

**THE EFFECT OF VAITARAN BASTI ALONG WITH DEVDARVYADI
GHANAVATI ON DISABILITY INDEX SCORE AND DEGREE OF
DISEASE ACTIVITY IN AMAVATA WSRT RHEUMATOID
ARTHRITIS**

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ABSTRACT

Introduction: Ayurved is the most ancient system of medicine, the main aim of Ayurveda is to maintain health and to cure diseased condition. Now a day life style of most of the people has been changed, so that faulty habits of taking faulty food are responsible to produce toxins like *Ama* in body. *Amavata* is a disorder, which is originated due to prolonged faulty habit of diet regimen.^[1] In early stage, there is joint involvement with some clinical sign and symptoms like *Angamarda*, *Aruchi*, *Trishna*, *Alasya*, *Gauravata* and *Jvara* etc., *Amavata* is a disease of *Madhyama Roga Marga*, so if not treated, it may lead to systemic complications. In Ayurved, detail description of

Amavata is found in *Madhava Nidana*, *Chakrapanidatta*, *Bhavaprakasha* and *Yogaratanakara*. Management of *Amavata* includes *Langhana*, *Svedana*, and oral intake of *Tikta Rasa*, *Dipana*, and Oral intake of *Katu Rasa*, *Virechana*, *Snehapana*, *Basti* and *Ruksha Sveda*.^[2] In this study, patients were treated with *Vaitarana Basti* along with oral administration of *Devadarvyadi Ghanavati* for 15 days. After this patients were advised to take *Devadarvyadi Ghanavati* 500 mg twice a day for more 15 days, after that after treatment assessment done.

Materials and Methods: Design of Study: Open Randomized clinical Study. **Sample size:** Total 30 Patients were selected for study. **Aims:** To evaluate the effect of *Vaitaran Basti* along with *Devadarvyadi Ghanavati* on Disability Index Score and Degree of Disease Activity in *Amavata*. **Result:** The cases recorded and treated in our institute. Significant results were seen in patients. **Conclusion:** The results obtained from this study were encouraging.

KEYWORDS: *Amavata*, Rheumatoid Arthritis, *Vaitaran Basti*, *Devadarvyadi Ghanavati*.

INTRODUCTION

Shah Ankoor and E. William St. Clair (2012) stated that Rheumatoid arthritis (RA) is a chronic inflammatory disease of unknown etiology marked by a symmetric peripheral polyarthritis. It is the most common form of chronic inflammatory arthritis and often results in joint damage and physical disability. Because it is a systemic disease, RA may results in a variety of extraarticular manifestations.^[3]

According to Shah Ankoor RA affects approximately 0.5-1% of the adult population worldwide. In contrast, many population studies from Africa and Asia show lower prevalence rates for RA in the range of 0.2- 0.4%. There is evidence that the overall incidence of RA has been decreasing in recent decades, whereas the prevalence has remained the same because individuals with RA are living longer.^[3]

Malviya A.N.(2012) opined that R.A. is a common disease having peak incidence in 3rd to 4th decades of life, with 3-5 times higher preponderance in female.^[4] According to Algappan (2014) the individuals with HLA-D4 and HLA- DR4 are more prone to R.A.; the male female ratio is 1:3. Management of RA includes Non-Steroidal Anti-Inflammatory Drugs (NSAIDs), Disease Modifying Anti-Rheumatic Drugs (DMARDs) such as Methotrexate, physiotherapy and surgery.^[5]

Ayurveda is the most ancient system of medicine, the main aim of Ayurveda is to maintain health and to cure diseased condition. Now a day life style of most of the people has been changed, so that faulty habits of taking faulty food are responsible to produce toxins like *Ama* in body. *Amavata* is a disorder, which is originated due to prolonged faulty habit of diet regimen.^[6]

The term *Amavata* itself explains the prime components of disease. The word *Amavata* consists of *Ama* and *Vata*. *Ama* produced due to *Nidana Sevana*, stimulated to aggravated *Vata Dosha*. *Ama* with vitiated *Vata* settles in *TrikaSandhi*, *Kapha Sthana* and other *Sandhi* of body and produces joint pain, joint stiffness, swelling, fever and causes temporary or permanent disability of joints, which crippled daily routine of patient.^[7]

In Ayurveda, detail description of *Amavata* is found in Madhava Nidana, Chakrapanidatta, Bhavaprakasha and Yogaratnakara. Management of *Amavata* includes *Langhana*, *Svedana*

and oral intake of *Tikta Rasa*, *Dipana*, and Oral intake of *Katu Rasa*, *Virechana*, *Snehapana*, *Basti* and *Ruksha Sveda*.^[8]

In this study, patients were treated with *Vaitarana Basti* along with oral administration of *Devadarvyadi Ghanavati* for 15 days. After this patients were advised to take *Devadarvyadi Ghanavati* 500 mg twice a day for more 15 days, after that After Treatment assessment done.

MATERIALS AND METHODS

Design of Study: Open Randomised clinical Study.

Sample size: Total 30 Patients were selected for study.

Aims

To evaluate the effect of *Vaitaran Basti along with Devadarvyadi Ghanavati* on Disability Index Score and Degree of Disease Activity in *Amavata*.

Objectives: Primary objective

1) To evaluate the effect of *Vaitarana Basti* along with *Devadarvyadi Ghanavati* orally, particularly on Disability Index Score and Degree of Disease Activity in *Amavata*.

Secondary Objective

- 1) To study the literature of *Amavata*.
- 2) To study Rheumatoid Arthritis from modern point of view.

Inclusion Criteria

- 1) Patients presenting with signs and symptoms of *Amavata* mentioned in classics.
- 2) All patients fulfilling the American criteria of rheumatoid arthritis (2010).
- 3) Patients of either sex aged between 30-60years.
- 4) Patients who were willing and able to participate in the study.
- 5) Patients who had not participated in any research projects since last 6 months.
- 6) Patients of rheumatoid arthritis with controlled hypertension and diabetes.

All of the above patients were included in the study.

Exclusion Criteria

- 1) Patients who were not willing for trial.
- 2) Patients who had gross disability in performing daily normal routine i.e. bed ridden

patients or confined to a wheelchair.

- 3) Patients with co-morbidities such as gouty arthritis, syphilitic arthritis etc
- 4) Patients with poorly controlled Hypertension (>160/100mmHg).
- 5) Patients with poorly controlled Diabetes Mellitus (BSL Fasting > 130mg/dl, Post Prandial>250mg/dl).
- 6) Patients with the evidence of malignancy.
- 7) Patients on prolonged medication (>6weeks) with corticosteroids, or any other drugs that may have an influence on the outcome of the study.
- 8) Patients who were currently participating in any other clinical trials (since last 6months).
- 9) Any other conditions which the researcher thinks may jeopardize the study.
- 10) Pregnant or lactating mothers etc.

All of the above patients were excluded from the study.

Selection of drug

- 1) *Devadarvyadi Ghanavati*
- 2) *Vaitarana Basti*

Table No 1: Table Showing Contents of *Devadarvyadi Ghanavati*.^[9]

Plants	Part used
<i>Devdaru</i>	<i>Kanda Sara</i>
<i>Vacha</i>	<i>Mula</i>
<i>Musta</i>	<i>Mula</i>
<i>Nagar</i>	<i>Kanda</i>
<i>Ativisha</i>	<i>Kanda</i>
<i>Haritaki</i>	<i>Phala</i>

Table No 2: Table Showing Contents of *Vaitarana Basti*.^[10]

Sr.No.	Contents of <i>Vaitarana Basti</i>	Matra in ancient <i>Parimana (Madhyam Matra)</i>	Matra in present era
1	<i>Amlika</i>	<i>1 Pala</i>	40 gm
2	<i>Guda</i>	<i>1 Shukti</i>	20 gm
3	<i>Saindhava</i>	<i>1 Karsha</i>	10 gm
4	<i>Tilataila</i>	<i>1/8th of Gomutra</i>	20 ml
5	<i>Gomutra</i>	<i>1 Kudava</i>	160 ml

Criteria of Assessment

A. Objective Criteria

- 1) ESR (erythrocytes sedimentation rate)
- 2) Hb%

3) RA (Rheumatoid Arthritis) Factor

Were evaluated before and after treatment.

B. Subjective Criteria

The signs and symptoms were assessed by adapting suitable method and objective signs by using appropriate clinical tools. The details are as follows.^[10] (M.N.25/6-10)

(a) Angamarda

S.No.		Score
1.	No <i>Angamarda</i>	0
2.	Occasional <i>Angamarda</i> but patient is able to do usual work	1
3.	Continuous <i>Angamarda</i> but patient is able to do usual work	2
4.	Continuous <i>Angamarda</i> which hampers routine work.	3
5.	Patient is unable to do any work.	4

(b) Aruchi

S.No.		Score
1.	Normal desire of food.	0
2.	Eating timely without much desire.	1
3.	Desire for food little late than normal time.	2
4.	Desire for food only after long intervals.	3
5.	No desire at all	4

(c) Alasya

S.No.		Score
1.	No <i>Alasya</i> at all.	0
2.	Start work in time with efforts.	1
3.	Unable to start work in time but complete it.	2
4.	Delay in start of work and Unable to complete it.	3
5.	Never able to start work, and always like rest	4

(d) Gauravata (Heaviness)

S.No.		Score
1.	No feeling of <i>Gauravata</i>	0
2.	Occasional heaviness in body but can do usual work.	1
3.	Continuous heaviness in body but can do usual work.	2
4.	Continuous heaviness which hampers usual work.	3
5.	Unable to do any work due to heaviness.	4

(e) Apaka (Indigestion)

S.No.		Score
1.	Normal digestion.	0
2.	Indigestion once or twice in a week in one meal	1

3.	Indigestion 3 to 5 times in a week in one meal	2
4.	Indigestion 3 to 5 times in a week in both meals	3
5.	Indigestion after every meal	4

(f) Kshudha Mandya

S.No.		Score
1.	No <i>Kshudha Mandya</i>	0
2.	<i>Kshudha Mandya</i> 1 to 2 times a week	1
3.	<i>Kshudha Mandya</i> 3 to 4 times a week	2
4.	<i>Kshudha Mandya</i> 4 to 6 times a week	3
5.	Continuous <i>Kshudha Mandya</i> .	4

(g) Vairasata (Unpleasant taste)

S.No.		Score
1.	Normal taste of mouth.	0
2.	Occasional sensation of <i>Vairasata</i> .	1
3.	Continuous <i>Vairasata</i> but vanishes after eating something.	2
4.	Continuous <i>Vairasata</i> which also persists after eating.	3
5.	Severe <i>Vairasata</i> throughout the day.	4

(h) Kukshi Kathinya

S.No.		Score
1.	Absent.	0
2.	Transient.	1
3.	Frequent.	2
4.	Regular.	3

(i) Nidra Viparyaya (Sleep Disturbances)

S.No.		Score
1.	Normal sleep.	0
2.	Disturb sleep during night with short nape during day.	1
3.	1-2 hrs reduction in night sleeps with gross increase in day sleep.	2
4.	3-5 hrs reduction in night sleeps with gross increase in day sleep	3
5.	Wakes during night and sleeps during day.	4

(j) Vidvibandha







S.No.		Score
1.	Absent	0
2.	Motion once a day but not at regular interval.	1
3.	Alternate day.	2
4.	Interval for more than one day.	3

S.No.		Score
1.	No morning stiffness.	0
2.	Morning stiffness >1/2 hr but <1 hr.	1
3.	Morning stiffness >1 hr but <6 hrs.	2
4.	Morning stiffness all over the day.	3

S.No.		Score
1.	No tenderness.	0
2.	Subjective experience of tenderness.	1
3.	Wincing of face on pressure.	2
4.	Wincing of face on pressure and withdrawal of affected part.	3
5.	Resists touching.	4

S.No.		Score
1.	No swelling	0
2.	Mild swelling	1
3.	Moderate swelling	2
4.	Huge swelling	3

Faces Pain Scale

					
0 Very happy, no hurt	2 Hurts just a little bit	4 Hurts a little more	6 Hurts even more	8 Hurts a whole lot	10 Hurts as much as you can imagine (don't have to be crying to feel this much pain)

0 1 2 3 4 5 6 7 8 9 10

no pain worst possible pain

(o) Range of Movements

S.No.		Score
1.	No movement restriction	0
2.	Restriction up to 10%	1
3.	Restriction up to 10-20%	2
4.	Restriction up to 20-30%	3
5.	Restriction up to 30-40%	4
6.	Restriction above 40%	5

(P) Hridagraha

S.No.		Score
1.	Absent	0
2.	Heaviness in chest	1
3.	Pain during physical activity	2
4.	Pain during respiratory movements	3

This scoring system mentioned by Rana N. (2008) in her P.G. thesis was followed so as to maintain uniformity in evaluation of effects.

c) Functional Parameters

It is the study to assess the general improvement in life style.

1) Walking Time

Patient was asked to walk for 50 meters and the time was recorded before and after treatment and gradation was given.

SN	Walking Time	Score
1	Up to 20 seconds	1
2	21 to 30 seconds	2
3	31 to 40 seconds	3
4	41 to 50 seconds	4
5	51 to 60 seconds	5

2) Grip Power

Patient was asked to inflate the Sphygmomanometer cuff and the recording of each and was separately recorded.

SN	Grip Power	Score
1	200 mmHg or more	0
2	200 to 120 mmHg	1
3	120 to 70 mmHg	2
4	Under 70 mmHg	3

3) General Functional Parameters

S.No.		Score
1.	Complete ability to carry on all the routine duties without handicap	0
2.	Adequate normal activity despite slight difficulty in joint movement	1
3.	Few activities are persisting but patient can take care of himself	2
4.	Few activities are persisting but patient requires an attention to take care	3
5.	Patient is totally bedridden	4

4) Joint Movements

The range of movement of each affected joint was measured by using Goniometer both before and after treatment.

SN	Joint Movement	Score
1	From 101^0 to 130^0	0
2	From 70^0 to 100^0	1
3	From 30^0 to 69^0	2
4	From 0^0 to 29^0	3

D) Degree of Disease Activity

For diagnostic and therapeutic purpose, it was done on the basis of criteria of American Rheumatism Association (1967).^[11] Details are given in the Table-17. In this criterion the maximum score is 30 representing an average grade of 3. After dividing the total score by 10 the grade of the disease is obtained and is denoted by grade zero (0) to three (3).

The table is described here with.

Table 3: Table Showing Semi Quantitative Criteria Of Estimation Of Disease Activity.

Grade	0	1	2	3
Morning stiffness	No morning stiffness	Morning stiffness >1/2 hr but <1hr	Morning stiffness >1 hr but <6 hrs	Morning stiffness throughout the day
Fatigue	No fatigue	Work fulltime despite Fatigue	Patient have to interrupt work to take rest	Fatigue at rest
Pain	No pain	Mild pain not disturbing Routine	Moderate pain hampering routine	Sever pain interrupting Routine
General function	All activities without difficulty	Most activities but with difficulty	Few activities, care for self	Little self care, mainly chair and bedridden
Grip strength in mmHg	>70	70-50	50-30	<30
Spread in joints	None	0-5	5-10	>10
ESR in mm/Hr	0-20	20-40	40-60	>60
Hb gm%	>12	12-10	10-9	<9
Physician's estimate	Inactive	Minimum	Moderately active	Severely active
Patient's estimate	Fine	Almost Well	Pretty Good	Pretty Bad

Disability Index

American Criteria of Rheumatoid Arthritis (ARA) 1987 has described the disability index, is highlighted herewith, and was also considered for assessment.

(The Indian Health Assessment Questionnaire)

Table-4: Table Showing Questionnaire Disability Index Score.

Sr. No	Activity of daily living (ADL) Are you able to:	Without any difficulty (0)	With some difficulty (1)	With much difficulty (2)	Unable to do (3)
1	Dress yourself, including tying saree / salwar / dhoti / payjama and doing buttons?				
2	Get in and out of bed?				
3	Lift a full cup or glass to your mouth?				
4	Walk outdoors on flat ground?				
5	Wash and dry your entire body?				
6	Squat in the toilet or sit cross – legged on the floor?				
7	Bend down to pick up clothing from the floor?				
8	Turn a tap on and off?				
9	Get in and out of auto rickshaw / manual rickshaw / car				
10	Walk three kilometers?				
11	Shop in a vegetable market?				
12	Climb a flight of stairs?				

Disability Index Score = Sum of all scores/ 12

Study Procedure

30 Patients of newly detected Amavata were selected for this pilot study. According to clinical and investigational parameters patients were included for this trial. All investigations were done at day zero i.e. before starting treatment. After that *Vaitarana Basti* along with oral administration of *Devadarvyadi Ghanavati* for 15 days. After this patients were advised to take *Devadarvyadi Ghanavati* 500 mg twice a day for more 15 days after that investigations and clinical assessment was done and these values were termed as aftertreatment values.

OBSERVATIONS AND RESULTS

Table no 5: Table Showing Effect on Symptom Score of 35 Patients of Amavata.

SN	Symptoms	Score			
		BT	AT	Diff	% of Relief
1	Angamarda	97	31	66	68.04
2	Aruchi	85	22	63	74.12
3	Alasya	92	26	66	71.74
4	Gauravata	99	39	60	60.61
5	Apaka	76	29	47	61.84
6	hamandya	95	33	62	65.26
7	Vairasata	103	26	77	74.76
8	Kukshikathinya	26	13	13	50
9	Nidraviparyay	70	23	47	67.14
10	Hridgrah	33	13	20	60.61
11	Vidvibandha	62	15	47	53.41
12	Jadya	88	41	47	53.41
13	Tenderness	86	26	60	69.77
14	Pain	288	106	182	63.19
15	Range of Movement	32	14	18	56.25
16	Swelling	40	08	32	80
	Average	85.75	29.06	56.69	64.38

Table-6: Table Showing Effect on Funtional Parameter Score of 35 Patients of Amavata.

S N	Parameter	Score			
		BT	AT	Diff.	% of Relief
1	Walking Time	120	57	63	52.5
2	Grip Power	45	14	31	68.89
3	General Functional Parameter	77	39	38	49.35
4	Joint Movement	26	13	13	50

Table-7: Wilcoxon Signed Rank Test on The Symptom Score of 35 Patients of Amavata.

	Symptoms	Mean \pm SD			Median		W	T+	T-	SD	Z	P
		BT \pm SD	AT \pm SD	Mean Diff \pm SD	BT	AT						
1	Angamarda	2.77 \pm 0.49	0.88 \pm 0.75	1.88 \pm 0.63	3	1	630	630	0	61.05	5.159	\leq 0.05
2	Aruchi	2.43 \pm 0.69	0.63 \pm 0.73	1.8 \pm 0.71	2	0	630	630	0	61.05	5.159	\leq 0.05
3	Alasya	2.63 \pm 0.73	0.74 \pm 0.50	1.89 \pm 0.68	2	1	630	630	0	61.05	5.159	\leq 0.05
4	Gauravata	2.83 \pm 0.62	1.11 \pm 0.76	1.71 \pm 0.52	3	1	630	630	0	61.05	5.159	\leq 0.05
5	Apaka	2.17 \pm 0.74	0.83 \pm 0.66	1.34 \pm 0.68	2	1	496	496	0	51.03	4.859	\leq 0.05
6	Kshudha mandya	2.71 \pm 1.15	0.94 \pm 0.75	1.77 \pm 0.77	3	1	630	630	0	61.05	5.159	\leq 0.05
7	Vairasyat a	2.94 \pm 0.76	0.74 \pm 0.61	2.2 \pm 0.83	3	1	630	630	0	61.05	5.159	\leq 0.05
8	Kukshikathinya	0.74 \pm 0.65	0.37 \pm 0.49	0.37 \pm 0.49	1	0	91	91	0	14.31	3.179	\leq 0.05
9	Nidraviparyaya	0.2 \pm 0.2	0.65 \pm 0.94	1.34 \pm 0.76	2	0	435	435	0	46.25	4.703	\leq 0.05
10	Hridgraha	0.94 \pm 0.59	0.37 \pm 0.49	0.57 \pm 0.5	1	0	210	210	0	26.79	3.919	\leq 0.05
11	Vidviband ha	1.77 \pm 0.84	0.42 \pm 0.56	1.34 \pm 0.54	2	0	595	590	0	58.49	5.086	\leq 0.05
12	Jadya	2.51 \pm 0.50	1.71 \pm 0.57	1.34 \pm 0.48	3	1	630	630	0	61.05	5.159	\leq 0.05
13	Tenderness	2.45 \pm 0.78	0.74 \pm 0.5	1.75 \pm 0.79	2	1	630	630	0	61.05	5.159	\leq 0.05
14	Pain	8.22 \pm 1.26	3.02 \pm 1.32	5.2 \pm 1.54	8	2	630	630	0	61.05	5.159	\leq 0.05

15	Range of Movement	0.91±0.78	0.40±0.49	0.51±0.5	1	0	171	171	0	22.96	3.723	≤0.05
16	Swelling	1.14±0.73	0.23±0.42	0.91±0.70	1	0	325	325	0	37.17	4.372	≤0.05

Table 8: Wilcoxon Signed Rank Test on Functional Parameter Score of 35 Patients of Amavata.

S N	Symptom s	Mean ± SD			Median		W	T+	T-	SD	Z	P
		BT±SD	AT±SD	Mean Diff±SD	BT	AT						
1	Walking Time	3.42±0.69	1.62±0.54	1.8±0.79	4	2	630	630	0	61.05	5.159	≤0.05
2	Grip Power	1.28±0.57	0.4±0.49	0.88±0.68	1	0	325	325	0	43.51	4.622	≤0.05
3	General Functional Parameter	2.2±0.68	1.11±0.63	1.08±0.5	2	1	528	528	0	53.48	4.936	≤0.05
4	Joint Movement	0.74±0.66	0.37±0.49	0.37±0.49	1	0	91	91	0	14.31	3.179	≤0.05

Table no 9: Wilcoxon Ranked Sign Test on Score of Degree of Disease Activity of 35 Patients of Amavata.

S N	Symptom s	Mean ± SD			Median		W	T+	T-	SD	Z	P
		BT±SD	AT±SD	Mean Diff±SD	BT	AT						
1	MorningStiffness	2.42±0.5	1.14±0.55	1.29±0.46	2	1	630	630	0	61.05	5.159	≤0.05
2	Fatigue	2.48±0.56	1.03±0.75	1.46±0.61	3	1	630	630	0	61.05	5.159	≤0.05
3	Pain	2.43±0.6	1.29±0.46	1.14±0.49	2	1	561	561	0	55.97	5.012	≤0.05
4	General Function	1.6±0.49	0.71±0.45	0.89±0.53	2	1	406	406	0	43.91	4.622	≤0.05
5	Grip Power	0.66±0.68	0.31±0.47	0.34±0.48	1	0	78	78	0	12.75	3.06	≤0.05
6	Spread in Joints	2.54±0.61	1.37±0.55	1.17±0.66	3	1	465	465	0	48.62	4.78	≤0.05
7	ESR	1.91±0.74	1.34±0.76	0.57±0.74	2	1	231	265	-34.5	35	3.3	≤0.05
8	Hb%	1.8±0.87	1.54±0.85	0.26±0.61	2	1	72	96	-24	17.61	2.04	≤0.05
9	Physicianestimation	2.4±0.69	0.97±0.38	1.43±0.56	3	1	595	595	0	58.49	5.08	≤0.05
10	Patientsestimation	2.34±0.64	1±0.48	1.34±0.68	2	1	496	496	0	55.06	4.85	≤0.05
11	Disease Activity	2.03±0.22	1.09±0.24	0.94±0.2	2	1	630	630	0	61.05	5.159	≤0.05
12	Disability index	1.69±1.37	1.04±0.35	0.65±0.4	1.58	0.91	630	630	0	61.05	5.159	≤0.05

Table 10: Table Showing Effect of Therapy by Paired t-Test on 35 Patients of Amavata.

S N	Parameter	Groups	Mean±SD		Mean of Diff. ±SD	SED	t	P
			BT	AT				
1	Lobin Gram %	TG	9.79±1.65	9.96±1.35	0.17±0.72	0.1215	1.387	>0.17
2	ESR	TG	49±15.39	36.86±14.57	12.14±12.65	2.139	5.677	<0.0001
3	TLC	TG	7345±1963.9	6605.7±1685.7	739.97±1415.3	239.23	3.093	0.0039

Total Effect of Therapy

Table 11: Table Showing Overall Assessment on Total 35 Patients of Amavata.

SN	Overall Assessment	Score	
		No. of Patients	Percentage %
1	Complete Remission	00	00
2	Marked Improvement	08	22.86
3	Mild Improvement	19	54.28
4	Unchanged	08	22.86
5	LAMA	00	00
6	Total	35	100

DISCUSSION

Yogaradnakara has expounded the role of indulgence in *Viruddha Ahara*, *Snigdha* food stuffs, habit of doing exercise after ingestion of food, or taking food immediately after exercise, working in water.^[12] Some of these are key factor. However importance has been given to *Agnimandya*. *Agnimandya* is the main to produce *Ama*.^[13]

Changes in *Ahara* and *Vihara* are responsible for Manifestation of *Amavata*. It is usually observed now days that sedentary life style, faulty working habits and *Vishamashana* give rise to production of *Ama* in body. *Ama* and *Vata* are two main pathological factors in *Amavata*, but involvement of *Pitta* and *Kapha Dosha* is also there in pathogenesis.

Amavata is a disease of *Madhyama Rogamarga* and it originates from irregularity in *Annavaha Strotas*. It originates from formation of *Ama* due to *Agnimandya* in body; *Ama* further combines with vitiated *Vata*. It mainly affects *Sandhi*, *Trik* and *Shleshma Sthana*. *Angamarda*, *Aruchi*, *Trishna*, *Alasya*, *Gaurava*, *Jvara* and *Sandhi Shula* are main signs and symptoms of *Amavata*, so that patient's routine life becomes painful and difficult.

Management of *Amavata* includes *Langhana*, *Svedana*, and oral administration of *Tikta*, *Dipana* and *Katu Dravya*. Thus management of 35 patients of *Amavata* with *Devdarvyadi Ghanavati* along with *Vaitarana Basti* shows effect on symptoms score will be more on % of relief in swelling, *Angamarda*, *Alasya*, *Aruchi*, *Vairasyata* and also on grip power. There is significant result on Degree of disease activity and disability index score. Result observed in this study shows that *Devdarvyadi Ghanavati* along with *Vaitaran Basti* might have positive result on stabilizing vitiated *Aama*, *Kapha* and *Vayu*. Not only this, but it was responsible to correct the excess of *Aama* and *Vata*. It might be because of properties of *Devdarvyadi Ghanavati* such as *Pachan Dipan* of *Tikta Katu Rasa*. as well as *Vaitaran Basti* specifically had role on *Amavata* particularly in *Ama-Avastha* as stated in Chakrapanidatta. *Vaitaran Basti* mainly comprising Gomutra is responsible to alleviate *Ama Dosha* and removal of *Vata Dosha*.

CONCLUSION

Combination of this *Ayurvedic* treatment definitely reduced symptoms of *Amavata* and had beneficial role on degree of disease activity and disability index score.

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