

Efficacy of *Langhana* with *Saptamushtika Yusha* in the Treatment of *Aama* in *Aamavata* with special reference to Rheumatoid Arthritis

Research Article

Jasminbegam Momin^{1*}, Gogate V E²

1. Post Graduate scholar, 2. Associate Professor,
Department of *Kayachikitsa*, Government Ayurved College, Nanded.

Abstract

In developing societies, the nutritional patterns collectively termed the 'western diet' including high fat and cholesterol, high protein, high sugar and excess salt intake as well as frequent consumption of processed and fast food promote obesity, cardiovascular diseases and metabolic syndrome which are now recognized as due to chronic inflammatory processes in body. According to the ancient *Acharyas*, above mentioned dietary habits are the common *hetus* responsible for the *Agnidushti* and development of diseases like *Aamavata*. The common signs and symptoms of *Aamavata* have similarities with Rheumatoid Arthritis which is an autoimmune disorder of unknown etiology. *Aamavata* has been a challenging problem to the medical field. Various treatment protocols are applied in this disease with partial success. The ancient *Acharyas* have mentioned the *Langhana* along with its different possible ways as a first *Upakrama* for the treatment of *Aamavata*. In present clinical study, five patients of clinically proven *Aamavata* were treated with *Laghu Aahara Rupi Langhana* by using *Saptamushtika Yusha* for seven days. All clinical *Nidanadi Ayurvediya* parameters and American College of Rheumatology guidelines for Rheumatoid Arthritis were followed. The assessment of symptoms was done with the help of Disease Activity Score (DAS). Erythrocyte Sedimentation Rate (ESR) which is increased in most of the chronic inflammatory conditions was also investigated. It was observed that there was a marked reduction in ESR along with the considerable relief in signs and symptoms of patient. The results are encouraging and indicate the efficacy of *Langhana* with *Saptamushtika Yusha* over *Aamavata*.

Key Words: *Aama*, *Aamavata*, *Rheumatoid Arthritis*, *Langhana*, *Saptamushtika Yusha*, *DAS*, *ESR*.

Introduction

Aamavata is a chronic systemic disease involving multiple joints. (1) Among ancient *Ayurved Samhitas*, *Madhav Nidana* mentioned the *Aamavata* as a specific disease entity where *Aama* and *Vata* plays a predominant role in the *Samprapti* of the disease. (2) The disease is mainly due to derangement of *Agni* which happens due to *Ahitakara Aahara-Vihara*. (2) It is very common due to the changing lifestyle of dietetic and behavioral ways like fast-food, lack of exercise, sedentary routine work. This results in the *Agnimandya* and subsequently production of *Aama* which circulates in the body and gets located in the *Sandhi* causing *Sandhishoola*, *Sandhishotha* and *Graha*. (2) The clinical manifestations of *Aamavata* can be compared with Rheumatoid Arthritis which is an autoimmune disorder of unknown etiology. (3) The prevalence of Rheumatoid Arthritis is 0.8% of the population. (4) The onset is most frequent during the 4th and 5th decades of life and women are affected three times more often than men. (4) The characteristic feature of established Rheumatoid

Arthritis is a persistent inflammatory synovitis usually involving peripheral joints in a systemic pattern. (4) It is a common disorder with varied clinical signs and symptoms related to multiple anatomical sites both articular and extra-articular. (5)

Allopathic system of medicine has got an important role to play in overcoming symptoms of articular diseases. (5) The drugs available to overcome the symptoms due to inflammation in the form of Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) and the long-term suppression is achieved by the Disease Modifying Anti-Rheumatic drugs (DMARDs). (5) But most of the NSAIDs have gastrointestinal side effects whereas DMARDs have bone marrow, renal and hepatic suppression. (5) Hence the management of this disease is merely insufficient in other systems of medicine and patients are continuously looking with a hope towards Ayurveda. (5)

According to *Ayurveda*, treatment of *Aama* has to be done initially for *Aamavata*. *Yogaratanakara* have described the *Chikitsa Siddhant* which includes firstly *Langhana* then *Swedanadi Upakramas*. (6) These should be used as per the *Rugna Bala* and *Vyadhi Avastha*. *Acharyas* have also stated *Sanshodhana*, *Pachanadi* ten different types of *Langhana*. (7) This study aims to evaluate the efficacy of *Langhana Upakrama* in the treatment of *Aama* in *Aamavata* by using *Laghu Aahara Rupi Langhana* in the form of *Saptamushtik Yusha*.

* Corresponding Author:

Jasminbegam Momin

PG scholar,

Department of *Kayachikitsa*,

Government Ayurved College, Nanded.

Email id - jasminmomin791992@gmail.com

Aim

To study the efficacy of *Langhana* with *Saptamushtika Yusha* in the treatment of *Aama* in *Aamavata* with special reference to Rheumatoid Arthritis.

Objectives

1. To study the relief in signs and symptoms of *Aamavata* by *Langhana Upakrama*.
2. To study the process and duration of *Aama Pachana* by *Langhana*.
3. To study the effect on erythrocyte sedimentation rate (ESR) before and after *Langhana* in *Aamavata*.

Materials and methods

Criteria of diagnosis

Aamavata – Madhava Nidanokta Aamavata Lakshanas (8) –

1. *Angamarda*
2. *Aruchi*
3. *Trushna*
4. *Aalasya*
5. *Gaurava*
6. *Jwara*
7. *Apaka*

Patient with *Sandhishoola* and any of 4 of above symptoms were diagnosed as *Aamavata*.

Rheumatoid arthritis

Table no. 1 – American College of Rheumatology (ACR) classification criteria for RA (9)

Subject	Criteria	Score
1. Duration of symptoms	Less than 6 weeks	0
	More than 6 weeks	1
2. Joint Distribution	1 large joint	0
	2-10 large joints	1
	1-3 small joints with or without involvement of large joint	2
	4-10 small joints with or without involvement of large joint	4
	More than 10 joints (at least 1 small joint)	5
3. Serology	Negative RF / CCP	0
	Low RF / CCP	2
	High RF / CCP	3
4. Acute phase reactants	Normal ESR / CRP	0
	Abnormal ESR / CRP	1

A sum of score of equal or more than 6 were diagnosed as Rheumatoid Arthritis.

RF – Rheumatoid Factor;

CCP – Anti Citrullinated Citric Peptide;

ESR – Erythrocyte Sedimentation Rate;

CRP – C Reactive Protein

Method of selection of subjects

Inclusion criteria

- Patients fulfilling the diagnostic criteria of *Aamavata* and Rheumatoid Arthritis as mentioned above are included.
- Patients between age group of 35-50 years.
- Patients of either sex.
- The patient having the disease for about 2 years and having acute attack in last 15 days.

Exclusion criteria

- Disease duration more than 2 years.
- Severe deformities with severe ankylosed joints.
- Patients who are steroid dependent.
- *Alpa Bala* and *Alpa Satva* patient
- Patient suffering from other systemic illness like diabetic mellitus / hepatic / renal / cardiac illness.
- Pregnant and lactating mothers.

Withdrawal criteria

- Patient showing any adverse reaction during the treatment.
- Occurrence of any other severe illness or any infectious condition in patient which may interrupt with the pathophysiology of the disease and requires some other medicines.
- If the BSL goes below 70mg/dl then he patient were withdrawn from the treatment.

Investigations

For the purpose of assessing the general condition of the patient of the patient and to exclude other pathologies, the following investigations were carried out

1. RA (Rheumatoid Arthritis) Test
2. CBC – Complete Blood Count
3. BSL – Random (Blood Sugar Level)
4. Urine analysis
5. ESR (Erythrocyte Sedimentation Rate)

Study location

A clinical study of 5 patients at IPD of our institute.

Study duration and follow up

Patients were administered with *Saptamushtika Yusha* at the time of *kshudhaprachiti* for seven days and assessment of signs and symptoms of patient was done on 0, 4th and 8th day.

Treatment protocol

The patients fulfilling the above diagnostic criteria were admitted at the IPD of our institute. The patients were administered with the *Laghu Aahara Rupi Langhana* in the form of *Saptamushtika Yusha* at the time *Kshudhaprachiti* for seven days.

Table No. 2 - Composition of Saptamushtika Yusha (10)

Ingredients	Properties
1. <i>Kulattha</i>	<i>Laghu, Kapha -Vataghna</i>
2. <i>Yava</i>	<i>Laghu, Ruksha, Lekhana, Purish Jananam</i>
3. <i>Kola</i>	<i>Hrudya, Ruchi-utpada</i>
4. <i>Mudga</i>	<i>Laghu, Ruksha, Sheeta, Kapha-Pittaghna</i>
5. <i>Mulaka</i>	<i>Tridosahara, Deepaniya, Pachaniya, Ruchikara</i>
6. <i>Sunthi</i>	<i>Truptighna, Aamavataghni, Deepaniya, Shoolaprashamaniya</i>
7. <i>Dhanyaka</i>	<i>Jwaraghna, Trushna nigrhana</i>

Method of Preparation (11)

All the ingredients were taken in 10gm (total 70gm) quantity and *Yusha* was prepared with 600ml of *jala*.

Criteria for assessment

The results of therapy were assessed on the basis of clinical signs and symptoms mentioned in Ayurvedic classics as well as by worldwide accepted DAS score. Functional capacity was also assessed and laboratory investigations were repeated at the end of the treatment.

Table No. 3 - The scoring pattern adopted for the subjective assessment is as follows

Subjective Criteria	Gradation
Angamarda	
No <i>Angamarda</i>	0
Occasional <i>Angamarda</i> but patient is able to do routine work	1
Continuous <i>Angamarda</i> but patient is able to do routine work	2
Continuous <i>Angamarda</i> which hampers the routine work	3
Patient is unable to do routine work	4
Aruchi	
Normal desire of food	0
Eating timely without much desire	1
Desire of food little late than normal time	2
Desire of food only after long time	3
No desire at all	4
Trushna	
Normal feeling of thirst	0
Frequent feeling with normal amount of fluid	1
Satisfactory quench after increased intake of fluids but no awaking during night	2
Satisfactory quench after increased intake of fluids with regular awaking during night	3
No quench after heavy intake of fluid	4

Aalasya	
No <i>Aalasya</i> at all	0
Start work in time with efforts	1
Unable to start work in time but complete it	2
Delay in start of work and unable to complete it	3
Never able to work and always like to rest	4
Gaurava	
No feeling of heaviness	0
Occasional heaviness in the body but can do routine work	1
Continuous heaviness in the body but can do routine work	2
Continuous heaviness in the body which hampers the routine work	3
Unable to do any work due to heaviness	4
Apaka	
Normal digestion	0
Indigestion once or twice in a week in one meal	1
Indigestion 3-5 times in a week in one meal	2
Indigestion 3-5 times in a week in both meal	3
Indigestion after every meal	4

Objective criteria

1. **Jwara** – It was recorded daily at 9am and if the patient was having pyrexia then every four hourly.
2. **BSL** – It was checked every evening in order to avoid any harm to the patient due to decreased BSL.
3. **ESR** – As it is increased in chronic inflammatory conditions, it was measured before and after the treatment in order to assess the inflammation.
4. **Disease Activity Score (DAS 28)** - It was calculated according to the formula – $0.56 \times \sqrt{\text{number of tender joints}} + 0.28 \times \sqrt{\text{number of swollen joints}} + 0.70 \times \text{Linear number (ESR)} + 0.014 \times \text{VAS}$

Table No. 4 - Visual Analogue Score (VAS)

0	No pain
1-20	Mild
21-40	Uncomfortable
41-60	Distress
61-80	Intense
81-100	Worst

Assessment of langhana (12) –

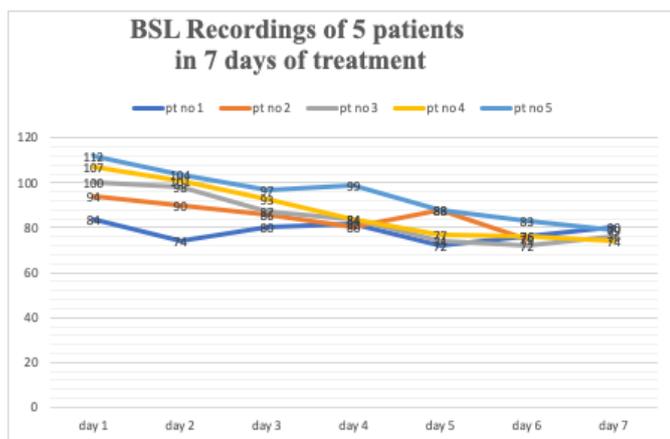
The assessment of *Langhana* was done with the help of *Samyaka Langhana Lakshanas* as stated by *Acharya Charaka*

Vata Visarga (Proper excretion of flatus), *Mutra Visarga* (Proper excretion of urine), *Purisha Visarga* (Proper excretion of feces), *Gatra Laghavata* (Lightness in the body) *Hrudaya-Udgar-Kantha-Aasya Shuddhi* (Feeling of purity in heart, eructation throat and mouth), *Tandra* (Disappearance of drowsiness), *Klama* (Disappearance of exertion), *Swedaprachiti* (Appearance of sweat), *Ruchi Utpatti* (Appearance of taste for food), *Kshudha and Pipasa Sahodaya* (Excessive hunger and thirst), *Nirvyathe Aantartmani* (Contentment).

Results

The BSL recordings of patients were done on every evening in order to avoid any harm due to restricted diet. It was found that maximum BSL level was on the first day and it was 110mg/dl. BSL was reduced upto 71mg/dl during the course of treatment. But there were no any complaints like giddiness n weakness. All patients were stable during the *Langhana Upakrama*

Graph no. 1- Graph showing the BSL levels of 5 patients during the course of Langhana Upakrama



ESR is raised in most of the inflammatory conditions. It was found that after the completion of *Langhana Upakrama*, there was considerable reduction in *shotha* and also marked reduction in ESR values.

Table no. 5 - The findings of ESR values of 5 patients before and after treatment are as follows

Pt. No	ESR – Before Treatment	ESR – After Treatment
1	34 mm/hr	24 mm/hr
2	80 mm/hr	36 mm/hr
3	60 mm/hr	50 mm/hr
4	62 mm/hr	54 mm/hr
5	17 mm/hr	10 mm/hr

The assessment of signs and symptoms of patients was done with the help of DAS 28 Score. The maximum difference between the score before and after the treatment was 32.44.

Table no. 6 – DAS 28 Score of 5 patients before and after treatment

Sr. No.	DAS Score – Before Treatment	DAS Score – After Treatment
1	28.05	18.96
2	61.32	28.88
3	45.92	37.45
4	46.61	39.64
5	14.95	8.91

Patients were having *Samyaka Mala-Mutra Pravartana*, *Ruchiutpatti*, *Samyaka Kshudhapravartana* and feeling of *Laghavata*.

Discussion

As no fuel was provided to the hypofunctioning *Jatharagni*, it was excited gradually. *Langhana* helps in the excitation of *Jatharagni* which causes *Pachana* of the undigested intermediate product, that is, *Guru*, *Pichchila* and *Stabdha Aama*. Hence, the patients were having feeling of *Laghavata* and free movements of joints. There was decrease in the complaints of *Sandhishoola*, *Sandhishotha* and *Graha*. The patients became able to do their routine work independently with minimum efforts.

The pathology of *Aamavata* originates in *Aamashaya* due to poor digestion in the presence of *Mandagni*. Thus *Aamavata* is not the disease of joints but it is a disease having *Udbhava Sthana* in the *Aamashaya* and *Abhivyakti* at the joints. Thus, by gradual excitation of *Jatharagni* with the help of *Langhana Upakrama*, *Pachana* of *Aama* is achieved and its further formation is restricted.

Due to cleaning of *Srotomarga*, *Vatanulomana* was there and *Ushma* was restored to its normal state. Thus, there was a considerable decrease in the complaints of *Jwara*.

All the ingredients of *Saptamushtika Yusha* have *Deepana*, *Pachana*, *Ruchi utpadaka* properties. This also helps in the digestion of *Aama*. This improves *Ruchi*, improves *Kshudha* and helps in *Samyaka Mala-Mutra Pravartana*. Thus, *Samyaka Langhana Lakshanas* were also achieved. Though the *Kulattha* is having *Amlapittajanana* property, it is used as one of the most important ingredient in this *Kalpa* but no patient had complained of the *Amlapitta*. This may be due to balancing effect of other ingredients.

Everyday BSL recording were done in order to provide any emergency medication in case of decreased sugar level. But all the five patients were stable as *Saptamushtika Yusha* was helping in improving the *Ruchi* and *Pachana* of *Aama*. So *Samyaka Kshudhapravartana* was there and all patients were taking *Yusha* as per their *Kshudha*. Hence there was no need of any emergency medicine.

ESR is raised in most of the inflammatory conditions. It was found that there was a marked reduction in ESR values after completing the *Laghu Aahara Rupi Langhana Upakrama*. This may be due to *Langhana* which helps in *Pachana* of *Aama* and reduction of *Shotha*.

The assessment was done with the help of DAS 28 Score. Patients have marked reduction in the complaints of joints swelling and tenderness and the score was considerably reduced. After completing the *Laghu Aahara Rupi Langhana Upakrama*, there was *Pachana* of *Guru, Pichchila* and *Stabdha Aama*, hence joints were having considerable reduction in swelling and tenderness. Patients were having free movements of joints, hence the DAS score reduced after the treatment.

Thus there was no worsening of signs and symptoms and patients were treated by *Laghu Aahara Rupi Langhana* by doing *Pachana* of *Aama* with the help of *Saptamushtika Yusha*. Then the patients were further treated with *Swedanadi Upakrama* as per the *Vyadhi Avastha*.

Conclusion

Langhana helps in the digestion of *Aama* and stops its further formation. The ingredients of *Saptamushtika Yusha* have *Deepana-Pachana* properties which facilitates in achieving the effects of *Langhana*. Patients were having *Ruchiutpatti, Samyaka Kshudhapavartana, Samyaka Mala- Mutra Pravartana* and feeling of *Laghavata* after completing the *Langhana Upakrama*. They became able to do their routine work independently with minimum efforts. Thus, the holistic approach by *Ayurvedic Chikitsa Siddhanta* is helpful in the treatment of *Aama* in *Aamavata*.

References

1. Saroj K. D., Sudhaben N. V. Clinical study on *Amavata* (Rheumatoid Arthritis) with *Simhanada Guggulu* and *Shatapushpadi Lepa*. International Journal of Ayurvedic Medicine. 2014, 5(1), page 70 searched on 12/11/2019 at 7.30pm.
2. Yadunandana Upadhyay. *Madhava Nidanam of Acharya Madhava*. 3rd edition. Varanasi; Chaukhambha Prakashana; 2013, page 508-509.
3. Clinical Research Protocols for Traditional Health Sciences (Ayurveda, Siddha, Unani), Central Council for Research in Ayurveda and Siddha, Department of AYUSH, Ministry of Health and Family Welfare, Govt. of India, New Delhi, 2010.
4. Fauci, Braunwald, Kasper, Hauser, Longo, Jameson, Loscalzo. HARRISON'S Principles of Internal Medicine. volume 2. 17th edition. Mc Grave Hill Companies. 2008, p 2083.
5. Pandey S. A., Joshi N. P., Pandya D. M. Clinical efficacy of *Shiva Guggulu* and *Simhanada Guggulu* in *Aamavata* (Rheumatoid Arthritis), International Quarterly Journal of Research in Ayurveda. 2012 Apr-June; doi:10.4103/0974-8520.105246; searched on 4/10/2019 at 8.40pm.
6. Shrilakshmi Shastri. *Yogaratanakara*. Varanasi; Chaukhambha Prakashana; page 566.
7. Ramharsha Singh. *Charak Samhita of Acharya Agnivesha*. Varanasi; Chaukhambha Surbharati Prakashana; 2017, page 121.
8. Shri Yadunandan Upadhyay. *Madhava Nidanam of Acharya Madhava*. Varanasi; Chaukhambha Prakashana; 2013, page 511.
9. Munjal Y.P., API Textbook of Medicine, 9th edition, Jaypee Brothers, Volume 2, page 1833.
10. Bramhanand Tripathi. *Sharangdhara Samhita of Acharya Sharangdhara*. Varanasi; Chaukhambha Surbharati Prakashana; 2015, page 104.
11. Bramhanand Tripathi. *Sharangdhara Samhita of Acharya Sharangdhara*. Varanasi; Chaukhambha Surbharati Prakashana; 2015, page 104.
12. Ramharsha Singh. *Charak Samhita of Acharya Agnivesha*. Varanasi; Chaukhambha Surbharati Prakashana; 2017, page 121.
