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# Clinical Evaluation of the Effect of *Eranda Taila* with *Haritaki Churna* and *Vaitarn Basti* in the Management of *Amavata* (Rheumatoid arthritis)

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# ABSTRACT

Amavata is one of the dreaded disease in the present era .It affects day to day life activity of the patient badly. Now a days, it becomes a challenge to physician to manage its chronicity, incurability, complication& morbidity. Considering the clinical features the disease Amavata can be correlated with rheumatoid arthritis as mentioned in contemporary medical science. Innumerable researches have been done to solve the clinical condition but an effective, safe, less complicated and cost effective treatment is still required. In this study, 80 numbers of patients of amavata were randomly registered from OPD and IPD, Dept.of kayachikitsa, Govt. Ayurvedic College and Hospital, Jalukbari, Guwahati, Assam. In this trial group, Erandataila 5ml along with Haritakichurna 3gm was given at bed time for 2months.Same patients were given Vaitaran Basti according to the schedule of Yoga Basti for 8 days (along with Tila taila Anuvasanbasti). On statistical analysis of the result, it was found that there was remarkable relief in the clinical features i.e pain, swelling, stiffness, tenderness, ESR along with health assessment questionnaire (HAQ).

# **KEYWORDS**

Amavata, Rheumatoid arthritis, Vaitaranbasti





# **INTRODUCTION**

Ayurveda, the divine science has extreme potency in curative and preventive aspects, specially in preventing the further progression of chronic diseases. It aims to maintain the health i.e. to maintain the homeostasis of the body and mind in healthy person and to cure the diseased person. Amavata is one of the dreaded diseases that the mankind faces today. The direct reference of Amavata is not found either in the Vedas or the Brihatrayi. Acharya Madhavakara in 7<sup>th</sup> AD described Amavata as a disease with a separate clinical entity in detail. The word Amavata is made up of two words i.e. 'Ama' and 'Vata'. This disease mainly occurs due to derangement of Agni, resulting in the production of Ama. When this Ama combines with vitiated Vata and occupies the Sleshmasthana, it results in a painful disease called "Amavata". The disease is characterized by sarujas and hisotha, vrischikdamstavatvedana of affected joints, gourava, agnimandya, trishna, jadya, jwar etc. In Amavata, Ama and Vata are the chief pathogenic factors which are contradictory in nature so it is difficult in planning the treatment. The features of Amavata described in the Ayurvedic classics are almost similar to that of Rheumatoid Arthritis mentioned in the contemporary

medical science, in relation to clinical features. Rheumatoid arthritis is a chronic heterogeneous systemic inflammatory disease which primarily affects the synovial joints resulting in pain, deformity and eventual functional limitation. The exact aetiopathogenesis of Rheumatoid arthritis is still obscure.

The drugs used by conventional medicine for the treatment of Rheumatoid arthritis are Nonsteroidal Anti-inflammatory Drugs Corticosteroids, (NSAIDs), Disease Anti-rheumatic Modifying Drugs (DMARDs). These medicines shows adverse effects when used for a long period of time. NSAIDs, which are used as a first line of treatment give only symptomatic relief but do not arrest the progression of the disease instead it causes deleterious effects in Gastrointestinal, Renal, Hepatic and Cardiovascular system. Oral steroids are potent anti-inflammatory agents, widely used in RA, but again Steroids cause a wide range of toxicity that can even occur at relatively low doses if used for long time. DMARDs such Methotrexate, as Sulphasalazine, Gold, Chloroquine, etc. are all pivotal in controlling the disease processes, its activity and bring about a remission. But the onset of the benefit with DMARDs takes few months of regular treatment and relapses often occur a few months after cessation of therapy. It can



also produce severe systemic toxicity. So, it is high time to resort to the management of the principle of Amavata (Rheumatoid arthritis) in order to find an effective, safe, less complicated and cost effective treatment.

Thus the present study of erandataila and haritakichurna as samshaman yoga with Vaitarana Vasti as samsodhana process were selected for the management of Amavata with the following Aims and Objectives of the study *"Clinical* evaluation of the effect of Eranda Taila with Haritakichurna and Vaitaran Basti in the management of Amavata (Rheumatoid arthritis)"

# AIMS AND OBJECTIVES

To evaluate the efficacy of the combine therapy of *Eranda Taila with Haritakichurna and Vaitaran Basti in the management of Amavata (Rheumatoid arthritis).* 

Toanalyse the result of the study statistically.

## **MATERIALS AND METHODS**

Ethical Committee Approval No. IEC/17 20-158

#### Source of Data:

Total 80 numbers of patients attending the OPD or IPD of Kayachikitsa department,

Government Ayurvedic college and Hospital, Guwahati suffering from Amavata (Rheumatoid arthritis)were randomly allocated.

# Method of collection of data:

#### Inclusion Criteria:

Patients with age group of 18-60 years, fulfilling the diagnostic criteria of Amavata (Rheumatoid arthritis) have been selected.

#### **Diagnostic Criteria:**

Patients have been diagnosed on the basis of-

Clinical features of Amavata likeangamarda, aruchi, trishna, alasya, gaurava, jwara, Sandhishula, sandhisotha, etc.

✤ The base of criteria for the diagnosis of Rheumatoid arthritis laid down by American Rheumatism Association (1987 revision) has also taken into consideration.

✤ Investigation: For the purpose of assessing the general condition of the patient, diagnosis of the patient and to exclude other pathological conditions, the following investigations had been carried out-

1) **Haematological investigations-** Blood for routine examination which includes Total count (TC), Differential Leukocyte Count (DLC), Erythrocyte Sedimentation Rate(ESR), Haemoglobin percentage (Hb%).

2) Biochemical examinations-

➤ Fasting and postprandial blood sugar



- SGOT. SGPT
- $\succ$  Serum creatinine
- $\succ$  Serum uric acid
- 3) RA factor/anti-CCP
- 4) C-Reactive protein
- 5) ASO titre
- 6) Stool for routine examination
- 7) Urine for routine examination

#### **Exclusion Criteria:**

- 1. Complicated Diabetes mellitus
- 2. Hypertension
- 3. Psychiatric disorders
- 4. Severe metabolic disorders
- 5. Epilepsy
- 6. Malignancy
- 7. Rheumatoid arthritis with chronicity more than 10 years
- 8. Having severe deformities
- 9. All other conditions which need regular medication had been excluded

#### **Intervention with Duration:**

Erandataila 5ml with haritakichurna3gm was given orally to the patients at bed time for 2 months along with Vaitaran Basti for 8 days from the beginning of the therapy.

\* The patients were strictly advised to follow pathya-apathya.

#### **Follow up studies:**

All the patients registered for this study were underwent assessment of signs and symptoms according to both Modern and Ayurvedic assessment of way and inflammatory index to evaluate the efficacy

of Erandataila with Haritakichurna and Vaitran Basti in the management of Amavata.

A total of three follow up were done on 15<sup>th</sup>, 30<sup>th</sup> and 60<sup>th</sup> day during 60 days course.

#### **Criteria for Assessment and scoring:**

#### **Clinical Assessment:**

The assessment of the patients was done on 0 day,  $15^{\text{th}}$ ,  $30^{\text{th}}$  day and  $60^{\text{th}}$  day.

- A. Subjective Parameters :
- ✤ Joint Pain-
- 0 No pain
- 1 Pain occasional, and bearable
- 2 -Pain frequent, can be managed with analgesics

3 -Pain persistent, unmanageable even with analgesic

#### **\*** Morning Stiffness:

0 - .No stiffness

1 - Early morning stiffness up to 30 minutes

2-Early morning stiffness more than 30 minutes,<45 minutes

- 3 Morning stiffness > 45 minutes
- **\*** Swelling:

0- No swelling

- 1 Just covering bony prominences
- 2 Severe swelling

#### ✤ Health Assessment Questionnaire (HAQ) For Rheumatoid Arthritis:

0- Complete ability to carry on all routine works without help.

1- frequent normal activity despite slight difficulty in joint movements.



2- few activities persisting, but can take care of himself/herself.

3- Few activities persisting but needs attendant to take care of himself herself.

4- patient is totally bed-ridden.

#### **\*** Objective parameter:

0 - No tenderness

- 1- Tender but bearable
- 2- Tender and winced
- 3- Tender, winced and withdraw
- \* Erythrocyte sedimentation rate(ESR)

## RESULTS

Amongst 80 patients included in the study maximum number of patients belonged to the age group of 31 to 40 years i.e. 40 patients (50%). Out of 80 patients (28.75%) belonged to the age group of 41 to 50 years, 9 patients (11.25 %) belonged to the age group of 18-30 years. A minimum of 8 patients (10%) represents the age group 51 to 60 years. Maximum number of patients belonged to female gender i.e. 73 patients (91.25%) followed by 7 patients (8.75%) belonging to male gender. Maximum number of patients, i.e, 50 numbers (62.5%) belonged to Hinduism followed by 28 patients (35%) Muslim religion and 2 patients (2.5%) belonged to Christian religion. Maximum numbers of patients were high school passed i.e. 41 patients (51.25%) followed

by 15 patients (18.75%) were graduate, 13 patients (16.25%) were illiterate and a minimum of 11 patients (13.75%) were primary school. Majority of patients were house wives i.e. 39 number of patients (48.75%) followed by 23 patients (28.75%) belonged to desk work and 18 patients (22.5%) belonged to field work. Maximum number of patients i.e. 53 patients(66.25%) belonged to middle class followed by 23 patients (28.75%)belonged to lower class and 4 patients (5%) belonged to higher class. Maximum number of patients i.e. 75 patients (93.75%) were married and a minimum of 5 patients (6.25%) were unmarried. Maximum number of patients i.e. 51 patients (63.75%) belonged to urban area followed by rural 29 patients (36.25%). In the study 40 numbers of patients (50%) had addiction towards tea along with betel nut chewing followed by tea was 15 cases (18.75%), only 4 cases (5%) had addiction of tea along with smoking. Lastly 2 cases (2.5%) showed addiction of alcohol and 19 cases (23.75%) showed no addiction towards any beverages.

# SUBJECTIVE PARAMETER Interpretation:

Table no. 1 depicts the effect of combined therapy of Eranda Taila with haritakichurna and Vaitara Basti on pain. Mean score before treatment was 2.2 and SD  $\pm$  0.54



which came down to 1.4 after treatment showed highly significant result at p with SD  $\pm 0.66$ , giving Z value 8.8 which <0.001.

**Table 1** Effect of the drug on trial group (n=80) for pain criteria after60 days (i.e. after completion of trial)

SI. No	Symptoms	$\overline{X}_{ m BT}$	$\overline{X}_{AT}$	SD BT	SD AT	SE	Z	Р	Remarks
1	Pain N=80	2.2	1.4	0.54	0.66	0.09	8.8	< 0.001	Highly Significant

#### **Interpretation:**

Table no. 2 Effect of Erandataila withharitakichurna and Vaitara Basti onstiffness reveals that before treatment mean

score was 2.5 with SD  $\pm 0.50$  which was bought down to 1.8 with SD  $\pm$  0.60 after treatment, giving Z value 8.75 which showed significant result at p <0.01.

**Table 2** Effect of the drug on trial group (n=70) for stiffness criteria after60 days (i.e. after completion of trial)

SI. No	Symptoms	$\overline{X}_{\mathrm{BT}}$	$\overline{X}_{\mathrm{AT}}$	SD bt	SD AT	SE	Z	Р	Remarks
1	Stiffness N=70	2.5	1.8	0.50	0.60	0.08	8.75	< 0.001	Highly Significant

#### **Interpretation:**

Table no. 3Effect of Erandataila withharitakichurna and Vaitara Bastionswelling reveals that before treatment mean

score was 1.7 with SD  $\pm 0.46$  which was bought down to 1.0 with SD  $\pm$  0.63 after treatment, giving Z value 7.7 which showed highly significant result at p <0.001.

Table	3 Effect of the dr	ugs on tria	l group (i	n=72) for	swelling c	riteria af	ter 60 da	ays (i.e. after	completion of trial)
Sl.	Symptoms	$\overline{X}_{\mathrm{BT}}$	$\overline{X}_{AT}$	SD BT	SD AT	SE	Ζ	Р	Remarks
No									
1	Swelling	1.7	1.0	0.46	0.63	0.09	7.7	< 0.001	Highly
	N=72								Significant

#### **Interpretation:**

Table no. 4 depicts the effect of Erandataila with haritakichurna and VaitaraBastion HAQ. Mean score before treatment was 36.8 and SD  $\pm$  9.6 which came down to 31.2 after treatment with SD  $\pm$ 9.1, giving Z value 3.6 which showed significant result at p <0.001.

Table	4 Effect of the dr	ugs on tria	l group (1	n=80) for H	IAQ after 6	50 days (i.	e. after	completior	n of trial)
SI.	Symptoms	$\overline{X}_{\mathrm{BT}}$	$\overline{X}_{\mathrm{AT}}$	<b>SD</b> <sub>BT</sub>	SDAT	SE	Z	Р	Remarks
<u>No</u> 1	HAQ N=80	36.8	31.2	9.6	9.1	1.47	3.6	< 0.01	Significant

#### **Interpretation:**

Table no.5 depicts the effect of Erandataila with haritakichurna and VaitaraBastion tenderness. Mean score before treatment was 1.37 and SD  $\pm$  0.84 which came down to 0.74 after treatment with SD  $\pm$ 0.81, giving t value 2.86 which showed significant result at p <0.01



Table 5 Effect of the drugs on trial group (n=80) for tenderness criteria after 60 days (i.e. after completion of trial)

SI. No.	Symptoms	$\overline{X}_{ ext{BT}}$	$\overline{X}_{\mathrm{AT}}$	SD bt	SD AT	SE	Z	Р	Remarks
1	Tenderness N=80	2.2	1.3	0.60	0.46	0.08	11.25	<0.01	Significant

#### **Interpretation:**

Table no. 6 shows that effect of Erandataila with haritakichurna and Vaitara Basti on ESR reveals that before treatment mean score was 52.1 with SD  $\pm$ 8.43 which was bought down to 39.0 with SD  $\pm$  19.87 after treatment, giving Zvalue10.73 which showed significant result at p <0.001.

Table 6 Effect of the drugs on trial group (n=80) for ESR after 60 days (i.e. after completion of trial)

Sl. No.	Symptoms	$\overline{X}_{ m BT}$	$\overline{X}_{\mathrm{AT}}$	SD bt	SD AT	SE	Z	Р	Remarks
1	ESR N=80	52.1	39.0	8.43	7.04	1.22	10.73	< 0.01	Significant

#### Interpretation:

Table no. 7 shows that Out of 80 patients, 6 patients (7.5%) were found complete remission, 44 patients (55%) were found major improvement, while 30 patients (37.5%) showed mild improvement.

**Table 7** Post Therapeutical assessment on relievedof clinical signs and symptoms (i.e. overallassessment of the treatment)

	Trial Group Total numbers or patients(n)=80				
	No of patient	Percentage			
Complete	6	7.5%			
remission					
Major	44	55%			
improvement					
Minor	30	37.5%			
improvement					
No improvement	0	0%			
DISCUSSION	J				

## DISCUSSION

In the study, it has found that maximum numbers of patients belonged to the age group 31-40 years (50%) and 41-50years (28.75%), which shows that the predominance of this disease is more in middle age groups. Majority of patient i.e.91.25% were female as compared to male (8.75%). Thus it can be inferred that that the prevelance of Amavata (Rheumatoid arthritis) is more common among female gender. Highest number of cases were found addiction positive, so there may be some role of the addiction factor for the formation of this disease. Maximum number of patients (41.25%) were having history of chronicity of 1-3years. The study revealed that maximum number of patients (48.75%)had irregular bowel habit which may be due to mandagni. In this present study, it has found that maximum patients, i.e. 52 patients (65%) were RA negative and rest 28 patients (35%) were RA positive. It means RA factor is not confirmatory test for the diagnosis of Amavata (Rheumatoid arthritis) but it can be of prognostic



significance because patients with high titers tend to have more severe and progressive disease with extra articular mani festation. The effect of therapies in the trial group were assessed statistically with Z-test. Table 1 to table 6 showed that the trial drug has shown significant result on the clinical features i.e. pain, swelling, stiffness, tenderness, ESR in terms of different degrees.

# CONCLUSION

The results were analyzed statistically which revealed that the combined therapy of Erandataila with Haritakichurna as samsaman yoga along with Vaitaranabasti as samsodhanchikisa has significant result in the management of the disease Amavata (Rheumatoid arthritis).



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