Management of *Amavata* through "Pachanartham Agnisandeepanam Param" by the Application of Panchmooladi Churnam

Puspa Priyadarshani¹, Vijay Shankar Pandey²

¹Post Graduate Scholar, Department of Ayurveda Samhita Evam Siddhant, Government Ayurvedic College & Hospital, Kadamkuan, Patna, Bihar, India

²Professor & HOD, Department of Ayurveda Samhita Evam Siddhant, Government Ayurvedic College & Hospital, Kadamkuan, Patna, Bihar, India

Abstract: <u>Background</u>: Amavata is one of the serious, agonizing painful condition that has been prevalent for many centuries. Due to its difficult management, it has been causing people to suffer and posing a challenge to the medical systems. 'Ama' is the prime factor of this disease, which is the outcome of Agni Vikara (Agnimandya, Agnidushti, etc.). Ama, along with Vitiated Vata, causes Amavata and manifests symptoms like Sandhisotha, Sandhishoola, and Sandhistabdhata. In modern science, Amavata is compared to Rheumatoid Arthritis (RA), a disease that affects joints, causing misery to human beings. The prevalence of RA in the world is estimated to be 0.24% to 1%, whereas in India, it is said to be 0.75%. However, it is a matter of concern that this serious disease doesn't have a definitive treatment in modern science. Here, Ayurveda comes forward to combat the disease with effective treatment protocols like Deepana, Pachana, etc., which deal with the root cause of the disease, i.e., Ama. <u>Methods</u>: A total of 30 patients were selected from the OPD/ IPD of GACH, Patna, fulfilling the criteria, of which 28 patients completed the trial. The trial drug 'Panchamooladi Churna' was given to the patients orally for 60 days, and follow-up was done every 15 days. <u>Conclusion</u>: A Total of 67% of patients were recorded with relieved signs and symptoms, while the rest patients with a chronic history of the disease showed no improvement.

Keywords: Ama, Vata, Amavata, Panchamooladi Churna.

1. Introduction

The disease "Amavata" is readily comprehensible as the term is composed of "Ama" and "Vata". Both of these factors are responsible for the disease. By its name, it can be well understood that Ama and Vata are equally contributing factors in this disease, but in the light of pathogenesis, "Ama" carries out a significant part. Ama is said to be the undigested Ahara Rasa that acts like Visha in the body. Its importance is also reflected by the word "Amaya", a synonym given to the Vyadhi (1). Agni is the invariable agent in the process of Paka (digestion, transformation). Hypofunctioning of Agni gives rise to many diseases ⁽²⁾. Amavata is a disease of Rasavaha Srotadushti aided by Mandagni, clinically a condition where Ama & Vata dosha vitiated simultaneously, settles into Trika Sandhis (3), and is characterized by pain in the joints, swellings, fever, and stiffness, which hampers dayto-day activities. Viruddha Ahara (Incompatible diet), Viruddha Chesta (Erroneous habits), Mandagni (Diminished Agni), Nischalata (Lack of physical activity), any exertion immediately after taking Snigdha Ahara, etc., are said to be the cause of Amavata⁽⁴⁾.

The clinical correlation of *Amavata* based on its causative factors, signs, and symptoms etc., can be done with Rheumatoid Arthritis (RA). Rheumatoid Arthritis (RA) is a type of chronic inflammatory disease, characterized by the involvement of symmetrical multiple peripheral joints. RA is the most common arthritis among all types of chronic inflammatory arthritis that often results in joint destruction and physical activities. The prevalence of RA in India is 0.96% of the total population. The last recorded data in 2021 depicts that 1.3 crore people have been diagnosed with RA, with a female and male ratio of 3:1.

The lack of a particular cure for this awful disease is concerning. Modern science majorly approves it as an autoimmune. Currently, the allopathic system treats RA patients with NSAIDs (Nonsteroidal anti-inflammatory drugs), DMARDs (Disease-modifying Anti-Rheumatic Drugs), etc. In the long run, these treatments cause substantial adverse effects and consequences. Hence, the preferred line of treatment in *Ayurveda* is *Ruksha Swedana*, *Langhana*, *Deepana*, *Pachana*, *Anulomana*, *Sranshan*, *Sothaghna*, *Shoolaghna*, etc.; of these, *Deepana*, *Pachana* are considered as baseline treatment. *Deepana-Pachana* drugs help in the digestion of food and inhibit the formation of *Ama*.

2. Materials & Methods

Materials:

- a) *Selection of patients:* Patients were selected from O.P.D and I.P.D (*Kaya Chikitsa/ Panchakarma/ Anusandhan Ekai*) of Government Ayurvedic College & Hospital (GACH), Kadamkuan, Patna, after fulfilling the inclusion and exclusion criteria.
- **b)** *Trial drug:* The trial drug here is *"Panchmooladi Churna"*; all the ingredients of the drug were collected from the Department of RS &BK and prepared in the Pharmacy of GACH, Patna.

Methods:

Ethical clearance and CTRI registration: The ethics clearance certificate from the Institutional Ethical Committee of GACH, Patna, under Aryabhata Knowledge University, was obtained. The trial was registered on CTRI (Clinical Trial Registry- India), CTRI/2024/07/069764.

Volume 14 Issue 5, May 2025 Fully Refereed | Open Access | Double Blind Peer Reviewed Journal www.ijsr.net **Method of collection of data:** Data were collected using a specially prepared case proforma.

Study design: Single-group study where patients were assigned to one group. It is a simple, random technique clinical trial.

Sample size: 30

Statistical Method: Variables on an ordinal scale (gradations) were analyzed using the Wilcoxon Signed Rank Test.

A complete medical history was obtained, and a physical examination was conducted using both *Ayurvedic* and modern diagnostic procedures. All patients were examined for demographic information such as age, gender, address, occupation, education, socioeconomic status, marital status, lifestyle, addictions, dietary habits, and so on. A detailed proforma was prepared to study all these conditions of the patients.

Inclusion criteria:

- 1) Patients having the age group 20 to 60 years.
- 2) The signs and symptoms are based on both *Ayurvedic* and modern points of view.
- 3) The patients fulfilling assessment criteria stated by ACR/ EULAR 2010.
- 4) Both seropositive and seronegative cases of RA.

Exclusion criteria:

- 1) Patients less than 20 years and more than 60 years.
- 2) Patients having severe degrees of deformity, complications, and *Upadravas* described in *Ayurvedic* texts.
- 3) Pregnant ladies and lactating mothers.
- 4) Immunocompromised patients.
- 5) Any other complications like Diabetes mellitus, Tuberculosis, Hypertension, etc.

The diagnostic and assessment criteria were chiefly divided into main signs & symptoms, i.e., *Sandhi Shoola* (joint pain), *Sandhi Sotha* (joint swelling), *Sandhi Stabdhata* (stiffness in joints), general signs & symptoms like *Angamarda* (body ache), *Aruchi* (anorexia), *Trishna* (thirst), *Alasya* (laziness), *Jwara* (fever), *Apaka* (indigestion) ⁽⁵⁾, etc. The above signs and symptoms were recorded in grades 0 to 3, along with the EULAR criteria were assessed.

Main signs & symptoms

Joint pain

- 0- No pain
- 1- Mild pain
- 2- Moderate, but no difficulty in moving
- 3- Difficulty in moving due to pain

Joint swelling

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

Stiffness in swelling

- 0- No stiffness
- 1- 5 min to 2 hours
- 2- 2 to 8 hours
- 3- More than 8 hours

Associated signs & symptoms

Body ache

- 0- No body ache
- 1- Body aches get better after a few minutes of activity
- 2- Body aches get better activity towards midday
- 3- Body aches persisting at all times

Anorexia

- 0- Accepts all Rasas
- 1- Accepts any 4 Rasas
- 2- Accepts any 2 Rasas
- 3- Doesn't accept the taste of food

Thirst

- 0- 0-2 liters/ day
- 1- > 2- 3 liters/ day
- 2- >3- 4 liters/ day
- 3- >4 liters/ day

Laziness

- 0- Interested in doing all activities
- 1- Can perform personal & other activities with little interest
- 2- Can perform personal & other activities without interest
- 3- No interest in any activities

Fever

- 0- No rise in Temp. (98.4° F)
- 1- Patient feels a rise in Temp. (98.4°-99°F)
- 2- Temp. 99°- 101° F
- 3- Temp >101° F

Indigestion

- 0- No indigestion
- 1- Heavy foods not digested properly
- 2- Delayed digestion of lighter food
- 3- Impaired digestion of even lighter food

Objective criteria

General functional capacity

- 0- Ability to do all activities without difficulty
- 1- Ability to do all activities but with difficulty
- 2- Ability to do few activities, always require help
- 3- Unable to perform activities

Walking time

- 0- 15-20 sec
- 1- 21-30 sec
- 2- 31-40 sec
- 3- >40 sec

Grip strength

- 0- 200 mm/Hg or more
- 1- 200-120 mm/Hg
- 2- 120-70 mm/Hg
- 3- Below 70 mm/Hg

Volume 14 Issue 5, May 2025

Fully Refereed | Open Access | Double Blind Peer Reviewed Journal

<u>www.ijsr.net</u>

International Journal of Science and Research (IJSR) ISSN: 2319-7064 Impact Factor 2024: 7.101

Table 1: Classification criteria ⁽⁶⁾ for R.A: a score of ≥ 6 is needed for the classification of a patient as having definite R.A.

SL.	Feature	Description	Score		
		One large joint	0		
А	Joint	Joint 2- 10 large joints			
	involvement	involvement 1-3 small joints			
		4- 10 small joints			
В		Negative RF and negative ACPA			
	Serology	Serology Low positive RF and low positive ACPA			
		High positive RF and high positive ACPA	3		
C	Acute	Normal CRP and normal ESR	0		
С	phase reactant	Abnormal CRP and abnormal ESR	1		
р	Duration of	<6 weeks	0		
D	symptoms	>6 weeks	1		

(EULAR: European League Against Rheumatism/ ACR: American College of Rheumatology 2010 criteria. ACPA: Anticitrullinated peptide antibody; CRP: C-reactive protein; ESR: Erythrocyte sedimentation rate; RF: Rheumatoid factor.)

Selection of the drug:

Drug name	Panchamooladi Churna
Route of administration	Oral
Dose	3 grams
Frequency	B.I.D. (Twice a day)
Anupana	Ushna jala (lukewarm water)
Duration	60 days
Follow-up	15 days

The trial drug, i.e., *Panchamooladi Churna* ⁽⁷⁾, is mentioned in *Charaka Samhita* as an excellent medication for

Kaphavritta Vata, Samakapha, vitiation of Vata, Pachana, Agnideepana Karma, etc. In the disease Amavata, Ama is the prime component for the initiation of the disease. The selected drug potentiates Agni, thus helping in the digestion of Ama, and prevents further formation of Ama. In addition to this, it alleviates vitiated Vata, Kaphavritta Vata, and Samakapaha, etc.

The trial drug, i.e., *Panchamooladi Churna*, with all its ingredients, is listed in Table no: 2; below.

Sl.no	Name	Latin name	Parts used	Proportion
1	Bilwa	Agle marmelos	Root	1 part
2	Shyonaka	Oroxylum indicum	Root	1 part
3	Gambhari	Gmelia arborea	Root	1 part
4	Patala	Stereospermum suoveolens	Root	1 part
5	Agnimantha	Clerodendrum phlomidis	Root	1 part
6	Haritaki	Terminalia chebula	Fruit	1 part
7	Sunthi	Zingiber officinale	Rhizome	1 part
8	Maricha	Piper nigrum	Fruit	1 part
9	Pippli	Piper longum	Fruit	1 part
10	Pippali	Piper longum	Root	1 part
11	Rasna	Pluchea lanceolata	Root	1 part
12	Ajaji	Cuminum cyminum	Fruit	1 part
13	Vidanga	Embellia ribes	Fruit	1 part
14	Shati/ Kachura	Curcuma zedoaria	Root	1 part
15	Saindhava Lavana	-	-	1 part
16	Yava kshar	-	-	1 part
17	Sarji kshar	-	-	1 part

Table 3: Represents the Drugs and their	properties and effect on main sign and symptoms

Drug	Properties	Effect
		Ama causes Srotarodha and vitiation of Kapha Dosha, leading to Vimarga
Bilwa,	Sothahara	Gamana of Vata, resulting in Sotha.
Shyonaka, Gambhari,		Being hot in potency (Ushna Virya), these undergo Katu Vipaka, which
Patala, Agnimantha		helps in digesting accumulated Ama and prevents further formation. Thus
		reduces Sotha (swelling)
	Ruksha, Ushna	Ruksha, Ushna, and Deepana properties help in the digestion of Ama,
Haritaki	Deepana	stimulation of Agni, thus resulting in improvement in Sotha and
	Sothahara (Su. Sutra 45, Bhav Prakash)	Sandhisotha.
Sunthi Maricha	Deepaniya	Ama is caused by Agnimandya, Agnidusthi.
Pippali Ajaji	Shoolaprashamana	Here, Deepaniya drugs help in stimulating Jatharagni and improve
		digestion, which results in the elimination of Ama Dosha from the body
		and reduction of vitiated Vata, resulting good response to Sandhisotha &
		Sandhishoola.
Rasna	Vata-haranam Srestha (Ch. Sutra 25)	Vitiated Vata is alleviated, thus reducing Sandhishoola, Sandhistabdhata.
Vidanga	Katu, Ushna	Due to its Katu, Ushna properties, it reduces Ama, stimulates digestive fire.
	Agnimandya, Aruchi-vinashani (Raj	Acts on Agnimandya, Aruchi, which is considered the root cause of
	Nighantu)	Amavata,

Volume 14 Issue 5, May 2025 Fully Refereed | Open Access | Double Blind Peer Reviewed Journal

www.ijsr.net

International Journal of Science and Research (IJSR) ISSN: 2319-7064 Impact Factor 2024: 7.101

	Katu, Tikshna	Katu, Tikshna properties help in the digestion of Ama.
Shati	SothaShoolasandhigrahapaha (Bhav	It acts on Sotha, Shoola, Sandhigraha, etc., thus helps in reducing the main
	Prakasha)	symptoms of Amavata.
Saindhava lavana,	Agnideepana	Helps in stimulation of Jatharagni, reduces Kapha, Vata Dosha, resulting
Yava kshar, Sarji kshar	Kapha-Vatahara	in reduction of pain, swelling, etc.

3. Observation

The following tables represent the statistical analysis of the signs & symptoms concerned and their improvement after the completion of the trial period.

Chief Commisints	M	ean	Maan Diff	CD	SE	Wilcower W	D Value	0/ Effect	Decult
Ciner Complaints	BT	AT	Mean Dill	5D	SE	wheeven w	P-value	70 Effect	Result
Joint pain	1.82	1.11	0.71	0.60	0.11	-4.066 ^b	0.00005	39.22	Sig
Joint swelling	1.54	0.79	0.75	0.75	0.14	-3.722 ^b	0.00020	48.84	Sig
Stiffness of joints	0.93	0.54	0.39	0.50	0.09	-3.317 ^b	0.00091	42.31	Sig

Table 4: Represents the statistical analysis of the chief complaints

General	Mean		Mean	SD	SE	Wilcovon W	D Value	%	Docult	
Complaints	BT	AT	Diff	SD 51		WIICOXOII W	r-value	Effect	Result	
Body-ache	1.57	0.89	0.68	0.86	0.16	-3.359 ^b	0.00078	43.18	Sig	
Anorexia	0.96	0.71	0.25	0.44	0.08	-2.646 ^b	0.00815	25.93	Sig	
Thirst	1.25	0.61	0.64	0.62	0.12	-3.819 ^b	0.00013	51.43	Sig	
Laziness	1.18	0.79	0.39	0.79	0.15	-2.309 ^b	0.02092	33.33	Sig	
Fever	0.93	0.68	0.25	0.52	0.10	-2.333 ^b	0.01963	26.92	Sig	
Indigestion	1.14	0.54	0.61	0.57	0.11	-3.900 ^b	0.00010	53.13	Sig	

 Table 5: Represents the statistical analysis of the general complaints

Table 6: Represents the statistical analysis	s of the objective parameters
--	-------------------------------

Objective peremeters	Mean		Moon Diff	SD	SE	Wilcowor W	D Value	0/ Effort	Decult
Objective parameters	BT	AT		3D	SE	wheeloon w	P-value	70 Effect	Result
General functional capacity	1.50	0.93	0.57	0.63	0.12	-3.578 ^b	0.00035	38.10	Sig
Walking time capacity	1.71	1.32	0.39	0.74	0.14	-2.480 ^b	0.01315	22.92	Sig
Grip strength	1.46	0.96	0.50	0.84	0.16	-2.725 ^b	0.00642	34.15	Sig

4. Result & Discussion

A total of 30 patients were registered for this trial, out of which 2 patients didn't complete the trial. Out of 28 patients, 21 were female, and 17 female patients were housewives; a high frequency of housewives supports the *Ayurvedic* idea of *'Nischalatwa'*, a sedentary lifestyle, as one of the factors contributing to *Amavata*.

The statistical observation from Table No. 4, after the trial, revealed that the percentage effect on joint pain is 39.22%, whereas the Wilcoxon signed Rank is -4.066^b and the P value is 0.00005, which is significant. Joint pain is induced by *Avarana* of *Vata* by *Ama*, which is stuck in the *Srotas;* the improvement in the *Laksanas* is owing to the *Srotoshodhana* qualities of the drug, which eliminated the *Avarana*. The *Ama Pachaka* and *Agnideepana* actions prevent further settlement of *Ama*, resulting in a good response to the symptom.

The percentage effect on joint swelling is 48.84%, whereas the Wilcoxon signed Rank is -3.722^{b} and the P value is 0.0002, which marks it significant. *Ama* causes *Srotarodha* and vitiation of *Kapha Dosha*, leading to *Vimarga Gamana* of *Vata*, resulting in *Sotha* (swelling). The *Deepana-Pachana*

properties of the drug aided in the digestion of *Ama*, inhibited the further formation of *Ama*, and subsequently reduced the vitiation of *Kapha Dosha*, thus resulting in a good response to the symptom.

The percentage effect on the stiffness of joints is 42.31%, whereas the Wilcoxon signed Rank is -3.317^{b} and the P value is 0.0009, which makes it significant. The *Deepana-pachana*, *Vatanulomana, and Srotosodhana* properties of the drug don't allow the further formation and settlement of *Ama*, thus resulting in a good response to the symptom.

From Table No. 5, we can observe that the P-value for bodyache, anorexia, thirst, laziness, fever, and indigestion is less than 0.05. Hence, we can conclude that the effect observed in body-ache, anorexia, thirst, laziness, fever, and indigestion is significant.

From Table No. 6, the P-value for objective parameters like general functional capacity, walking time capacity, and Grip Strength is less than 0.05. Hence, we can conclude that the effect observed in general functional capacity, walking time capacity, and grip strength is significant.

Probable mode of action of the drug:

Volume 14 Issue 5, May 2025 Fully Refereed | Open Access | Double Blind Peer Reviewed Journal www.ijsr.net

International Journal of Science and Research (IJSR) ISSN: 2319-7064 Impact Factor 2024: 7.101



5. Conclusion

In today's era, faulty diet, sedentary lifestyle, desk-bound professions, and lack of physical activity give rise to gut health issues like *Agnimandya*, *Aruchi*, *Apaka*, and *Asthi-Sandhi* disorders. The disease *Amavata* fits perfectly to the above statement. *Viruddha Ahara* leads to *Agnimandya*, which in turn causes the formation of *Ama*. *Viruddha Chesta*, *Nischalata* etc. causes *Asthi-Sandhi Vikara*. *Amavata* is one of the serious, agonizing, painful conditions that have been prevalent for many centuries. It has been leading man to misery and has challenged the medical systems, as it is arduous to manage. *Amavata* is the resultant of the combined effect of the simultaneous aggravation of two pathological entities, *Ama* and *Vata*. *Ama*, a toxic substance, formed as a result of *Agnimandya* when it comes together with vitiated *Vata Dosha*, manifests disease.

Clinically after the trial, there is significant improvement in Sandhi Shoola, Sandhi Shotha, and Sandhi Stabdhata. As the Amavata is a Kapha-Vata Pradhana Triodosajanya Vyadhi, the Tridoshahara, and Vata-Kaphahara properties of the ingredients of the drug had a good impact on the above complaints. The Pachana effect of Panchmooladi Churna helped in the Pachana of Ama, and Agnideepan-karma stimulated Agni and aided in the digestion process by reducing the chief symptoms.

Chief complaints like *Sandhi Shoola, Sandhi Sotha, Sandhi Stabdhata*, and general complaints like *Angamarda, Aruchi, Trishna, Alasya, Jwara, Apaka,* etc, were found to be significantly reduced in all patients. The level of significance was different for the different symptoms. The degree of severity was higher in some patients, while the majority of the patients were almost equal.

The trial therapy showed improvement in 18 patients, among which complete remission was recorded in 01 patient, 07

patients showed marked improvement, 05 patients showed moderate, and 05 patients showed mild improvement. The total mean reduction in the ESR values and CRP values has been seen and was statistically significant in the 18 patients.

6. Overall Assessment of the result

Among the 28 patients treated, 10 (35.70%) patients did not show any response, 07 patients (25.00%) responded to marked, 05 patients (17.86%) responded to moderate, 05 patients (17.86%) responded to mild, and only 1 (3.57%) showed complete remission.

- In Acute cases (up to 6 months) of 07 (25.00%) patients showed marked improvement, and 1 (3.57%) patient showed complete remission.
- In sub-acute cases (up to 6- 12 months) of 05 (17.86%) patients showed moderate improvement, and 05 patients (17.86%) showed mild improvement.
- In chronic cases (more than 1 year) of 10 (35.70%) patients showed no improvement.

7. Limitations of the Study

The collection of the exact part of some raw drugs was not possible, especially the root part, considering the environmental safety to save the tree. As the trial was conducted for a short duration and the sample size was small, a pinpoint conclusion cannot be drawn. Hence, it is suggested that the same study be conducted over large samples for a longer duration.

References

 Charak Samhita By Dr. Laxmidhar Dwibedi, Published by Chaukhamba Krishnadas Academy Varanasi, Print Year-2021 Part-2 Nidana Sthana-1/5, page no. -644.

Volume 14 Issue 5, May 2025 Fully Refereed | Open Access | Double Blind Peer Reviewed Journal www.ijsr.net

- [2] Astanga Hridayam of Vagbhatta with Hindi Commentary by Dr. Harischandra Singh Kushwaha, Vol-1, Chaukhamba Orientalia, Varanasi, 13th Edition, Nidana Sthana-12/1.
- [3] Madhav Nidanam, Madhukosha Teeka by Dr. Brahmananda Tripathy, Chaukhamba Surbharati Prakashan, Varanasi, Reprint year-2019, Part-1, Chapater-25, verse 5, Page no- 571.
- [4] Madhav Nidanam, Madhukosha Teeka by Dr. Brahmananda Tripathy, Chaukhamba Surbharati Prakashan, Varanasi, Reprint year-2019, Part-1, Chapater-25, verse 1, Page no- 571.
- [5] Madhav Nidanam, Madhukosha Teeka by Dr. Brahmananda Tripathy, Chaukhamba Surbharati Prakashan, Varanasi, Reprint year-2019, Part-1, Chapater-25, verse 6, Page no- 575.
- [6] Davidson's Principles & Practice of Medicine, 22nd edition, Chapter- Rheumatology and bone disease, Page no 1097.
- [7] Charak Samhita By Dr. Laxmidhar Dwibedi, Published by Chaukhamba Krishnadas Academy Varanasi, Print Year-2021 Part-3 Chikitsa Sthana-15/88-93, Page no 535.