

## WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

SJIF Impact Factor 8.074

Volume 8, Issue 10, 778-789.

Case Study

ISSN 2277-7105

# PAIN MANAGEMENT IN AMAVATA WITH SPECIFIC REFERENCE TO RHEUMATOID ARTHRITIS- A CASE STUDY

Shaktijit Babar<sup>1\*</sup>, Darshana Chaure<sup>1</sup>, Ashish Thatere<sup>2</sup> and Prakash Kabra<sup>3</sup>

<sup>1</sup>P.G. Scholars, <sup>2</sup>Asst. Professor, <sup>3</sup>Guide, Prof. & Head Department of Kayachikitsa, Government Ayurved College & Hospital, Nagpur.

Article Received on 25 June 2019,

Revised on 15 July 2019, Accepted on 04 August 2019,

DOI: 10.20959/wjpr201910-15470

## \*Corresponding Author Shaktijit Babar

P.G. Scholars, Department of Kayachikitsa, Government Ayurved College & Hospital, Nagpur.

#### **ABSTRACT**

Rheumatoid Arthritis is a chronic multi-system disease of unknown cause, though the most prominent manifestation of Rheumatoid Arthritis is an inflammatory Arthritis of peripheral joints, usually with symmetrical distribution. Rheumatoid Arthritis is a common disease having peak incidence in 3<sup>rd</sup> to 4<sup>th</sup> decade of life. The male female ratio is 1:3. The non-steroidal anti-inflammatory, immune modulators or some time steroids relieve the pain, but patients have to face side effects. As well as by the time disease advances contracture and disability develops. This condition resembles with *Amavata* in Ayurved. *Amavata* is derived from word "*Ama*" and "*Vata*". The word

Ama is the condition in which various ailments in system create toxic effects. The *Ama* along with *Tridosha* occupies *Shleshmasthana* (particularly *Asthisandhi*) and results in painful disease named as "*Amavata*". *Langhan*, *Svedan*, *Shodhan* and *Shaman* had been depicted for treating Amavata. A case recorded and was treated in our institute. Results obtained are encouraging which are presented in full paper.

**KEYWORDS:** Amavata, Vaitaran Basti, Jalokavcharana & Shaman.

**Abbreviation: VAS:** Visual Analogue Scale, **RA:** Rheumatoid Arthritis.

## **INTRODUCTION**

As per Harsh Mohan<sup>[1]</sup> Rheumatoid Arthritis (R.A.) is a chronic multi-system disease of unknown cause, though the most prominent manifestation of rheumatoid arthritis is an inflammatory arthritis of peripheral joints, usually with symmetrical distribution. Its systemic

manifestation includes haematological, pulmonary, neurological and cardiovascular abnormalities.

Malviya A.N. [2] is of the opinion that Rheumatoid Arthritis is a common disease having peak incidence in 3<sup>rd</sup> to 4<sup>th</sup> decade of life. With 3-5 times higher preponderance in female. The individual with HLA-D4 and HLA-DR4 are more prone to R.A. The male female ratio is 1:3. Doherty M and Raision S H<sup>[3]</sup> highlighted that around 40% patients of Rheumatoid arthritis patient are registered disabled within 3 years. Around 80% are moderately to severely disabled within 20 years and 25% will require a large joint replacement. Factors that associated with a poorer prognosis are disability of presentation, female gender, involvement of multiple joint and a positive Rheumatoid factor and Anti-CCP. The clinical presentation of *Amavata*, as described by. [5] closely resembles with Rheumatoid arthritis.

Amavata is a disease of chronic joint pain and body pain accompanied by swelling of some or all of the joints along with some generalized symptoms. In later stage more, joints may be involved. Amavata is derived from word "Ama" and "Vata". The word Ama is the condition in which various ailments in system create toxic effects. The Ama along with Tridosha occupies Shleshmasthana (Asthisandhi) and results in painful disease named as "Amavata". As per principles of management of Amavata Langhan, Svedan, Tikta, Dipana, Katu, Virechana, Snehapana and Vaitarana Basti and Ruksha Sveda are indicated. Chakrapani in Chakradatta has strongly recommended beneficial role of Vaitaran Basti. Importance of Basti in Amavata is bestowed by Chakradatta. He stressed to administer Vaitarana in Amavata. Devdarvyadi Churna as stated in Ayurvedic texts, is also effective in Amavata. In Amavata and Italian Amavata. Devdarvyadi Churna as stated in Ayurvedic texts, is also effective in Amavata. Important in Etripathi K.D. Importante to face side effects. As well as by the time disease advances contracture and disability develops. People are looking forward for pain relief to Ayurved. So that ayurvedic line of management play an important role in pain management of Amavata.

#### MATERIALS AND METHODS

#### **A Case Profile**

47 years old, female patient B/B relative and admitted in GACH, Nagpur in Kayachikitsa department had.

#### **Chief Complaint**

Sarvang Sandhi Shula, Sarvsandhighrah, Ubhay Hasthpad Parvsandhi Shula Avum Shoth, Janu Sandhi Shotha, Chankramankashtata, Asan Uthapana Kastata since 7 years and Varam Var Mutrapravritti, Jvaranubhuti, Asamyak Malapravritti, Urah Pradehi Daha since 1 month.

#### Past H/O

H/O Bronchial Asthma since 7 years

No any systemic disorder.

## **Past medicinal History**

H/O Oral consumption of NSAID si4 years.

H/O of taking some Ayurvedic medicine for asthma and for same complaints

#### **Past Surgical History**

H/O Tubectomy 18 years ago in GMC, Nagpur.

Family History: Non-specific.

Vaiyaktik Vrittant

Aahar: Pramana: Madhyam, Sarv Rasa Pradhan Aahar with dominant Ushna, Guru, Snighdha Guna. Patient had habbit of Paryushit Aahar Sevan.

Vihara: occupation of patient was House wife, Duration of work- 6-8 hours.

Patient had habbit of Divasvapa, Nishapana.

Vyasan: No.

Asthavidh Parikshana: Jivha was Sama, Spasta Shabda, Akruti was Madhyam, Nadi- 78/min Regular, Mala-Asamyaka, Mutra- Varam Var Mutrapravritti, Sparsh-Samshitoshna, Ruksha, Drik-Aspashta.

Urah Parikshana: No abnormality detected.

*Udar Parikshana*: No abnormality detected.

## **Investigations**

CBC with ESR: Hb%: 8 gm/dl, TLC: 5900/cumm, Platlets: 2.00lac/cumm, ESR: 50mm/hr.

**BSL Fasting:** 87 mg/dl, **Post-prandial:** 102 mg/dl.

Urine Routine and Microscopic: No Abnormality Detected.

**RA Test:** 18.67IU/ml.

Anti CCP: 1231.14RU/ml (positive>25RU/ml)

#### **Management**

Langhana: Laghu Aahar like Lajja, Mudga Yusha, Kulatha Yusha and Rajgira Laddu was advice to patient.

**Svedan Chikitsa:** Initially *Svedan Chikitsa* was given with *Valuka Potali Sveda* twice a day in morning and evening.

Pachana (Tikta) Chikitsa: Pachana Chikitsa was given with Raspachaka Kvath (containing Kutki, Patola, Kutaj) 20 ml twice a day before meal for first five initial days.

Shodhan Chikitsa (Vaitaran Basti): Vaitaran Basti was administered to patient after Pachana Chikitsa for next 15 consecutive days in morning after breakfast through anal route.

#### Shamana Chikitsa

Devdarvyadi Churna (Devdaru. Nagarmotha, Vachha, Ativisha, Haritki, Shunthi)5gm twice a day with luke warm water along the course of Basti was adviced to patient.

Syrup. Immudab 10 ml TDS, cap. Imrox and cap. Imzon 2 BD was adviced to patient as immune-modulators.

#### Jalaukavcharana Chikitsa

After completion of *Vaitaran Basti* course, *Jalaukavcharana* over bilateral knee joints was done two times at interval of seven days.

#### Nidan Parivarjan Chikitsa

Pathykar Aahar and Vihar was adviced to patient according to Ayurvedic text. [11][12]

#### Criteria of Assessments

- 1. Score for clinical symptoms
- 2. Disability index score

- 3. Visual Analogue Scale
- 4. Walking Time
- 5. Grip Power
- 6. Goniometric Angle
- 7. Dimensions of Joints
- 8. Haematological investigations

## **Tables:**

Table-1: Showing Symptoms of  $Amavata^{[16]}$ 

## (a) Angamarda

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

## (b) Aruchi

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

## (c) Alasya

S.N.		Score	B. T	A. T
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	3	3
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.N.		Score	B. T	A. T
1.	No feeling of Gauravata	0		
2.	Occasional heaviness in body but can do usual work.	1		
3.	Continuous heaviness in body but can do usual work.	2	3	2
4.	Continuous heaviness which hampers usual work.	3		
5.	Unable to do any work due to heaviness.	4		

## (e) Apaka (Indigestion)

S.N.		Score	B. T	A. T
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	1	0
4.	Indigestion 3 to 5 times in a week in both meals	3		
5.	Indigestion after every meal	4		

## (f) Kshudha Mandya

S.N.		Score	B. T	A. T
1.	No Kshudha Mandya	0		
2.	Kshudha Mandya 1 to 2 times a week	1		
3.	Kshudha Mandya 3 to 4 times a week	2	1	0
4.	Kshudha Mandya 4 to 6 times a week	3		
5.	Continuous Kshudha Mandya	4		

## (g) Vairasata (Unpleasant taste)

S.N.		Score	B. T	A. T
1.	Normal taste of mouth.	0		
2.	Occasional sensation of <i>Vairasata</i> .	1		
3.	Continuous Vairasata but vanishes after eating something.	2	0	0
4.	Continuous Vairasata which also persists after eating.	3		
5.	Severe <i>Vairasata</i> throughout the day.	4		

## (h) Kukshi Kathinya

S.N.		Score	B. T	A. T
1.	Absent.	0		
2.	Transient.	1	1	0
3.	Frequent.	2	1	U
4.	Regular.	3		

## (i) Nidra Viparyaya (Sleep Disturbances)

S.N.		Score	B. T	A. T
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	2	1
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.N.		Score	B. T	A. T
1.	Absent	0		
2.	Motion once a day but not at regular interval.	1	1	0
3.	Alternate day.	2	1	U
4.	Interval for more than one day.	3		

## (k) Jadya (Morning stiffness):

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

## (l) Hridagraha

S.N.		Score	B. T	ΑT
1.	Absent	0		
2.	Heaviness in chest	1	0	0
3.	Pain during physical activity	2	U	U
4.	Pain during respiratory movements	3		

## (m)Trishna

S. N		Score	B. T	A. T
1.	Daily normal quantity of water to quence thirst. (<=2lit)	0		
2.	Require more additional water than normal (2-2.5lit)	1	2	0
•	Require two-fold additional water than normal(2.5-3lit)	2	2	U
4.	Require additional water >3litre more than normal still feels thirsty.	3		

## (n) Jvar (Fever)

S.N.		Score	B. T	A. T
1.	Normal (98-99°F)	0		
2.	Mild (99-100°F)	1		
3.	Moderate (100-103°F)	2	1	0
4.	High(103-105°F)	3		
5.	Hyperpyrexia(>105°F)	4		

## (o) Pidanasahatva (Tenderness)

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

## **Table-2: Showing Disability Index Score**

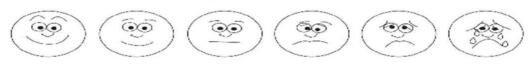
S. N	Activity of daily living (ADL) Are you able to:	B. T	A. T
1	Dress yourself, including tying saree / salwar / dhoti	2	1
1	/payjama and doing buttons?	2	1
2	Get in and out of bed?	2	1
3	Lift a full cup or glass to your mouth?	1	1
4	Walk outdoors on flat ground?	3	2
5	Wash and dry your entire body?	2	2

6	Squat in the toilet or sit cross – legged on the floor?	3	3
7	Bend down to pick up clothing from the floor?	3	2
8	Turn a tap on and off?	3	2
9	Get in and out of auto rickshaw / manual rickshaw / car	2	2
10	Walk three kilometers?	3	3
11	Shop in a vegetable market?	3	3
12	Climb a flight of stairs?	3	3
	TOTAL SCORE	30/12 = 2.5	25/12= <b>2.08</b>

Table-3: Showing Visual Analogue Scale for pain assessment.

Visual Analogue Scale	Before Treatment	After Treatment
	6	4

#### **Faces Pain Scale**



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

#### Visual Analog Scale (VAS)

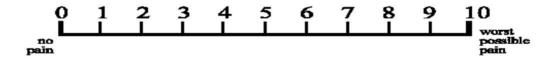


Table-4: Showing 50 meter Walking Time in Amavata.

S.N	Walking time B. T	Walking time A. T
1	6min 25sec	5min 45 sec

Table-5: Showing Grip Power in Amavata.

S.N	Grip Power B. T	Grip Power A. T
1	0 mm/Hg	50 mm/Hg

Table 6: Showing Goniometric Angle in Amavata.

S.N	Joints Involved	Goniometric Angle B. T	Goniometric Angle A. T
1.	Right Knee Joint flexion	$0-130^{0}$	0-130 <sup>0</sup>
2.	Left Knee Joint flexion	$0-115^{0}$	$0-120^{0}$

**Table 7: Showing Dimensions of joints in** *Amavata***.** 

S. N	<b>Knee Joint</b>	Left B.T	Left A.T	Right B.T	Right A.T
1.	Above 5 cm	38	36	39	38
2.	Middle	40	37.5	38.5	38
3.	Below 5 cm	32	30	32.5	31

S.N	Ankle Joint	Left B.T	Left A.T	Right B.T	Right A.T
1.	Above 5 cm	20	20	20.5	20
2.	Middle	23	23	24	24
3.	Below 5cm	22	22	23	22

S.N	wrist Joint	Left B.T	Left A.T	Right B.T	Right A.T
1.	Above 5 cm	19	19	19	18.5
2.	Middle	15	15	16	16
3.	Below 5cm	14	14	15	15

Table-7: Showing Investigation done in Amavata wsrt Rheumatoid Arthritis.

S.N	Investigation	B.T	A.T
1.	Haemoglobin	8gm%	9.8 gm%
2.	ESR	50 mm/hr	45 mm/hr
3.	Anti-CCP	1231.14 RU/ml	805.21 RU/ml
4.	RA Factor	18.67IU/ml	

#### **RESULTS**

Significant reduction in total symptom score, VAS and Disability index score was moderately reduced, Grip Power, walking time was improved. Markedly reduction in Goniometric angle and dimension of joints suggestive of excellent effect of therapy on Amavata wsrt Rheumatoid Arthritis.

#### **DISCUSSION**

In *Amavata Ruksha Svedan* with *Valuka Potali* was helpful in *Pachana* of *Ama* situated locally in *Shleshmasthana* (*Asthi and Sandhi*) in consequences relieved the pain and stiffness in the joints. *Virudha Guna Chikitsa* was adviced here i.e to remove *Sthamba Svedan* was adviced. <sup>[13]</sup> *Langhan* i.e *Laghu Aahar* was adviced to treat the *Mandagni* responsible for formation of *Amarasa* in *Amashaya* from *Aahar*.

Raspachaka Kvath was helpful in Pachana of Ama at Koshta and Dhatu level. Ingredient of Raspachaka Kvath was mainly Katu and Tikta Rasatmak which was responsible for Ama Pachana at Koshta level and helpful in maintaining Jataragni which was required for formation of healthy Anna Rasa for Prakrit Dhatu formation. [14]

Vaitarana Basti was main treatment in Ayurveda for Amavata. Which was helpful in Amavata to remove the Ama situated all over body in Shleshmasthana, Dhamni and Trika Sandhi responsible for Sandhi Shula.

Devdarvyadi Churna contains six herbal drugs like: Haritki, Shunti, Ativisha, Mustha, Vachha, Devdaru which was mostly Tikta and Katu Rasatmak helpful in Pachana and Dipana management in consequence Shula is reduced. As Amavata is correlated with autoimmune disease, Rheumatoid Arthritis, some immunomodulator drugs are used to increase Vyadhishamatva of patient which help to boost patient against such long duration chronic multiple joint disorder.

In this case patient was also treated for pain management according to Charak concept of *Raktaj Vyadhi*. In which when Patient do not get relief from *Ushna*, *Tikshna Chikitsa*. *Shita* and *Snigdha Chikitsa* was contraindicated in *Amavata*. So that considering the concept of *Raktaj Vyadhi* management of *Raktaj Vyadhi* i.e *Jalaukavcharana* was performed here which was helpful to reduce *Daha*, *Shotha*, *Shula* situated at joints and also to reduce the progression of contracture development. <sup>[15]</sup>

#### **CONCLUSION**

Amavata is a disease having different Avastha such as Sama and Nirama Avastha. If patients are treated as per Avastha, definitely pain hampering the daily life of patients, is going to relieved. Being related to Madhyam Roga Marga, Patient needs combination of treatment at a time. It was acknowledged from this case study experience that Vaitarana Basti and Valuka Potali Svedan remains at the top in pain management in Amavata. As well as concept mentioned by Charaka of Jalaukavcharana play an important role in pain management.

The combination of this Ayurvedic treatment can be helpful in treating the cases of *Amavata* wsrt Rheumatoid Arthritis. However, the trial was on only one patient and multiple such cases can be taken for study by similar line of management.



Figure-1: Showing Jalokavcharana at Knee joints in Amavata.

#### REFERENCES

- 1. Harsh Mohan: Text of pathology, Jaypee Brother Medical Publishers (P) LTD, New Delhi, 2005; 843.
- 2. Malaviya A.N.: A.P.I text book of medicine: Published by The Association of Physicians of India 9<sup>th</sup> edition, 2012; 2: 1829.
- 3. Doherty M and Raision S H.: Davidson's principles and practice of medicine 21<sup>st</sup> edition, 2010; 1096.
- 4. Tripathi K.D.: Essentials of medical pharmacology. Jaypee Brother Medical Publishers (P) LTD, New Delhi, 2008; 210.
- 5. Tripathi I and Tripathi D S: Yogaratnakar: Chaukhambha Krishnadas academy Varanasi: Amavata Nidan, 2013; 452.
- 6. Upadhyaya Y: Madhav Nidan Vidyotini Hindi Commentary: Chaukhambha Prakashan Varanasi, 2014; 508.
- 7. Tripathi I: Chakradatta: Chaukhamba Sanskrit Bhawan Varanasi: Amavata Chikitsa, 2018; 25/1: 166.
- 8. Tripathi I and Tripathi D S: Yogaratnakar: Chaukhambha Krishnadas academy Varanasi: Amavata Chikitsa, 2013; 453.
- 9. Tripathi I: Chakradatta: Chaukhamba Sanskrit Bhawan Varanasi: Amavata Chikitsa, 2018; 73/32: 455.
- 10. Shastri A: Bhaishajya Ratanavali 29/53: Chaukhambha Prakashan Varanasi, 2015; 618.

- 11. Tripathi I and Tripathi D S: Yogaratnakar: Chaukhambha Krishnadas academy Varanasi: Amavata Chikitsa, 2013; 459.
- 12. Tripathi I: Chakradatta: Chaukhamba Sanskrit Bhawan Varanasi: Amavata Chikitsa, 2018; 25/86: 172.
- 13. Kushwaha.H. S: Charak Samhita Uttarardha reprinted: Chaukhambha orientalia Varanasi: Chikitsasthan, 2016; 3/202 pg no-114.
- 14. Kushwaha.H. S: Charak Samhita Poorvardha reprinted: Chaukhambha orientalia Varanasi: Sutrasthana, 2016; 22/11-12: 320.
- 15. Kushwaha.H. S: Charak Samhita Poorvardha reprinted: Chaukhambha orientalia Varanasi: Sutrasthana, 2016; 24/17-18: 333-334.
- 16. Khatri A.: A PG thesis submitted to MUHS, Nashik; entitled "A Clinical Study on The Management of Amavata wsrt Rheumatoid Arthritis by Kshara Basti". GACH, Nagpur, 2014.