



**A COMPARATIVE STUDY OF PUNARNAVADI VATI AND  
AJAMODADI VATI IN THE MANAGEMENT OF AMAVATA W.S.R.  
TO RHEUMATOID ARTHRITIS**

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### ABSTRACT

*Amavata* is one of the most challenging diseases for the medical science, as it causes intolerable pain and severe deformities making the patient disable and bed ridden. Having several features similar to Rheumatoid arthritis, *Amavata* can be correlated with Rheumatoid arthritis (R.A.). *Ama* and vitiated *Vata* plays dominant role, though all *Dosha* take part in the causation of the disease. *Amavata* is such a disease which continues to pose challenge to physician due to severe morbidity and crippling nature. It also shows extra articular features

like bodyache, stiffness etc. Many research works have been carried out to solve this clinical enigma. But an effective, safe and less complicated treatment is still required for the management of *Amavata*. So, in present study total 29 patients were registered and were randomly divided into 2 Groups .Group A- *Punarnavadi Vati* & Group B - *Ajamodadi Vati*. Both the groups showed significant relief in symptoms; however, compared to *Punarnavadi Vati*, *Ajamodadi Vati* showed better result in the management of *Amavata*.

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**KEYWORDS:** *Ama, Amavata, Ajamodadi Vati, Punarnavadi Vati, Rheumatoid Arthritis.*

## INTRODUCTION

Fast moving lives of recent era people do not have timely food; exercise etc. & they run at work immediately after meal. These factors lead to *Vata Prakopa, Agnimandhya* and formation of *Ama*. That *Ama* being propelled by *Vata Dosha* moves towards the *Kapha Sthana* especially *Sandhi* (joints), which settled over there to produce the signs and symptoms of *Amavata*, like *Sandhishoola, Sandhishotha, Gauravta* and *Angamarda* etc.<sup>[1]</sup> and other classical features *Aruchi, Trishna, Alasya, Jwara, Apaka* and *Shunataanganam* etc.<sup>[2]</sup> *Amavata* having several features similar to Rheumatoid arthritis in modern medical science, so *Amavata* can be correlated with Rheumatoid arthritis (R.A.). The cause of R.A. is still unknown; though several theories advocate an auto immune mechanism. To emphasize the wide spread nature of this disease word rheumatism is used. Rheumatology also includes several other diseases having close similarity to R.A. Rheumatoid arthritis is the 2<sup>nd</sup> common arthritis after Osteoarthritis and is most common inflammatory arthritis. Female to male ratio is 3:1.<sup>[3]</sup> R. A. is seen worldwide and affects all races. Usually occurs in the age group of 35 to 50 yrs.<sup>[4]</sup> Till today in Modern Medical Science there is no proper effective medicine for the disease. Drugs used like NSAID's, DMARD's, Steroids and immunosuppressant's etc. produce only symptomatic relief and have so many side effects. All the medical systems are looking towards *Ayurveda* for effective and safe remedy for this disabling disorder.

In *Ayurveda* the principles of treatment of *Amavata* are *Langhana, Swedana*, drugs having *Tikta Katu Rasa, Dipana* properties, *Virechana, Snehapana* and *Basti*.<sup>[5]</sup> Many approaches are in practice to treat *Amavata*, but still remains a challenging problem. Many research works have been done on this disease but still there is a need for an effective, safe and less complicated treatment. So a clinical study was planned to evaluate the clinical efficacy of oral medication i.e. *Punarnavadi Vati* and to compare the effect of *Punarnavadi Vati* and *Ajamodadi Vati* in the management of *Amavata*. In this study, *Punarnavadi Vati* has been selected and was prepared from ingredients of *Punarnavadi Churna*.<sup>[6]</sup> This *Vati* is used as test drug in Group A due to its *Katu Tikta Rasa, Ushna Virya, Amapachaka, Shothahara & Vatakaphashamaka* properties it helps to distroy the *Samprapti* of *Amavata*. In control group, *Ajamodadi Churna*<sup>[7]</sup> has been selected and prepared in *Vati* form which carries the properties like *Amapachaka, Vedanahara, Vatakaphashamaka & Rasayana*. On comparing

the effect of two therapies it can be concluded that both the groups proved their efficacy in reducing the signs & symptoms, but after statistical analysis says that *Ajamodadi Vati* is more effective than test *Punarnavadi Vati*.

### **AIMS AND OBJECTIVES**

1. To study the aetiopathogenesis and symptomatology of *Amavata* according to *Ayurveda* and modern medical science.
2. To evaluate the therapeutic effect of *Punarnavadi Vati*.
3. To compare the efficacy of *Punarnavadi Vati* and *Ajamodadi Vati* in the management of *Amavata*.

### **MATERIALS AND METHODS**

The Patients fulfilling the criteria for diagnosis of the disease were selected from the O.P.D. & I.P.D. of Govt. Akhandanand & Maniben Ayurvedic Hospital between the age group 16-60yrs, irrespective of their Sex, Religion, Education etc. Patients were randomly divided in to two groups Group A (*Punarnavadi Vati*) & Group B (*Ajamadadi Vati*).

#### **Inclusion Criteria**

The patients age of between 16-60 years and having clinical signs and symptoms of *Amavata* as per *Ayurvedic* texts were taken for the present work. The basis of criteria led down by American Rheumatism Association (ARA) 1988 was also taken into consideration.<sup>[8]</sup> Both Seropositive & Seronegative RA factor cases were also selected.

#### **Exclusion Criteria**

Patients having chronicity for more than 5 years or with severe crippling deformity were excluded. The patients suffering from systemic Chronic diseases like D.M., VSD, LVH, IHD, AIDS, T.B etc. and other diseases which may lead to fatal condition were also strictly rejected for present study.

#### **Investigations**

For the purpose of assessing the general condition of the patient and to exclude other pathologies Rheumatoid Factor, Routine Haematological investigation and Routine Urine examination were carried out before & after the treatment.

### Therapeutic regimen

Total 29 patients were registered for the present study. They were randomly divided into following two groups.

**1. Group A:** In this group 15 patients of *Amavata* were registered but 14 patients were completed the treatment. *Punarnavadi Vati* was given as oral medicine to the patients.

Dose: 4 tablets (Each tablet of 500mg) before food three times a day.

*Anupana:* Luke warm water (*Ushna Jala*).

**2. Group B:** In this group 14 patients of *Amavata* were registered & 12 completed the treatment. These patients were treated by *Ajamodadi Vati* as oral medicine.

Dose: 4 tablets (Each tablet of 500mg) before food three times a day.

*Anupana:* Luke warm water (*Ushna Jala*).

**Duration of the treatment:** 8 weeks.

**Follow-Up:** 4 weeks after completion of treatment.

### Dietary Restrictions

The patients were strictly advised to follow the restrictions regarding food, food habits and life style. They were instructed to avoid the possible causative factors of disease and causes for *Agnimandya*.

### Criteria for Assessment

The results of the therapy were assessed on the basis of clinical signs and symptoms mentioned in *Ayurvedic* classics as well as by ARA (1988) taken as subjective criteria. While functional capacity of the patients and laboratory investigations were assessed before and after the treatment schedule consider as objective criteria for present study.

### Clinical Assessment

The details of scoring pattern adopted for assessment of clinical signs and symptoms are as follows:

**Table 1: Scoring criteria of *Sandhishoola* (Joint pain).**

Grade	Score
No pain	00
Mild pain of bearable nature, felt occasionally.	01
Moderate pain, but no difficulty in joint movement, appears frequently and requires some <i>Upashaya</i> measures for relief.	02
Slight difficulty in joint movements due to pain or severe pain, requires	03

medication and may remain throughout the day.	
More difficulty in joint movement and pain is severe, disturbs sleep and requires strong analgesics	04

**Table 2: Scoring criteria of *Sandhishotha* (Swelling in the Joint).**

Grade	Score
No swelling	00
Mild swelling.	01
Moderate swelling	02
Severe swelling.	03

**Table 3: Scoring criteria of *Sandhistadbhata* (Stiffness of the joints).**

Grade	Score
No stiffness or stiffness lasting for 5 min	00
Stiffness lasting for 5 min to 2 hrs.	01
Stiffness lasting for 2 to 8 hours	02
Stiffness lasting for more than 8 hours	03

**Table 4: Scoring criteria of *Sandhi-Asahishnuta* (Tenderness of joints).**

Grade	Score
No tenderness	00
Subjective experience of tenderness	01
Wincing of face on pressure	02
Wincing of face with withdrawal of affected parts on pressure	03
Resists to touch	04

***Ushnashparshata* (Warmth of joint):** The temperature of the joint surface was measured using the dorsum of palm of the physician and compared with the normal body surface.

**Table 5: Scoring criteria of *Ushnashparshata* (Warmth of joint)**

Grade	Score
Raised temperature when compared to the normal body surface	02
Normal temperature	00
Fall in local temperature after treatment	01
No change in temperature after treatment	02

**General & Associated Symptoms:** Symptoms like *Aruchi*, *Alasya*, *Agnimandya*, *Apaka*, *Trishna*, *Angamarda*, *Gaurava*, *Jwara*, *Praseka*, *Daha*, *Anaha*, *Bahumutrata*, *Kukshishula*, *Nidraviparyaya*, *Chhardi*, *Bhrama*, *Hritgraha*, *Vibandha*, *Antrakujana*, and *Daurbalya* were scored as below.

**Table 6: Scoring criteria of Associated Symptoms**

Grade	Score
Symptom observed before treatment	02
Complete relief after treatment	00
Some relief after treatment	01
No improvement after treatment	02

**Functional Assessment:** Following periodical functional tests were carried out for objective assessment of the improvement of *Àmavata* patients.

- **Walking time:** The patients were asked to walk a distance of 25 feet and the time taken was recorded before and after the treatment by using stop watch.
- **Grip Strength:** To find out the functional capacity of the affected upper limb, the patient's ability to compress an inflated ordinary sphygmomanometer cuff under standard conditions was recorded before and after the treatment.
- **Foot pressure:** To have an objective view of the functional capacity of the legs, foot pressure was recorded by the ability of the patients to press a weighing machine.

**Criteria for overall effect of the therapy:**

- Complete remission:** 100% relief in the signs and symptoms.
- Marked improvement:** 76 - 99% relief in the signs and symptoms.
- Moderate improvement:** 51 - 75% relief in signs and symptoms.
- Mild improvement:** 26 - 50% relief in signs and symptoms.
- Unchanged:** Below 25% relief in signs and symptoms.

**Statistical Analysis:** The informative data collected from observation at the end of treatment. They were subjected to statistical analysis in terms of mean score ( $\bar{x}$ ), standard deviation (S.D.), standard error (S.E.), paired and unpaired 't' test was carried out at the level of 0.05, 0.01, 0.001 of 'P' level. The results were interpreted as:

- **P > 0.05 : Insignificant**
- **P < 0.05 : Significant**
- **P < 0.01 : Highly Significant**
- **P < 0.001: Highly Significant**

**Observations**

Maximum number of patients (34.48%) belonged to the age group of 41-50 years. Total 51.72% patients were belonging to 3<sup>rd</sup> & 4<sup>th</sup> decade of life. Majority of patients were female

(93.10%) out of which 86.21 % are housewives. Maximum number of patients (48.28%) having *Vata-Kapha Prakriti*. It was found that 79.31 % patients having positive family history, 72.41% patients were having gradual onset and 37.93% patients were having chronicity of 2-3 years. Most of the patients were found to be indulged in *Viruddha* (58.62%), *Vishamasana* (58.62%), *Ruksha Ahara* (51.72 %), *Bhojanottara Vyayama* (37.93) and *Diwasvapa & Nishchalatwa* (27.58%). The observations made that maximum 89.66% of patients had *Atichinta* followed by 37.93% had *Shoka* as *Mansika Nidana*. It was observed that maximum numbers of patient (100%) were having *Sandhishula*, *Sandhishotha*, and *Sandhigraha* & 89.66% had *Sparshasahyata*. Among general symptoms *Angamarda*, *Gaurva* and *Alasya* were observed in all patients. *Jwara* (89.66%), *Apaka* (82.76%) *Aruchi* & *Trishna* (79.31%) and *Sunta-Anganama* (68.96%) were observed in patients. Majority of the patients i.e. 96.55% were having *Jadyata*, *Agnimandya* (89.66%) and 82.76% *Ushnasparshata* around joints. *Daurbalya*, *Vibandha*, *Antrakujan* were found in 72.41%, 65.52% and 44.83% cases respectively.

In the present study, it was observed that in involvement of PIP joints in all patients. While involvement of Knee joint, DIP joints, Ankle joints and Hip joints were observed in 96.55%, 89.66%, 51.72% and 44.83% patients respectively. 31.03% involvement of Elbow joints, 20.69% of Shoulder joints, 17.24% of Sacroiliac joint and 6.89% of MCP & IPJF were observed in over all cases.

## RESULTS

**Effect of therapies on Subjective criteria:** In the present study, Statically Highly significant results ( $P < 0.001$ ) were observed in all the Cardinal Symptoms (Table no. 7 & 8). In Group A better percentage of relief was observed in the many symptoms like *Apaka*, *Angashunata*, *Daurbalya*, *Prasek* and *Nidralpata* which is statistically highly significant (Table no. 7). While in Group B, the symptoms like *Angamarda*, *Aruchi*, *Trishna*, *Alasya*, *Gaurav*, *Jwara*, *Agnimandya*, *Utsahahani*, *Vibandha*, *Kukshishula*, *Antrakujana*, *Anaha* & *Jadyata* shows better percentage of relief.

### Effect of therapies on Objective criteria

- **Effect of therapy on Grip strength:** In group A the mean score of Grip strength was 3.4 before treatment which was reduced to 1.9 after treatment with 44.11% relief which is statistically highly significant. While in group B, the mean score of Grip strength was 3.27

before treatment which was reduced to 1.73 after treatment with 47.22% relief which is also statistically highly significant.

- **Effect of therapy on walking time:** Before treatment the mean score of walking time in group A was 2.83 which was reduced to 1.83 after treatment with 35.29% relief. It was statistically insignificant. The mean score of walking time in group B was 2.5 before treatment which was reduced to 1.25 after treatment with 50% relief. It was statistically highly significant.
- **Effect of therapy on foot pressure:** In group A the mean score of foot pressure was 3.78 before treatment which was increased to 2.33 after treatment with 38.23% relief. It was statistically highly significant. The mean score of foot pressure in group B was 2.6 before treatment which was decreased to 1.5 after treatment with 42.31% relief. It was statistically highly significant.
- **Effect on E.S.R. value in Group A and B:** In E.S.R. value, mean score before treatment in both A and B group were 54.5 and 55.2 respectively and it were reduced to 45.3 and 40.1 respectively after treatment. Group A percentage wise relief was 16.88% while group in B was 27.35%. Data shows improved results. Other hematological parameters in both the groups were statistically insignificant.

### **Overall effect of therapy**

In group A the mean score was 48.57 before treatment which was reduced to 16.43 after treatment with 66.16 % relief. It was statistically highly significant ( $P < 0.01$ ). The mean score in group B was 35.69 before treatment which was reduced to 10.86 after treatment with 69.28 % relief. It was statistically highly significant (Table 9).

### **Comparative effect of both therapies**

By applying unpaired 't' test, it is observed that statistically significant difference are found in improvement of *Sandhigraha* and *Sandhishotha* by *Punarnavadi Vati* than *Ajamodadi Vati*. While in all other symptoms statistically insignificant improvement is observed (table 10, 11 & 12). So from the obtained data it may be inferred that the treatment schedule of group B is more effective than test drug of group A, when overall improvement is concerned.

**Table 7: Effect of Group A therapy on Cardinal Symptoms of Amavata.**

Symptoms	n	Mean score		% of relief	X	‘t’	‘p’
		B.T.	A.T.				
<i>Sandhishoola</i>	14	22.86	11.07	51.56	11.78	21.97	<0.001
<i>Sandhishotha</i>	14	15.21	3	80.28	12.21	9.44	<0.001
<i>Sandhigraha</i>	14	17.14	6.36	62.92	10.79	8.4	<0.001
<i>Sparshasahtva</i>	14	13.07	4.07	68.85	9	9.6	<0.001

**Table 8: Effect of Group A therapy on Cardinal Symptoms of Amavata**

Symptoms	n	Mean score		% of relief	X	‘t’	‘p’
		B.T.	A.T.				
<i>Sandhishoola</i>	12	15.75	5.83	62.96	9.92	11.34	<0.001
<i>Sandhishotha</i>	12	15.75	5.58	64.55	10.17	13.61	<0.001
<i>Sandhigraha</i>	12	10.75	3.33	68.99	7.42	12.71	<0.001
<i>Sparshasahtva</i>	11	10.18	2.27	77.68	7.91	8.34	<0.001

**Table 9: Group wise total effect of therapy on signs & symptoms of Amavata.**

	‘n’	Mean score		% of Relief	X	S.D. ±	S.E. ±	‘t’	P
		B.T.	A.T.						
Group A	30	48.57	16.43	66.16	32.13	50.66	9.25	3.47	<0.01
Group B	29	35.69	10.86	69.28	24.72	32.6	6.05	4.08	<0.001

**Table 10: Comparative effect of both therapies on Cardinal Symptoms of Amavata**

Symptoms	Mean Score		S.D. (±)	S.E. (±)	Df.	‘t’	‘p’
	Group A	Group B					
<i>Sandhishula</i>	11.79	10.17	2.29	0.90	24	1.78	>0.05
<i>Sandhishotha</i>	12.21	8.42	3.93	1.55	24	2.45	<0.05
<i>Sandhigraha</i>	10.79	7.42	3.79	1.49	24	2.26	<0.05
<i>Sparshasahyata</i>	9	7.91	3.36	1.35	23	0.81	>0.05

**Table 11: Comparative effect of both therapies on general & associated Symptoms.**

Symptoms	Mean Score		S.D. (±)	S.E. (±)	Df.	‘t’	‘p’
	Group A	Group B					
<i>Angamarda</i>	1.36	1.42	0.65	0.26	24	-0.23	>0.05
<i>Aruchi</i>	1.33	1.5	0.9	0.41	18	-0.41	>0.05
<i>Trishna</i>	1.33	1.43	0.78	0.37	17	-0.27	>0.05
<i>Alasya</i>	1.29	1.42	0.76	0.3	24	-0.43	>0.05
<i>Gaurava</i>	1.36	1.42	0.65	0.26	24	-0.23	>0.05
<i>Jwara</i>	1.79	2	0.33	0.14	22	-1.55	>0.05
<i>Apaka</i>	1.7	1.64	0.59	0.26	19	0.23	>0.05
<i>Suntan –anganam</i>	1.42	1.38	0.7	0.32	18	0.13	>0.05
<i>Agnimandya</i>	1.5	1	0.52	0.22	21	-0.23	>0.05
<i>Utsahahani</i>	1.29	1.4	0.81	0.48	10	-0.23	>0.05
<i>Daurbalya</i>	1.38	1.36	0.61	0.29	17	0.07	>0.05
<i>Praseka</i>	2	1.67	0.33	0.24	6	1.36	>0.05
<i>Chhardi</i>	2	2	0	0	3	-	-

<i>Bhrama</i>	0.8	1	0.98	0.82	5	-0.24	>0.05
<i>Vibandha</i>	1.14	1.22	0.9	0.44	15	-0.18	>0.05
<i>Kukshishula</i>	1	1.2	0.77	0.49	8	-0.41	>0.05
<i>Antrakujana</i>	1.2	1.29	0.77	0.38	15	-0.24	>0.05
<i>Anaha</i>	1	2	0	0	5	-	-
<i>Daha</i>	1	1	0	0	1	-	-
<i>Bahumutrata</i>	-	-	-	-	-	-	-
<i>Jadyata</i>	1.21	1.42	0.69	0.27	24	-0.78	>0.05
<i>Nidralpata</i>	1	0.25	0.83	0.72	4	1.04	>0.05
<i>Usnata around joints</i>	1.64	1.5	0.52	0.23	19	0.62	>0.05

**Table 12: Comparative effect of both therapies on Functional parameters of *Amavata*.**

Symptoms	Mean Score		S.D. (±)	S.E. (±)	Df.	‘t’	‘p’
	Group A	Group B					
Walking time	1	1.25	0.79	0.43	12	-0.59	>0.05
Gripping strength	1.44	1.1	0.65	0.3	17	1.13	>0.05
Foot pressure	1.5	1.55	0.9	0.39	19	-0.13	>0.05
E.S.R.	11.71	15.42	22.99	9.04	24	-0.41	>0.05

## DISSCUSSION

Maximum number of patients i.e. 34.48% belonged to the age group of 41-50 years followed by (31.03%) patients belonged to age group 31-40 yrs. which shows its predominance in middle age group. As per *Acharya Sushruta Haani avastha* begins from 40 yrs onwards. This is an age, where in deterioration of *Dhatu* starts.<sup>[9]</sup> This leads to reduced *Vyadhikshamatva* during this age. As per modern medical science the peak onset time is in 4<sup>th</sup> & 5<sup>th</sup> decades.<sup>[10]</sup> In this study total 65.51% patients were belonging to 4<sup>th</sup> & 5<sup>th</sup> decade of life. In this study sample majority of patients i.e. 93.10% were female which clearly shows the predominance of the disease in females. Textual reference also reflects the predominance of Rheumatoid Arthritis in female. The nature of the household work especially after taking meal, which is one of the causative factors mentioned in *Ayurvedic* text, may be the responsible factor of *Amavata*. According to modern concept of RA, genetic predisposition is one, among the major cause of this disease.<sup>[11]</sup> The data shows that 79.31% patient gave positive family history of the disease. In this present study, data shows that Maximum (73.08%) of the patients was R.A. positive and 34.62% negative. The presence of Rheumatoid Factor does not establish the diagnosis for RA, but it can be of prognostic significance, because patients with high titers tend to have more severe and progressive disease with extra-articular manifestation. In both the groups none of the patients was found complete cure because of short duration course of therapy as well as chronic nature of disease. In *Punarnavadi Vati* group marked improvement in 21.43% and moderate improvement in 78.57% of patients was

observed whereas In *Ajamodadi Vati* group 33.33% of patients showed marked improvement and moderate improvement in 66.67%. Total percentage of relief in group B (69.28%) was observed to be slightly greater than group A (66.16%). So from the obtained data it may be inferred that the treatment schedule of group B is more effective than test drug of group A.

#### **Probable mode of action of *Ajamodadi Vati* in *Amavata***

As a control drug *Ajamodadi Vati* having *Katu, Tikta, kashaya Rasa, Laghu, Ruksha, Ushna Guna, Ushna Virya & Katu Vipaka* properties. Along with drugs such as *Pathya Vriddhadaru, Pippali* which have has *Rasayana* properties. *Deodara, Vidanga, Saindhava, Pathya* is *Vatashamaka* and *Vatanulomana*.

In the first stage of disease pathogenesis *Amotpatti* takes place. At this stage *Ajamodadi Vati* causes *Amapachana* as all the general pharmacodynamic properties i.e. *Katu, Tikta, Kashaya Rasa, Laghu, Ruksha, Ushna Guna, Ushna Virya & Katu Vipaka* are against the *Guru, Snigdha, Picchila & Sheeta* properties of *Ama*. Later *Yugpat Prakopa* of *Doshas* is checked by *Vatakaphahara* action of Drugs. Further *Ama* formation is stopped by *Dipaniya & Rasayana* action. In *Srotoabhishtyanda*, it shows *Srotoshodhana Karma* by its *Laghu, Ruksha, Ushna Guna &* relieves the symptoms of *Sandhishhula, Shotha, Angamarda, Alasya, Gaurava* etc. Also associated symptoms like *Vibandha, Anaha* are relieved by *Vatashamaka & Vatanulomaka* properties. Most of the Drugs are *Vatakaphashamaka, Agnidipaka & Amapachaka*, so it is very suitable for *Sampraptivighatana* of the disease by combating the main culprits (*Vata, Kapha, Ama & Mandagni*), the root causes of *Amavata*.

#### **Probable mode of action of *Punarnavadi Vati* in *Amavata***

For the study group drug chosen is *Punarnavadi Vati* having *Katu, Tikta Rasa, Laghu, Ruksha Tikhsna, Ushna Guna, Ushna Virya, Katu Vipaka* properties. Along with this *Punarnava, Shunthi, Shatavha* are having *Shothaghna* and *Shulaghna* properties. *Amruta, Vriddhadaru* and *Mundi* are having *Rasayana* property.

*Tikta & Katu Rasa* possess antagonistic properties to *Ama & Kapha*. Because of their *Dipana & Amapachana* properties *Amarasa* is digested & excessive production of *Kapha* is reduced which in turn removes the *Srotorodha*. Further *Ama* formation is stopped by *Dipaniya & Rasayana* action. Because of *Laghu, Ruksha, Tikhsna, Ushna Guna, Katu Rasa* it helps in *Srotoshodhana & Srotovivarana* which relieves the symptoms such as *Sandhishhota, Sandhigraha, Angamarda* etc. By virtue of its *Ushna Virya* it acts against *Kapha & Vata*

*Dosha*. Thus the combination of *Punarnavadi Vati* by its *VataKaphashamaka*, *Agnidipaka* & *Amapachaka* properties is suitable for *Samprativighatana* of *Amavata*.

## CONCLUSION

*Amavata* is one of the most challenging problem that makes the patient weep in agony of pain & reduces functional capacity with severe stiffness & crippling deformities of joints making them bed ridden. Observations showed a close resemblance to epidemiology of disease in terms of Age & Sex ratio. *Virudhahara*, *Bhojanottara Vyayama*, *Mandagni*, *Nishchalatwa*, *Vata-Kapha* predominancy showed a close resemblance with the textual references. On comparing the effect of two therapies it can be concluded that both the groups proved their efficacy in reducing the signs & symptoms, but the treatment schedule of group B (*Ajamodadi Vati*) is more effective than test drug of group A (*Punarnavadi Vati*). On comparing the effect of two therapies it can be concluded that both the groups proved their efficacy in reducing the signs & symptoms, but the treatment schedule of group B (*Ajamodadi Vati*) is more effective than test drug of group A (*Punarnavadi Vati*). Our follow-up study shows that after the completion of treatment recurrence of symptoms was observed in both the groups. So the whole treatment of *Amavata* should be followed along with *Panchakarma* therapy to get better results.

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