

An Open Longitudinal Clinical Trial to Validate Chikitsa Sutra of Amavata vis-a-vis Rheumatoid Arthritis

Dr. Prema .P¹, Dr. Sanjaykumar .MD², Dr. Rajendra .V³

¹PG Scholar, Department of PG Studies in Kayachikitsa, Government Ayurveda Medical College, Mysuru, India

²Associate Professor, Department of PG Studies in Kayachikitsa, Government Ayurveda Medical College, Mysuru, India

³Professor and Head, Department of PG Studies in Kayachikitsa, Government Ayurveda Medical College, Mysuru, India

Abstract: *Amavata is a kapha -vata dosha pradhana and rasavaha srotojanyavikara, which is caused due to ama. It is mainly characterised by shoola (Pain), shotha (swelling), and stabdhata (morning stiffness) in sandhi, due to vikruta vata associated with Ama. The disease Amavata has similarity with Rheumatoid arthritis in clinical presentation. Rheumatoid arthritis (RA) is a chronic systemic inflammatory poly arthritis that primarily affects small diarthrodial joints of the hands and feet in a symmetrical pattern. The prevalence of RA, worldwide is approximately 0.8 % (0.3% to 2.1%) of the population, while in India the prevalence is 0.5% to 0.75%. The peak age of onset is in the fourth and fifth decade of life with more than 75% patients developing disease between 30 and 50 years of age. In the present study an attempt was made to validate the Chikitsa sutra of Amavata assessing the efficacy of chronological administration of treatment principles described in Chakradatta, i.e. Langhana, Swedana, Tikta deepana katu dravya sevana, Virechana, Snehapana and Basti. In this study Snehapana is administered after Basti in the form of Shamana sneha. This study was a single group open clinical trial with pre and post test design. The study was undertaken with the sample size of 40 subjects who fulfilled the diagnostic criteria of Amavata vis-à-vis Rheumatoid arthritis.*

Keywords: *Amavata, Rheumatoid arthritis, Basti, Snehapana.*

1. Introduction

Amavata is a pain predominant and movement restricting disease. It hampers the normal activities of the patient. *Amavata* is challenge to the physician owing to its chronicity, incurability, complications and morbidity.

Amavata is a *rasavaha sroto dushti janya vikara* and is mainly due to the impairment of *jatharagni* and *dhatwagni*, resulting in the production of *ama*. Such *ama* when gets associated with *vikruta vata* and gets located in *sandhi* it produces *shoola* (pain), *shotha* (swelling) and *stabdhata* (stiffness) of *sandhi* (joint)¹. It is heterogeneous disease with variable severity, unpredictable course and variable response to drug treatment.² The prevalence of RA, worldwide is approximately 0.8 % (0.3% to 2.1%) of the population, while in India the prevalence is 0.5% to 0.75%. The peak age of onset is in the fourth and fifth decade of life with more than 75% patients developing disease between 30 and 50 years of age³

In Western medical science the drugs are available to reduce symptoms due to inflammation in the form of Non-steroidal anti-inflammatory drugs (NSAID's) and long term suppression is achieved by Disease modifying anti rheumatic drugs (DMARD's). Since the clinical course of Rheumatoid arthritis is chronic with intermittent exacerbations and remissions there is need for safer and effective management for longer duration.

Different treatment procedures and compound preparation mentioned under the *chikitsa* of *Amavata* have been traditionally used in the management of RA.

In the present study an attempt was made to validate the *Chikitsa sutra* of *Amavata* assessing the efficacy of chronological administration of treatment principles described in *Chakradatta*⁴, i.e. *langhana, swedana, tikta deepana katu dravyasevana, virechana, snehapana and basti*. In this study *snehapana* is administered after *basti* in the form of *shamana sneha*.

Objective of the study

To Assess and validate the *Chikitsa sutra* of *Amavata* described in *Chakradatta*.

2. Materials and Methods

Study design-It is a single group open longitudinal clinical trial.

Inclusion Criteria

- 1) Subjects irrespective of gender, aged between 25 to 60 years with the signs and symptoms of *Amavata vis -a -vis* Rheumatoid arthritis were selected for the study.
- 2) Both freshly detected and treated cases of *Amavata vis -a -vis* Rheumatoid arthritis were taken for the study.

Exclusion Criteria

- 1) Subjects with co-morbidity of uncontrolled diabetes mellitus, uncontrolled hypertension and other systemic disorders which interfere with the intervention were excluded.
- 2) Pregnant & Lactating women were excluded.
- 3) Subjects suffering from rectal pathologies like haemorrhoids, fissure, and rectal prolapse were excluded.
- 4) Subjects unfit for *Bastikarma* were excluded in the study.

Diagnostic Criteria

1. The diagnosis were based on the classical signs and symptoms of *Amavata* such as *Shoola* (pain), *Shotha* (swelling) and *Stabdhatta* (morning stiffness) in the multiple joints.
- 2.

The individuals who qualify the 1987 revised criteria for the classification of RA and 2010 ACR EULAR classification criteria of Rheumatoid arthritis were included.

The 1987 Revised criteria for the classification of RA. For classification purpose a subject shall be said to have RA. If she/ he has satisfied at least 4 of these 7 criteria. Criteria 1 to 4 must have been present for at least 6 weeks. The 2010 ACR EULAR Classification for Rheumatoid arthritis.

Classification criteria for RA (Score based algorithm: add score of categories A-D: A score of 6/10 is needed for classification of a subject having definite.

	Criterion	Definition
1	Morning stiffness.	Lasting for at least 1 hour.
2	Arthritis of 3 or more joint areas.	At least 3 joint areas simultaneous have soft tissue swelling or fluid.
3	Arthritis of hand joints.	At least 1 joint area swollen.
4	Symmetric arthritis.	Bilateral simultaneous involvement of same joint areas.
5	Rheumatoid nodules.	Subcutaneous nodules over bony prominence or extensor surface or in juxta articular regions.
6	Serum Rheumatoid factor.	Demonstration of abnormal amounts of serum Rheumatoid factor.
7	Radiographic changes	Erosions or unequivocal bony prominence.

Joint involvement	
Joint involvement-1 large	0
2-10 Large joints	1
1-3 Small joints (With or without involvement of large joint)	2
4-10 Small joints (with or without involvement of large joint)	3
>10 joints (atleast 1 small joint)	5
Serology (atleast 1 test result is needed for the classification)	
Negative RF and Negative ACPA	0
Low positive RF or Low positive ACPA	2
High positive RF or High positive ACPA	3
Acute Phase reactants (atleast 1 test result is needed for the classification)	
Normal CRP and Normal ESR	0
Abnormal CRP and Abnormal ESR	1
Duration of symptoms	
< 6 weeks	0
>6 weeks	1

Assessment Criteria

Assessment criteria includes

Sandhi shotha (swelling in the joints).

Sandhi shoola (pain in the joints).

Sandhi Stabdhatta (morning stiffness of the joints).

Sandhi shoola (pain in joints)

0- No pain.

1- Mild pain of bearable severity which comes occasionally.

2 - Moderate pain but no difficulty in movement of joint, appears frequently and requires some relieving measures

3 - Slight difficulty in joint movements due to pain and requires medication.

4- More difficulty in moving joints, due to severe pain there will be disturbed sleep.

Sandhi Shotha (Swelling of joints).

0 – No swelling.

1- Slight swelling.

2- Moderate swelling.

3 –Severe swelling.

Sandhi Stabdhatta (morning stiffness of joints).

0 -No stiffness or stiffness lasting for 1 hour.

1 – Stiffness lasting for 1 to 2 hours.

2- Stiffness lasting for 2 to 8 hours.

3- Stiffness lasting for more than 8 hours.

Functional Grading of Rheumatoid arthritis:

Grade 1 – No handicap, can carry on all daily activities.

Grade 2 – Moderate restriction of activities but independent.

Grade 3 – Marked restrictions of activities, mostly limited to self-care, needs assistance.

Grade 4 – Bed or chair –bound.

Disease activity score 28 (DAS 28)

Calculation of the disease activity score (DAS28).

Erythrocyte sedimentation rate or c- reactive protein can be used for the calculation.

Calculation:

calculator: www.4s.dawn.com/das28.

Interpretation:

>5.1 high activity

2.6-5.1 Moderate activity

2.6-3.2 Low Activity

<2.6 Remission.

Assessment Schedule

In this study totally five assessments were done, As per the following schedule

Pre assessment was done on 0 day before the intervention.

There were three mid assessments in following order:

On 9th day after the completion of the intervention of *Langhana, Swedana, Tikta Deepana, Katu dravya sevana.*

On 11th day after *Virechana karma.*

On 19th day after *Basti karma.*

Post assessment was done after the completion of *Shamana snehapana* i.e on 35th day.

Statistical Methods

The results were analysed statistically by using descriptive statistics and Pearson Chi square test using Service product for statistical solution (SPSS) for windows software.

Investigations

Following investigations were done before and after the completion of intervention:

For diagnostic purpose Rheumatoid Factor was done.

For assessment of prognosis C-reactive protein and Erythrocyte sedimentation rate (ESR) were done.

Other blood investigations and urine analysis were done wherever necessary to exclude other systemic disorders.

3. Intervention

Intervention was based on Chikitsa sutra of Amavata, which includes,

For first 8 consecutive days, *Langhana*, *Swedana*, *Tikta deepana katu dravya sevana* were carried out.

Langhana: *Langhana* was carried out in the form of Laghu ashana diet⁵.

Sweda -*Valuka Sweda* was carried out for all the affected joints⁶.

Tiktadeepanakatudravayasevana - *Vaishwanara churna* 12gms in three equally divided doses with hot water as Anupana was administered after food⁷.

Virechana- *Mridu virechana* with 30-50ml of *Gandarvahastadi Eranda taila*⁸ was administered on 9th day of intervention.

Basti- From 11th to 18th day, Basti was administered in yoga basti pattern.

Anuvasana basti with *Bruhath Saindyavadhya taila* and *Niruha basti* was administered in the form of kshara basti⁹.

Snehapana -*Shamana sneha* with *Shunti ghrita* in the dose of 12 ml was administered in the morning hours on empty stomach when patient felt hungry. It was given for the duration 16 days (19th – 35th day) after the Basti karma

LAGHU ASHANA

Diet in the form of laghu ashana was advised and instructions were given to the subjects regarding preparation, intake, quantity of the diet, as mentioned in table no 1

Menu	1	2	3	4	5	6	7	8
Breakfast	Rice yavagu, hot water	Saptamushti yusha, hot water	Rice yavagu, Panchakola sidda jala.	Saptamushti yusha, hot water	Rice yavagu, hot water	Saptamushti yusha, hot water	Rice yavagu, hot water	Rice yavagu, panchakola sidda jala.
Lunch	Krushara, takra with shunti, lashuna	Rice with kulattha kruta yusha and takra with shunti, lashuna	Krushara, takra with shunti, lashuna.	Rice with kulattha kruta yusha and takra with shunti, lashuna	Krushara, takra with shunti, lashuna.	Rice with kulattha kruta yusha and takra with shunti, lashuna	Krushara, takra with shunti, lashuna.	Krushara, takra with shunti, lashuna.
Dinner	Krushara, hot water.	Rice with mudga kruta yusha, panchakola sidda jala	Rice with kulattha kruta yusha, hot water	Krushara, hot water.	Rice with kulattha kruta yusha, hot water	Rice with mudga kruta yusha, panchakola sidda jala	Krushara, hot water.	Rice with kulattha kruta yusha, hot water.

4. Results

SANDHI SHOOLA

Table 2: Showing the results of Sandhishoola in the subjects of Amavata

		Sandhi shoola				Total
		1	2	3	4	
Day 0	Count	0	0	29	11	40
	% within sessions	0.0%	0.0%	72.5%	27.5%	100.0%
Day 9	Count	0	20	20	0	40
	% within sessions	0.0%	50.0%	50.0%	0.0%	100.0%
Day 11	Count	1	31	8	0	40
	% within sessions	2.5%	77.5%	20.0%	0.0%	100.0%
Day 19	Count	23	17	0	0	40
	% within sessions	57.5%	42.5%	0.0%	0.0%	100.0%
Day 35	Count	34	6	0	0	40
	% within sessions	85.0%	15.0%	0.0%	0.0%	100.0%
Total	Count	58	74	57	11	200
	% within sessions	29.0%	37.0%	28.5%	5.5%	100.0%

	Value	Df	Asymp.sig. (2 sided)
Pearson Chi Square	228.737	12	.000

Out of 40 subjects, before intervention 0 day 11 (27.5%) subjects had grade 4 severity, 29 (72.5%) subjects had grade 3 severity.

Mid assessments results were as follows, On 9th day after completion of *Laghu ashana*, *Valuka sweda*, and

consumption of *Vaishwanara churna*, 20 (50.0%) subjects had grade 3 severity, 20 (50.0%) individuals had grade 2 severity of sandhi shoola.

After *Mridu virechana karma*, on 11th day 8 (20.0%) subjects had grade 3 severity, 31 (77.5%) clients had grade 2 severity, 1 (2.5%) subject had grade 1 severity.

After *Kshara basti karma*, on 19th day, 17 (42.5%) volunteers had grade 2 severity, 23 (57.5%) subjects had grade 1 severity.

Post assessment i.e on 35th day after *Shamana snehapana Shunti ghrita*, 6 (15.0%) individuals had grade 2 severity, 34 (85.0%) subjects had grade 1 severity.

The result obtained regarding the parameter of *Sandhi shoola* showed statistically highly significant with P value.000

Sandhi Shotha

Table 3: Showing the results of Sandhi shotha in the subjects of Amavata

		Sandhi shotha				Total
		0	1	2	3	
Day 0	Count	0	0	9	31	40
	% within sessions	0.0%	0.0%	22.5%	77.5%	100.0%
Day 9	Count	0	4	35	1	40
	% within sessions	0.0%	10.0%	87.5%	2.5%	100.0%
Day 11	Count	0	14	26	0	40
	% within sessions	0.0%	35.0%	65.0%	0.0%	100.0%

Day 19	Count	5	31	4	0	40
	% within sessions	12.5%	77.5%	10.0%	0.0%	100.0%
Day 35	Count	24	16	0	0	40
	% within sessions	60.0%	40.0%	0.0%	0.0%	100.0%
Total	Count	29	65	74	32	200
	% within sessions	14.5%	32.5%	37.0%	16.0%	100.0%

	Value	Df	Asymp.Sig. (2 sided)
Pearson Chi-Square	298.856	12	0.000

Out of 40 subjects, before intervention. On 0 day, 31 (77.5%) subjects had grade 3 severity, 9 (22.5%) subjects had grade 2 severity.

Mid assessments results were as follows,

On 9th day after completion of *Laghu ashana*, *Valuka sweda*, and consumption of *Vaishwanara churna*, 1 (2.5%) had grade 3 severity, 35 (87.5%) volunteers had grade 2 severity, 4 (10.0%) had grade 1 severity of *Sandhi shotha*.

After *Mridu virechana karma*, on 11th day 26 (65.0%) individuals had grade 2 severity, 14 (35.0%) subjects had grade 1 severity of *Sandhi shotha*.

After *Kshara basti karma*, regarding the *Sandhi shotha*, on 19th day 4 (10.0%) subjects had grade 2 severity, 31 (77.5%) subjects had grade 1 severity, 5 (12.5%) subjects had grade 0 severity.

Post assessment i.e on 35th day after *shamana snehapana Shunti ghrita*, 16 (40.0%) individuals had grade 1 severity, 24 (60.0%) subjects had grade 0 severity of *Sandhi shotha*.

The result obtained regarding the parameter of *Sandhi Shotha* showed statistically highly significant with P value.000

SANDHI STABDHATA

Table 4: Showing the results of *Sandhi stabdhata* in the subjects of *Amavata*.

		Sandhi stabdhata				Total
		0	1	2	3	
Day 0	Count	0	0	12	28	40
	% within sessions	0.0%	0.0%	30.0%	70.0%	100.0%
Day 9	Count	0	5	34	1	40
	% within sessions	0.0%	12.5%	85.0%	2.5%	100%
Day 11	Count	0	17	23	0	40
	% within sessions	0.0%	42.5%	57.5%	0.0%	100.0%
Day 19	Count	8	29	3	0	40
	% within sessions	20.0%	72.5%	7.5%	0.0%	100.0%
Day 35	Count	33	7	0	0	40
	% within sessions	82.5%	17.5%	0.0%	0.0%	100.0%
Total	Count	41	58	72	29	200
	% within sessions	20.5%	29.0%	36.0%	14.5%	100.0%

	Value	Df	Asymp.Sig. (2 sided)
Pearson Chi square	307.387	12	0.000

Out of 40 subjects, before intervention. On 0 day, 28 (70.0%) subjects had grade 3 severity, 12 (30.0%) subjects had grade 2 severity.

Mid assessments results were as follows,

On 9th day after completion of *Laghu ashana*, *Valuka sweda*, and consumption of *Vaishwanara churna*, 1 (2.5%) had grade 3 severity, 34 (85.0%) subjects had grade 2 severity, 5 (12.5%) clients had grade 1 severity.

After *Mridu virechana karma*, on 11th day 23 (57.5%) individuals had grade 2 severity, 17 (42.5%) subjects had grade 1 severity of *Sandhi stabdhata*.

After *Kshara basti karma*, on 19th day 3 (7.5%) subjects had grade 2 severity, 29 (72.5%), subjects had grade 1 severity, 8 (20.0%) had grade 0 severity of *Sandhi stabdhata*.

Post assessment i.e on 35th day after *shamana snehapana Shunti ghrita*,

7 (17.5%) subjects had grade 1 severity, 33 (82.5%) subjects had grade 0 severity of *Sandhi stabdhata*. The result obtained regarding the parameter of *Sandhi stabdhata* showed statistically highly significant results with P value.000

Functional Gradings

Table 5: Showing the results on improvement of Functional Gradings:

		Functional Gradings				Total
		1	2	3	4	
Day 0	Count	0	10	19	11	40
	% within sessions	0.0%	25.5%	47.5%	27.5%	100.0%
Day 9	Count	0	22	18	0	40
	% within sessions	0.0%	55.0%	45.0%	0.0%	100%
Day 11	Count	13	21	6	0	40
	% within sessions	32.5%	52.5%	15.0%	0.0%	100.0%
Day 19	Count	24	16	0	0	40
	% within sessions	60.0%	40.0%	0.0%	0.0%	100.0%
Day 35	Count	27	13	0	0	40
	% within sessions	67.5%	32.5%	0.0%	0.0%	100.0%
Total	Count	64	82	43	11	200
	% within sessions	32.0%	41.0%	21.5%	5.5%	100.0%

	Value	Df	Asymp.Sig. (2 sided)
Pearson Chi square	142.408	12	0.000

Out of 40 subjects, before intervention, on 0 day, 11 (27.5%) subjects had grade 4 severity, 19 (47.5%) subjects had grade 3 severity. 10 (25.0%) subjects had grade 2 severity of functional gradings.

Mid assessments results were as follows,

On 9th day after completion of *Laghu ashana*, *Valuka sweda*, and consumption of *Vaishwanara churna*, 18 (45.0%) subjects had grade 3 severity, 22 (55.0%) subjects had grade 2 severity of functional gradings.

After *Mridu virechana karma*, on 11th day, 6 (15.0%) subjects had grade 3 severity, 21 (52.5%) subjects had grade 2 severity, 13 (32.5%) subjects had grade 1 severity.

After completion of *Kshara basti karma*, on 19th day 16 (40.0%) had grade 2 severity, 24 (60.0%) subjects had grade 1 severity of functional gradings.

Post assessment was done on 35th day after *Shamana snehapana Shunti ghrita*, 13 (32.5%) subjects had grade 2 severity, 27 (67.5%) clients had grade 1 severity of functional gradings.

The result regarding the parameter of Functional gradings showed statistically highly significant results with P value.000.

C-Reactive Protein (CRP)

Table 6: Showing results of C-Reactive Protein in the subjects of Amavata vis –a-vis Rheumatoid arthritis.

CRP		Sessions		Total
		BI	AI	
Positive	Count	23	19	42
	% within sessions	57.5%	47.5%	52.5%
Negative	Count	17	21	38
	% within sessions	42.5%	52.5%	47.5%
Total	Count	40	40	80
	% within sessions	100.0%	100.0%	100.0%

	Value	Df	Asymp.Sig. (2 sided)
Pearson Chi square	.802	1	.370

Rheumatoid factor

Table 7: Showing the result of RA factor in the subjects of Amavata vis –a –visRheumatoid arthritis

RA factor		Sessions		Total
		BI	AI	
Positive	Count	26	24	50
	% within sessions	65.0%	60.0%	62.5%
Negative	Count	14	16	30
	% within sessions	35.0%	40.0%	37.5%
Total	Count	40	40	80
	% within sessions	100.0%	100.0%	100.0%

	Value	Df	Asymp.Sig. (2 sided)
Pearson chi square	.213	1	.644

Erythrocyte sedimentation rate (ESR)

Table 8: Showing the result of ESR in the subjects of Amavata vis –a-vis Rheumatoid arthritis.

ESR		Sessions		Total
		BI	AI	
0-20mm/hr	Count	4	5	9
	% within sessions	10.0%	12.5%	11.2%
21-40mm/hr	Count	8	9	17
	% within sessions	20.0%	22.5%	21.2%
41-60 mm/hr	Count	6	10	16
	% within sessions	15.0%	25.0%	20.0%
61-80 mm/hr	Count	9	8	17
	% within sessions	22.5%	20.0%	21.2%
81-100 mm/hr	Count	10	6	16
	% within sessions	25.0%	15.0%	20.0%
>100	Count	3	2	5
	% within sessions	7.5%	5.0%	6.2%
Total	Count	40	40	80
	% within sessions	100%	100%	100%
	Value	Df	Asymp.Sig. (2 sided)	
Pearson chi square	2.429	5	.787	

Disease activity score 28 (DAS 28):

Table 10: Showing the DAS 28 in the subjects of Amavata vis –a-vis Rheumatoid arthritis

DAS 28		Sessions		Total
		BI	AI	
>2.6-3.2	Count	0	4	4
	% within sessions	0.0%	10.0%	5.0%
3.2-5.1	Count	0	23	23
	% within sessions	0.0%	57.5%	28.8%
>5.1	Count	40	13	53
	% within sessions	100.0%	32.5%	66.2%
Total	Count	40	40	80
	% within sessions	100.0%	100.0%	100.0%

	Value	df	Asymp.Sig (2 -sided)
Pearson Chi Square	40.755	2	.000

5. Discussion

Amavata is a *kaphavata pradhana vyadhi* is characterised by *sandhi shoola, shotha, stabdhata*. In the present clinical trial *Amavata* considered with special reference to Rheumatoid arthritis. The management adopted in this clinical trial is *Chikitsa sutra of Amavata*.

Langhana is the first line of treatment in *Amavata*. Laghu ashana can be considered laghu in quantitative (rashi) as well as qualitative (guna) aspect. In this kind of dietary intake fulfils the nutritional requirements of the body on one hand but simultaneously does not hampers the agni.

Valuka sweda possess *ruksha, laghu and ushna guna*. *Ushna guna* helps in *sthanika amapachana* and does *sroto vilayana*, thus reduces the *sandhi shoola, sandhi shotha and sandhi stabdhata*. *Vaishwanara churna* was selected for the purpose of *agnideepanaa and amapachana*, because most of the ingredients possess *katu, tikta, kashaya, laghu, ruksha, tikshna guna, ushna veerya, deepana pachana, shoola hara* in action. The pharmacological action of *vaishwanara churna* was carminative, immune stimulant, analgesic and anti inflammatory. *Mridu virechana karma* was carried out with *Gandharvahastadi eranda taila*. It is *vatakaphahara, shoolahara, rechaka, agnivaradhana*. pharmacologically having anti arthritic, analgesics, carminative action.

Bastikarma once the rogi attain *nirama avastha* and *koshta shuddhi*, *Basti chikitsa* should be adopted to pacify *vata dosha*. *Anuvasana Basti* was carried out with *Bruhath saindhavadyataila* and *Niruhabasti* in the form of *Ksharabasti* as *yogabasti* pattern was adopted. *Bruhath saindhavadhya taila* contains drugs which posses *laghu, ushna, snigdha, sukshma, kshara, tikshna, vyavayi, vata anulomaka, shoolahara, shothahara* properties.

Kshara basti contains *Gomutra, guda, shatapushpa.guda. chincha* posses, *katu, tikta rasa, laghu, tikshna guna, ushna veerya, kaphavatahara, deepana, srotovishodana* in action.

Shamana sneha with *Shunthi gritha* was given after *bastikarma* for the purpose of *roga shamana*. *Shunthi ghrita* is *shoolahara, shophahara, adhmaana hara, amavata hara,*

agnidipaka in action and Anti inflammatory and anti arthritic and immunomodulatory in action.

6. Conclusion

Amavata is *kapha vata pradhana vyadhi* and it come under *rasavaha srotovikara*. The disease *Amavata* has similarity with Rheumatoid arthritis in clinical presentation. Rheumatoid arthritis (RA) is a chronic systemic inflammatory disease, clinically presents as polyarthritis involving small and large diarthrodial joints of the extremities, in a symmetrical pattern. It is heterogeneous disease with variable severity, unpredictable course and variable response to drug treatment.

As the condition progresses *asthi dhatu* is involved and leads to *anga vaikalyata*.

The disease *Amavata* is diagnosed based on classical signs and symptoms, specific laboratory tests like raised ESR, RA Factor and CRP and the individuals who comes under the 1987 Revised Criteria for the Classification of RA and 2010 ACR EULAR classification criteria of Rheumatoid arthritis that comprises 7 criteria which helps in the diagnosis of RA.

In the present study an attempt was made to validate the *Chikitsa sutra* of *Amavata* assessing the efficacy of chronological administration of treatment principles described in *Chakradatta*. I.e. *Langhana*, *Swedana*, *Tikta deepana katu dravya sevana*, *Virechana*, *Snehapana* and *Basti*. In this study *Snehapana* is administered after *Basti* in the form of *Shamana sneha*.

The result obtained regarding the *sandhi shoola*, *sandhi shotha*, *sandhi stabdhata*, functional grading and Disease activity score with P value 0.000. The *Chikitsa sutra* of *Amavata* is effective in management of the *Amavata* –avis Rheumatoid arthritis.

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