinical features of Amavata have been recognized in Ayurveda before centuries itself. The two oldest texts on Ayurvedic medicine, the Charak Samhita and Sushruta Samhita<sup>[3]</sup>

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often refer to symptoms such as joint pain and swelling like diagnostic features. *Amavata* is a disease of chronic joint and body pain, accompanied by a swelling of some or all of the synovial joints. These symptoms are typically accompanied by immobility, a loss of taste, thirst, indigestion, a lack of enthusiasm, a feeling of heaviness, and fever. If the condition is allowed to progress the pains may begin to migrate from place to place, with an deep stinging and burning sensation. There may be scanty, frequent urination, and sleep may become distributed. The digestion will continue to worsen, with bowel irritability and spasm, constipation, nausea and vomiting. There may be dizziness with profuse perspiration and extreme stiffness.

After birth human beings goes through various stages of life. These stages are concerned with *Bala* of *Sharira* (e.g. *Madhyam Vayavastha - Pravara Bala*) and prone to particular disease.

Thus Agni is one of the most important factors which can afflict the healthy stage of human being. The second is hereditary factor which also have the capacity to afflict the healthy internal environment of human being. The disease rheumatoid arthritis can be presented as very similar to Amavata. The disease Rheumatoid arthritis is chronic in nature and affect mostly middle age group i.e. Madhyam Vayavastha. Rheumatoid arthritis is the most common persistent inflammatory arthritis, occurring throughout the world and in all ethnic group. The prevalence is highest in Indians. The clinical course is prolonged, with intermittent exacerbations and remissions. Rheumatoid arthritis occurs in 0.5-1.0% of the population; women affected three times more often than men; prevalence increases with age, onset most frequent in fourth and fifth decade. As Amavata is compared to Rheumatoid Arthritis we have underestimated the morbidity and mortality of rheumatoid arthritis. Our goal must be to intervene and focus on less toxic drug as early as possible in disease process. Ramaban Rasa is effective in Amavata as well as in Agnidushti and Eranda Sneha is used to treat vitiated doshas as it is a Vatahara.

Hence present study of therapeutic effect of *Ramban Rasa* with *Eranda Sneha* and without *Eranda Sneha* in treatment of *Amvata* is being selected.

#### MATERIALS AND METHODS

Study was carried out on the patients suffering from *Amavata* attending OPD and IPD of Shri Shivayogeeshwar Rural Ayurvedic Medical College and Hospital, Inchal, institute irrespective of sex, religion, occupation, etc.

#### **Criteria for selection of patients**

#### **Inclusion Criteria**

- 1. Subject of age between 18-60 years.
- 2. Both the sexes i.e. Male or Female.
- 3. Subjects having Sandhi Shool, Sandhi Shoth, Sandhi Stabdhta, Sparsh Asahishnutwa (Pain on touch-tenderness) and other associated Lakshanas of Amayata.

#### **Exclusion Criteria**

- 1. Subject pre diagnosed with any history of Hypertension, malignancy, HIV, Diabetes Mellitus, Rheumatic Fever or any chronic systemic disease.
- 2. Pregnant women and lactating mothers.
- 3. Patients having history of *Amavata* for more than 3 year.

#### Withdrawal from study

- 1. Discontinuation of treatment during trial.
- Development of any complication. Evidence of any inter-current illness which may interrupt the efficacy of drug.
- 3. Evidence of any inter-current illness which may interrupt the efficacy of drug.

#### **Diagnostic Criteria**

The diagnosis was done on the basis of signs and symptoms as described in various Ayurvedic classics like *Sandhi Shoola* and *Sandhi Shotha* etc. Also criteria of American College of Rheumatology (ACR-EULAR 2010 Classification) of RA taken into consideration as follows;

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- Morning stiffness lasting for > 1 hour.
- Arthritis of 3 or more joint areas.
- Arthritis of hand joints.
- Symmetrical Arthritis.
- Presence of Rheumatoid factor (positive RA factor).
- Raised ESR.

#### **Criteria for assessment**

Clinical features of *Amavata* mentioned in Ayurvedic classics were considered for diagnosis and assessment.

#### **Subjective Parameter**

- 1. Sandhi Shoola (Vruschik Dandhavat Vedana/ joint pain).
- 2. Sandhi Shoth (joint swelling).
- 3. Sandhi Stabdhata (joint stiffness).
- 4. Sandhi Sparshaasahatvam (joint tenderness).

#### **Objective Parameter: (ACR 2010)**

- 1. Walking time
- 2. Foot pressure
- 3. Grip strength

#### **Investigative Parameter**

- 1. RA factor
- 2. ESR

#### Criteria for establishment of diagnosis of disease

Data was collected from commencing the therapy also periodically as per the criteria described below.

Table 1: Clinical assessment grade with scoring

Subjective	Grade with score				
Sandhi Shoola	Severe : 3	Moderate : 2	Mild : 1	No Complaint : 0	
Sandhi Shotha	Severe : 3	Moderate : 2	Mild : 1	No Swelling : 0	

Sandhi Stabdhata	For > Two hr : 3	For 30 min to 2 Hr : 2	For 5 min to 30 min: 1	For 5 min : 0
Sandhi Sparshaasahatva m	Resists to touch: 3	Winces and withdraw s the affected joints : 2	Wincing of face on pressur e:1	No complaint s:0
Objective				
Walking time (for 25 feet in number of second)	>40 sec : 3	31-40 sec : 2	21-30 sec : 1	15-20 sec : 0
Foot pressure	<10 kg : 3	15-10 kg : 2	20-16 kg : 1	25-21 kg : 0
Grip strength	Under 70 mmHg : 3	119-70 mmHg : 2	199-120 mmHg : 1	200 mmHg or more : 0
Investigative parameter				
RA factor	Positiv e : 1	Negative : 0		
ESR (in 1 <sup>st</sup> hour )	>50:3	Between 36-50 mm/hr: 2	Betwee n 21-35 mm/hr:	Between 0-20 mm/hr:0

#### **Drug formulation**

Rambana Rasa was prepared in Rasashastra and Bhaishyajya Kalpana Dept. under guidance of teachers. Eranda Sneha was procured from standard pharmacy.

#### **Admistration of drug**

Group A (20 Patients): Ramban Rasa 125mg BD with Eranda Sneha 10 ml BD for 21 days.

Group B (20 Patients): Ramban Rasa 125mg BD without Eranda Sneha for 21 days.

#### **OBSERVATION AND RESULTS**

As grading used assessment parameters were ordinal in nature, "Wilcoxon Signed Rank test" is used for intra-group comparison (i.e. before and after

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treatment of a group) while for inter-group comparison, (i.e. for comparing two groups with each other) "Mann-Whitney U test" is used. We have tested hypothesis for each parameter and result is interpreted accordingly. The level of significance is kept at 0.05. Proper summary statistics like mean, median, S.D., IQR (Inter Quartile Range) are provided along with graphical and diagrams.

Table 2: Comparison between Group A and Group B

Parameters	Group	N	Mean Rank	Sum of Ranks	Mann- Whitney U	P- Value
Sandhi Shoola	Group A	20	27.53	550.50	59.500	0.000
	Group B	20	13.48	269.50		
	Total	40				
Sandhi Shotha	Group A	20	22.40	448.00	162.000	0.241
	Group B	20	18.60	372.00		
	Total	40				
Sandhi Stabdhata	Group A	20	23.60	472.00	138.000	0.059
	Group B	20	17.40	348.00		
	Total	40				
Sandhi Sparsha Asahatvam	Group A	20	23.20	464.00	146.000	0.070
	Group B	20	17.80	356.00		
	Total	40				
ESR	Group A	20	23.00	460.00	150.000	0.114
	Group B	20	18.00	360.00		
	Total	40				
Walking time	Group A	20	21.55	431.00	179.000	0.480

	Group B	20	19.45	389.00		
	Total	40				
Foot pressure	Group A	20	23.38	467.50	142.500	0.060
	Group B	20	17.63	352.50		
	Total	40				
Grip Strength	Group A	20	23.65	473.00	137.000	0.058
	Group B	20	17.35	347.00		
	Total	40				

For comparison between Group A and Group B, we have used Mann Whitney U test. From above table we can observe that P-Values for almost parameters are greater than 0.05. Hence we conclude that there is no significant difference between Group A and Group B, but Group A have more significant result than Group B.

Table 3: Overall assessment of therapy

Variables	Group A	Group B
Sandhi Shoola	Significant	Significant
Sandhi Shotha	Significant	Significant
Sandhi Stabdhata	Significant	Significant
Sandhi Sparshasahatvam	Significant	Significant
Walking time	Significant	Significant
Grip strength	significant	Significant
Foot pressure	Significant	Significant
RA factor	Insignificant	Insignificant
ESR	Significant	significant

RA and ESR factors are mere investigations and not assessment parameters, they will not be considered while calculating overall improvement.

Table 4: Mean % improvement in both groups

Parameter	Mean % improvement		
	Group A	Group B	
Sandhi Shool	73.90%	37.00%	
Sandhi Shotha	76.30%	64.10%	
Sandhi Stabdhata	72.50%	51.20%	
Sandhi Sparshasahatvam	67.60%	46.30%	
Walking time	68.40%	56.10%	
Foot pressure	56.40%	34.10%	
Grip Strength	60.50%	35.70%	
Overall % of assessment	72.18%	46.35%	

Table 5: Distribution of patients according to relief

Overall Effect	No. of patients				
(patient wise)	Group A		Group B		
	Count %		Count	%	
Excellent Improvement	01	5.00%	00	00.00%	
Good Improvement	19	95.00%	04	20.00%	
Moderate Improvement	00	00.00%	16	80.00%	
Mild Improvement	00	00.00%	00	00.00%	
Total	20	100.00%	20	100.00%	

In group A, 19 patients (95%) were observed with good improvement while 1 patient (5%) was seen with excellent improvement. In group B, 16 patients (80%) realized moderate improvement while 4 patients (20%) were observed with Good improvement.

#### **DISCUSSION**

#### Mode of action of drug

Rambana Rasa as Amapachak, Agnidipak and Doshashamak for the treatment of Amavata. According to modern point of view, drug may acts as antioxidant, anti-inflammatory, analgesic, anti-arthritic, immune modulatory and radical scavenging activities.

Eranda Sneha is Madhura, Katu, Kashaya Rasa, Ushna Virya, Madhura Vipaka and having Vata-KaphaShamaka property which is having specific Vyadhihara i.e. Amavatahara action.

Acharya Charaka has given brief description of how Virechana Dravya acts in the body. In disease Amavata, Srotorodha is mainly present which is clear due to property of Srotovishodhana of Virechana drugs. It has direct affect on Agnisthana and thus also helpful in increasing Agni. Eranda Sneha helps in normalizing the Pratilomagati of Vata thus breaking Samprapti of disease Amavata and thereby relieving sign and symptoms of the disease.

#### **CONCLUSION**

At the end of the study, following conclusion can be drawn on the basis of observation made, results achieved and through Discussion in the present context as below; Amavata as a separate disease is not described in Brihatrayi, first time its detailed description is available in medieval period text Madhava Nidana. Amavata is Chronic disease in nature (Arthritis rank second as the most prevalent chronic ailment after heart disease) and has insidious onset. As the word suggests, in Amavata, the predominant entities in disease process are Ama and vitiated Vata. It is observed that Amavata and Rheumatoid arthritis, very closely resembles each other because of their symptomatology. Maximum patients selected in the present study were between the 35 to 60 years, Maximum patients of this series were males, and maximum number of patients was registered for the study was Kapha-Vata Pradhana Prakriti. Group A (Rambana Rasa with Eranda Sneha) provided better results in Sandhi Shoola, Sandhi Shotha, Sandhi Stabdhata, Sandhi Sparshaasahatvam as Ayurvedic parameter of Amavata as well as improvement in Walking time, foot pressure, grip strength. Group B (Ramabana Rasa without Eranda Sneha) provided good results in Sandhi Shoola, Sandhi Shotha, Sparsha Sahatva, Sandhi Stabdhata etc. On comparing the effect of two therapies it can be concluded that Group A (Rambana Rasa with Eranda Sneha) provided better results a most of the Lakshanas and objective criteria at a significant level. The data of the present series reveals that in Group A out of 20 patients, none of the

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patients got complete remission, 01 patients (5%) excellent improved, 19 patients (95%) good improved. In Group B, out of 20 patients, none of the patients got complete remission, 04 patients (20%) good improved,16 patients (80%) were moderately improved. The improvement is statistically significant in all two groups, but comparatively group A has more significant relief. No side effects were observed in this study. To achieve more significant results we can increase dose of drugs and duration of treatment. There is no side effect of present dose of Ramban Rasa observed so; we can increase it for more significant results. Further evaluation of this drug is still required for assessing the Side effects and exact mode of action on Large Sample. It can be suggested that Rambana Rasa with Eranda Sneha could provide a better treatment modality in the disease Amavata.

#### **REFERENCES**

- Ayurved Acharya Shri Sudharshan Shashtri, Ayurved Acharya Shrinsadunndnipadheya, volume-1, Madhav nidan, edition reprint-2003 chukhamba prakashan, Page no. 508.
- Vd. Y.G Joshi (edition) 2003, Charak Samhita, Shri Chakradattapani Vicharit Ayurved Dipika Vikhya with yashavant Marathi commentary, vol no -2, vatavyadhi chikista adhaya, pune. vaidyamitra prakashan, page no-617.
- Dr. Anant Ram Sharma: Sushruta Samhita volume-1 edited with Susruta Vimarsini Hindi commentary along with special deliberation etc by foreword by Acharya Priyavrat Sharma. page no-455.
- Kaviraj Dr Ambikadatta Shashtri, Sushrut Samhita, Chaukhamba Prakahsna, Part I, reprint 2014, Sutra Sthana chapter no.35, Page no-173.
- 5. Davidson, Principles and practice of medicine; 21<sup>th</sup>edition, chapter no.25, Page no 1088.
- 6. Harisons Manual of Medicine; 18<sup>th</sup> edition, section 12, Page no.1072.
- Achrya Vidyadhar Shukla and Pro. Ravidatta Tripathi, Charak Samhita, Chaukhamba Prakashan, 2010 reprinted, volume II, Chapter 12, Sholka No. 72, Page No – 279.

- Achrya Vidyadhar Shukla and Pro. Ravidatta Tripathi, Charak Samhita, Chaukhamba Prakashan, 2010 reprinted, volume II, Chapter 16, Sholka No. 61/62, Page No -404.
- Achrya Vidyadhar Shukla and Pro. Ravidatta Tripathi, Charak Samhita, Chaukhamba Prakashan, 2010 reprinted, volume II, Chapter 28, Sholka No. 195, Page No -716.
- Storey , G.D.2001. Alfred Baring Gar rod (1819-1907).
   Rheumatology 40: 1189-1190.
- 11. Arnett FC, Ed worthy SM, Bloch DA, Mc Shane DJ, Fries JF, Cooper NS, et al. The American Association 1987 revised criteria for the classification of rheumatoid arthritis Rheum 1988,31:15-24.
- 12. Aletaha D, Neogi T, Silman A, Funovits J, Felson D, et al.2010 Rheumatoid arthritis Classification Criteria : An American College Of Rheumatology/European League.
- 13. Hench PS, Kendall EC, Slocumb CH, Polley HF,. The effect of hormone of the adrenal cortex (17- hydroxyl 11- de hydro corticosteriod : Compound E ) and of pituitary adrenocorticotropic hormone on rheumatoid arthritis. Proc Staff Meet Mayo Clin 1949;24:181-97.
- Achrya Vidyadhar Shukla and Pro. Ravidatta Tripathi ,Charak Samhita, Chaukhamba Prakashan, 2010 reprinted, volume II , Chapter 15, Sholka no.13-15, Page no-360-361.
- 15. Achrya Vidyadhar Shukla and Pro. Ravidatta Tripathi ,Charak Samhita, Chaukhamba Prakashan, 2010 reprinted, volume II ,Chapter 15,Sholka no.50-51, Page no.-369.
- Achrya Vidyadhar Shukla and Pro. Ravidatta Tripathi, Charak Samhita, Chaukhamba Prakashan,2010 reprinted,volume II, Chapter 15,Sholka no. 3-4, Page no.- 358.
- 17. Dr Bramhanand Tripathi, Ashtang Hrudayam, Chaukhamba Prakahshan, reprint 2014, Chapter 13,Sholka no.25, Page no.188.
- 18. Ayurved Acharya Shri Sudharshan Shashtri. Ayurved Acharya Shri Sadunndnipadheya ed, volume-1, Madhav Nidan, edition reprint-2003, Chaukhamba Prakashan, Page no-509.
- 19. Ayurved Acharya Shri Sudharshan Shashtri. Ayurved Acharya Shri Sadunndnipadheya ed, volume-1, Madhav

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NIDAN, edition reprint-2003, Chaukhamba Prakashan, Page no-510.

20. Acharya Vidyadhar Shukla and Pro. Ravidatta Tripathi, Charak Samhita, Chaukhamba Prakashan, 2010 edition, volume II, Chapter 15, Sholka no.44, Page no.367. How to cite this article: Dr. Sanjay D. Late, Dr. G. Vinay Mohan, Dr. M. B. Rudrapuri, Dr. G. S. Dharmannavar. A Compartive Clinical Study of therapeautic effect of Rambana Rasa with and without Eranda Sneha in Amavata w.s.r. Rheumatoid Arthritis. J Ayurveda Integr Med Sci 2019;5:18-24.

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