# A CLINICAL STUDY TO EVALUATE THE EFFICACY OF SADYO VIRECHANA AND VAITARANA BASTI AS YOGA BASTI SCHEDULE IN AMAVATA W.S.R TO RHEUMATOID ARTHRITIS

# Abstract

Rheumatoid arthritis is second most common joint disorder. About 0.7% of world population is affected by RA. Females are three times more affected than male. It is a chronic inflammatory Auto Immune joint disease, characterized by pain, swelling, and painful limitation tenderness of movements. Generalized stiffness may occur but morning stiffness lasting more than one hour is a characteristic feature. Amavata can be correlated with Rheumatoid Arthritis due to same presentation of disease. Asthi and Sandhi are the chief site for the manifestation of cardinal symptoms like Sandhishoola, Shandhishotha and Sandhigraha etc. All the three Doshas take part in the pathogenesis of disease but Ama and vitiated Vata Dosha play the dominant role. In modern medical science there is no effective medicine for this disease. All that modern medicine used DMARD, steroids and NSAID frequently which have negative impact on immune system and gives only temporary relief. Hence the management of this disease is merely insufficient in other systems of medicine and patients are continuously looking with a hope towards Ayurveda to overcome this challenge. Hence an effort is done to compare the efficacy of Vaitarana Basti following Sadyo Virechana in Amavata (Rheumatoid Arthritis). Method: It is single blind Pilot clinical study with pre-test and post- test design wherein 3 patients suffering from Rheumatoid Arthritis are selected. Patients are administered Virechana Karma with Gandharva Hastadi Eranda Taila followed by Vaitarana Niruha Basti during morning in empty stomach (Niranna) daily as Yoga Basti procedure. Anuvasana Basti is

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administered same day evening after food with *Bruhat Saindhavadya Taila* (50 ml). *Result:* In present study there were significant improvement symptomatically after treatment with significant improvement were seen in Laboratory investigations.

**Keywords:** Amavata, Rheumatoid Arthritis, Virechana Karma, Vaitarana Basti

# I. INTRODUCTION

According to Ayurveda, simple freedom from disease is not health. For a person to be healthy he should be mentally and spiritually happy and imbalance of *Doshika* equilibrium is term as *Roga*. Among *Tridosha, Vata* is responsible for all Cheshta and all disease. The affliction of *Asthi* and *Sandhi* by *Prakupita Vata* with Ama is the chief phenomena in *Samprapti* of *Amavata* resulting in symptoms like *Gatra Stabdhata, Vikunchana of Manya, Trika, Prustha, Kati and Janu etc.* [1, 2] As per symptoms described for Rheumatoid Arthritis it resembles as that of *Amavata* with vitiation of *Asthi* and *Sandhi* especially. Sandhi are one of the types of Marma and form a part of *Madhyama Roga Marga* [3]. Thus, involvement of Marma, *Madhyama Roga Marga, Vata Dosha* and *Dhatu Kshaya* make disease *Kashta Sadhya* [4]. More than a year of active disease without remission and early development of functional disability are of poor prognostic value.

Sedentary life style, food habits and genetic predisposition are the major predisposing factor in the causation of Rheumatoid Arthritis. It is a chronic inflammatory Auto Immune joint disease [5]. Rheumatoid arthritis make the affected person unfit for an independent life. RA is chronic systemic, inflammatory disorder of unknown cause that is characterized by symmetrical polyarticular pain, swelling, morning stiffness and fatigue. The aim of treatment in RA is to reduce joint inflammation, to restore joint mobility and thus to prevent tissue destruction and deformity. As per the data available 5% among the total world population is said to be affected by RA with male female of ratio 1:3 [6]. In India prevalence rate is 0.75% among the people over the age of 16 years. Persistently active RA often results in articular cartilage and bone destruction thus leading to functional disability, it is vital to diagnose and treat this disease early and aggressively before damage ensures.

Acharya Chakrapani was the pioneer in describing the principles of treatment of *Amavata* which are *Langhana*, *Swedana*, drugs having *Tikta-Katu Rasa* and *Dipana* property, *Virechana, Snehapana* and *Basti* [6]. *Panchakarma* is a very unique therapeutic procedure, because of its preventive, promotive, prophylactic and rejuvenate properties as well as providing a radical cure. Among these *Panchakarma, Basti Karma* is such a *Chikitsa* that is applicable in all the *Vata Vyadhi* [7]. *Amavata* is a *Vatika* disorders and *Vata* is also controls and regulator of other two *Dosha, Dhatu* and *Mala* and also all the body activities [8]. Therefore, once *Vata* is controlled by *Basti*, all these factors are automatically regulated and total body equilibrium is achieved. Acharya Charaka, has indicated *Basti* prepared with *Guda, Saindhava, Amlika* and *Gomutra* which are having *Ushna, Tikshna* and *Pachana* effect to deal with *Ama* and *Taila* to deal with *Vata Dosha* [9]. *Shodhana Karma* is having importance especially in *Bahudosha Avastha* of any disease. Among them *Virechana Karma* have been mentioned in different classics for the treatment of *Amavata* [10].

Taking this in account it was thought that *Sadyo Virechana Karma* followed by *Vaitarana Basti* would be more useful in disintegration of pathogenesis (*Samprapti Vighatana*) of *Amavata*. These drugs are proved to have *Ama Pachana*, *Vatahara*, *Shothahara*, *Vedanasthapana* etc properties by various research workers.

# **II. AIMS AND OBJECTIVES**

- 1. To study in detail about Amavata.
- 2. To study in detail about Rheumatoid Arthritis
- 3. To study in detail about Sadyo Virechana and Vaitarana Basti in Amavata.

# **III.METHODOLOGY**

# 1. Source of Data

- Literary Source: All the classical Ayurvedic, Modern Literature, Journals and Contemporary texts including the websites about the disease and treatment are reviewed n documented for the intended study.
- **Sample Source:** Patients attending OPD and IPD, Department of *Panchakarma*, Sri Paripoorna Sanathana Ayurveda Medical Hospital, Nelamangala are randomly selected.
- **Drug Sources:** *Basti* and *Virechana Dravya* like *Guda, Saindhava Lavana, Bruhat Saindhava Taila, Chincha* and *Gomutra* are collected from Pharmacy attached to the *Bhaishaja Kalpana* Department, Sri Paripoorna Sanathana Ayurveda Medical Hospital, Nelamangala.
- 2. Method of Collection of Data: A special proforma will be prepared with all points of history taking, physical signs, symptoms of Ayurveda and lab investigations will be carried out as mentioned in allied sciences. Accordingly, patients are selected and will be subjected to detailed clinical history and complete examinations.
- **3. Diagnostic Criteria:** Patients diagnosed on the basis of Pratyatma Lakshana of Amavata like Angamarda, Aruchi, Alasya, Gaurava, Shunata, Saruja Shopha etc.

# 4. Inclusion Criteria

- Patients presenting with *Pratyatma Lakshana* of *Amavata*.
- Subjects are selected irrespective of caste and sex.
- Patients between the age of 16-60 yrs.
- Patients indicated for Virechana Karma, Niruha and Anuvasana Basti procedure.

# 5. Exclusion Critera

- Patients suffering from systematic diseases like uncontrollable diabetes mellitus, uncontrolled hypertension, TB of spine, psychiatric illness will be excluded from study.
- Patients suffering from grave conditions like Malignant tumours and other severe illness like HIV, HbsAg will be excluded.
- Congenital Joint deformity.
- Patients suffering from Rheumatoid Arthritis during Pregnancy.
- Patients with age less than 16yrs and more than 60yrs.

- 6. Study Design: It will be a single blind Pilot study with pre-test and post- test design where in 3 patients suffering from Amavata will be selected irrespective of their gender, cast or creed. The parameter of signs and symptoms will be scored on the basis of standard method and will be analyzed statistically.
- **7. Interventions:** 3 patients with Pratyatma Lakshana of Amavata w.s.r. to Rheumatoid Arthritis approaching O.P.D./I.P.D./ Camp section of Sri Paripoorna Ayurveda Medical College, Hospital & Research Centre will be selected randomly irrespective of their sex, religion and cast. Administration of Sadyo Virechana followed by Vaitarana Basti is planned.

*Anuvasana basti-5* in no with *Bruhat Saindhava Taila*. *Vaitarana Basti-3* in no with the quantity of 400 ml (approx. 4 *prasrutha*).

Days	1	2	3	4	5	6
Morning	Sadyo		N.BVB.	N.BVB.	N.BVB.	
(Pratah)Before	Virechana					
food						
Evening		A.B-BS	A.B-BS	A.B-BS	A.B-BS	A.B-BS
(Sayam) After		Taila	Taila	Taila	Taila	Taila
food						

# Table 1: Treatment Schedule

8. Duration of Study: Pilot study to evaluate the effect of *Sadyo Virechana Karma* and *Vaitarana Basti* as *Yoga Basti* schedule is for 6 days.

*Follow up*: 12<sup>th</sup> day after completion of treatment. *Study Duration*: 18 days.

- **9.** Assessment Criteria: Assessment was done before treatment, after treatment and during follow-up on basis of clinical symptoms i.e. subjective and objective parameters to assess the overall effect of therapy.
  - Parameters of Study (Objective Parameters)

Criterion	Score		
Joint affected:			
1 large joints	0		
2-10 large joints	1		
1-3 small joints	2		
4-10 small joints	3		
>10 joints	5		
Serology			
Negative RF	0		

# Table 2: ACR 2010 to Diagnose RA

Low positive RF	2
High Positive RF	3
Duration of	
Symptoms:	
<6 weeks	0
>6 weeks	1
Acute Phase	
Reactant	
Normal ESR	0
Abnormal ESR	1

Patients with a score >6 are considered to have definite RA

# • Parameters of Study (Subjective Parameters)

- ➤ Sandhi shoola
- ➤ Sandhi shotha
- > Sparshasahyata
- ➢ Sandhi graham

# Associated Symptoms like Jwara, Alasya, Gaurava, Asyavairasya, Daurbalya, Akarmanyata, Utsahahani, Angamarda, Daha, Trishna

- Ruchirahara kala (Taste and appetite)
- > Abhyavaharanabhilasha (Revival and improvement in hunger)
- > Ahara Kala Samyagajaranam (Digestion of ingested food within time)

Details of the scores adopted for main signs and symptoms in present study were as follows:

• Scale for Assessment: These points are discussed in detail as follows:

#### > 14 Score – To Cessation of Cardinal Symptoms like

#### Sandhishoola (Pain in joints)

- No pain 0
- Mild pain 1
- Moderate pain, but no difficulty in moving 2
- Slight difficulty in moving due to pain 3
- Much difficulty in moving the bodily parts 4

#### Sandhishotha (Swelling in joints)

- No swelling 0
- Slight swelling 1
- Moderate swelling 2
- Severe swelling 3

# Sparshasahyata (Tenderness in Joints)

- No tenderness 0
- Subjective experience of tenderness 1
- Wincing of face on pressure 2
- Wincing of face and withdrawal of the affected part on pressure 3
- Resist to touch 4

# Sandhigraha (Stiffness in Joints)

- No Stiffness or Stiffness lasting for 5 mins. 0
- 5 min to 2 hrs 1
- 2 to 8 hrs 2
- More than 8 hrs 3

# > 10 Score to – Associated Symptoms like

Jwara, Alasya, Gaurava, Asyavairasya, Daurbalya, Akarmanyata, Utsahahani, Angamarda, Daha, Trishna were scored as mentioned below –

- Symptoms observed before treatment 10
- Some relief after treatment 05
- Complete relief after treatment 00
- No improvement after treatment 10

*Agni Bala:* It has been given 22 score out of 56 which has been further divided into (4+8+10).

# ➢ 4 Score to Ruchirahara kala (Taste and appetite)

- Equal willing towards all Bhojya Padartha 0
- Willing towards some specific Ahara or Rasavishesha 1
- Willing towards only most liking food and not to other 2
- Unwilling for food, but takes meal 3
- Total unwilling for meal 4

# **8** Score to *Abhyavaharanabhilasha* (Revival and improvement in hunger)

- Person taking food in normal quantity twice a day 0
- Person taking food in moderate quantity twice a day 2
- Person taking food in less quantity twice a day 4
- Person taking food in less quantity once a day 6
- Person not at all taking food 8

- 10 Score to Ahara Kala Samyagajaranam (Digestion of ingested food within time): If proper at the end of digestion will give Jirna Ahara Lakshana they are
- Utsaha
- Laghuta
- Udgar Shuddhi
- Kshutta Pravritti
- Trishna Pravriti
- Yathochhita Malotsarg

# Scoring according to Jirna Ahara Lakshana

- Presence of all (six) symptoms after 6 hrs 0
- Presence of five symptoms after 6 hrs -2
- Presence of four symptoms after 6 hrs 4
- Presence of three symptoms after 6 hrs -6
- Presence of two symptoms after 6 hrs 8
- Presence of one symptom after 6 hours 10

# **IV. RESULTS**

The basis of assessment of results, the response shown by the patients to *Sadyo Virechana* followed by *Vaitarana Basti* in *Amavata*, finally the overall effect of the procedure are computed. The results observed are arranged in a systematic manner in the form of tables and graphically.

Criteria	3 Patients				
	Symptoms Prese	ent Before	Symptoms Present After		
	Treatme	Treatment		Treatment	
	Grade	%	Grade	%	
Joints Affected	Grade 1	100	Grade 0	100	
RF	Grade 2	100	Grade 0	100	
Duration	Grade 1	100	Grade 0	100	
ESR	Grade 1	100	Grade 1	100	
Sandhishoola	Grade 3	100	Grade 0	100	
Sandhishotha	Grade 3	33.33	Grade 0	100	
	Grade 2	66.66			
Sparshashayta	Grade 3	100	Grade 0	100	
Sandhigraha	Grade 2	100	Grade 0	100	
Associated Symptoms	Grade 10	100	Grade 0	100	
Ruchiahara Kala	Grade 2	100	Grade 0	100	
Abhyavaharana	Grade 2	100	Grade 0	100	
Abhilasha					
Ahara Kala Samyag-	Grade 6	33.33	Grade 2	100	
Jaranam	Grade 4	66.66			

# Table 3: Treatment Result

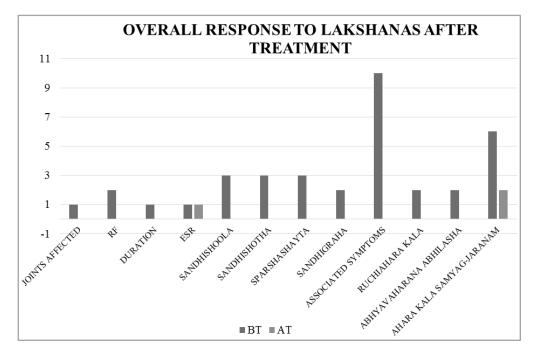


Figure 1: Treatment Result

# V. DISCUSSION

The earliest references of *Amavata* can be found in Atharva Veda in terms of *Sandhi Vikriti* [11]. Detail description about *Amavata* is found in Hareeta Samhita about its etiology, clinical manifestation, types, prognosis, treatment and dietary regimen [12].

Rheumatoid Arthritis is a chronic inflammatory Auto Immune joint disease. RA is chronic systemic, inflammatory disorder of unknown cause that is characterized by symmetrical polyarticular pain, swelling, morning stiffness and fatigue.

Madhavakara has explained the *Samprapti* of *Amavata* as follows; in the presence of *Mandagni*, if one is exposed to *Nidana* then *Ama* is formed in the *Amashaya* along with vitiation of *Vata Dosha* [13]. This Ama circulates all over the body, propelled by the vitiated *Vata* exhibiting an affinity to get lodged in the *Shleshma Sthana* i.e. Sandhi. Further, this circulating Ama in the *Dhamanis* interact with the normally present *Vata Pitta* and *Kapha Dosha* giving rise to variegated color to the virulent Ama. It becomes more and more Guru and *Picchila*, facilitating *Sroto Abhishyandana* and *Srotorodha*. Further these vitiated *Ama* and *Vata* will lodge in the *Trika* and *Sandhi* i.e., *Shleshmasthana* leading to the symptoms like *Gatra Sthabdhata*, *Sandhi Shula*, *Sandhi Shotha*, etc. Acharya Chakrapani was the pioneer in describing the principles of treatment of *Amavata* which are *Langhana*, *Swedana*, drugs having *Tikta-Katu Rasa* and *Dipana* property, *Virechana*, *Snehapana* and *Basti* [9].

In this work an effort has been made to study the efficacy of the *Sadyo Virechana* followed by *Vaitarana Basti Karma* treatment by observing and comparing the effects before and after the treatment. All the 3 cases selected for pilot study approached for the treatment for *Amavata* wsr to Rheumatoid Arthritis. The same treatment protocol can be adopted for the large group sample for evaluating the effect of Ayurvedic Management.

# VI. CONCLUSIONS

The changes in lifestyle, food habits and specially stress have kept on contributing several new diseases which have become a challenge for the human race. *Amavata* is one among such diseases which affect the life of the human being. The initiative factors for this pathogenesis are *Ama* and *Vata*. *Amavata* represents the vitiation of *Tridosha*. Ama is the result of Agnimandhya and causes the derangement of Agni. This research may support the pivotal of Ama explained by Acharyas in causing the disease.

Sama Lakshanas were present in majority of the patients, Sadyo Virechana use for Kostha Shodhana and Vatanulomana also it was observed that, it has increased the appetite by acting on the Agni which does Amapachana.

Vaitarana Basti is a simple combination of commonly available drugs, which are also cost effective. It is a type of Niruha Basti with some changes in the drug combination. As a whole the content of Vaitarana Basti has Laghu, Sukshma, Ushna and Teekshna properties which can act on both Vata and Kapha Dosha. Gomutra being the chief content of Basti which does the Pachana of the Ama and removes the Srotoavarodha.

Conclusion can be made from the present study that Basti can offer good benefit in neurological manifestations of *Amavata* Pain, Stiffness, Tenderness etc. An integrated approach bestows unlimited benefits to the suffering.

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