

## A CLINICAL STUDY ON THE EFFECT OF KALA BASTI WITH MADHUYASHTYADI NIRUHA AND BALAGUDUCHYADI TAILAM ANUVASANA IN THE MANAGEMENT OF VATARAKTA W.S.R TO GOUT

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### ABSTRACT

**Background:** Gout in modern science is a metabolic disorder of purine metabolism which can be diagnosed by elevated serum uric acid. The symptomatology of *Vatarakta* like Shool, Shoth, Sparshagyatwam etc. mimics the symptoms of gout. It is a form of inflammatory arthritis characterized by recurrent attacks of red, tender, hot and swollen joint caused by deposition of needle like crystal of uric acid known as monosodium Urate crystals. In Classics, it is mentioned that *Ksheer Siddha Basti* is considered best for *Vatarakta* as *Ksheer* pacifies *Dushit Rakta* and *Basti* procedure itself pacifies *Vata*.

**Aim:** To evaluate the efficacy of *Kala Basti* with *Madhuyashtyadi Niruha Basti* and *Balaguduchyadi Anuvasana Basti* in the management of *Vatarakta* w.s.r to Gout. **Materials and Methods:** This is Open label randomized single arm prospective interventional Clinical Trial. A total of 30 patients

were treated by giving *Kala Basti* with *Madhuyashtyadi Niruha Basti* and *Balaguduchyadi Anuvasana Basti*. The observations were recorded using an ordinal scale (grading method), the Wilcoxon Signed Rank Test was applied to evaluate the effect of *Madhuyashtyadi Basti* before treatment (BT) and after treatment (AT). **Results:** The results presented indicate that all seven subjective parameters—*Sandhishoola*, *Sandhishotha*, *Kshate Atiruk*, *Twak Vaivarnaya*, *Daha*, *Sparsha Agyatavyam*, and *Stabdhata*—showed a statistically significant

reduction after treatment. **Conclusion:** *Madhuyashtyadi Niruha* and *Balaguduchyadi Anuvasana Basti* in *Kala Basti Krama* is found to be effective in *Vatarakta* i.e Gout.

**KEYWORDS:** *Vatarakta*, Gout, *Kala Basti*, *Madhuyashtyadi Niruha Basti*, *Balaguduchyadi Tailam Anuvasana Basti*.

## INTRODUCTION

There are so many diseases that is offering hurdles in individual's life and one of them is *Vatarakta*. Many of its symptoms resemble with modern day Gout arthritis. *Vatarakta* is a metabolic disorder involving *Vata Dosha* imbalance affecting *Rakta Dhatu*. When aggravated *Vata* circulates through *Shrotas*, and the already *Dushit Rakta* obstruct *Vata* and again agitate *Vata*, which further leads to *Vatarakta*.<sup>[1]</sup> Thus, *Vatarakta* is mainly said to be manifested due to *Raktwaha Shrotodushti*. Gout in modern science is a metabolic disorder of purine metabolism which can be diagnosed by elevated serum uric acid. The symptomatology of *Vatarakta* like Shool<sup>[2]</sup>, Shoth<sup>[3]</sup>, Sparshagyatwam<sup>[4]</sup> etc. mimics the symptoms of gout. It is a form of inflammatory arthritis characterized by recurrent attacks of red, tender, hot and swollen joint caused by deposition of needle like crystal of uric acid known as monosodium Urate crystals. In Classics, it is mentioned that *Ksheer Siddha Basti* is considered best for *Vatarakta* as *Ksheer* pacifies *Dushit Rakta* and *Basti* procedure itself pacifies *Vata*. Thus, *Madhuyashtyadi Niruha Basti* is considered from *Charaka Samhita*.<sup>[5]</sup> Also, *Guduchi* is considered as drug of choice for *Vatarakta* and *Bala* acts well on vitiated *Vata Dosha*, that's why *Balaguduchyadi Tailam* is taken for *Anuvasana Basti*. *Basti* introduced into the *Pakwasaya* acts upon the whole body and on every system of the body, from head to toe and draws out the impurities by its potency similar to the sun which evaporates the water from the earth by itself.<sup>[6]</sup> Hence *Acharya Charaka* considered *Basti* as the best treatment for *Vatarakta*.<sup>[7]</sup> Modern science is using quick acting NSAIDS & uricosuric for treatment, which have control over joint pain but have potential side effects. Thus, it becomes a great concern how to deal with Gout and treat properly. Thus, an attempt has been made to see the result, recurrence possibility, benefits and side effects of *Madhuyashtyadi Niruha* and *Balaguduchyadi Anuvasana* in the management of *Vatarakta* w.s.r Gout.

## AIM

To evaluate the efficacy of *Kala Basti* with *Madhuyashtyadi Niruha Basti* and *Balaguduchyadi Anuvasana Basti* in the management of *Vatarakta* w.s.r to Gout.

## OBJECTIVE

- To establish an effective method of treatment of *Vatarakta*
- To study any adverse effect during the trial
- To compare the prognosis, pathogenesis, symptoms and complications of both modern and *Ayurvedic* aspect of the disease i.e Gout and *Vatarakta*.

## MATERIALS AND METHODS

The Whole Study will be Comprised of following 3 Phases-

1. Preparation of Trial Drug
2. Administration of *Basti*
3. Clinical Study

### 1. Preparation of trial drug

The Trial drug *MADHUYASHTYADI NIRUHA BASTI* is prepared in the *Panchakarma* Workshop of GACH, Patna and *BALAGUDUCHYADI TAILAM* is Prepared by GACH – Pharmacy

a. *Madhuyashtyadi Basti Preparation*<sup>[8]</sup>- as mentioned by Acharya Charaka

यष्ट्याह्वयस्याष्टपलेन सिद्धं पयः शताह्वाफलपिप्पलीभिः।

युक्तं ससर्पिर्मधु वातरक्तवैस्वर्यवीसर्पहितो निरूहः ॥

### MADHUYASTIADI NIRUH BASTI PREPARATION

| S.NO | DRUGS                      | PART USED | QUANTITY |
|------|----------------------------|-----------|----------|
| 1.   | <i>Mulethi</i>             | Roots     | 400g     |
| 2.   | <i>Shouf</i>               | seeds     | 5g       |
| 3.   | <i>Madanaphala Pippali</i> | Seeds     | 5g       |
| 4.   | <i>Goghrita</i>            | -         | 50ml     |
| 5.   | <i>Madhu</i>               | -         | 50ml     |
| 6.   | <i>Godugdha</i>            | -         | 400ml    |

Firstly, *Kwath* is prepared adding 400g of *Mulethi Churna* and 400 ml of water with 4 times of water. When all water gets burn out reducing it into ¼ times of total. *Kalka* is prepared by wetting the finely grinded *Shouf* and *Madanaphala Pippali*. *Basti* is then prepared in a sequence as mentioned by *Acharya Vangbhatta*.

माक्षिकं लवणं स्नेहं कल्कं क्वाथमिति क्रमात् ॥ आवपेत निरुहाणामेष संयोजनेविधिः<sup>[9]</sup> ।

Initially 50 ml of *Madhu* is placed in a container and 5 g of *Saindhava* is added churned with the medium pace and in clockwise direction. Melted *Goghrit* is added slowly and the mixture

is churned continuously in order to form a homogeneous mixture. Then, above prepared *Kalka* is added and churned continuously. Lastly, the prepared *Kwath* is added and mixed properly. The whole mixture is filtered with fine thin cloth.

### b. BALAGUDUCHYADI TAILAM ANUVASANA BASTI PREPARATION

-as mentioned in *Sahasrayoga*<sup>[10]</sup>

बलागुडूच्योः काथेन तैलं क्षीरसमन्वितम् । चन्दनोशीरयष्ट्या मुस्ताकल्कं पचेद्बुधः ॥

सिद्धमेतद्वातरक्तं रक्तपित्तं शिरोरुजम् । वातरक्तकृतान् रोगानाशु हन्यात्सुपूजितम् ।

The oil is prepared by adding paste of *Chandana*, *Ushir*, *Yashti* and *Musta* along with milk to the decoction of *Bala* and *Guduchi* in *Til Tail*. It is very beneficial in treating Gout, *Raktapitta*, *Shiroruja* and other disorders caused by gout.

### Preparation of *Balaguduchyadi Tailam*<sup>[11-15]</sup>

The drugs required for *Balaguduchyadi Tailam* preparation were obtained from local market.

| S.NO | DRUGS                  | PART USED | QUANTITY |
|------|------------------------|-----------|----------|
| 1.   | <i>Bala</i>            | Root      | ½ part   |
| 2.   | <i>Guduchi</i>         | Kanda     | ½ part   |
| 3.   | <i>Mulethi</i>         | Root      | 1/8 part |
| 4.   | <i>Musta</i>           | Rhizome   | 1/8 part |
| 5.   | <i>Shweta chandana</i> | Kand sara | 1/8 part |
| 6.   | <i>Usheera</i>         | Root      | 1/8 part |
| 7.   | <i>Til taila</i>       | -         | 1part    |
| 8.   | <i>Godugdha</i>        | -         | 4 times  |
| 9.   | <b>Water</b>           | -         | 4times   |

*Murchita Tila Taila* was taken in a clean wide mouthed stainless-steel vessel. The vessel was placed over mild fire and when air bubbles start appearing in *Tila Taila*, *Drava Dravya* (water) was added 4 times of *Sneha* (*Murchita Tila Taila*). Then milk was added 4 times of *Sneha*. Then *Kwath* of *Bala* and *Guduchi* is prepared by taking ½ part of both drugs individually and adding 8 parts of water reducing it into 4 times. Now, *Kalka* of drugs- *Mulethi*, *Musta*, *Sweta*, *Chandanan* and *Usheer*, were taken each 1/8 parts of *Sneha* were added to the vessel and boiled with frequent stirring until *Sneha-Siddhi Lakshna* appear in it. *Madhyama Paka* of oil is done by making sure of *Kalka* should be soft and devoid of moisture. And perfect *Varti* could be prepared through it. Later it was filtered through a clean cloth and preserved in wide mouthed containers.

### 2. Administration of Basti<sup>[16]</sup>

The *Basti* prepared will be administered as per Classical reference for 16 days viz. *Anuvasana* on day 1 and then 6 *Anuvasana* and 6 *Niruha Basti* alternatively for 12 days and final 3 *Anuvasana* on last 3 days of the trial.

### Source of collection of data

Screening, selection and registration of 30 patients randomly from OPD and IPD Panchakarma Department, GACH Patna, based on inclusion and exclusion criteria. This Clinical trial was started after registration in CTRI, having registration **CTRI/2025/05/085601** and was approved by Institutional Ethics Committee, wide Memo. No. 07 dated 3.01.2025.

### Inclusion Criteria

- Patients having Serum uric acid conc. more than 7.0mg/dl in male and more than 6.0 mg/dl in female.
- Patients having their age between 18-70yrs
- Patients having sign & symptoms of *Vatarakta* (Gout).

### Exclusion Criteria

- Patients having complications of *Vatarakta* (*Upadrava*) like, *Moorcha*, *Hikka* etc.
- Patients having secreting tophus.
- Patients associated with HIV, Hepatitis and also pregnant women.
- Patients below age 18 years and above 70 yrs of age

### Assessment Criteria

The improvement in the patients will be assessed mainly on the basis of relief in the cardinal symptoms of the disease. To assess the effect of therapy subjectively, all the signs & symptoms will be given scoring pattern depending upon their severity.

#### A. Subjective parameter

| PARAMETER  | FEATURES                                       | GRADING  |
|--|--|----------|
| <b>1.SANDHI SHOOL</b> <sup>[17]</sup><br>(Severe pain in affected joint) | No pain  | <b>0</b> |
|  | Pain of bearable nature on movement.           | <b>1</b> |
|  | Pain at rest & mild restriction of movement.   | <b>2</b> |
|  | Restriction of movement & requires medications | <b>3</b> |
| <b>2.SANDHI SHOTHA</b> <sup>[18]</sup><br>(Swelling)                     | No swelling                                    | <b>0</b> |
|  | Pitting edema up to 2mm                        | <b>1</b> |
|  | Pitting edema between 3-4 mm                   | <b>2</b> |

|   |  |   |
|---|--|---|
|   | Pitting edema more than 4mm                                      | 3 |
| <b>3.SPASHAAGATWAM<sup>[19]</sup></b><br>(Loss of Tactile sensation)                  | No numbness  | 0 |
|   | Slight touch Sensation and slight numbness                       | 1 |
|   | No touch sensation but have slight pricking pain on Pinching.    | 2 |
|   | Complete numbness  | 3 |
| <b>4.KSHATE ATIRUK<sup>[20]</sup></b><br>(Severe pain on slight injury or Tenderness) | No tenderness  | 0 |
|   | Subjective experience of tenderness                              | 1 |
|   | Wincing of face on pressure                                      | 2 |
|   | Resist to touch  | 3 |
| <b>5.DAHA<sup>[21]</sup></b><br>(Burning Sensation)                                   | None   | 0 |
|   | Mild/ Tolerable  | 1 |
|   | Moderate/Needs medicine  | 2 |
|   | Severe/Intolerable   | 3 |
| <b>6.VAIVARNYA<sup>[22]</sup></b><br>(Discoloration)                                  | No discoloration   | 0 |
|   | Pinkish coloration   | 1 |
|   | Red-Pinkish coloration   | 2 |
|   | Marked red coloration  | 3 |
| <b>7.STABDHATA<sup>[23]</sup></b><br>(Stiffness)                                      | 3/4 free movements against that of the normal range of movements | 0 |
|   | 1/2 free movements against that of the normal range of movements | 1 |
|   | 1/4 free movements against that of the normal range of movements | 2 |
|   | Difficulty with the complete range of movements                  | 3 |

### B. Objective parameter

The analysis of the values of the serum uric acid will be done before & after the treatment and during the follow up to compare the condition of affected joints.

### Criteria for the total effect of the therapy

To assess the total effect of the therapy, the following criteria were fixed to each of the status.

- Complete remission - 100% relief.
- Markedly improved - >75% relief.
- Moderately improved - 50% to 75% relief.
- Mildly improved - 25% to 50% relief.
- Unchanged: ≤25% relief in Signs and Symptoms

**% Relief Formula** = Finding Score/Total score x100

### STUDY DESIGN

**Sample size:** - 30

**Type of study:** - Open label single arm prospective interventional Clinical Trial

**Allocation** - Randomized

**Duration of treatment**-16 days

**No. of follow ups** – 4

**Each follow up days**-8 days

**Total treatment duration**-32 days

### **PROCEDURE FOR ANUVASANA BASTI ADMINISTRATION**

*Anuvasana Basti* is given in 28 patients. They were given Basti just after a light meal. Firstly, patient is locally done *Snehana* and *Swedana* in the *Kati Pradesha*. Then he/she is asked to lie over the bed in left lateral position with right leg stretched upward. A syringe is filled with lukewarm *Balaguduchyadi Tailam*, making sure that the air does not get trapped within it and then a catheter is fixed in its mouth. After wearing a surgical glove, take a few drops of oil and apply it over the tip of the rubber catheter. Also, apply within the anal canal by 2 fingers i.e index and middle finger. This allows the anal sphincters to relax. Now, ¼th of the catheter is inserted into the canal just along the spinal cord. The plunger is pressed carefully with the medium pace, making sure that the oil is not leaking out. After pushing whole oil, the catheter is pulled out slowly. Ask the patient to lie in supine position. Then a proper massage over abdomen and thighs is done. The index toe of both leg is pulled upward passively and release it after reaching a few heights one by one about three times. Ask patient to lie down for 5 min and then shift to him/her ward.

### **PROCEDURE FOR NIRUHA BASTI ADMINISTRATION**

*Niruna Basti* is given to 28 patients in empty stomach. Firstly, patient is locally done *Snehana* and *Swedana* in the *Kati Pradesha*. Then he/she is asked to lie over the bed in left lateral position with right leg stretched upward. An enema pot is filled with luke warm prepared *Basti* and the operable clamp is pressed closed. After wearing a surgical glove, take a few drops of oil and apply it over the tip of the nozzle of the enema pot. Also, apply within the anal canal by 2 fingers i.e index and middle finger. This allows the anal sphincters to relax. Now, the nozzle is inserted into the canal just along the spinal cord. Operable clamp is released slowly to move out *Basti Dravya*, making sure that the *Basti* is not leaking out. When the whole *Basti Dravya* move out, the nozzle is pulled out slowly. Ask the patient to lie in supine position Then a proper massage over abdomen and thighs is done. Ask patient to lie down for 5 min and then shift to him/her ward.

### **OBSERVATIONS AND RESULTS**

The clinical study's data were subjected to numerous dimensions on various variables in order to determine the etiopathogenesis and progression of the disease. Total 30 patients suffering from *Vatarakta*, fulfilling the inclusion criteria, were registered and enrolled for the clinical study.

**Table 1: Distribution According to Age.**

| AGE (in years) | NO OF PATIENTS | PERCENTAGE% |
|----------------|----------------|-------------|
| 20-30 Years    | 3              | 10.0        |
| 31- 40 Years   | 2              | 6.7         |
| 41-50 Years    | 9              | 30.0        |
| 51-60 Years    | 10             | 33.3        |
| 60-70 Years    | 6              | 20.0        |
| Total          | 30             | 100.0       |

The above table shows that in the present study

- Maximum Number of patients i.e. 33% belonged to age group between 51-60 years,
- Followed by 30% patients in age group between 41-50 years of patients were observed each.
- 20% belong to age group between 60-70 years.

**Table 2: Distribution According to Gender.**

| GENDER | NO. OF PATIENTS | PERCENTAGE% |
|--------|-----------------|-------------|
| Male   | 15              | 50          |
| Female | 15              | 50          |
| Total  | 30              | 100         |

In the present clinical study of the total patients, 15 were males constituting 50% of the study population, while 15 were females also constituting 50%.

**Table 3: -Distribution According to Occupation.**

| OCCUPATION  | NO. OF PATIENTS | PERCENTAGE % |
|-------------|-----------------|--------------|
| Housewife   | 13              | 43.33        |
| Student     | 3               | 10           |
| Business    | 4               | 13.33        |
| Office Work | 3               | 10           |
| Labourer    | 2               | 6.66         |
| Others      | 5               | 16.66        |
| Total       | 30              | 100%         |

In the view of occupation of patients, it was observed that

- Maximum i.e. 43.33 patients were house wives.
- 13.33% patients had their business and 6.66% were labors.

- 10% were student and office workers each.

**Table 4: - Distribution According to Bowel.**

| BOWEL       | NO. OF PATIENTS | PERCENTAGE% |
|-------------|-----------------|-------------|
| Normal      | 15              | 50          |
| Loose       | 3               | 10          |
| Constipated | 12              | 40          |
| Total       | 30              | 100         |

**Above table reveals that**

- 40% patients are constipated, 10% experiences loose stool
- Rest 50% have stool with normal consistency.

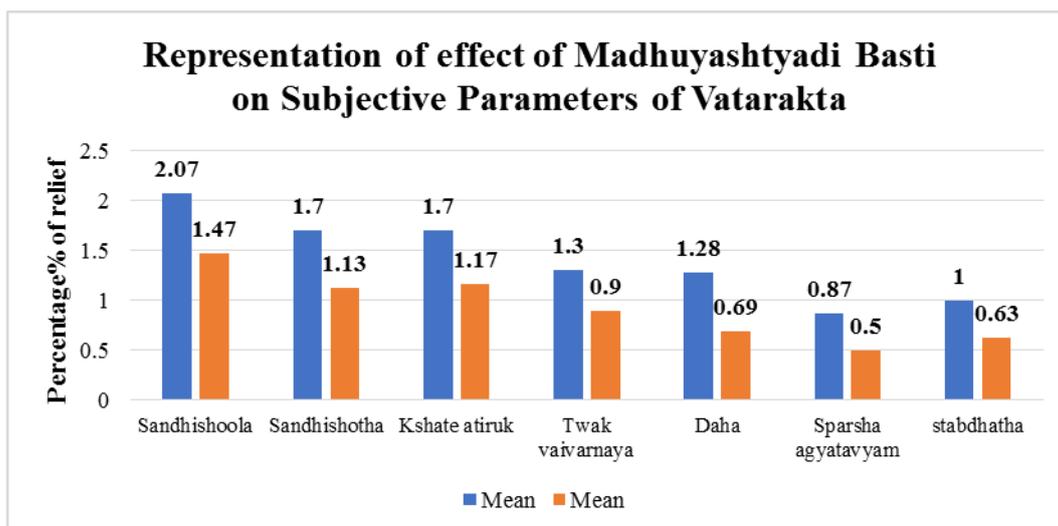
**Other Observational findings**

In *Ahara* *Nidana*, maximum number of patients i.e. 60% were having *Vata Prakopaka* diet, 46.66% having *Rakta Prakopaka* diet. Excessive use of *Vidaahi Anna* was found in 43.33% of patients. In *Vihara* *Nidana*, maximum patients i.e. 80% had habit of *Diwa Swapna* and 63.33% patients were having *Achankramana*. *Vegadharana* was observed in 36.66% patients whereas *Ratri Jagarana* in 23.33 % of the patients. While considering the *Mansika Nidana*, maximum patients i.e. 56.6% were having *Chinta* and 43.33% were suffering from *Shoka*. 30% of the patients were found suffering from *Krodha*.

**Table No. 5: Effect of *Madhuyashtyadi Basti* on Subjective Parameters of *Vatarakta*.**

| Parameters                | Mean |      | SD    |       | Z value | P value | Effect % | Results |
|---------------------------|------|------|-------|-------|---------|---------|----------|---------|
|                           | BT   | AT   | BT    | AT    |         |         |          |         |
| <i>Sandhishoola</i>       | 2.07 | 1.47 | 0.64  | 1.167 | -2.335  | 0.02    | 28.99    | S       |
| <i>Sandhishotha</i>       | 1.7  | 1.13 | 0.877 | 1.106 | -2.181  | 0.029   | 33.53    | S       |
| <i>Kshate atiruk</i>      | 1.7  | 1.17 | 0.837 | 1.147 | -2.004  | 0.045   | 31.18    | S       |
| <i>Twak vaivarnaya</i>    | 1.3  | 0.9  | 0.877 | 1.155 | -2.089  | 0.037   | 30.77    | S       |
| <i>Daha</i>               | 1.28 | 0.69 | 0.751 | 1.137 | -2.074  | 0.038   | 46.09    | S       |
| <i>Sparsha Agyatavyam</i> | 0.87 | 0.5  | 0.629 | 0.938 | -2.088  | 0.037   | 42.53    | S       |
| <i>Stabdhattha</i>        | 1    | 0.63 | 0.695 | 1.033 | -2.382  | 0.017   | 37       | S       |

*HS = Highly Significant, S = Significant, NS = Not Significant*



The observations were recorded using an ordinal scale (grading method), the Wilcoxon Signed Rank Test was applied to evaluate the effect of *Madhuyashtyadi Basti* before treatment (BT) and after treatment (AT). The results presented in above table indicate that all seven subjective parameters—*Sandhishoola*, *Sandhishotha*, *Kshate Atiruk*, *Twak Vaivarnaya*, *Daha*, *Sparsha Agyatavyam*, and *Stabdhata*—showed a statistically significant reduction after treatment. The P values for all parameters were less than 0.01, indicating significance at the 1% level. Therefore, the null hypothesis is rejected, and it can be concluded that *Madhuyashtyadi Basti* produced a statistically significant effect on all assessed subjective parameters of *Vatarakta*.

**Table No. 6: Effect of Madhuyashtyadi Basti on Objective Parameters of Vatarakta.**

| Parameters       | Mean |       | SD     |        | Z value | P value | Effect % | Results   |
|------------------|------|-------|--------|--------|---------|---------|----------|-----------|
|                  | BT   | AT    | BT     | AT     |         |         |          |           |
| <b>URIC ACID</b> | 7.47 | 6.13  | 0.692  | 0.917  | -4.785  | 0.000   | -17.94%  | <b>HS</b> |
| <b>RA Factor</b> | 15.5 | 15.03 | 2.515  | 2.399  | -1.069  | 0.285   | -3.03%   | <b>NS</b> |
| <b>Hb%</b>       | 13   | 13.13 | 2.56   | 2.27   | -0.63   | 0.529   | 1.00%    | <b>NS</b> |
| <b>ESR</b>       | 36.2 | 37.17 | 10.237 | 10.086 | -0.83   | 0.934   | 2.68%    | <b>NS</b> |
| <b>CRP</b>       | 3.12 | 2.8   | 1.41   | 1.51   | -1.948  | 0.051   | -10.26%  | <b>NS</b> |

HS = Highly Significant, S = Significant, NS = Not Significant

Since the objective parameters were recorded before treatment (BT) and after treatment (AT), the Wilcoxon Signed Rank Test was applied to evaluate the therapeutic effect of *Madhuyashtyadi Basti*. The results indicate that Uric Acid levels showed a highly significant reduction (17.94%) with a Z value of -4.785 and  $P < 0.001$ , demonstrating a strong therapeutic effect on metabolic parameters associated with *Vatarakta*. In contrast, RA Factor showed only a mild reduction (3.03%), which was not statistically significant ( $P = 0.285$ ).

ESR values showed a slight increase (2.68%), and this change was also statistically not significant ( $P = 0.934$ ), indicating no meaningful effect of the intervention on ESR levels. Similarly, CRP levels decreased by 10.26%, but the change remained statistically not significant ( $P = 0.051$ ), suggesting a borderline but inconclusive effect on inflammatory markers. Hemoglobin (Hb%) showed a marginal increase of 1.00%, which was statistically not significant ( $P = 0.529$ ), indicating that the treatment did not adversely affect hemoglobin levels. Overall, it can be concluded that *Madhuyashtyadi Basti* demonstrated a highly significant effect on Uric Acid, while its effects on RA Factor, ESR, CRP, and Hb% were statistically not significant in the present study.

## DISCUSSION

Among the 30 patients, 28 patients who completed the study, subjective assessment revealed considerable improvement in signs and symptoms. A substantial number of patients showed marked improvement, while the remaining patients exhibited moderate improvement. None of the patients reported no improvement or worsening of symptoms. This highlights the effectiveness of *Kala Basti* in providing symptomatic relief, improving joint function, and enhancing overall quality of life in patients suffering from *Vatarakta*. *Kala Basti* is considered as the most effective therapeutic modality for *Vata*-dominant disorders, and *Vatarakta* is described in the classics as a *Vata-Rakta Pradhana Vyadhi*. *Basti* administered through the *Pakvashaya* acts systemically by regulating *Apana Vata*, which in turn controls the movement of other *Vata subtypes*. *Madhuyashtyadi Niruha Basti*, prepared with drugs having *Madhura Rasa*, *Sheeta Virya* and *Snigdha Guna*, helps in pacifying vitiated *Rakta* and alleviating inflammation, burning sensation, and pain. The presence of *Godugdha* and *Yashtimadhu* contributes to *Rakta Prasadana* and tissue nourishment. *Balaguduchyadi Anuvasana Basti*, rich in *Vatahara*, *Balya* and *Rasayana* properties, strengthens joints, nourishes *Asthi* and *Majja Dhatu*, and prevents recurrence of symptoms.

From a modern perspective, *Basti* therapy enhances gut-mediated absorption of lipid-soluble components, improves microcirculation, reduces inflammatory mediators, and supports renal excretion of metabolic waste products such as uric acid. Thus, the combined action of *Shodhana* and *Shamana* through *Kala Basti* effectively breaks the *Samprapti* of *Vatarakta*, providing sustained symptomatic relief and functional improvement.

## Mode of Action

### Ayurvedic view

- *Basti* goes into *Pakvasaya*, where *Vata Dosha* is mostly found. *Basti* mainly helps in the pacification of vitiated *Vata Dosha* just in the same way that cutting a plant's roots kills its stem, branches, shoots, seeds, and leaves, relaxing the *Vata* also kills diseases in other parts of the body.<sup>[24]</sup>
- *Acharya Susruta* said that the *Virya* of *Basti* medicines gets to all parts of the body through the *Srotas*, like how water that is put on a plant's root gets to its leaves. He also said that even though *Basti* drugs leave the body quickly with *Mala*, their *Virya* affects the whole body through the action of *Apana* and other *Vayus*, like how the sun takes water from the ground.<sup>[25]</sup>
- *Ashtanga Sangraha* added to this by saying that the *Virya* of *Basti* drugs first feeds the *Apana Vayu* and then has an effect on the *Samana Vayu*. This energy first feeds *Samana Vayu*, then helps *Vyana Vayu*, and finally feeds *Udana Vayu* and *Prana Vayu*. All five types of *Vata* are good for your health when they are in their normal state. Then, the *Virya* in *Basti* drugs works on *Pitta* and *Kapha* to bring them back into balance and feed them. *Vyana Vayu* takes the *Virya* of the *Basti* drugs to *Tiryaka Pradesa*. *Apana Vayu* takes it to *Adha Pradesa*, and *Prana Vayu* takes it to *Urdhva Pradesa*. In the same way that water delivered through pathways feeds a farm, the *Virya* of *Basti* drugs brought by the five types of *Vata* through *Srotas* feed the whole body.<sup>[26]</sup>
- *Parashara* says that the *Guda* is the body's *Mula* and that all of the *Sira* are located there. The *Sneha* that is given through *Guda* gets to the head and feeds the body. *Amarkosa* says that the word *Payu*, which is similar to *Guda*, gets its name from the fact that it can soak up *Basti Dravya*, or oil.
- According to *Acarya Caraka*, *Basti Dravya* gets to the *Grahani*. In this way, we can understand how the *Basti* can stimulate the *Jatharagni* in *Grahani*. Because it has *Sukshma Guna*, *Sneha Dravya* can go through the *Sukshma Srotas* and reach the *Grahani*. In this spot, it has an effect on *Samana Vayu*, which is close to the *Jatharagni*. *Jatharagni* is improved by *Samana Vayu*. Because of *Sneha*, *Samana Vayu* goes back to working normally and makes the *Jatharagni* stronger.<sup>[27]</sup>
- *Basti* helps *Apana Anulomana*, which raises *Jatharagni* by improving the function of *Purisha*. This means that *Basti* affects *Agni*, which is thought to be the cause of all illnesses. This could be the reason why *Basti* is seen as half of the *Kayacikitsa*.

- Medicine of *Basti* first gets to the *Pakvasaya* and then the *Grahani*. The site of *Purishadhara Kala* is *Pakvasaya*, and the site of *Pittadhara Kala* is *Grahani*. Because of this, *Basti* has a direct effect on *Pittadhara Kala* and *Purishadhara Kala*.
- Commentator *Dalhana* has noted that *Purishadhara* and *Asthidhara Kala* are identical, and *Pittadhara Kala* and *Majjadhara Kala* are the same.<sup>[28]</sup> From this evidence, it is evident that *Basti* has a direct impact on *Asthi* and *Majja Dhatu*. *Majja* is found in the *Asthi*. Additionally, *Mastulunga* is considered *Mastaka Majja*.<sup>[29]</sup> *Vata Nadi* is also formed by *Majja*, and *Majja* is the seat of *Vata Dosha*. Thus, *Basti* is beneficial in treating central nervous system disorders.
- *Basti* has an impact on two important things: *Vata* and *Agni*. Both are in charge of making *Dhatu* and feeding it. *Vata* is thought to watch over the *Dhatu*. All of the *Dhatu*s can do their usual jobs because the *Vata* is under control.

### Modern view<sup>[30]</sup>

We can understand the mode of action of *Basti* through following ways:

1. By absorption mechanism
2. By system biology mechanism
3. By neural stimulation mechanism
4. By excretory mechanism

**1. By absorption method:** How drugs are taken in the rectal area is the most important question in *Basti* administration. There is a lot of blood and water flow in the rectum, and medicines can pass through the rectal mucous like any other lipid layer. This makes it easy for lipid-soluble compounds to be taken. When making *Basti*, all the ingredients are mixed together in a way that makes the *Basti Dravyas* quickly absorbed. This happens because the ingredients break down long-chain fatty acids into short-chain fatty acids.

**2. By system biology concept:** The notion of system biology states that all of our organs are interconnected. For example, if we pull a thread at one end, we will feel the movement of the string at the other end. This is due to the intermolecular connections that exist throughout our body. As a result, administering *Basti* in the rectal region will very certainly have an effect on other parts of the body.

**3. Neural stimulation mechanism:** According to Dr. Michael Gershan, an anatomy and cell biology professor at Columbia University in New York, the gut contains roughly 100 million neurons, which is more than the spinal cord. The gut contains major neurotransmitters such as

serotonin, glutamate, norepinephrine, and nitric oxide. By connecting with a few numbers of command neurons, the brain transmits instructions to the gut inter neuron, which then sends signals up and down the pike. Both command neurones and interneurons are found in the myenteric plexus and the submucosal plexus, which are two layers of gut tissue. Command neurones decide how the activity pattern works. The only way for the vagus nerve to change the level is to slow down or speed up its beats. The ENS and the CNS work together. When Basti is stimulated (either by chemo or mechano sensors), it may turn on the appropriate part of the CNS, which will lead to the desired effect.

**4. By excretory method:** If we observe the anatomy of the sigmoid colon, rectum and anal region we can see that there is presence of parasympathetic nerve supply in this region quite abundantly and this helps in stimulating the function of defecation reflexes.

## CONCLUSION

As mentioned in classics that *Kseer Basti* is considered to be best for *Vatarakta* and *Guduchi* is considered drug of choice for *Vatarakta*. Considering this, *Madhuyashtyadi Niruh Basti* and *Balaguduchyadi Anuvasana Basti* is selected. And when used in *Vatarakta* patients, it has given a very positive results signifying that *samhitas* are actually like Wikipedia of today's world in which each and everything is documented only after deep discoveries and researches. It is like a slap to those modern scientist people who consider *Ayurveda* as a Pseudoscience and always emphasise that *Ayurveda* need research. Apart from this, patients with symptoms of *Vatarakta* also having elevated serum uric acid level when given the treatment, then in most of the patients' symptoms got subsided as well as elevated Serum uric acid also got near to normal. This proves somehow that *Vatarakta* and Gout are correlated to each other.

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**REFERENCES**

1. Charak Samhita-Charak chikitsasthana (29/10) Vidyotini Hindi vyakhya by Prof. Kashinath Shastri (volume 2), chaukambha Bharti Academy, Varanasi, re edition, 1998; p-820.
2. Charak Samhita-Charak Chikitsasthana (29/20) Vidyotini Hindi vyakhya by Prof. Kashinath Shastri (Vol-2), Chaukhambha Bharti Academy, Varanasi re edition, 1998; p-822.
3. Charak Samhita-Charak Chikitsasthana (29/21) Vidyotini Hindi vyakhya by Prof. Kashinath Shastri (Vol-2), Chaukhambha Bharti Academy, Varanasi re edition, 1998; p-822.
4. Charak Samhita-Charak Chikitsasthana (29/16) Vidyotini Hindi vyakhya by Prof. Kashinath Shastri (Vol-2), Chaukhambha Bharti Academy, Varanasi re edition, 1998; p-820.
5. Charak Samhita-Charak Siddhisthana (3/46) Vidyotini Hindi vyakhya by Prof. Kashinath Shastri (Vol-2), Chaukhambha Bharti Academy, Varanasi re edition, 1998; p- 1000.
6. Susruta Samhita – Ayurvedatatwasandeeepika-Chikitsasthana (35/25-30) hindi vyakhya by Kaviraj DR. Ambikadatta Shastri (Vol-1), Chaukhambha Sanskrit Sansthana Varanasi, Edition, 2015; pg-192.
7. Charak Samhita-Charak Chikitsasthana (29/88) Vidyotini Hindi vyakhya by Prof. Kashinath Shastri (Vol-2), Chaukhambha Bharti Academy, Varanasi re edition, 1998; p-831.
8. Charak Samhita-Charak Siddhisthana (3/46) Vidyotini Hindi vyakhya by Prof. Kashinath Shastri (Vol-2), Chaukhambha Bharti Academy, Varanasi re edition, 1998; p- 1000.
9. Astanghridyam-Sutrasthana (19/45-46) vidhyotini Bhasa tika by Kaviraja Atrideva Gupta Chaukhambha Prakashana, Varanasi re-edition, 2021; pg-166.
10. Sahashrayoga-Pancham prakaran Ath tailayogah (5/80) by Kendriya Ayurveda evum siddha Anusandhan Parishad, New Delhi, Yugantar Prakashan Private Limited, Date Of Publication-30.11., 1990; p-275.
11. Sharandhar Samhita Vyakhyakar Dr. Srimati Shailja Shrivastava madhyamakhanda (9/6) chaukhambha orientalia Varanasi edition, 2015; p 216.
12. Sharandhar Samhita Vyakhyakar Dr. Srimati Shailja Shrivastava madhyamakhanda (9/6) chaukhambha orientalia Varanasi edition, 2015; p2 16.
13. Sharandhar Samhita Vyakhyakar Dr. Srimati Shailja Shrivastava madhyamakhanda (9/3-4) chaukhambha orientalia Varanasi edition, 2015; p 215.

14. Sharandhar Samhita Vyakhyakar Dr. Srimati Shailja Shrivastava madhyamakhanda (9/6) chaukhambha orientalia Varanasi edition, 2015; p 216.
15. Sharandhar Samhita Vyakhyakar Dr. Srimati Shailja Shrivastava madhyamakhanda (9/15) chaukhambha orientalia Varanasi edition, 2015; p 217.
16. Charak Samhita-Charak Siddhistana (3/25-28) Vidyotini Hindi vyakhya by Prof. Kashinath Shastri (Vol-2), Chaukhambha Bharti Academy, Varanasi re edition, 1998.
17. Charak Samhita-Charak chikitsastana (29/20) Vidyotini Hindi vyakhya by Prof. Kashinath Shastri (Vol-2), Chaukhambha Bharti Academy, Varanasi re edition, 1998.
18. Charak Samhita-Charak chikitsastana (29/21) Vidyotini Hindi vyakhya by Prof. Kashinath Shastri (Vol-2), Chaukhambha Bharti Academy, Varanasi re edition, 1998.
19. Charak Samhita-Charak chikitsastana (29/16) Vidyotini Hindi vyakhya by Prof. Kashinath Shastri (Vol-2), Chaukhambha Bharti Academy, Varanasi re edition, 1998.
20. Charak Samhita-Charak chikitsastana (29/16) Vidyotini Hindi vyakhya by Prof. Kashinath Shastri (Vol-2), Chaukhambha Bharti Academy, Varanasi re edition, 1998.
21. Charak Samhita-Charak chikitsastana (29/16) Vidyotini Hindi vyakhya by Prof. Kashinath Shastri (Vol-2), Chaukhambha Bharti Academy, Varanasi re edition, 1998.
22. Charak Samhita-Charak chikitsastana (29/17) Vidyotini Hindi vyakhya by Prof. Kashinath Shastri (Vol-2), Chaukhambha Bharti Academy, Varanasi re edition, 1998.
23. Charak Samhita-Charak chikitsastana (29/21) Vidyotini Hindi vyakhya by Prof. Kashinath Shastri (Vol-2), Chaukhambha Bharti Academy, Varanasi re edition, 1998.
24. Charak Samhita-Charak Siddhisthana (3/6) Vidyotini Hindi vyakhya by Prof. Kashinath Shastri (Vol-2), Chaukhambha Bharti Academy, Varanasi re edition, 1998; p- 969.
25. Susruta Samhita – Ayurvedatatwasandeeepika-Chikitsasthana (37/54) hindi vyakhya by Kaviraj DR. Ambikadatta Shastri (Vol-1), Chaukhambha Sanskrit Sansthana Varanasi, Edition, 2015; pg-192.
26. Astanga samgraha by Dr. P. Srinivas Rao kalpsthana (5/68-72) chaukhambha krishnadas academy Varanasi edition, 2000.
27. Chakrapani commentery on Charak Samhita-Charak Siddhisthana (3/24) Vidyotini Hindi vyakhya by Prof. Kashinath Shastri (Vol-1), Chaukhambha Bharti Academy, Varanasi re edition, 1998.
28. Dalhana commentory on Susruta Samhita – Ayurvedatatwasandeeepika-Chikitsasthana (4/40) hindi vyakhya by Kaviraj DR. Ambikadatta Shastri (Vol-1), Chaukhambha Sanskrit Sansthana Varanasi, Edition, 2015.

29. Dalhana commentary on Susruta Samhita – Ayurvedatatwasandeeepika-Chikitsasthana (32/13) hindi vyakhya by Kaviraj DR. Ambikadatta Shastri (Vol-1), Chaukhambha Sanskrit Sansthana Varanasi, Edition, 2015.
30. <https://www.ayurpub.com/wp-content/uploads/2022/04/2058-2064.pdf>