

**TO EVALUATE THE EFFECT OF PANCHAMULADI BASTI AND VAISHVANARA
CHURNA IN THE MANAGEMENT OF AMAVATA W.S.R. TO RHEUMATOID
ARTHRITIS****Dr. Vikas*¹, Dr. Ajay Kumar² and Dr. Anuradha Lalotra³**¹Assistant Professor, Dept. of Panchkarma, Khalsa Ayu. Medical College & Hospital, Nangal Kalan, Mansa, Punjab.²Assistant Professor, Dept. of Rog Nidana, S.S.M.D.Ayu. College & Hospital, Moga, Punjab.³Assistant Professor, Dept. of Dravya Guna, S.S.M.D.Ayu. College & Hospital, Moga, Punjab.***Corresponding Author: Dr. Vikas**

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ABSTRACT

Amavata word is composed of two words *Ama* and *Vata*, the condition which is caused by accumulation of *Ama* and *Vata*. In terms of medicine *Ama* refers to the events that follow and the factors that arise because of impaired functioning of 'Agni' whereas in literal terms the word "*Ama*" means unripe, immature, and undigested *Ahara Rasa*. This '*Ama*' is then carried by '*Vayu*' and travels throughout the body and accumulates in the joints, at the weaker sites (*Khavaigunya*), produces the symptoms like *Sandhi Shotha*, *Sandhi Shula*, *Stabhddata* (stiffness) and other systemic sign and symptoms of *Amavata*. The features of *Amavata* are much identical to Rheumatoid Arthritis. Rheumatoid arthritis is a chronic, progressive, and disabling autoimmune disease. It causes inflammation and pain in and around the joints and affect other body organs. **Method:** Study was carried out in single group of 10 patients. Patients were selected randomly from the OPD/IPD of the Department of *Panchkarma*, R.G.G.P.G. Ayurvedic Hospital, Paprola. *Panchamuladi Basti* was administered according to *Kala Basti* regime along with *Vaishvanara Churna*- 3gm BD with Luke warm water after meal was given for 16 days with 15 days follow up period. **Results:** Out of total 10 patients, 3 patients (30%) showed marked improvement i.e. more than 76% improvement in signs and symptoms and 7 patients (70%) showed moderate improvement i.e., the relief in between 51% to 75%. **Conclusion:** *Panchamuladi Basti* and *Vaishvanara Churna* have shown better relief in most of the cardinal features of *Amavata* with significant result.

KEYWORDS: *Amavata*, *Panchamuladi Basti*, *Vaishvanara Churna*, *Khavaigunya*, Rheumatoid Arthritis.**INTRODUCTION**

Among various diseases, *Amavata* is one of the crippling disease in the present era. It is not only a disorder of locomotor system but is a systemic disease and is named after its chief pathogenic constituents i.e. *Ama* and *Vata*. Excessive consumption of *Nidana* of *Amavata* in pre-existing stage of *Mandagni* leads to formation of *Ama* and simultaneous vitiation of *Tridosha* especially the *Vata Dosh*. Primarily the *Samprapti* takes place in *Amashaya* and *Pakvashaya* and subsequently spread out in whole body through *Dhamanis* with especial predilection for *Slesma Sthana*. So, the disease manifests as a systemic disease involving especially *Sandhi*, *Asthi*, *Majja Dhatu* and *Srotasa* transporting them along with the vitiation of other *Dushyas* such as *Mansa*, *Snayu* etc. *Madhyama Rogamarga* is affected in this disease.

Amavata is a disorder where in lot of similarity is seen with Rheumatoid arthritis. Rheumatoid arthritis is an autoimmune chronic inflammatory disorder. Autoimmune diseases are illnesses that occur when the

body tissues are mistakenly attacked by its own immune system. RA is characterized by an inflammation of the synovial joints leading to joint and periarticular tissue destruction as well as a wide variety of extra articular features. Because it can affect multiple other organs of the body, rheumatoid arthritis is referred to as a systemic illness and is sometimes called rheumatoid disease.

Rheumatoid arthritis is the 2nd common arthritis after osteoarthritis and is most common inflammatory arthritis. Female to male ratio is 3:1. Usually occurs in the age group of 30 to 60 yrs. The hallmark of the disease is chronic, symmetric, polyarthritis, synovitis of peripheral joints that affects the hands & feet and any joint lined by a synovial membrane.

No doubt Modern system of medicine has got an important role to play in overcoming agony of pain, restricted movement and disability caused by the articular diseases. Simultaneously prolonged use of Modern medicines are giving rise to many side effects.

Due to wide spectrum of the disease, much prevalence in the society and lack of effective treatment in alternative system of the medicine disease was chosen for the study. *Panchkarma* is a science of radicle treatment and purification of the body. *Basti Karma* is considered as *Ardha Chikitsa* in *Ayurvedic* texts. Therefore, *Panchamuladi Basti* had been selected in the present study. While to normalize the *Agni*, *Deepana*, *Pachana* and *Vatanulomna* purpose a wonder drug *Vaishvanara Churna* was used.

Aims and Objectives

- To assess the efficacy of *Panchamuladi Basti* and *Vaishvanara Churna* in management of *Amavata*.
- To develop effective *Panchkarma* therapy for the management of *Amavata*.

MATERIALS AND METHODS

Source of data

Patients were selected randomly from the OPD/IPD of the Department of *Panchkarma*, R.G.G.P.G. Ayurvedic Hospital, Paprola. Only those patients who were having age between 18 and 70 yrs, fulfilling the inclusion criteria were included in the study irrespective of sex, caste, and religion.

Inclusion criteria

- Patients willing for study were included in the study.
- Age Group 18-70 years irrespective of sex, education, religion, socioeconomic status etc.
- Patients with signs and symptoms of *Amavata* (Rheumatoid arthritis).
- Written informed consent of the patients was obtained before inclusion in study.

Exclusion criteria

- Patients not willing for the study.
- Patients below age of 18 years and above 70 years of age.
- Patients suffering from cardiac, respiratory and any infectious diseases were not included in the study.
- Malignancy.
- Patients already taking chemotherapy, radiotherapy.
- Pregnant and lactating women.
- Any allergy to the research drugs.

Ethical clearance: Ethical clearance was obtained from Institutional Ethics Committee before the commencement of study vide certificate no. Ayu/IEC/2019/1235

Parameters of study

Subjective criteria: Following signs and symptoms were taken into account while making the diagnosis of *Amavata* (Rheumatoid arthritis)-

- 1) *Angamarda*
- 2) *Aruchi*
- 3) *Trishna*
- 4) *Alasya*
- 5) *Gauravata*
- 6) *Jwara*
- 7) *Apaka*
- 8) *Agnimandya*
- 9) *Daha*
- 10) *Jadya*
- 11) *Sparsh ashyata*
- 12) *Sandhi shula*
- 13) *Sandhi shotha*
- 14) *Vidvibandha*
- 15) *Nidravipraya*

✓ Objective criteria

- 1) Raised ESR
- 2) RA factor

Investigations

After detailed clinical assessment on the basis of signs and symptoms, following investigations were carried out to confirm the diagnosis as well as to rule out any underlying disorders if any.

- ❖ Routine haematological
 - CBC, ESR, FBS
- ❖ Biochemical investigations
 - RA factor, C-Reactive Protein, B. Urea, S. Creatinine, S. Uric acid, S. Calcium, S. Lipid Profile
- ❖ Radiological examination of the joints in selected cases.

Plan of study

Panchamuladi Basti was administered according to *Kala Basti* regime along with *Vaishvanara Churna*.

- *Panchamuladi Niruha Basti*- Total 6 *Bastis* were given according to *Kala Basti* regime.
- *Anuvasana Basti*- *Dwipanchmuladya Taila Anuvasana* total 10 *Anuvasana Bastis* were given according to *Kala Basti* regime.
- *Vaishvanara Churna* - 3gm BD with Luke warm water after meal for 16 days.

Duration of Study: 16 days

Follow up: After 15 days

CONTENTS OF VAISHVANARA CHURNA

S.N.	Name of drug	Latin Name	Family	Part used	Proportion
1.	<i>Manimantha (saindhava lavana)</i>	<i>Nacl</i>	-	-	2 part
2.	<i>Yamani (yavani)</i>	<i>Trachyspermum ammi Linn. Sprague</i>	<i>Umbelliferae</i>	<i>Fruit</i>	2 part
3.	<i>Ajamoda</i>	<i>Trachyspermum roxburghianum Benth.</i>	<i>Umbelliferae</i>	<i>Fruit</i>	3 part
4.	<i>Nagara (Shunthi)</i>	<i>Zingiber officinale Roxb.</i>	<i>Zingiberaceae</i>	<i>Rhizome</i>	5 part
5.	<i>Haritaki</i>	<i>Terminalia chebula Retz.</i>	<i>Combretaceae</i>	<i>Fruit</i>	12 part

DRAVYA FOR PANCHAMULADI BASTI

द्विपंचमूले त्रिफलां सबिल्वां फलानि गोमूत्रयुतः कषायः।
कलिगपाठाफलमुस्तककल्कः ससैन्धवः क्षारयुतः सतैलः ।

निरुहमुख्यः कफजान् विकाराम् सपाण्डुरोगलसकामदोषान्।
हन्यात्तथा मारुतमूत्रसंग वस्तेस्तथाऽऽटोपमथापि घोरम्।।

(च.सि. 3/59-60)

Ingredients of Kwatha

S.N.	Name of drug	Botanical name	Family	Part used	Proportion
1	Bilwa	<i>Aegle marmelos</i> Linn.	Rutaceae	Root bark	1 part
2	Gambhari	<i>Gmelina arborea</i> Roxb.	Verbenaceae	Root bark	1 part
3	Patala	<i>Stereospermum suaveolens</i> Roxb.	Bignoniaceae	Root bark	1 part
4	Agnimantha	<i>Premna mucronata</i> Roxb.	Verbenaceae	Root bark	1 part
5	Shyonaka	<i>Oroxylum indicum</i> Linn.	Bignoniaceae	Root bark	1 part
6	Brihati	<i>Solanum indicum</i> Linn.	Solanaceae	Root	1 part
7	Kantakari	<i>Solanum surattense</i> Burm. f.	Solanaceae	Root	1 part
8	Gokshura	<i>Tribulus terrestris</i> Linn.	Zygophyllaceae	Whole plant	1 part
9	Shalaparni	<i>Desmodium gangeticum</i> DC	Fabaceae	Root	1 part
10	Prishniparni	<i>Uraria picta</i> Desv.	Fabaceae	Root	1 part
11	Haritaki	<i>Terminalia chebula</i> Retz.	Combretaceae	Fruit pericarp	1 part
12	Vibhitaki	<i>Terminalia bellirica</i> Roxb.	Combretaceae	Fruit pericarp	1 part
13	Amalaki	<i>Embllica officinalis</i> Gaertn.	Euphorbiaceae	Fruit pericarp	1 part
14	Bilwa	<i>Aegle marmelos</i> Linn.	Rutaceae	Fruit	1 part
15	Madanaphala	<i>Randia spinosa</i> (Poir.)	Rubiaceae	Phala pippali	1 part

DWIPANCHMULADYA TAILA FOR ANUVASANA BASTI

Sr. No.	Name of Drug	Botanical name	Family	Part Used	Proportion
1.	Manjistha	<i>Rubia cordifolia</i> Linn.	Rubiaceae	Mula (Root)	1/16 th part
2.	Lodhra	<i>Symplocos racemosa</i> Roxb.	Symplocaceae	Twak (Bark)	1/64 th part
3.	Nalika	<i>Cinnamomum zeylanicum</i> Breyn.	Lauraceae	Twak/ Patra (Bark/ leaves)	1/64 th part
4.	Haridra	<i>Curcuma longa</i> Linn.	Zingiberaceae	Kand (Rhizome)	1/64 th part
5.	Nagarmotha	<i>Cyperus rotundus</i> Linn.	Cyperaceae	Kand (Rhizome)	1/64 th part
6.	Haritaki	<i>Terminalia chebula</i> Retz.	Combretaceae	Phala (Pericarp)	1/64 th part
7.	Vibhitaki	<i>Terminalia bellirica</i> Roxb.	Combretaceae	Phala (Pericarp)	1/64 th part
8.	Amalaki	<i>Embllica officinalis</i> Gaertn.	Combretaceae	Phala (Pericarp)	1/64 th part
9.	Hriber	<i>Juniperus communis</i> Linn.	Pinaceae	Phala (Pericarp)	1/64 th part
10.	Ketki	<i>Pandanus odorotissimus</i> Linn. D.	Pandanaceae	Pushpa (flower)	1/64 th part
11.	Vatvriksha	<i>Ficus bengalensis</i> Linn.	Moraceae	Praroha	1/64 th part

Criteria for the assessment of overall effect of the therapies

The total effect of the therapy was assessed considering the overall improvement in signs and symptoms. For this purpose, following categories were maintained.

1. Cured: 100 % relief in signs and symptoms.
2. Marked improvement: More than 76% improvement in signs and symptoms was recorded as marked improvement.
3. Moderate improvement: 51% to 75% improvement in signs and symptoms was considered as moderate improvement.
4. Mild improvement: 26% to 50% improvement in signs and symptoms was considered as mild improvement.
5. No Improvement: Less than 25% reduction in signs and symptoms was noted as unchanged.

Statistical Analysis

The information collected regarding demographic data is shown in percentage. The scores of criteria of assessment were analyzed statistically in form of mean score B.T.

(Before treatment), A.T. (After treatment), (B.T. - A.T.) difference of mean and S.D. (Standard Deviation). Wilcoxon Signed rank test was carried out at $p > 0.05$, $p < 0.05$, $p < 0.001$.

The results were shown as significant or non-significant depending upon p value.

- ❖ $P > 0.05$ - Non significant result
- ❖ $P < 0.05$ - Significant
- ❖ $P < 0.001$ - Highly significant

OBSERVATION AND RESULT

Predominance of signs and symptoms of *Amavata* were studied in 10 patients it was observed that *Angamarda*, *Sandhishula*, *Sandhishotha*, *Jadya* was present in 10 (100%) patients followed by *Sparshashyata*, *Agnimandya* in 9 (90%) patients. while 8 (80%) patients presented with complaints of *Alasya* & *Gaurvata*. *Aruchi*, *Trishna*, *Apaka*, *Daha* & *Nidra Viparya* was observed in 7 (70%) patients. *Jwara* was observed in 4 (40%) patients followed by 3 (30%) patients with *Vidvibandha*.

Incidence of signs and symptoms of Amavata in 10 patients.

Sr. No.	Signs and symptoms	No. of Patients	% age
1.	Angamarda	10	100
2.	Aruchi	7	70
3.	Trishna	7	70
4.	Alasya	8	80
5.	Gauravata	8	80
6.	Jwara	4	40
7.	Apaka	7	70
8.	Agnimandya	9	90
9.	Daha	7	70
10.	Jadya	10	100
11.	Sparshashyata	9	90
12.	Sandhishula	10	100
13.	Sandhishotha	10	100
14.	Vidvibandha	3	30
15.	Nidra vipraya	7	70

40% of the patients were in age group 31-40 years & 40% of patients were also in age group 41-50 years followed by 20% of the patients with in age group of 18-30 years. In the present study 20% patients were males and 80% were females. Maximum number of patients i.e., 50% were Housewives & 60% patients were belonging in middle class and 40% were lower middle class. In the present study, 60% patients were addicted to tea or coffee and 10% patients were addicted to smoking. Maximum (60%) patients were leading sedentary lifestyle. Most of the patients of this series i.e., 70% were having *Madhyama Koshtha*. 80% were having *Madhyama Satva*, 50% patients were of *Vata-Kaphaja Prakriti*, 30% patients were of *Vata-Pittaja Prakriti* & 20% patients were of *Pitta-Kaphaja Prakriti* & 100% of patients were of *Rajasika Prakriti*.

100% of the patients gave a negative family history. It was observed that 100% patients were having symmetrical involvement of joints. Maximum patients 40% presented with 2 to 4 years of illness, 30% presented with < 2 years of illness, 20% presented with 6 to 8 years of illness & 10% presented with 4-6 years. Maximum i.e., 80% patients registered with insidious onset whereas 20% patients reported with acute onset of the disease. Present study showed that out of 10 patients, that DIP, PIP, MTP & Knee joints were involved in 7 (70%) patients, Ankle & Shoulder joint were involved in 6 (60%) patients, Elbow joint was involved in 5 (50%), wrist joint was involved in 4 (40%) whereas MT joint was involved in 3 (30%) of patients. Maximum number of patients i.e. 80% experienced worsening the symptoms during winters. Most of the patients in this series i.e. 90% were having reactive RA Factor.

Statistically significant relief ($p < 0.05$) was found in *Angamarda* (%age relief=76%), *Aruchi* (%age relief=75%), *Trishna* (%age relief=85.71%), *Alasya* (%age relief=84.21%), *Gauravata* (%age relief=73.68%), *Jwara* (%age relief=93.3%), *Apaka* (%age relief= 85.71%), *Agnimandya* (%age relief=76.47%),

Daha (%age relief=80%), *Jadya* (%age relief= 57.89%), *Sparshashyata* (%age relief=59.09%), *Sandhishula* (%age relief= 54.55%), *Sandhishotha* (%age relief=57.14%), *Vidvibandha* (%age relief=92.31%), *Nidra vipraya* (%age relief=82.35%).

Effect of therapy on Parameters of Amavata.

Parameters	N	Mean		D	% Age Relief
		BT	AT		
<i>Angamarda</i>	10	2.5	0.6	1.9	76%
<i>Aruchi</i>	7	2	0.5	1.5	75%
<i>Trishna</i>	7	1.4	0.2	1.2	85.71%
<i>Alasya</i>	8	1.9	0.3	1.6	84.21%
<i>Gauravata</i>	8	1.9	0.5	1.4	73.68%
<i>Jwara</i>	4	1.5	0.1	1.4	93.33%
<i>Apaka</i>	7	1.4	0.2	1.2	85.71%
<i>Agnimandya</i>	9	1.7	0.4	1.3	76.47%
<i>Daha</i>	7	1.5	0.3	1.2	80%
<i>Jadya</i>	10	1.9	0.8	1.1	57.89%
<i>Sparsh Ashyata</i>	9	2.2	0.9	1.3	59.09%
<i>Sandhi Shula</i>	10	2.2	1.0	1.2	54.55%
<i>Sandhi Shotha</i>	10	2.1	0.9	1.2	57.14%
<i>Vidvibandha</i>	3	1.3	0.1	1.2	92.31%
<i>Nidravipraya</i>	7	1.7	0.3	1.4	82.35%
RA Factor	9	0.9	0.8	0.1	11.11%
ESR Raised	10	1.6	1.3	0.3	18.75%

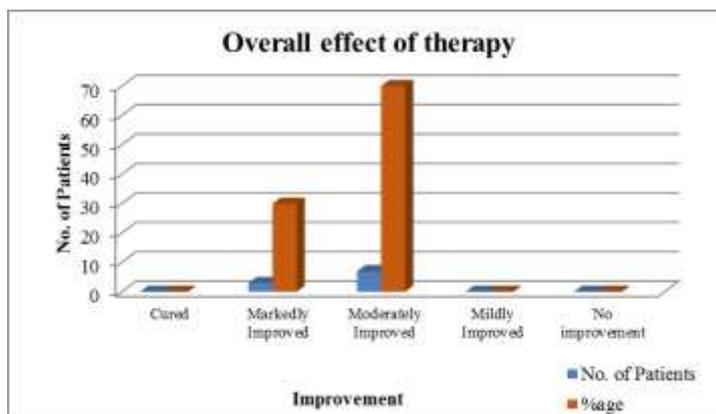
While non-significant results were observed on RA Factor and ESR. In case of RA Factor, mean score before study was 0.9 which came down to 0.8. The percentage of fall was 11.11% which was statistically non-significant. The mean ESR value in mm of Hg per hour before treatment was 1.6 which came down to 1.3. The percentage of fall was 18.75% which was statistically non-significant.

Overall Effect of the Therapy

Out of total 10 patients, 3 patients (30%) showed marked improvement i.e. more than 76% improvement in signs

and symptoms and 7 patients (70%) showed moderate improvement i.e. the relief in between 51% to 75%.

S. No.	Result	No. of Patients	Percentage
1.	Cured (100% relief)	0	0
2.	Markedly Improved (76-99% relief)	3	30
3.	Moderately Improved (51-75% relief)	7	70
4.	Mildly Improved (26-50% relief)	0	0
5.	No improvement (<25% relief)	0	0



DISCUSSION

- In case of "Amavata" two processes occur simultaneously. One is excessive formation and accumulation of "Ama" and resulting in *Dhatu Kshaya*. As, *Dhatu Kshaya* is mentioned as one of the reasons of *vata prakopa*. The accumulated, stagnated and vitiated *Dosha* start moving forward *Slesma Sthana*. Specially *Sandhis* leads to *Sandhisotha*, *Sandhiruja*, *Sandhigraha* and *Gauravata*. On other hand "Dosha" further propelled into whole body through the *Dhamani* by *Vyana Vayu* leads to systemic manifestation e.g. *Alasya*, *Angamarda*, *Aruchi*, *Apaka*, *Jwara* etc.
- The drugs selected for *Basti* are mainly possess *Vednasthapana*, *Sothahara*, *Deepana*, *Pachana*, *Vatakaphahara* properties. These *Gunas* helps to alleviate *Kapha* & *Vata* in the body. Maximum drugs in *Dashmoola* are *ushna Virya* and having *Vata kapha Shamaka* properties.
- Yavakshara*, *Gomutra*, *Madanphala*, *Musta*, *Inderyava*, *Patha* all these drugs possess *Tikta Katu Rasa*, *Laghu Ruksha Guna* and *Ushna Virya* helped in *Amapachana*. *Yavakshara*, *Gomutra*, *Madanphala* also helped in relieving *Srotosanga* due to *Ushna Virya*. *Saindhava* due to its *Sukshma* and *Tikshna* properties help *Basti Dravya* to reach upto molecular level. *Basti* with its *Virya* reached all over body and expelles vitiated *Doshas* out and corrected *Vimarga Gamana* of *Doshas*.
- Dwipanchmuladya Taila* was selected for both *Niruha* and *Anuvasna Basti*. *Murchhita Til Taila* used to prepare *Dwipanchmuladya taila* which is best among the vegetable origin *Sneha dravya*. It is considered to have best *Vatashamaka* properties among other *Sneha Dravya*. *Taila* has got *Ushna*,

Snigdha, *Sukshma*, properties by virtue of which it reaches deeper *Dhatu*s like *Asthi* and *Majja* by penetrating through minute channels. *Til Taila* is *Vedanasthapaka*, *Sandhaniya*, *Deepana*, *Shulaprashmana*.

- It is also very well known fact in Modern Science that drugs given through rectal route are more beneficial than oral route. Rectal mucosa is highly vascularized. Drugs administrated through rectum which is unionized and lipid soluble gets readily absorbed into rectal mucosa. Drugs given through rectal route absorbed in two ways: By superior hemorrhoidal veins & by middle and inferior hemorrhoidal veins. The drugs absorbed through superior and middle vein go directly to systemic circulation & do not undergo first pass metabolism. Rectal mucosa has extensive lymphatic circulation which facilitates absorption and systemic exposure of absorbed drugs.
- Vaishvanara churna* contains *Saindhava lavana*, *Yavani*, *Ajmoda*, *Shunthi* and *Haritaki*. *Katu Rasa* pacifies *Kapha*. *Kashaya Rasa* reduces *Pitta* and *Kapha*. *Lavana Rasa* liquefies *Kapha* and clear channels. It also has laxative effect. Due to *Laghu*, *Ruksha* and *Tikshna Guna*, this *Churna* possesses the *Lekhana* property that brings lightness and clears obstruction by removing vitiated *Kapha*.
- Ushna Virya* help in suppression of *Vata* and *Kapha Doshas*. Also have *Deepana Pachana* properties which help in *Pachana* of *Amadosha*. *Katu Vipaka* is *Agnivardhaka* and *Srthoshodaka* which cures the symptoms like *Agnimandya*, *Aruchi*, *Daurbalya*. *Mandagni* is responsible for the formation of *Ama*, which is the main pathogenic factor of *Aamvata*.

Vaishvanara Churna contains *Saindhava Lavana*, *Yavani*, *Ajmoda*, *Shunthi* and *Haritaki*.

- *Saindhava Lavana* is *Tidoshashamaka*, *Rochana* and *Deepana*.
- *Yavani* is *Vedanasthapana*, *Shothhara*, *Anulomak*, *Deepana-pachaka*.
- *Ajmoda* is *Kaphavata Shamaka*, *Deepana* and *Vataanulomak*.
- *Shunthi* is *Shothhara*, *Vednasthapana*, *Jwaraghana*, *Vatashamka*, *Deepana- Pachaka*.
- *Haritaki* is *Tridosahara* mainly *Vatashamaka*, *Deepana-Pachana*, *Mriduvirechana*, *Shothhara*, *Jwaraghana*.

CONCLUSION

The present study “*To evaluate the effect of Panchamuladi Basti and Vaishvanara Churna in the management of Amavata w.s.r. to Rheumatoid Arthritis*” has been conducted at R.G.G.P.G. Ayurvedic College and Hospital, Paprola. Out of total 10 patients, 3 patients (30%) showed marked improvement in signs and symptoms and 7 patients (70%) showed moderate improvement. *Panchamuladi Basti* and *Vaishvanara Churna* have shown better relief in most of the cardinal features of *Amavata* with significant results. Even though this is a single-group clinical study on a small number of patients. It needs to be studied on a large sample size to draw a conclusive result. No adverse effect of the therapy was noted during the study and in the follow up period.

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