

# A Case Study to Evaluate the Effect Nagar Ghrita Sneha Pan in the Management of Amavata w.s.r. of Rheumatoid Arthritis

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**Abstract**— *Amavata* is a disease affecting joints all over the body and also have other extra articular manifestation. Clinical feature of *Amavata* such as pain, swelling, stiffness, fever, general disability are more identical mentioned in classical texts. In classics, Acharya Chakradutt has mentioned Treatment of *Amavata* is Deepan, Pachan, Shodhan, Shaman Snehapan, Vaitaran Vasti, Virechan<sup>[1]</sup> etc. Among them Snehapan after Virechan is very effective in the chronic cases of *Amavata*. Literary material from Ayurvedic texts was compiled critically analysed and clinically observed on patient to include the key references necessary for evaluating the hypothesis. Pachan Karma will be carried out with Nagar+Gokshur kwath 50ml twice daily for 3 days and then Sarvanga Abhyanga Swedana/Baluka swedana will be carried out for next 3 days and then Virechan karma will be with Eranda tail 30ml added to Haritaki kwath 50 ml. after Nagar Ghrita sneha pan for 10 days. The result suggest that Nagar Ghrita Pan after Virechan karma is effective in the management of *Amavata*.

**Keywords**— *Amavata*, Snehapan, Virechan, panchkarma, shodhan.

## I. INTRODUCTION

Panchkarma's are the First essential step for the Ayurvedic management of disease. Panchkarma is the process which gets to the root cause of the problem. Acharya Chakradatta described panchkarma treatment in *Amavata*. In the Present Study is aimed to finding out an effective remedy for *Amavata*, well-known disease affecting masses. For this, we selected Nagar Ghrita Snehapan after Virechana to judge there efficacy in this disabling disease. Acharya Madhav has described *Amavata* as an independent disease. *Amavata* is one of the very painful disease describes the pain as "Vrischika Damshavata Vedana<sup>[5]</sup> the symptom of *Amavata* is very much similar to the symptom of Rheumatoid arthritis. The Rheumatoid arthritis is a chronic immuno-inflammatory systemic disease that affect mainly synovial joints with possibility of extra articular manifestation. Generally the joint involvement is bilateral peripheral symmetrical and characterized by early morning stiffness with positive R.A Factor in 75% of patients. Rheumatoid arthritis occurs worldwide in all races, sexes, age and climates. This disease is three time more prevalent among females than among male by the usual diagnostic criteria. The onset is more frequent during 4th and 5th decade of life with 80% of patients developing the disease between the ages of 35 to 50 years. Acharya Chakrapani was the pioneer in describing the principles of treatment of *Amavata*.<sup>[1]</sup> According to above caption in the present study Sneha pan after Virechana has been

selected to evaluate the effect of these treatment modalities. Nagar Ghrita has been selected as Shamana after Virechana. Nagar Ghrita having Amapachana & Vatakaphahara properties, so it may correct the Doshavitiation Agnivaishmya, Dhatu Dushti and Alpa Vyadhi Kshamatva.

## II. MATERIALS METHODS

In the present study total 17 patients of *Amavata* were registered.

❖ Snehapan Group –i.e Nagar Ghrita Snehapan after Virechana for 10 days.

*Aims and Objectives of the Research Work*

- i. To explore the literature pertaining to *Amavata* in different Ayurvedic Samhitas.
- ii. To evaluate the effect of Nagar Ghrita Snehapan after Virechana in the management of *Amavata*.
- iii. To assess the effect of Nagar Ghrita Snehapan in the disease *Amavata*.
- iv. To develop cost effective Panchkarma treatment in the management of *Amavata*.

❖ *Materials and Methods:*

1. *Literary:* It was compiled from the available literature of Ayurveda and Modern classics & latest research papers published in reputed general.
2. *Clinical:* By analyzing the data from the results obtained during the present study.

➤ *Selection Criteria:*

a) *Inclusion Criteria*

1. Patient willing for trial.
2. Age group 20-70 years irrespective of sex, race, religion and socio-economic status.
3. Patient with clinical features of *Amavata* as described in *Madhava Nidana*.
4. American criteria for Rheumatoid arthritis.
5. Written consent of the patient was obtained before inclusion in the trial.

b) *Exclusion criteria*

1. Patients not willing for the trial.
2. Patients below 20 and above 70 years.
3. Patients having any associated chronic ailments like D.M, cardiac disorder, renal disorder and alcoholic liver disease, chronic hemolytic anemia.
4. Pregnant and lactating mother.

Nagar Ghrita Sneha Pan Group

<b>Pachana</b>	Shunti Gokshura kwatha <sup>[2]</sup>	50 ml BD for 3 days.
<b>Abhyanga</b>	Brihat Saindhavadi Taila	75-100 ml sitting for next 3 days or as per requirement of patient.
<b>Virechanakalpa</b>	Haritaki kwatha 30ml+Eranda Taila 30ml <sup>[3]</sup>	
<b>Samsarjankram</b>	According to shodhana	
<b>Sneha Pan</b>	Nagar Ghrita <sup>[4]</sup>	10 ml B.D for 10 days

Criteria of Assessment:

Assessment was done on the basis of subjective, objective criteria and grading pattern adopted before treatment and after treatment.

a. Subjective Criteria:-

- Clinical Sign, Symptoms and functional ability of patient along with Laboratory Investigations.

b. Clinical Assessment:-

- Samanya lakshana and Pravridha lakshana-Madhava Nidana<sup>[6]</sup>.
- Grading of the patients was done according to severity of the symptoms, signs and functional capacity of the patients.

Name of Symptoms	Grades	Score	BT	AT
<b>Angamarda</b>	No angamarda	0		
	Occasional angamarda but patient is able to do usual work	1		
	Continuous angamarda but patient is able to do usual work	2		
	Continuous angamarda which hampers routine work	3		
	Patient is unable of do any work	4		
<b>Gauravata</b>	No feeling of heaviness	0		
	Occasional heaviness in body but can do usual work	1		
	Continuous heaviness in body but can do usual work	2		
	Continuous heaviness that hampers usual work	3		
	Unable to do any work due to heaviness	4		
<b>Apaka</b>	No Apaka at all (normal digestion)	0		
	Occasional indigestion once or twice a week in one meal	1		
	Occasional indigestion 3-5 times a week in one meal	2		
	Indigestion 3-5 times a week in both meals	3		
	Indigestion after every meal	4		
<b>Vid Vibandha</b>	Absent	0		
	Motion once a day but not at regular interval	1		
	Alternate day	2		
	Interval for more than one day	3		

c. Symptoms and Signs of R.A. given in modern texts are as follows:-

Name of Symptoms	Grades	Score	BT	AT
<b>Tenderness</b>	No Tenderness	0		
	Subjective feeling of Tenderness	1		

	Wincing of face on pressure	2		
	Wincing of face on pressure and withdraw of concerned part	3		
	Resists touching	4		
<b>Morning Stiffness</b>	No morning stiffness	0		
	Morning stiffness>1/2 hour but >1 hour	1		
	Morning stiffness>1 hour but > 6 hour	2		
	Morning stiffness all the day through	3		
<b>Joint Pain</b>	No pain	0		
	Mild pain of low intensity , does not hampers in daily routine work	1		
	Moderate pain hamper the daily routine work	2		
	Severe pain causing definite interruption in routine work	3		
<b>Swelling</b>	No Swelling	0		
	Mild Swelling	1		
	Moderate Swelling	2		
	Severe Swelling	3		
<b>ESR Increased</b>	0 – 30 mm 1st hour	0		
	30-60 mm 1st hour	1		
	60-90 mm 1st hour	2		
	90-120 mm 1st hour	3		
<b>RA Factor Reactive</b>	Negative	0		
	Weakly Positive	1		
	Positive	2		
	Strongly positive	3		

Functional assessment

Walking Time	Patient is asked to walk a distance of 50 meter and time is recorded before and after treatment and scored as follow:-	BT	AT
	< 30 sec	0	
	31 – 40 sec	1	
	40 – 50 sec	2	
	51 – 60 sec	3	
	>60 sec	4	

General Functional Assessment

Name of Symptoms	Grades	BT	AT
<b>Grade – I</b>	Self- depended	0	
<b>Grade – II</b>	Perform light work only	1	
<b>Grade – III</b>	Can do very light work	2	
<b>Grade – IV</b>	Just able to care her/ himself	3	
<b>Grade – V</b>	Completely bed ridden or confined to wheel chair.	4	

Laboratory Investigations

Blood-Haematological- Hb<sub>gm</sub>%, TLC, DLC, ESR, FBS  
 Bio-Chemical- R.A.factor, S.Cholesterol, S.Uric Acid, SGOT, SGPT, B.Urea, Sr.Creatinine, X ray as per need.  
 Urine-Routine and Microscopic.

Total Effect of Therapy

Steps for calculating overall percentage of improvement of individual patients-

All the BT score of every symptoms of a patient were added.

All the AT score of every symptoms of that patient were added.

Overall percentage of improvement of each patients was calculated by the formula, (Total BT – Total AT) / Total BT X 100

The results obtained were measured according to the grades given below:

- Cured: 100 % relief in signs and symptoms.
- Marked improvement: More than 60% improvement in signs and symptoms was recorded as marked improvement.
- Moderate improvement: 31% to 60% improvement in signs and symptoms was considered as moderate improvement.
- Mild improvement: 10% to 30% improvement in signs and symptoms was considered as mild improvement.

**Statistical Analysis**

This was assessed in terms of Mean score, Standard Deviation, Standard Error, Paired ‘t’ test.

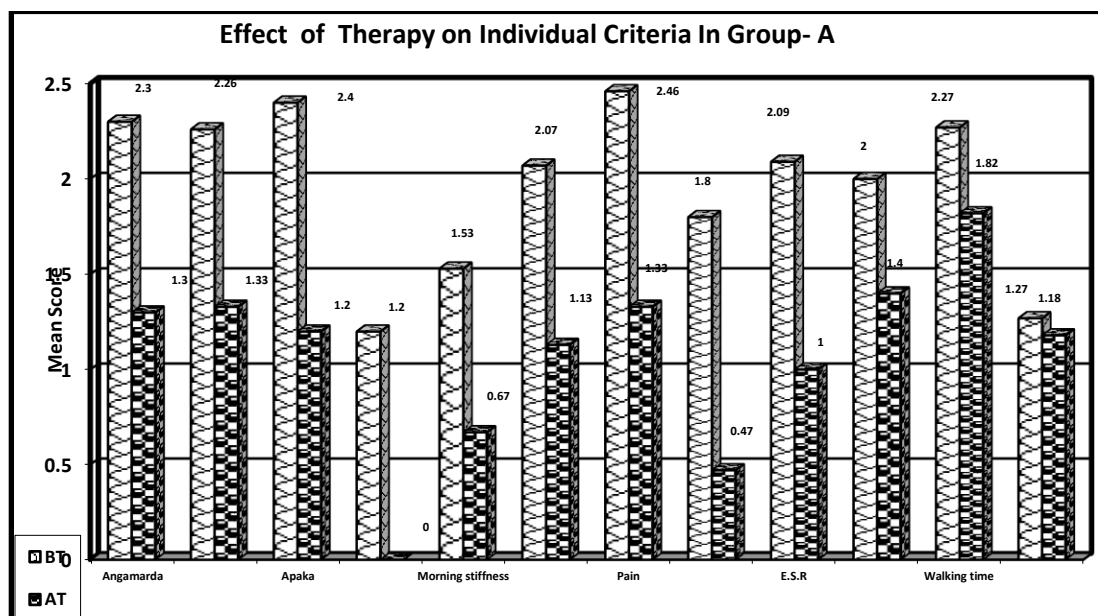
- $p > 0.05$  Non significant result
- $p < 0.05$  Significant
- $p < 0.01$  and  $p < 0.001$  Highly significant Effect of Therapy

In the present study 17 patients were registered out of which 15 completed the trial. The clinical data and effect of therapy on 15 patients is presented below.

**Effect of Therapy on Individual Criteria**

The efficacy of *Nagar Ghrita Pan after Virechana* was adjudged in 15 patients on the basis of assessment criteria’s and results were derived after executing statistical analysis.

Parameters	N	Mean		D	%age Relief	SD ±	SE±	t	P
		BT	AT						
Angamarda	13	2.30	1.30	1.00	45.16	0.58	0.16	6.25	<0.001
Gauravata	15	2.26	1.33	0.93	50	0.35	0.09	12.47	<0.001
Apaka	10	2.40	1.20	1.20	50	0.42	0.13	9.00	<0.001
Vidvibandha	10	1.20	0	1.20	83.33	0.63	0.20	6.00	<0.001
Morning stiffness	15	1.53	0.67	0.86	56.52	0.35	0.09	9.54	<0.001
Tenderness	15	2.07	1.13	0.94	45.16	0.26	.067	14.00	<0.001
Pain	15	2.46	1.33	1.13	54.05	0.48	0.13	10.58	<0.001
Swelling	15	1.80	0.47	1.33	74.07	0.49	0.13	10.59	<0.001
E.S.R. Increased	11	2.09	1.00	1.09	52.17	0.54	0.16	6.71	<0.001
R.A Factor Reactive	10	2.00	1.40	0.60	17.64	0.97	0.31	1.96	>0.05
Walking time Increased	11	2.27	1.82	0.45	36	0.52	0.16	2.89	<0.05
General Function Assessment	11	1.27	1.18	0.09	7.14	0.30	0.09	1	>0.05



Bar Diagram

**Analysis of above table reveals following points:**

Statistically Highly Significant relief ( $p < 0.001$ ,  $p < 0.01$ ) was found in *Angamarda* (%age relief=45.16%), *Gauravata* (%age relief= 50%), *Apaka* (%age relief=50%), *Vidvibandh* (%age relief = 83.33%), *Morning Stiffness* (%age relief=56.52%), *Tenderness* (%age relief=45.16%), *Pain* (%age relief=54.05%), *Swelling* (%age relief = 74.07%), *E.S.R* (%age relief = 52.17%), and Statistically Significant relief ( $p < 0.05$ ) was found in walking time(%age relief=36 %), Statistically Non

Significant relief ( $p > 0.05$ ) was found in *R.A Factor* (%age relief=17.64%), and *General Function Assessment* (%age relief = 7.14%)

**Overall Effect of Therapy**

S.N.	Result	No. Of Patients	Percentage
1	Cured	0	0%
2	Markedly Improved(>61%)	4	26.66%
3	Moderately Improved(31-60%)	11	73.33%
4	Mildly Improved(10-30%)	0	0%

## III. CONCLUSION

*Amavata* now a day, burning and challenging disease of Medical Science. First time *Acharya Madhava* has described the disease elaborately with the *Nidana, Samprapti, Pratyatma Lakshanas* etc. '*Ama*' is one of the chief pathogenic factors of the disease. *Ama* is generated at various levels in the body which are at *Jatharagni* level, *Bhutagni* level and *Dhatwagni* level. *Amavata* in modern medical science, clearly resembles with RA. This comparison is almost undoubtful, but including RA, some other diseases in modern medical science also comes under the *Amavata* in Ayurveda. An exact comparison of *Amavata* with RA is still a matter of reasoning in *Ayurvedic* field. Predominance of *Vata, Kapha & Mandagni* along with *Tridosha* dusti was found to play an important role. Maximum *Doshanubandha* found as *Vata & Kapha* in this study sample. Maximum number of patients in the study sample were having *Madhyam kostha* and *Krura kostha* which shows the disturbance *Kapha & Vata dosha*. Thus, it can be concluded that *Nagar GhritaSnehaPan* is quite effective in the management of *Amavata*

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