

#### Research Article

# MANAGEMENT OF AMAVATA WITH AMAVATARI RASA INDIVIDUALLY AND ALONG WITH VALUKA SWEDA

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#### Abstract

In the clinical practice, it is evident that the patients suffering with the dreadful disease Amavata is alarmingly increasing. These patients may exhibit the symptoms of either rheumatoid arthritis or rheumatic disease, for both of these diseases the complete solace is still lacking in contemporary medicinal system. On the basis of Ayurveda literatures, a clinical trial was conducted on 40 patients of Amavata, to evaluate efficacy of the trail drug Amavatari rasa alone and along with valukasweda (sudation by sand bolus) in two separate groups of each 20 randomly selected patients. The combined therapy i.e. the Amavatari rasa with valukasweda provided highly significant relief in sarvadaihika main symptoms with p value <0.001. The overall results revealed that the group with combined therapy i.e. Amavatari rasa with valukasweda provided long lasting result in all stanika and sarvadihika symptoms not only after treatment but also in follow up than the group treated with Amavatari rasa alone.

Key words: Amavata; Amavatari rasa; Valukasweda; Trikasandhies; Shoola; Gatrastabdhata.

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#### INTRODUCTION

Amavata is a disease in which vata and Ama provokes concurrently, lump together, deposits in trikasandhies and exhibites the cardinal feature of immense pain in joints like 'scorpion bite', inflammation at joints, raised temperature and stiffness all over the body.<sup>[1]</sup>

Though Amavata is considered to be a disease of madhyama rogamarga, if left untreated, it leads to various complication like Sankocha (Inability to extend the limb or abnormal flexed state of limb), [2] khanjatha (Patients gait is altered because of pain, caused by akshepana of khandara, which is situated in the sakthi by katigatavata), Vataroga (neuropathies) angavaikalya (deformity of joints/ body parts) and Hridayavikruti (cardiac ailments). Thus it heads the patients to frozen life.

Amavata is compared with Rheumatoid arthritis and some compares it with rheumatic fever. Rheumatoid arthritis is a systemic, chronic inflammatory joint disorder, which affect predominantly the synovial joints. Cardiac involvement. symmetrical involvement of joints along with pain, stiffness and swelling with number of systemic complications resembles the disease Amavata. The opinion regarding correlation with rheumatic fever [3] also cannot be ruled out, due to many similarities with Amavata.

There is no specific line of treatment in contemporary science which brings solace to the patients. Allopathic system can manage this with its various potent remedies capable of suppressing or controlling the disease activity and gives relief to the patient. But none of them gives a permanent cure and lastly advices prolonged penicillin therapy instead.

Ancient Vedic literatures also mentioned about the various disorders which leads to

impairment of movement. But Amavata, as a disease entity is not available even in Brihatrayees. This is first recognized and described in detail by Madhavakara in 9<sup>th</sup> century. Acharya Chakradutta, Yogaratnakara, Gadanigraha and Bhavaprakasha have given emphasis on a therapeutic programme in terms of chikitsa sutra instead of single therapy for complete cure without reoccurrence or to manage this disease. [4] Amapachana as well as vatagna (palliates vatadosha) measures are the highlights of the same. Valukapotali sweda is mentioned as the unique sudation therapy which provides excellent results on the symptoms pertaining to joints. [5]

Keeping on view, all its prevalence and for better management of the disease, this research work is taken as a clinical evaluation of Amavatari rasa with the reference of Bhaishajya ratnavali Amavata chikitsa Adhyaya, [6] which fulfills deepana, pachana and anulomana properties with its special combination of herbo-mineral ingredients, alone and along with valukasweda which is easy for administration, with no side effects and cost effective, in the management of the disease Amavata.

#### **OBJECTIVES**

Objective of the present study are:

- Management of Amavata with trial drug Amavatari rasa individually and along with valukasweda on randomly selected patients.
- To establish the safe, economical and effective medication for Amavata without side effect, formulated as explained in the classical.

#### **HYPOTHESIS**

#### **Null Hypothesis**

Amavatari rasa alone or along with Valukasweda is ineffective against the disease Amavata.



#### **Alternate Hypothesis**

Amavatari rasa alone or along with Valukasweda is effective against the disease Amavata.

#### **MATERIALS AND METHODS**

#### 1. Source of data

Diagnosed patients of Amavata irrespective of sex, occupation and socio-economic status were selected from IPD and OPD of A.L.N.R.M. Ayurveda Hospital, Koppa, Karnataka. Totally 40 patients were included in this study, with 20 patients randomly allotted in each of two groups.

#### a) Inclusion criteria

- The patients of Amavata diagnosed on the basis of signs and symptoms described in Ayurvedic classics will be selected for the study.
- Patients from either sex with in the age group between 20-60 years.
- Patients without any systemic complications including cardiac complications.

#### b) Exclusion criteria

- Those who are suffering from complications of Amavata will be excluded.
- Rheumatic heart disease, hypertension.
- Patients who are unfit for Valukasweda.

#### c) Laboratory Investigations

- Blood Hb%, ESR, TC, DC, RA and ASLO.
- Radiological X ray of affected joints.

All these investigations are done before and after the treatment according to necessity.

#### 3. Study design

It was a randomised standard single blind comparative clinical study. The response of the drug is assessed weekly through interrogation, signs and symptoms and recorded incase proforma specially designed for the study. Pre test and post test data were analysed with suitable statistical analysis and compared.

#### 4. Treatment schedule (intervention)

**Group A** – Administered Amavatari rasa 750mg twice daily in empty stomach for 30 days, with hot water as anupana, followed by dietary measures and follow up was done after 30 days.

**Group B** – Administered Amavatari rasa 750mg with hot water as anupana, twice daily in empty stomach for 30 days with Valukasweda for 21 days with same dietary measures and follow up was done after 30 days.

#### 5. Criteria for assessment of symptoms:

The improvement of patients was assessed on the basis of relief in the signs and symptoms like sarvadaihika, stanika main symptoms and associated symptoms, and srotodusti of disease were assessed with scoring pattern.

Subjective parameters were provided with self assessment scales and documented in gap of 7 days up to 30 days and follow up on 60<sup>th</sup> day, to analyse the effect of trial statistically.

# Methodology of Valukasweda (Ruksha sweda)

Valukasweda is a dry or ruksha type of sweda used in kaphaja disorders as well as in the disease originated out of ama, especially indicated in Amavata disease by almost all the authors who have dealt with it. Valuka means sand. Valukasweda is a process in which the



fine white cloth, tied properly as bolus, with sand in it and it is to be warmed and applied over the affected part of the body.

#### Procedure of conducting the valuka sweda

The procedure is mentioned in Charaka and Sushruta. The procedure of conducting the valukasweda is very simple, easy to do without much strain, cost effective and it also gives good result. The procedure of conducting valukasweda includes.

First the physician should educate the patient about this sudation therapy. Then the sudation is applied on the affected part of the patient with due regards to the season, rogibala, rogabala, organ affected, age of the patient etc. After the daily routines in the morning, the patient should be asked to sit or lie down in a comfortable position. The part such as eyes, heart etc. should be covered with kamala patra or wet cloth or simply by the touch of cold hands. Before administration of swedana, the patient body temperature, blood pressure, pulse rate, heart beats should be recorded. Then, the fomentation should be applied to the parts affected according to the need of the individual. The warm sand bolus of the required temperature should be applied on the affected parts of the body. In the joints the sweda should be done comfortably in circular manner. The temperature of the bolus must be maintained uniformly so that the patient should not feel discomfort either by more heat or less heat. If the sand becomes cold, the bolus must be changed and again a warm bolus should be applied on the affected part, till the local symptoms are reduced, or when the patient feels satisfied. In each affected part, usually sweda is done for 10-15 minutes.

#### **Duration of the treatment**

The sweda can be done either one or two or more times daily depending upon the severity of the disease. The valukasweda can be done either seven or fourteen or twenty one day continuously

#### **OBSERVATION**

The patient should be observed for proper or improper or excessive sudation. In case of excessive sudation, immediately the proper treatment should be adopted.

Soon after sudation, the patient should not be allowed to drink or touch the cold water. He should not be exposed to cold. The patient must be asked to take rest for some time and then he must be allowed to take hot water bath to remove sweat from body, then he must be given light food.

#### Diet and regimen

During the course of the treatment the patient should not- Take cold things, expose to sunlight, heavy exercise, suppression of natural urges, excessive thinking.

#### Samyakswinna laxana

By proper sudation the following signs and symptoms will be noticed in a patient. <sup>[7]</sup> The signs and symptoms are assessed by the scoring chart. (Table 1)

- 1. Coldness in the body will be stopped.
- 2. Alleviation of pain.
- 3. Stiffness of body will disappear.
- 4. Heaviness of the body will be reduced.
- 5. Softness of the body will be seen.
- 6. Appearance of sweating will be visible.
- 7. Signs and symptoms of the disease will decrease or disappear.
- 8. Patient will have a liking towards cold things.

#### Statistical analysis

For assessing the improvement of symptomatic relief and to analyse statistically, the observations were recorded before and after the treatment and after follow up.



**Table 1: Scoring chart of Clinical assessment** 

I	Sarvadaihika main symptoms	grade 0	grade I	grade II	grade III
1	Angamarda	No angamarda	can do day to day routines	Angamarda, restricts the routines	Cannot move due to Angamarda
2	Alasya	No feeling of laziness	Daily works did satisfactorily but delayed	Doing works unsatisfactorily and delayed	Reduces work due to unenthusiasm
3	Jwara	Absence of Fever	Jwaralakshana, without rise in temperature	Jwaralakshana, up to $100^{\circ}\mathrm{F}$	Jwara above 100° F temperature
4	Angashoonata	No swelling	Slight swelling	Moderate swelling with pain during movement	Severe swelling with immobilization of joints
II	Stanika main symptoms				
1	Daha	Absence of daha	Lesser feeling of daha	More daha	Cannot tolerate
2	Raga	Absent	Mild discoloration	Moderate discoloration	Marked redness
3	Shoola	No pain	Mild/moderate pain during movement	Difficulty in moving due to pain	Unable to move body parts due to pain
4	Staimithya	Stiffness absent	Stiffness only in early morning	Prolonged stiffness for 2 hours	Stiffness restricts the daily routines
5	Kandu	Itching absent	Reduced by scratching	Itching all over the day	Itching all over the day
III	Associated symptoms				
1	Aruchi	Equal willing towards all food substances	Willing towards some specific foods	Willing towards only one rasa	Willing towards only most liking food
2	Trushna	1 – 2 litres/24 hrs	2 – 3 litres/ 24 hrs	3 – 4 litres/ 24 hrs	More than 4 litres
3	Apakata	Absence of indigestion	Feeling hungry 8 hrs after intake of prior food	Feeling hungry only 12 hrs after intake of prior food	Feeling hungry 24 hrs after intake of prior food
IV	Srotodustisymptoms			•	
1	Anna vaha Rasa vahaMajjavaha	Only few symptoms of one srotodusti	Only few symptoms of more than one srotodusti	Many symptoms of 2 or more srotodusti	All symptoms of all involved srotodusti

The mean, percentage, standard deviation, standard error, 't' value and 'p' value were calculated. Paired 't' test was used for the calculation of 't' value. The total result including the overall effect of therapy is presented in tables for both groups. (Table 2)

#### **Description on observations during study**

Observation revealed that the more number of patients falls under various categories like 52.5% were in 20-30 years of age group,

Occupational wise housewives had more incidences with 47.5%, Poor socio economic status persons was observed to be more with 45%, Patients with mixed type diet were found more with 57.2% incidence, Kaphavataja prakriti patients with 35%, avara satwa patients with 65% of incidence, all patients had annavha srotodushti lakshanas with 100% of incidence followed by rasavaha srotodushti lakshanas in 95%. Only 10% of incidence was found with positive family history, 95% of patients were addicted to one or more habits of tobacco and alcohol.



This study revealed the percentage of patients involved in various etiology of this disease i.e., Incompatible dietary regimen like fried, improperly cooked, fast food in 82.5% of patients, about 92.5% patients get indulged in excessive work soon after intake of snigdha bhojana, 35-40% of patients involved more in mental stressful work without physical exercises. The cold climate and rainy season triggered the symptoms in 85% of patients. (Table 3)

#### **RESULTS**

Results were depicted in Table 4 to Table 8.

#### **DISCUSSION**

Observation of this study reveals that the disease is more prevalent in the age group between 20 to 30 years, and more interestingly, as said in the classics it is evident that all most all patients were indulged in incompatible or junk food or indiscipline food habits with disruptive physical exercises.

Kaphaja and vata Kaphaja prakruti peoples are found to be more prone to get this disease and the severity of the suffering is found to be directly proportional to the reduction in the satva of the patients. It is also proved in this study that the mandagni is one of the chief culprits of this disease.

The srotodusti symptoms presented in patients were very similar to that of classical references especially Annavaha, Rasavaha, Majjavaha which gives an idea about the mode of spreading of morbidity inside the body as well as further probable complications.

Results of the study shown good relief with statistically highly significant value for general symptoms like Angamarda, Alasya, Jwara and Angashoonatha in the patients treated with Amavatari rasa alone, but the combined therapy shown almost 15 percent

more effective results in the generalized symptoms and almost 25 percent overall effective in local symptoms like shoola, sthaimithya and kandu. Since the valukasweda is teekshna and rooksha, its effect on daha and raga was poor. The effect can be expected much more in the prolonged treatment.

Study revealed that few symptoms like Apaka, aruchi, trushna were less responded to the treatment and it is understood that they were palliated more by nidanaparivarjana and pathyasevana.

Overall assessment of this clinical trial revealed that, including srotodusti, for all symptoms of the disease was well palliated even after the follow up and the combined therapy was the frontrunner in whole study.

Probable mode of action of amavatari rasa based on the Pharmacological action<sup>[7]</sup>

Amavatari rasa has its unique action on Amavata based on following properties. Ingredients are composed of herbo – mineral drugs like Triphala, Chitraka, Guggulu, Eranda, Parada and Gandhaka, Shudha Parada and shudha Gandhaka is taken in the form of Kajjali.<sup>[8]</sup> Kajjali is deepaka, pachaka, rasayana along with anulomana property and acts as a best catalyst. Triphala Vatanulomana, balya and rasayana. Hence prevents the degeneration of the tissues. Shudha Chitraka is an excellent deepaka and pachaka. Shudha Guggulu is Vatahara. Eranda is Amapachana, vatanulomana.

## Physiological effects of heat applied on body

It improves metabolism. Increases blood supply which induces muscle relaxation and increases the efficiency of muscle action. Gives a sort of local sedative effects by valukasweda (heat applied) on nerves. The valukasweda does three main actions by its ruksha and ushna guna.



Table 2: Assessment of overall effect of therapy

	Improvement	Signs and Symptoms
1	Complete relief	Patients in whom all signs and symptoms came down to normal or 100% relief were considered as complete relief cases.
2	Marked improvement	In whom there was 75% relief in signs and symptoms were considered to be marked improved cases.
3	Moderate improvement	Patients in whom there was relief in signs and symptoms by more than 50% were considered to be moderately improved.
4	Improvement	Patients in whom there was relief in signs and symptoms by more than 25% were considered to be improved.
5	Unchanged	Patients in whom there was no relief or less than 25% relief in signs and symptoms were considered to be unchanged cases.

Table 3: Incidences of Roopa of Amavata

Sl. No.	Presenting Symptoms	Incidence percentage		<b>Presenting Symptoms</b>	Incidence percentage
1.	Shotha	100%	6.	Gatrasthabdatha	77.5%
2.	Angamarda	87.5%	7.	Shoola	62.5%
3.	Jwara	82.5%	8.	Mala baddhata	60%
4.	Apaka	87.2%	9.	Bahumootrata	60%
5.	Alasya	82.5%	10.	Daha	20%

Table 4: Effect of Amavatari rasa on symptoms of Amavata after the therapy

gamiadaihilta grimntama		Mean sco	res	- %	SD	SE	4 volue	n-value
sarvadaihika symptoms	BT	AT	BT-AT	70	SD	SE	t-value p-value	
Angamarda	1.3	0.75	0.55	50	0.604	0.135	4.066	< 0.001
Alaysa	1.4	0.95	0.45	45	0.510	0.114	3.942	< 0.001
Jwara	1.25	0.85	0.40	40	0.600	0.135	3.683	< 0.010
Angashoonata	1.25	0.65	0.40	40	0.502	0.112	3.559	< 0.010
Stanika symptoms								
Daha	1.30	0.70	0.60	50	0.699	0.221	2.713	< 0.050
Raga	1.30	0.80	0.50	50	0.527	0.166	3.00	< 0.050
Shoola	1.35	0.85	0.50	40	0.760	0.170	2.938	< 0.010
Staimithya	1.35	0.95	0.40	40	0.598	0.133	2.990	< 0.010
Kandu	1.00	0.625	0.375	37.5	0.517	0.182	2.041	< 0.100
Associated symptoms								
Aruchi	1.25	0.85	0.40	40	0.598	0.133	2.990	< 0.010
Trushna	1.35	0.85	0.50	40	0.760	0.170	2.938	< 0.010
Apaka	1.15	0.65	0.50	45	0.600	0.135	3.683	< 0.010
Symptoms of Srotodusti								
Anna vaha	1.30	0.90	0.40	40	0.598	0.133	2.990	< 0.010
Rasa vaha	1.30	0.80	0.50	45	0.600	0.135	3.683	< 0.010
Majjavaha	1.40	0.90	0.50	40	0.760	0.170	2.938	< 0.010

Swedana does the pakwata of ama. Srotomukha vishodana i.e. it helps the pakwadoshas to come to koshta from shaka. Vayuscha nigraha i.e. it regulates movements of vata. With these main functions valuka sweda does ama pachana, sandhi shoola nasha,

sandhi shotha nasha, gatrastabdatha nasha etc. in the disease Amayata.

By the ushna, ruksha and the laghugunas it does the pachana of ama, which is seated in local sandhies.



Table 5: Effect of Amavatari rasa on symptoms of Amavatat after follow up

Commodibiles sometoms		Mean so	cores	0/	cD.	CE	4	valua n valua	
Sarvadihika symptoms	BT	AFU	BT-AFU	- %	SD	SE	t-value	p-value	
Angamarda	1.3	0.70	0.60	55	0.598	0.133	4.485	< 0.001	
Alaysa	1.4	0.90	0.50	40	0.760	0.170	2.938	< 0.010	
Jwara	1.25	0.75	0.50	45	0.600	0.135	3.683	< 0.010	
Angashoonata	1.25	0.75	0.45	45	0.510	0.114	3.942	< 0.001	
Sthanika symptoms									
Daha	1.30	0.60	0.70	60	0.674	0.213	3.279	< 0.010	
Raga	1.30	0.70	0.60	60	0.516	0.163	3.674	< 0.010	
Shoola	1.35	0.90	0.45	45	0.510	0.114	3.942	< 0.001	
Staimithya	1.35	0.95	0.40	40	0.502	0.112	3.559	< 0.010	
Kandu	1.00	0.50	0.50	50	0.537	0.188	2.645	< 0.050	
Associated symptoms									
Aruchi	1.25	0.80	0.45	45	0.510	0.170	2.938	< 0.010	
Trushna	1.35	0.95	0.40	40	0.502	0.112	3.559	< 0.010	
Apaka	1.15	0.70	0.45	45	0.510	0.114	3.942	< 0.001	
Srothodusti symptoms									
Anna vaha	1.30	0.85	0.45	45	0.510	0.114	3.942	< 0.001	
Rasa vaha	1.30	0.75	0.55	50	0.604	0.135	4.066	< 0.001	
Majjavaha	1.40	1.00	0.40	40	0.502	0.112	3.559	< 0.010	

Table 6: Effect of Amavatari rasa and Valukasweda on the management of Amavata symptoms after therapy

Convedeibile gymntoms		Mean sc	ores	- %	SD	SE	t-value	n volue
Sarvadaihika symptoms	BT	AT	BT-AT	70	SD	SE		p-value
Angamarda	1.40	0.75	0.65	60	0.587	0.131	4.950	< 0.001
Alaysa	1.25	0.75	0.50	50	0.512	0.114	4.358	< 0.001
Jwara	1.20	0.75	0.45	45	0.510	0.114	3.942	< 0.001
Angashoonata	1.25	0.70	0.55	50	0.604	0.135	4.066	< 0.001
Stanika symptoms								
Daha	1.33	0.83	0.50	41.66	0.674	0.194	2.569	< 0.050
Raga	1.42	1.00	0.416	41.66	0.514	0.148	2.788	< 0.050
Shoola	1.45	0.80	0.65	60	0.567	0.131	4.950	< 0.001
Staimithya	1.30	0.85	0.45	45	0.510	0.114	3.942	< 0.001
Kandu	1.00	0.50	0.50	50	0.537	0.188	2.645	< 0.050
Associated symptoms								
Aruchi	1.30	0.90	0.45	45	0.510	0.133	3.942	< 0.001
Trushna	1.25	0.80	0.45	45	0.510	0.133	3.942	< 0.001
Apaka	1.35	0.85	0.50	40	0.760	0.170	2.996	< 0.010
Symptoms of srotodusti								
Anna vaha	1.35	0.90	0.45	45	0.510	0.131	3.942	< 0.001
Rasa vaha	1.40	0.85	0.55	50	0.604	0.135	4.066	< 0.001
Majjavaha	1.30	0.65	0.65	60	0.587	0.131	4.950	< 0.001

Sandhishotha in Amavata is brought about by accumulation of kaphadosha and ama. By amapachana property of valukasweda, it does liquefaction of ama. At the same time, it also does srotovikasana by its ushna guna resulting in increased circulation. Liquefied ama is reabsorbed into circulation.

Hence, there will be reduction of swelling in joints. Due to increased circulation, ama moves from sandhi into circualtion leading to sthabdanasha thereby joint movements come to normal. As amapachana takes place, margavarodha also reduces, so movement of the vata comes to normal.



Table 7: Effect of Amavatari rasa and Valukasweda on the management of symptoms of Amavata after follow up

Campadaihilea ayumntama		Mean so	cores	- %	SD	SE	t-value	p-value
Sarvadaihika symptoms	BT	AFU	BT-AFU	70	SD	SE		
Angamarda	1.40	0.70	0.70	65	0.571	0.127	5.480	< 0.001
Alaysa	1.25	0.55	0.70	60	0.656	0.146	4.765	< 0.001
Jwara	1.20	0.60	0.60	55	0.598	0.133	4.485	< 0.001
Angashoonata	1.25	0.50	0.75	65	0.638	0.142	5.751	< 0.001
Stanika symptoms								
Daha	1.33	0.83	0.50	58.33	0.583	0.148	3.922	< 0.010
Raga	1.42	1.00	0.416	66.66	0.492	0.142	4.643	< 0.001
Shoola	1.45	0.80	0.65	65	0.638	0.142	5.251	< 0.001
Staimithya	1.30	0.85	0.45	50	0.512	0.114	4.358	< 0.001
Kandu	1.00	0.50	0.50	62.5	0.517	0.182	3.415	< 0.050
Associated symptoms								
Aruchi	1.30	0.70	0.60	55	0.596	0.133	4.485	< 0.001
Trushna	1.25	0.70	0.55	50	0.604	0.135	4.066	< 0.001
Apaka	1.35	0.80	0.55	50	0.604	0.135	4.066	< 0.001
Symptoms of Srotodusti								
Anna vaha	1.35	0.75	0.60	55	0.598	0.133	4.485	< 0.001
Rasa vaha	1.40	0.90	0.50	50	0.512	0.114	4.358	< 0.001
Majjavaha	1.30	0.55	0.75	65	0.638	0.142	5.251	< 0.001

Table 8: Comparision of Over all effect of Amavatari rasa alone and along with Valukasweda on 20 patients of Amavata after treatment and after follow up

After treatment (	percentage wise)		After follow up	(percentage wise)
Sarvadaihika symptoms	Group 1	Group 2	Group 1	Group 2
Angamarda	50	60	55	65
Alaysa	45	50	40	60
Jwara	40	45	45	55
Angashoonata	40	50	45	65
Stanika symptoms				
Daha	50	41.66	60	58.33
Raga	50	41.66	60	66.66
Shoola	40	60	45	65
Staimithya	40	45	40	50
Kandu	37.5	50	50	62.5
Associated symptoms				
Aruchi	40	45	45	55
Trushna	40	45	40	50
Apaka	45	40	45	50
Srotus				
Anna vaha	40	45	45	55
Rasa vaha	45	50	50	50
Majjavaha	40	60	40	65

Ushnaguna of valukasweda acts contrary to sheetaguna of vata which subsides vata to its normalcy. Vatashamana in turn results in reduction of pain. Valukasweda does the dilatation of srotas and production of sweda.

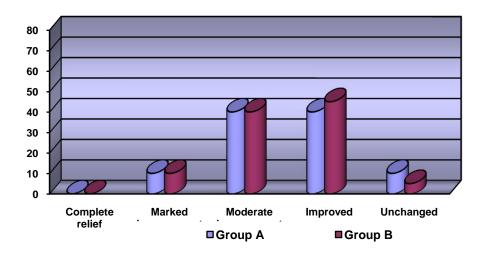
So the channels of body will be cleared causing srotoshuddhi and lightness of the body. Because of above said important properties, valukasweda is specially indicated in Amayata.



Table 9: Comparison of overall effect of therapies between the Group A and Group B after treatment and follow up

Overall effect Cotegowy	After tr	eatment	After follow up		
Overall effect Category	Group A	Group B	Group A	Group B	
Complete relief	0	0	0	0	
Marked improvement	10	10	5	25	
Moderate improvement	40	40	25	50	
Improved	40	45	40	25	
Unchanged	10	5	30	0	

**Graph 1: showing comparison of overall improvement in both groups** 



By these observations it is clear that the group with combined therapy i.e. Amavatari rasa with valuka sweda provided better and long lasting result than the group with Amavatari rasa alone.

#### **CONCLUSION**

The drug Amavatari rasa was found to be very effective in the management of the symptoms like Angamarda, Jwara, Daha etc. of Amavata. The combined therapy i.e. Amavatari rasa along with valukasweda gave highly significant result in relieving all sarvadaihika main symptoms, associated symptoms and srotodustilakshanas also. The study gives new perspective management of Amavata i.e. in the Group 'B' the combined therapy of Amavatari rasa along with Valukasweda better result with long lasting sustained relief was

found when compared to the Group 'A' treated with Amavatari rasa alone. Limitations of the study are, the size of the sample was small to draw generalized conclusion. The drug palatability was less. So it is recommended for further study advised for large sample. Change in formulation i.e. in capsule form for better palatability and easy administration.

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