

## Immunomodulatory action of "Mustadi Yapana Basti"

in Amavata-a case study

## Sujata Diliprao Jadhav<sup>1</sup>, Sadhana A. Kulkarni<sup>2</sup>, Madhumati S. Nawkar<sup>3</sup>

- <sup>1.</sup> PG Scholar,
- 2. Associate Professor and HOD, Kayachikitsa Department,
- 3. Associate Professor and Head Sanskrit-Samhita Siddhant Department.

Radhakishan Toshniwal Ayurved Mahavidyalaya, Akola, Maharashtra, India

\*Corresponding author: Email: <u>sujatajadhav@2007gmail.com</u>

## **ABSTRACT:**

Amavata is inflammatory condition of joints. In Amavata there is vitiation of vata due to the Apachit Annarasa called Ama. The symptoms of Amavata closely resemble with Rheumatoid Arthritis. Modern Science According to Rheumatoid Arthritis is autoimmune disease, if it is not properly treated for longer time then it causes disability in patient. This Article discusses about Immunomodulatory Action of Mustadi Yapan Basti along with Simhanad guggulu and Guduchi ghan vati. Here a female patient of Amavata was observed.

**KEYWORDS**: *Amavata*, Rheumatoid Arthritis, *Mustadi Yapan Basti*.

## **INTRODUCTION:**

Immune mediated diseases occur either because of lack of an appropriate immune response as in immunodeficiency states or an abnormal response like in allergic diseases and disease. autoimmune Autoantibodies directed against self-antigens are present in many Autoimmune diseases. These may be directed to any constituent of cell. cell membrane. cytoplasm, deoxyribonucleic acid and other proteins in nucleus. Although their pathogenic role is not clear they are good diagnostic

markers due to their frequent association with specific diseases. However, the mere presence of an autoantibody is not necessary to form disease and absence of autoantibody does not exclude an disease<sup>1</sup>. Autoimmune diseases may be either systemic or organ specific. is Rheumatoid arthritis systemic autoimmune disease. Rheumatoid Arthritis is а chronic immune inflammatory systemic disease that synovial joints with affects extra articular manifestations<sup>2</sup>. A combination of pain and stiffness leading to loss of function, is a classical feature of joint disease<sup>3</sup>. In Rheumatoid Arthritis the patients become immunocompromised, if theses patient is not treated for longer time disability can occur in patients. Rheumatoid Arthritis which is believed to have а prevalence range of approximately 0.8-1.0% in Caucasians with female to male ratio of  $3:1.^4$ 

*Aamvat* is one of the most crippling disease found all over globe. *Amavata* is the disease of *Madhyam Rogmarga*. *Mandagni* is root cause for all type of diseases<sup>5</sup>. *Mandagni* causes formation of *apakva annarasa*. In *Amavata Aama* and *Vata* are two predominant factors in *Nidana*. *Gatrastabdhata* is considered as the *pratyatma lakshna* of *Amavata*. The symptoms of Rheumatoid Arthritis most closely resemble with that of *Amavata*.

In chronic cases of *Amavata* the patient becomes immunocompromised, in this regard a case study has been done to evaluate the immunomodulatory action of *Mustadi Yapana Basti*.

#### **MATERIAL AND METHODS:**

The treatment included *Mustadi Yapan Basti, Simhanad guggul, Guduchi Ghan vati* internally treatment and *Sarwanga Bashpa swedan* as external treatment. The study was conducted at R.T. Ayurved Mahavidyalayaand Rugnalaya, Akola. The patient was informed about the treatment and the consent of patient was taken.

## **CASE REPORT:**

A Female patient of age 18 years with O.P.D. No.10290 dated 15.09.2019 visited O.P.D. of R.T.A.M Akola with complaint of multiple joint pains for 6 years.

History of present illness: Female patient at the age of 13 had fever with swelling and pain of left knee joint which subsided after Allopathy treatment, after 8 days she suffered from pain and swelling of Ankle Joint. Gradually She suffered from pain and stiffness in bilateral knee, ankle. She was facing difficulty in performing her day to day activity. She was also suffering from generalised body ache.

In past 5 years she had undergone multiple therapies. when she visited OPD she was bedridden, emaciated and couldn't walk by her own, thus she was taken to OPD on wheel chair.

Though the case was prediagnosed *as Amavata*, when patient visited OPD she was in *Udarka awastha* of *Amavata*.

History of past illness: No History of any major illness

Family history: Not present

### **Personal history:**

- Diet: Vegetarian
- Micturition: 4-5 times/day,0-1/night
- Appetite: Poor
- Sleep: Adequate
- Bowel habit: Irregular
- Addiction: Nil

## Ashtavidha Pariksha:

- *Nadi* (pulse) :78/min
- *Shabda* (speech): Clear
- *Mala* (stool): Often constipation
- Sparsha (touch): Warm on joint
- *Mutra* (urine): Frequency normal
- Drika (eyes): Pallor

- *Jivha* (tongue): Sam
- Akruti (built): Krusha

### **General Examinations:**

- Temperature: 99.1 <sup>0</sup>F
- B.P :110/70mmhg
- Respiratory rate:19/min
- Body weight:27kg

### **Systemic Examination:**

On examination, patient was found to be conscious and well oriented to time place and person. Assessment of CNS, CVS, RS of patient was found within normal limits. Clinically, no clinical abnormality was detected on per abdomen On examination. of Inspection, musculoskeletal system, marked swelling on knee and ankle joint, swan neck deformity was present with restriction of joint movement. On all palpation tenderness and local temperature was observed in knee and ankle joint.

Blood investigation: On 18/09/2019

- Hb:9.0 gm%
- ESR:30 mm
- RBC:6.32 mil/cu mm
- Serum Uric Acid:2.1 mg/dl
- TLC:2100/cu mm
- C-Reactive Proteins(CRP):6.2 mg/dl
- Platelet count: 3,83,000/cu mm

• S. Rheumatoid Factor (RA Test):20

## **TREATMENT PLAN:**

Patient was admitted IPD attached to institute. Treatment of patient started from the date of her 1st visit to OPD. Blood investigation was done on 18/09/2019 showing decrease WBC count denoting the immunocompromised state of patient. Mustadi Yapan Basti was given for 3days for Upashay-Anupshaya. Patient had improvement so Basti was continued for 15 days with External and Internal treatment schedule as per written in table 1.

#### **Table 1 Treatment protocol**

Treatment	Medicine	Dose	Days
External	Bashpa	once	15 days
	swedan		
	Mustadi	350ml	15 days
	Yapan	once	
	Basti		
Internal	Simhnad	250 mg	15 days
	Guggul	BD	
	Guduchi	250 mg	15 days
	ghan vati	BD	

## **Criteria for selection of Medicine:**

Although *Mustadi Yapan Basti* is not recommended for *Amavata* but patient was so emaciated and immunocompromised. Along with these, she had severe *Sandhishool* thus "Mustadi Yapan Basti" was given. Bashpa Swedan was given to reduce pain and stiffness. Guduchi Ghan Vati was given for immunomodulatory action. Oral Medication were selected as a Vyadhipratyanic drug.

#### Assessment criteria:

Patient was assessed on the basis of clinical sign and symptoms. Therapeutic effect was recorded using Visual Analog Scale (VAS) and Blood investigations done before and after treatment.

## **OBSERVATION AND RESULT:**

It was observed that (table 2,3,4) patient had marked improvement in severity of symptoms. Patient gradually recovered with the treatment. There was significant improvement in of symptoms sandhishula (Joint pain), Sandhishotha (Joint swelling), Kriyahani (inability to perform activity). Hb % was increased from 9 to 9.2 gm%, TLC count increased from 2100/cu mm to 4500/cu mm and Platelet count increased from 3,83,000/cu mm to 4,00,000/cu mm.

Observations of subjective parameters:

Table	2
I auto	4

Sandhishula		BT	After 7days	After 15 days
Janusandhi	Right	10	7	3
	Left	9	6	3
Gulfasandhi	Right	9	6	2
	Left	8	7	1

Table3

Sandhishotha		BT	After7 days	After 15 days
Janusandhi	Right	16.3cm	13.4cm	11.2cm
	Left	17.4cm	13.7cm	11.1cm
Gulfasandhi	Right	11.4cm	9.8cm	7.8cm
	Left	11.7cm	10.1cm	8.6cm

Table4

Kriyahani		BT	After 7 days	After 15 days
Janusandhi	Right	+++	++	+
	Left	+++	++	_
Gulfasandhi	Right	+++	++	_
	Left	+++	++	_

# **Observations of objective parameters:**

Parameter	Before Treatment	After 7 days	After 15 days
Hb %	9 gm%	9 gm%	9.2 gm%
RBC	6.32 million/cu mm	6.41 million/cu mm	6.31 million/cu mm
TLC	2100/cu mm	2600/cu mm	4500/cu mm
Platelet	3,83,000/cu mm	3,42,000/cu mm	4,00,000/cu mm

**DISCUSSION:** In *Amavata* mainly *Langhana* treatment is indicated<sup>6</sup>. But here the case presented was

immunosuppressed condition in *Amavata*. In this case *Vyadhihar* treatment along with treatment of

Udarka was given. Although Laghana (fasting) is indicated in Amavata, but in patient the present case was so emaciated and immunocompromised thus Langhana was not suitable. Langhana should be prescribed so that it should not overpower physical strength (prana avirodhi). Here in this case Simhnad Guggulu was given as Vyadhipratyanic drug as is mentioned it in Amavatadhikar. As everybody knows that Guduchi has immunomodulatory action. *Guduchi* promotes strength. alleviates all the three dosas, it is Grahi, hot, rejuevening and digestive stimulant, it cures Jwara and Ama thus Guduchi given Ghan Vati was for immunomodulatory action. The aim of all the therapeutic measures was to maintain the strength of body and to boost up by which the patient becomes free from disease<sup>7</sup>.

To increase immunity and strength "*Mustadi Yapana Basti*" was given to patient. *Yapana* type of *basti* is indicated to all patients. It instantaneously promotes strength and rejuvenates the body<sup>8</sup>.

Mustadiyapanbasti contains Musta, Bala, Aragawadha, Rasna, Manjishta, Punarnava, Bibhitak, Guduchi, Laghupanchmoola, Madanphala, Milk and Meat soup.<sup>9</sup>

	Actions and
Drug	uses
Musta	Deepan, Pachan,
	Jwaraghna
Bala	Balya, Vatahar,
	Jwaraghna, Ojovardhak
Aaragwadha	Jwaraghna, Sansrana,
	Vatashaman,
	Vedanasthapan,
	Shothaghna
Rasna	Pachan, Vatahar,
	Jwaraghna, Shothahar
Manjishta	Deepan, Pachan,
	Jwaraghna,
	Pittasanshaman,
	Shothahar, Shonitsthapan
Punarnava	Shothaghna, Deepan,
	Vatakaphashamak
Bibhitak	Deepan, Anuloman,
	Vedanasthapak,
	Jwaraghna
Guduchi	Tridoshashamak,
	Vedanasthapak, Hrudya,
	Raktashodhak, Jwarghna,
	Rasayan
Laghupanch	Vatapiitashamak,
moola	Shothahar
Madanphala	Kaphavatashodhak and
	shamak, Shothahar,
	Pittanissarak,
	Raktashodhak

*Ghruta* is *vatapittashamak*, *balya*, *agnivardhak*, *madhur*, *saumya*, *sheetavirya*, *jwaraghna* and *vayasthapak* also.<sup>10</sup> *Ghruta* is having special property i.e. *Yogavahitva* which is helpful in increasing bioavailability of other drugs without losing its own property. *Ghruta* alleviates *pitta and vata*.<sup>11</sup>

Cow milk has 10 properties which are similar to Oja, so milk having identical properties is conductive to the promotion of <u>Oja</u>, thus milk is an elixir per excellence.<sup>12</sup>

Meat soup is highly nutritive for all. Those who are dehydrated or emaciated, who are convalescence stage and those who aspire better strength and complexion, meat soup is ambrosia. It promotes voice, youth, intelligence, power of sensory organs and longevity.<sup>13</sup>

Rather than more oral medications we focused on *"Mustadi Yapana Basti"*. because of this course pain, inflammation was drastically reduced and patient was able to walk by herself and to do day to day activities by her own.

#### **CONCLUSION:**

Although the "Mustadi Yapana Basti" does not specifically come under Aamavat Adhikar, but in this case patient's condition was so immunocompromised and emaciated. thus instead of Langhana, *"Mustadi* Basti" Yapana was selected. Sandhishula, Sandhishotha, Kriyahani symptoms reduced and overall strength was increased. The drugs were well tolerated by the patient and her WBC count increased significantly as a result of treatment.

### **REFERENCES:**

- Agrawal A.K, Nadkar M.Y, API Textbook of medicine, 9<sup>th</sup> edition, The Association of Physicians of India, Mumbai,2012,155.
- Malaviya A.N, Handa R., API Textbook of medicine,9<sup>th</sup> edition, The Association of Physicians of India, Mumbai, 2012, 1829.
- Glyhnm, Drake W.M, Hutchinson's clinical methods, 23<sup>rd</sup> edition, Edinburgh, Elsevier, 2012, 254.
- Davidson's principles of Medicine, Brain R Walker, Nicki R.Colledge, Rheumatology and bone disease, 22<sup>nd</sup> edition, Elsevier, 2014, 1096.
- Vagbhat, Dr. Ganesh Krushna Garde, Ashtang Hridya Nidansthana, Adhyay 12, 1, Varanasi, Chowkhamba Surbharati Prakashan, 2019, 197.

- Yogratnakar, Dr.Indradev Tripathi, Dr. Dayashankar Tripathi, Yogratnakar with Vaidya Prabha hindi commentery, Varanasi, Chowkhamba Krishnadas Academy, 2007, 453.
- Charak, R.K Sharma, Bhagwan Dash, Carak Samhita, vol 3, Chikitsasthanam, Chapter3, 141, Varanasi, Chowkhamba Sanskrit Series Office, reprint2013, 150.
- Charak, R.K Sharma, Bhagwan Dash, Carak Samhita, vol 4, Siddhisthanam, Chapter12, 16/1, Varanasi, Chowkhamba Sanskrit Series Office, reprint2013, 409.
- Charak, R.K Sharma, Bhagwan Dash, Carak Samhita, vol 4, Siddhisthanam, Chapter12, 16/1, Varanasi, Chowkhamba Sanskrit Series Office, reprint2013, 408.

- 10. Sushrut, Kaviraj mbikadatta shastri, Susrut Samhita, Sutrasthan, Adhyay 45,96, Varanasi, Chowkhambha Sanskrit Sanstan, 2057.
- 11. Charak, R.K. Sharma, Bhagwan Dash, Carak Samhita, vol1, Sutrasthan, Chapter 13, 14, Varanasi, Chowkhamba Sanskrit Series Office, reprint 2014, 249.
- 12. Charak, R.K.Sharma, Bhagwan Dash, Carak Samhita, vol1, Sutrasthan, Chapter 27,217, Varanasi, Chowkhamba Sanskrit Series Office, reprint 2014, 533.
- 13. Charak, R.K.Sharma, Bhagwan Dash, Carak Samhita, vol1, Sutrasthan, Chapter 27, 312, Varanasi, Chowkhamba Sanskrit Series Office, reprint 2014, 556.

*Cite this article:* 

Source of funding: Nil

"Immunomodulatory action of "Mustadi Yapana Basti" in Amavata-a case study." Sujata Diliprao Jadhav, Sadhana Ashutosh Kulkarni, Madhumati Shailesh Nawkar Ayurline: International Journal of Research In Indian Medicine 2020;4(5): 01-08