Effect of Shodhan and Shaman in the Management of Aamvat with respect to Rheumatoid Arthritis - A Clinical case Study

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***Abstract*—The disease Amavata maybe correlated with Rheumatoid Arthritis due to its similar clinical feature. The symptoms of Amavata are Sandhi Shula (pain in joint), Sandhi Sotha (swelling of joints), Sparsahata (tenderness around joint), Angamarda (body ache), Aruchi (anorexia), Trisna (thirst), Gaurava (heaviness) Jvara (fever), Apaka (swelling), Sunnata Anga (loss of sensation). The symptoms of rheumatoid arthritis are morning stiffness, polyarthritis, pitting oedema, proximal muscle stiffness, mimicking with polymyalgia rheumatic swelling of metcarpo-phalangeal joints and proximal interphalangeal joints. Joints are active inflamed if they are tender on pressure and have stress pain on passive movement and soft tissues swelling. So, Amavata may be considered as equivalent to rheumatoid arthritis. The drug selected for management of Amavata (rheumatoid arthritis) were compound formulation normally Amavatari Yoga and Therapy Vaitaran Basti. So, in my study, 60 patients were to be treated in 2 groups. Group- A 30 patients was to be treated with Amavatari Yoga (Lasuna - 1gm + Sunthi - 1gm + Nirgundi - 1gm + Tagar - 1gm) before meal twice daily for 45 days. Group- B 30 patients was to be treated with Vaitaran Basti for 7 consecutive days followed by Amvatari Yoga twice daily for 45 days. The above mentioned Amavatari Yoga and Vaitaran Basti are very effective for the management of Amavata (rheumatoid arthritis) considering their pharmacodynamic action.**

***Index Terms*—Amavata, Rheumatoid Arthritis, Tagar, Lasuna, Sunthi, Nirgund, Amavatari Yoga, Vaitarana Basti.**

I. INTRODUCTION

Amavata is a major burning problem in India as well as all over the world. Due to its character, the disease Amavata is distressing ailment for both patient as well as physician. As it is a chronic problem repeated use of drugs are necessary as well for prolonged period. Now in this situation option of treatment comes under Ayurvedic medicine, single or compound form made from herbs like Lasuna, Sunthi, Nirgundi, Tagar, etc. can treat this disease effectively.

The Ayurvedic text described several types of joint disorder under the heading of Sandhi Vata, Vatarakta, Amavata, Kousthakasirsaka, Urustambha, Katishula, Pisthashula.

The joint socialization of life through locomotion or movement by using his or her joints, muscles, ligaments. From the minute he/she loses the power of locomotion, he/she not only feels himself/herself a miserable creature but also becomes a burden to his or her family and society.

Description of Amavata is not available in Vedic period, Pauranik and Epic period. In Samhita Kala (2500BC-600AD) that in Charak Samhita, Sushruta Samhita, Ashtang Sangha, Ashtanga Hridaya, description of Amavata in Ashtanga Hridaya vividly describe the concept of Ama in details with Ama dosa in Sutra sthan, chapter 13. The principle of treatment of Ama is rarely noted in the text.

The symptoms of disease Amavata is very similar to Rheumatoid Arthritis. It is an auto immune disorder,

and it effect 0.5 to 0.3% of population. The study in title is comparative clinical study of Shodhan Uttar Shaman and Shaman Chikitsa in the management of Amavata with special reference to Rheumatoid Arthritis has been selected. So, the role of Amavatari Yoga with/without Vaitaran Basti is the major concern of the study.

Selected patients were divided into two groups. Group A patients were treated with Amavatari Yoga powder 4 gram twice daily with lukewarm water for 45 days. Group B patient were treated with Vaitaran Basti followed by Amavatari Yoga powder 4 grams twice daily with lukewarm water for 45 days.

II. OBSERVATION

Observation of results was assets through the parameter i.e. clinical sign and symptoms along with the statistical analysis.

Step – I

The patients those will fulfill the clinical features mentioned in Ayurvedic texts like Sandhi Shula, Sandhi Sotha, Angamarda, Aruchi, Trishna, Gaurava, Sparshahata, Jvar.

Step – II

Patients should be exposed for history taking, general examination, examination of musculo-skeletal system in particular, drawing of blood, sample of Hb%, ESR, RA-factor.

Step – III

Group– A: 30 patients were administered Amavatari Yoga in the dose of 4gm twice daily before meal for 45 days.

Group – B: 30 patients were received Vaitaran Basti for 7 consecutive days followed by Amavatari Yoga for 45 days.

Step – IV

The patient should be assess through clinical, laboratory and biochemical parameter initially and at the end of the study after 45 days.

Step – V

Overall assessment of observation and result along with statistical analysis.

Step – VI

Statistical Analysis data will be express as mean, ± standard division (SD), ± standard error (SE). The student paired 't' test would be used independent group for parametric variables.

Therapy Review

Basti has got an important place in Panchakarma therapy and is indicated for the treatment of various diseases.

Generally, a Basti is applied through the rectum though it may also be applied par urethra. In such cases the term Uttar Basti is applied. Though in a generic sense the term Basti is applied for all kinds of Basti such as Niruha Basti, Anuvasan Basti, Uttar Basti, Siro Basti etc. The Charak's description of Basti, as interpreted by Chakrapani and Jejjat appears specific for Niruha Basti.

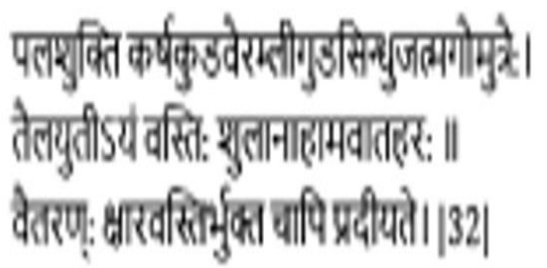
Basti is considered as half of the entire therapeutic measure.

Basti prolongs life span by preventing disease, arresting the ageing process. It enhance Agni and may be given at any age. It is better than other therapy as because it can be administered in all ages, Snehapana is not required before treatment of Basti. It is trouble for the children due to their non-palatability. Basti serves all those function without facing digestion.

Basti by itself expelling out Vit, Sleshma, Pitta, Anila, Mutra, offers firmness of the body and enriches Shukra. By expelling morbid accumulation of Dosa in the entire body, Basti cures all type of diseases.

Vaitaran Basti

Vaitaran Basti is only mentioned by Chakradatta for the treatment of Amavata.


पलशुक्ति कर्षकुडवेरम्लीगुडसिन्धुजलगोमुत्रै।
तैलयुतोऽयं वस्तिः शूलानाहामवातहरः॥
वैतरणः क्षारवस्तिर्भुक्त्वापि प्रदीयते।।32।

(Chakradatta Naruha adhikar)

Amlika (Tamarind) - 40gm, jaggery - 20gm, Saindhava Lavana - 10gm & cow urine - 160ml respectively mixed with a little oil. This removes Shula (colic pain), Anaha (constipation) and Amavata.

Procedure of Basti

1. Patient Posture - Left lateral position with left lower extremity straight and right lower extremity flexed on knee and hip joint.
2. Oleation of Anus - Jatyadi or Padmakadi taila are applied locally in Guda marga (anus) and in Basti also.
3. The patient is asked to take deep breath while the Basti and Basti Ausadhi are introduced.
4. Shivering of the hand is avoided as it may produce Guda Ksala or anal injury.
5. Quicker insertion of Basti is avoided.
6. Too slow induction of Basti is also avoided.
7. Opening of Basti Netra should be kept straight.
8. The total Basti drug should not be introduced in the Pakwasaya in order to avoid entrance of Vayu into the Pakwasaya, which may produce pain.
9. Basti tube should be immediately pulled out after introduction of the drugs.
10. Patient should remain lying in the same posture (left lateral) upto ½ hrs introduction of Basti.
11. After that patients should take up Utkatukasana to eliminate the Mala Begas (passes of stool).

Ingredients of Vaitaran Basti

S. No.	Ingredients	Amounts
1.	Guda (melted and filter jiggery)	25gm
2.	Saindhava Lavana	10gm
3.	Sneha (Tila Taila)	120ml
4.	Cincha Kalka (paste of Tamarind)	50gm
5.	Go mutra (Cow urine)	200ml
Total Quantity = 400ml (approximately		

III. DRUGS REVIEW

Amavatari Yoga contents four ingredients – 1) Lasuna, 2) Sunthi, 3) Nirgundi & 4. Tagar. Each one is 1gm in quantity. Total 4gm administered in powder form.

Lasuna
Scientific Name: Allium Sativum sp.
Family: Liliaceae
Rasa: Madhu, Lavan, Katu, Tikta, Kashay
Guna: Snigdha, Guru, Tikshna, Sara
Virya: Usna
Vipaka: Katu

Sunthi
Scientific Name: Zingiber officinale sp.
Family: Zinziberaceae
Rasa: Katu
Guna: Guru, Ruksha, Tikshna
Virya: Usna
Vipaka: Madhur

Nirgundi
Scientific Name: Vitex negundo sp.
Family: Verbinaceae
Rasa: Katu, Tikta
Guna: Ruksha, Laghu
Virya: Usna
Vipaka: Katu

Tagar
Scientific Name: Valeriana officinalis sp.
Family: Valerianaceae
Rasa: Tikta, Katu, Kashay
Guna: Laghu, Snigdha
Virya: Usna
Vipaka: Katu

IV. MATERIALS AND METHODS

Study Area
Amavata treated with Amvatari Yoga and Vaitarani Basti with special reference to rheumatoid arthritis (A chronic immunological arthropathy).

Place of Study
Patients were selected from OPD & IPD of Mandsaur Institute of ayurved education and research mandsaur , Bhopal, Madhya Pradesh.On the basis of history taking, clinical examination, laboratory and biochemical investigation by strictly following inclusion & exclusion criteria.

Inclusion Criteria

- Patients were included after explaining the study in details and signing the informed consent.
- Patients willing to participate in this study.
- Between the age group of 20 – 60 years.
- Both sexes i.e., male & female.
- Present of any four of the following criteria according to American College of Rheumatology.

→ Morning stiffness more than 1 hour.
→ Arthritis of 3 or more joints.
→ Arthritis of hand joint more than 6 weeks.
→ Symmetrical arthritis more than 6 weeks.
→ Presence of rheumatoid modules.
→ Serum rheumatoid factor positive.
→ Typical radiological, radiographic change of arthritis of PA view of hand and wrist.

Exclusion Criteria

- Age below 20 and above 60 years.
- Patient not willing to participate in study.
- Patient with other types of diagnosed arthritis like Septic arthritis, Generative type of arthritis and Gouty arthritis.
- Patient receiving any other method of treatment.
- Pregnant and lactating mother suffering from arthritis.
- Severe deformities and severe ankylosing of joints.
- Patient with other serious illness like cardiac, hepatic and renal problems.
- Patient should developed Secondary complication of rheumatoid arthritis like pleuro/pericardial disease, severe damage of joints and bed ridden patients.

Diagnostic Criteria
Subjective Criteria
From clinical sign & symptoms as per Ayurvedic and modern trained.

- Sandhi Shula (pain in joints)
- Sandhi Shotha (swelling of joints)
- Sparshahata (tenderness around the joints)
- Stiffness of joint
- General functional capacity

Objective Criteria

- Blood for TC, DC, ESR, Hb%
- Blood for RA factor.
- X-ray of affected joints (if required)

Assessment Criteria

(i) Assess the patient through the sign & symptoms before and after treatment.
(ii) Laboratory & Biochemical study done before and after the end of the study.
(iii) Scoring Pattern

Sandhi Sula (Pain in joints)	Score
No pain	0
Mild Pain	1
Moderate pain no difficulty during movement	2
Moderate pain with difficulty during movement	3
Much difficulty in the body parts during movement	4

Sandhi Sotha (Swelling of the joints)	Score
No swelling	0
Mild swelling	1
Moderate swelling	2
Mark swelling	3
Severe swelling	4

Sparshahata (Tenderness in joints)	Score
No tenderness	0
Patient says the joint is tender	1
Patient winces	2
Patient winces with withdrawal	3
Patient did not allow to touch the joint	4

General Functional Capacity	Score
Complete capacity to carry on all routing duties	0
Normal activities despite of difficulty in joint movement	1
Few activities are persisting with difficulty, but patient can take care of him/herself	2
Few activities are persisting, but patient required attendant	3
No activities	4

Stiffness of the joints	Score
No stiffness	0
0-5 mins	1
5-12 mins	2

Upto 30 mins	3
Upto 1 hours	4

Treatment Group

Shown the group wise distribution of 60 patients according to their treatment

S. No.	Treatment group	Name of Drug	Form of application	Vehicles	Dose	Duration
1	Group A- No. of patients – 30	Amavatari Yoga	Powder	Lukewarm water	4g. twice daily before meal	45 days
2	Group B- No. of patients –30	Vaitaran Basti	Liquid	Go Mutra	400ml. once daily at morning	7days
		Amavatari yoga	Powder	Lukewarm water	4g. twice daily before meal	45 days

Practical Analysis with Result

Effect of treatment in Group – A patients of Amavata (Rheumatoid Arthritis)

S. No.	Symptoms	Mean		x Mean of difference	% of Relief	SD	SE	"t" value	P value
		BT	AT						
1	Sandhi Sula (Pain in joint)	2.64	2.28	0.36	13.63%	0.806	0.161	2.23	<0.02
2	Sandhi Sotha (Swelling of joint)	2.28	2.12	0.16	7.01%	0.374	0.074	1.89	<0.05
3	Sparshahata (Tenderness around joint)	2.28	2.16	0.12	5.26%	0.331	0.866	1.81	<0.05
4	General functional capacity	2.4	2.24	0.16	6.67%	0.374	0.74	2.06	<0.05
5	Stiffness of joints	2.28	2.16	0.12	5.26%	0.331	0.066	1.82	<0.05

Effect of treatment in Group – B patients of Amavata (Rheumatoid Arthritis**)**

S. No.	Symptoms	Mean		x Mean of difference	% of Relief	SD	SE	"t" value	P value
		BT	AT						
1	Sandhi Sula (Pain in joint)	2.5	2.00	0.5	20%	0.507	0.092	5.43	<0.001
2	Sandhi Sotha (Swelling of joint)	1.80	1.30	0.5	27.78%	0.506	0.09	5.44	<0.001
3	Sparshahata (Tenderness around joint)	1.43	0.96	0.46	32.86%	0.506	0.09	5.07	<0.001
4	General functional	1.86	1.20	0.635	36.67%	0.49	0.089	7.11	<0.001

	capacity								
5	Stiffness of joints	1.36	0.96	0.4	29%	0.5	0.091	4.39	<0.001

BT = Before Treatment, SE = Standard Error, AT = After Treatment, SD = Standard Deviation
x = Difference of Mean, "t" value = paired "t" test, "p" value = Level of significance

V. DISCUSSION

Effect of treatment on symptoms like Sandhi Shula (pain in joints), Sandhi Shotha (swelling of joints), Sparshahata (tenderness around joints), stiffness of joints & general functional capacity were observed in both Group A and Group B patients before and after treatment.

In Group A patients the therapy provided significant results i.e. $p<0.02$ in,relief of symptoms like Sandhi Shula (pain in joints) and Sandhi Shotha (swelling of joints), Sparishahata (tenderness around the joints), stiffness of joints and general functional capacity, the result is $p<0.05$.

The therapy provided highly significant results i.e. $p<0.001$ in Group B patients the symptoms like Sandhi Shula (pain in joints) and Sandhi Shotha (swelling of joints), Sparshahata (tenderness around the joints), stiffness of joints and general functional capacity.

The drugs used in this study both orally and per rectally was found very effective for the correction of derangement of Ama and Vata due to their properties. Encouraging result has been found in both the treatment Group A and Group B but Group B patients having better result in comparison to Group A.

VI. CONCLUSION

1. Ama & Vata are two pathogenic factors responsible for Amavata.
2. Amavata is a challenging as well as chronic disease, mainly effecting the joints.
3. Sandhi Shula (pain in joints), Sandhi Sotha (swelling of joints), Sparshahata (tenderness around the joint) are the main symptoms of Amavata.
4. Amavata may be correlated with rheumatoid arthritis based on symptomatology.
5. Mandagni plays an important role for the disease Amavata.
6. Vata & Kapha dosa plays an important role in the disease Amavata.
7. The prevalence of Amavata is predominant in Vata Kapha prakriti persons.
8. Raja Tama Manas prakriti persons are more prone to this disease
9. Both treatment Group A and Group B were found effective in alleviating the symptoms of Amavata.

REFERENCES

[1] Tripathi B. Charaka Samhita of Agnivesha Elaborated by Charaka & Dhribhdala edited with Charak Chandrika Hindi Commentary, Chaukhamba Surabharati Prakashan, Varanasi, 2013. Siddhi Sthan, 7/2.
[2] Ibid, Siddhi Sthan, 1/40.
[3] Ibid, Siddhi Sthan, 1/27.
[4] Ibid, Siddhi Sthan, 10/6–7.
[5] Ibid, Siddhi Sthan, 1/28.
[6] Ibid, Siddhi Sthan, 3/20.
[7] Thakral, K.K. Shushruta Samhita. Text With Hindi Commentary of Nibandha Sangraha and Nyaya Chandrika, Chaukhambha Orientalia, Varanasi, 1st Edition 2014, Chikitsa Sthan 38/5.
[8] Shashtry J.L.N. Illustrated Dravyaguna Vigyan Chaukhambha Orientalia, Varanasi, 3rd Edition 2008, Vol pg, 531 Vol. II.
[9] Ibid, Page – 519, Vol. II.
[10] Ibid, Page – 411, Vol. II.
[11] Ibid, Page – 801, Vol. II