

# Case Series to Evaluate the Efficacy of Selected Treatment Modality in the Management of *Vātarakta* (Gouty Arthritis)

Samaranayaka Liyanage Gayani Sewwandi\*, Fathima Shazmin Hazari, Mallawa Arachchige Maheshi Sandunika

Temporary demonstrator, Department of Cikitsa, Faculty of Indigenous Medicine, Gampaha Wickramarachchi University of Indigenous Medicine, Yakkala, Sri Lanka

\*Corresponding Author

DOI: <https://doi.org/10.51244/IJRSI.2023.1011026>

Received: 24 November 2023; Accepted: 30 November 2023; Published: 10 December 2023

## ABSTRACT

*Vātarakta* is a more common and distressing metabolic condition that exists nowadays. *Rakta* (blood) is the major *Dūshya* (vitiating) in *Vātapradhāna* (predominance of *Vāta*), *Tridōshaja* (three body humors), and *Vātavyādhi* (disease of *Vāta*). *Vātarakta* is a condition in which *Vāta*, a prominent *Dōsha*, is unduly worsened by vitiating *Rakta*. Gout and *Vātarakta* are associated in modern science. Gout is a purine metabolic disorder that results in hyperuricemia and the development of monosodium urate crystals in joints. Gout's primary symptom is pain, which interferes with sufferers' daily lives. The purpose of this study is to determine the efficacy of a selected treatment modality in the management of *Vātarakta*. Three case presentations with a follow-up period of one month were studied. Treatment modality including *Sinhasya Panchamūli Phānta*, *Chadrprabhā Vati*, *Nawarathna Kalka*, *Thriphalā Chūrna*, *Pinda Thaila*, and *Nadi Swēda* was advised for four months along with *Pathya Apathya* (wholesome and unwholesome). Pre- and post-treatment assessments of subjective criteria were made. According to the results, the symptoms were reduced by 25%, 33.33%, 50%, 66.66%, and 100%. It may be concluded that *Pathya Apathya*, combined with a selected treatment modality, is a secure and reliable treatment for *Vātarakta*.

**Key words:** Gout, Hyperuricemia, *Rakta*, *Vāta*, *Vātarakta*

## INTRODUCTION

Urate crystals (monosodium urate monohydrate) form and cause the clinical condition known as gout. The crystals may accumulate in soft tissues, such as cartilage, causing no inflammation, or in joints, generating an abrupt inflammatory response. The abrupt onset of severe acute monarticular arthritis in a peripheral joint of the leg characterizes the majority of gout patients. Complete remission of the arthritis is followed by increasingly frequent recurrences. Some patients experience tophi development in cartilage, tendons, and bursae after around 10 years of recurrent gouty arthritis [1], [2], [3], [4].

Gouty arthritis, or *Vātarakta*, is a chronic condition caused by an abnormal metabolism brought on by unhealthy eating patterns and lifestyle choices. *Vāta* and *Rakta* that are vitiating cause *Vātarakta*. First, vitiating *Vāta* blocks the way for vitiating *Rakta*, and subsequently, *Rakta* itself becomes impeded. The clinical presentation of this condition can be compared to that of gouty arthritis. Since *Vātarakta* is a *Santarpana-Janya Vyādhi*, *Āma-Dōsha* is first dominating. It bears a striking resemblance to "gouty arthritis" in contemporary medicine. This purine metabolism problem, which is due to hyperuricemia, is characterized by discomfort and swelling in the intermetatarsophalangeal joint (IMTP), initially followed by other joints, and interferes with the patient's daily activities [5], [6], [7], [8], [9].

The most common type of inflammatory arthropathy is gout. Its prevalence and incidence appear to have

increased in recent decades, according to several studies. There are many known risk factors for developing gout, such as hyperuricemia, genetics, dietary variables, alcohol use, metabolic syndrome, hypertension, obesity, use of diuretics, and chronic renal disease. The most common kind of inflammatory arthritis, gout, is linked to a lower quality of life. Hyperuricaemia, or elevated serum uric acid (SUA) levels, is a necessary condition before gout can occur. In and around joints, monosodium urate (MSU) crystals form as SUA levels rise and the physiological saturation threshold for uric acid in bodily fluids is exceeded. Clinical signs of MSU crystal deposition include tophaceous deposits of MSU crystals in the joints and skin, chronic joint deterioration, and acute bouts of severe pain and inflammation affecting peripheral joints, most frequently the first metatarsophalangeal (MTP) joint. The foundational tenet of Ayurveda is that "disorders of basic elements in the body are the root cause for different diseases," meaning that having control over the various fundamental elements in the body (*Sharīra*) is a sign of good health and immunity to disease. The body's basic constituents are discovered to remain in equilibrium, much like in *Vātarakta*, with the help of *Ayurvedic* treatments and therapies <sup>[10]</sup>.

*Rakta* is the major *Dūshya* in *Vātarakta*, a *Vātapradhana Tridōshaja Vyādhi*. *Sushruta* describes it in *Vātavyādhi Chikitsā*, but *Charaka* emphasizes it in *Vātarakta's* distinct chapter following *Vātavyādhi Chikitsā*. It is a long-term, intricate metabolic condition of the musculoskeletal system that causes searing, throbbing, and excruciating pain in the joints that are affected. *Vāta* and *Rakta* are both affected by different causal variables in *Vātarakta*, a disease. The indicators of the predominance of *Vātarakta* are rapid modernization, junk food culture, stressed lifestyles, and urbanization. It is essential to have a comprehensive examination of all elements of the condition for therapy due to the severe pain, inflammation, joint deformity, and restricted joint movements, as well as the possibility of numerous consequences such as chronic kidney disease and Urate Nephrolithiasis. The management of *Vātarakta* is a challenging endeavor due to its morbidity, chronicity, incurability, and comorbidities. Therefore, an effort has been made to concentrate on *Shamana Aushadis* (pacification medicines) and *Shōdhana* (purification) methods suggested in many authentic *Ayurvedic* books <sup>[11], [12], [13]</sup>.

## The Purpose of the Study

The purpose of this study is to determine the efficacy of the selected treatment modality in the management of *Vātarakta*.

## RESEARCH METHODOLOGY

### A Case Presentations

#### 1 Case 1:

A 48-year-old female patient (housewife) attended the OPD of *Gampaha Wickramarachchi* Ayurveda Teaching Hospital (190 A) with complaints of pain in multiple joints like the knee, wrist, shoulder, elbow, metacarpophalangeal and metatarsophalangeal joints, tenderness, burning sensation, itching, and discoloration of the skin for four years. She had no history of diabetes or hypertension but had gastritis and constipation for six months. Her younger daughter had a *Vātarakta* condition. She consumed little rice and curry; instead, she consumed many spicy foods and flour-containing foods like hoppers, string hoppers, and buns. Sometimes she was fasting without taking food. She had not taken any medicine for this before. There were no abnormalities in *Ashtavidha Pariksh?* (eight-fold examination) except Mala (stool).

#### 2 Case 2:

A 50-year-old female patient (nurse) attended the OPD of *Gampaha Wickramarachchi* Ayurveda Teaching Hospital (195 A) with complaints of pain in multiple joints like the knee, wrist, shoulder, elbow, metacarpophalangeal and metatarsophalangeal joints, tenderness, burning sensation, swelling, itching, and

discoloration of the skin for more than ten years. As other complains, she has had diabetes, gastritis, constipation, and back pain for the past five months. Within two months, she had a TIA (transient ischemic attack). Her muscles were flaccid, and her nails were damaged and wasted. As she was abroad (in Arabic) for 20 years, she was malnourished and had not taken meals on time. She had not consumed chicken or fish during that period, as she was a vegetarian. As well as she was awakening at night excessively during that period. As well, there was no family history. There were no abnormalities in *Ashtavidha Parikshā* except *Mala*.

### 3 Case 3:

A 56-year-old female patient (fashion designer) attended the OPD of *Gampaha Wickramarachchi* Ayurveda Teaching Hospital (198 A) with complaints of pain in multiple joints like the knee, wrist, shoulder, elbow, metacarpophalangeal and metatarsophalangeal joints, tenderness, burning sensation, swelling, itching, and discoloration of the skin for more than five years. He had no history of diabetes or hypercholesterolemia but had gastritis for five months and constipation for six months. He had been suffering from *Vātakantaka* (plantar fasciitis) for several months, and he had taken Panadol as a painkiller. Also, he was excessively awake at night and prolonged standing due to his job. As well, he consumed excessively flour-containing foods like *Roti*, *Pittu*, and hoppers. According to his family history, his younger sister had a *Vāta Rakta* condition.

## B Treatment Modality

Treatment was planned for 4 months with *Pathya Apathya*

*Sinhasya Panchamūli Phānta*- One table spoon of *Phānta* added to 4 cups of water and boiled it until reduced to 1 cup and consumed twice daily.

*Chandraprabhā Vati*- 2 *Guli* twice daily with luke warm water

*Thriphala Chūrna*- 30 g mixed with 240 ml boiled water and consumed twice daily.

*Navarathna Kalka*- 1 g twice a day with luke warm water

*Pinda* oil- Apply twice a day

*Nadi Swēda*- Apply twice a day

*Pathyapathya* (Do's & Dont's)

Dietary guidelines were advised to follow throughout the lifetime.

*Pathya* (Do's)- Light diet, *Vyāyāma* (exercises), *Yōgabhyāsa* (yoga exercise).

*Apathya* (Dont's)- Spicy, food, junk food, alcohol, smoking, vegetables like Capsicum, potato, cabbage, spinach, tomato. Stop consuming pickle, curd, dry food items, non-vegetarian food. Avoid awaking last

night, *Vēgavarōdha* (suppressing of urges), swimming, exposure to excessive cold <sup>[14]</sup>.

## C Criteria for Assessment of Symptoms

Assessment was done on improvements in signs and symptoms with the help of a suitable scoring method. Here, cases of *Vātarakta* were assessed by comparing the symptoms before and after treatment. Then the data were analyzed by Microsoft Excel. The patients were monitored for one month following treatment.

Even after one month of follow-up, no indications or symptoms of gout were noted.

Table I: Assessment Criteria [15].

<p><i>Sparshasahishnuta</i> (Tenderness)</p>	<p>0 – No tenderness 1 – slight, bearable pain on pressure 2 – wincing of face on pressure 3 – wincing of face on pressure with withdrawal of affected part 4 – strictly resisting to touch</p>
<p><i>Tōda</i> (pain)</p>	<p>0 – no pain 1 – bearable pain, not disturbing the daily routine 2 – Pain affecting daily routine, controlled efficiently with analgesics 3 – Pain hampering daily routine, poorly controlled with analgesics 4 – pain not responding to analgesics</p>
<p><i>Dāha</i> (Burning sensation)</p>	<p>0 – No burning sensation 1 – Occasional burning, not disturbing the daily routine 2 – persistent burning, requiring medication, controlled efficiently 3 – persistent burning, controlled poorly with medication 4 – persistent burning, not responding to medication</p>
<p><i>Shōtha</i> (swelling)</p>	<p>0 – Absence of swelling 1 – Mild swelling, circumferencial variation of 0-5mm 2 – moderate swelling hampering movement, circumferencial variation of 6-10mm 3 – definite swelling hampering movement, circumferencial variation of 11-15mm 4 – Tense swelling hampering joint movement, circumferencial variation of 16-20mm</p>
<p><i>Kandu</i> (Itching)</p>	<p>0 – Absence of itching in joints 1 – Occasional itching 2 – mild persistent itching, controlled with medication 3 – moderate persistent itching, poorly controlled with medication 4 – persistent itching, not responding to medication</p>

<b>Vaivarnya</b> (Discoloration)	0 – no hyperaemia
	1 – Hyperaemia of M/P joints
	2 – Hyperaemia of M/P joints along with either tarsal/ ankle/ knee joint
	3 – Hperaemia of M/P joints along with tarsal, ankle, knee joint
	4 – Hperaemia of M/P joints along with tarsal, ankle, knee joint with I/P joints

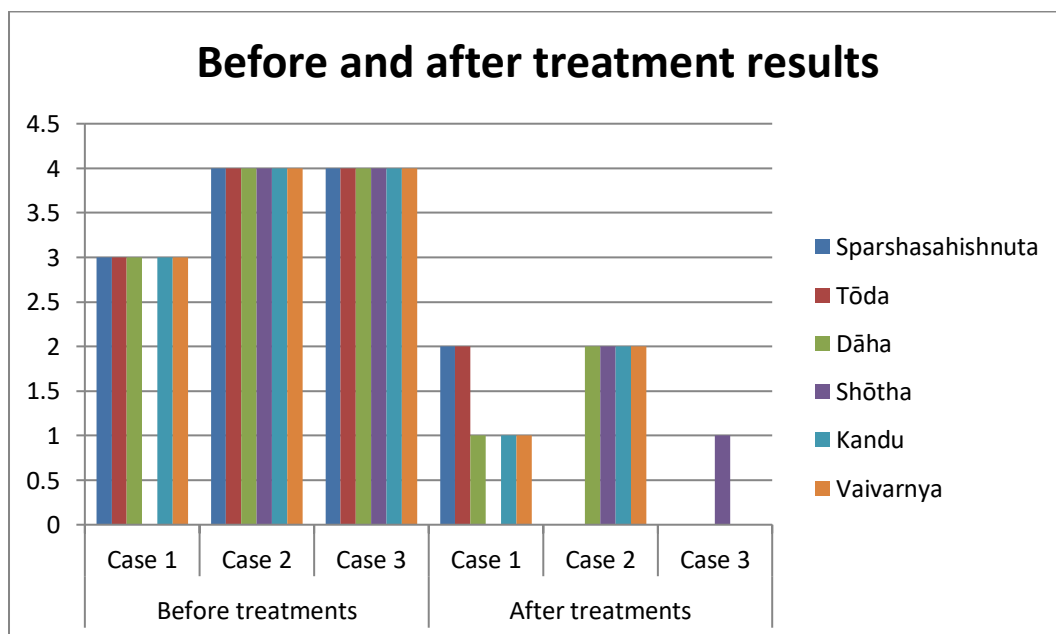
### D Limitations

Patients with traditional *Vātarakta* indications and symptoms as defined by both contemporary science and Ayurveda were chosen. Additionally, men and women between the ages of 40 and 60 were chosen. Excluded from the study were expectant mothers, nursing mothers, patients with life-threatening conditions such as HIV, Hepatitis B, psychiatric disorders, bleeding disorders, and COVID-19-positive patients.

## RESULTS AND DISCUSSION

Table II: Before and After Treatment Results

Symptom	Before treatments			After treatments		
	Case 1	Case 2	Case 3	Case 1	Case 2	Case 3
<i>Sparshasahishnuta</i>	3	4	4	2	0	0
<i>Tōda</i>	3	4	4	2	0	0
<i>Dāha</i>	3	4	4	1	2	0
<i>Shōtha</i>	0	4	4	0	2	1
<i>Kandu</i>	3	4	4	1	2	0
<i>Vaivarnya</i>	3	4	4	1	2	0



Ayurveda describes *Vātarakta* as a disease involving an imbalance of the *Vāta Dōsha* that affects the *Rakta Dhātu*. *Vāyu* is aggravated by long rides on horses, camels, or elephants, while *Rakta*, or blood, is tainted by the consumption of *Lavana* (salt), *Amla* (sour), *Katu* (pungent), and *Kshāra*, among other foods. By obstructing the *Vāta's* passageways, *Rakta* further vitiates and contaminates the *Rakta*, or blood. Later, the blood that *Vāyu* vitiated burns the entire blood supply of the body before gravitating towards the foot. *Vātarakta* is the name for this toxic mixture of vitiated *Vāta* and *Rakta*. *Vātarakta* and gout may potentially be connected etiopathologically <sup>[16]</sup>.

*Sparshasahishnuta* was 100% healed in cases 2 and 3, while it was reduced up to 66.66% in case 1. *Toda* was also 100% healed in cases 2 and 3, while it was reduced to 66.66% in case 1. *Dāha* was completely healed in case 3, and it was reduced up to 50% in case 2, and in case 1, it was reduced up to 33.33%. *Shōtha* was absent in case 1, and it was reduced up to 50% and 25% in cases 2 and 3. Both *Kandu* and *Vaivarnya* were 100% reduced in case 3, while they were reduced up to 50% and 33.33% in cases 2 and 1.

*Sinhasya Panchamūla Phānta* is best for *Vāta Rakta* because it pacifies both *Vāta* and *Rakta Dōshas*. Both *Nawarathna Kalka* and *Thriphala Chūrna* increase digestive power through *Āma Pāchana* (digestive action) and *Virēchana* (purgative) action. It is needed to digest *Āma* (undigested food) because all diseases occur due to *Āma* formation. As well as *Thriphala Chūrna* Pacify all three *Dōshas*. *Chandraprabhā Vati* reduces serum uric acid in gouty arthritis and gives significant relief in pain, itching and swelling <sup>[17]</sup>.

Contrarily, *Pinda Taila* is mentioned in most *Ayurvedic* classics and most commonly advocated for external use in the management of *Vātarakta* <sup>[18]</sup>. With the application of *Pinda Taila*, the roughness in soles and palms greatly reduced due to *Snigdha* (unctuous) *Guna* (action) of oil <sup>[19]</sup>. The patient should receive *Svēdana* (sudation) treatment once he has recovered from *Snēhana* (oletion) therapy. The patient may undergo the appropriate sort of *Svēda* after *Abhyanga* (massage), such as *Nādi Svēda*, *Prastara Svēda*, *Samkara Svēda* (types of sudation), etc. It reduces the body's rigidity, heaviness, and coldness and liquefies the *Snigdha*-vitiating *Dōshas* (caused by *Snēhana Karma*), which are dispersed throughout the body. This makes it possible to easily eliminate the vitiated *Dōshas* by the inducement of perspiration. *Swēdana* therapy is the most effective treatment for vitiated *Vāta* and *Kapha* dominating disorders, according to *Āchārya* (teacher) *Charaka* (*Charaka*, 200 BC). In order to prevent the *Vāta* problems from remaining in the *Kōstha* (gut) after being softened by *Snēhana*, the *Svēdana* procedures should be repeated <sup>[20]</sup>.

## CONCLUSION

From this case series, it can be concluded that *Vātarakta* can be effectively managed with a selected treatment modality. However, further clinical research with a larger sample size may be needed to further authenticate the efficacy.

## REFERENCES

1. Emmerson, B. T. (1996). The management of gout. *New England Journal of Medicine*, 334(7), 445-451.
2. Wilson, L., & Saseen, J. J. (2016). Gouty arthritis: a review of acute management and prevention. *Pharmacotherapy: The Journal of Human Pharmacology and Drug Therapy*, 36(8), 906-922.
3. Morris, H., Grant, K., Khanna, G., & White, A. J. (2014). Gout in a 15-year-old boy with juvenile idiopathic arthritis: a case study. *Pediatric Rheumatology*, 12, 1-5.
4. Ptak, I., Grygiel-Górniak, B., & Samborski, W. (2022). Gout in the course of systemic lupus erythematosus: Literature review and case study report. In *Rheumatology Forum* (Vol. 8, No. 3, pp. 105-110).

5. Patel, P., Bhatted, S. K., & Dharmarajan, P. (2020). Systematic Review on Understanding and Management of Vatarakta (Gouty Arthritis). *Int J Health Sci Res*, 10(9), 198-204.
6. Venkatesh, H., Venkatesh, P., & Hegde, N. (2018). A Case Study on Dushta Vrana caused due to Vatarakta. *Journal of Ayurveda and Integrated Medical Sciences*, 3(04), 228-233.
7. Scholar, P. G. (2022). A CASE STUDY ON THE EFFICACY OF TILA KALKA UPANAHA AND YOGA BASTI IN THE MANAGEMENT OF VATARAKTA (GOUTY ARTHRITIS).
8. Shinde, A. S., & Burley, A. K. (2021). ROLE OF RAKTAMOKSHANA & SHAMANA CHIKITSA IN THE MANAGEMENT OF VATARAKTA WSR TO GOUT: A CASE STUDY.
9. Negi, V. (2016). Pain management with leech therapy in vatarakta (Gout): A case study. *EJPMR*, 3(9), 427-429.
10. Singh, B. K., Trivedi, N., Das, R. R., Arora, R., Verma, A. K., & Verma, A. (2021). Rheumatoid Arthritis and gout: medicinal plants as a drug alternative. *Journal of Advanced Scientific Research*, 12(02 Suppl 1), 79-96.
11. Badugu, S., & Rao, K. R. S. (2019). Management of Vatarakta (Gouty Arthritis) in Ayurveda-A Review. *Journal of Ayurveda and Integrated Medical Sciences*, 4(05), 323-336.
12. Ramachandran, A. P., Prasad, S. M., Prasad, U. N., & Jonah, S. (2010). A comparative study of Kaishora Guggulu and Amrita Guggulu in the management of Utthana Vatarakta. *Ayu*, 31(4), 410.
13. Chaudhary, N., & Mishra, S. (2023). Management of Vatarakta with Yashtyahwa Niruha Basti: A Case Study. *Journal of Ayurveda and Integrated Medical Sciences*, 8(8), 273-278.
14. Thakare, V. P. A., Sinha, A. K., & Kumar, S. (2019). MANAGEMENT OF GAMBHIR VATARAKTA WITH SHAMAN CHIKITSA: A CASE STUDY..
15. Arora<sup>1</sup>, S., & Sharma, P. (2023). ROLE OF VASADI KSHAYAM IN THE MANAGEMENT OF VATARAKTA WSR TO HYPERURICEMIA—A CASE STUDY.
16. Patil, S. S. (2022). Ayurvedic management of Vatarakta with special reference to Gout: A Case Study. *World Journal of Advanced Research and Reviews*, 16(3), 1087-1091.
17. Mooss, A. E. N., Smina, P. B., & Nair, P. K. S. (2019). Traditional Ashtavaidyan Ayurvedic Therapy in the Functional Improvement of Patients with Gouty Arthritis. *Journal of Ayurveda Physicians & Surgeons (JAPS)(EISSN 2394-6350)*, 6(1), 7-10.
18. Singh, N., Johri, S., & Muley, M. (2021). REVIEW OF GOKSHURADI GUGGULU AND PINDA TAILA IN VATARAKTA WSR TO GOUTY ARTHRITIS.
19. Adhikari, R. V., & Bhurke, R. P. (2019). “EFFECT OF PINDA TAILA ON VIPADIKA (PALMO–PLANTAR PSORIASIS)”–A CASE STUDY.
20. Kumar, D. R. (2013). The role of panchakarma therapy in musculoskeletal disorders with special reference to vatavyadhi. *Global Journal of Research on Medicinal Plants & Indigenous Medicine*, 2(1), 23.

Participant's consent form

Investigator	Telephone Number	Address
Dr. S. L. G. Sewward	071-2884994	11114, Suhada Ma, Gampaha Rd, Yakkala.

Please circle your answer

Did you have an opportunity to ask questions and discuss about study?  Yes  No

Have you received satisfactory answers to the questions you asked about project  Yes  No

Who explained the study to you?

..... Dr. S. L. G. Sewward: .....

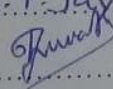

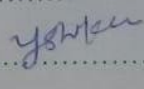
Do you agree to take part on your own wish?  Yes  No

I understand that the information I give is confidential  Yes  No

I give my consent to take part in the study and I agree to involve myself to the research procedures  Yes  No

Do you agree?

Name ... H. D. R. T. Jayaratna, J. THUREKA, H. N. L. N. Kumara .....

Signature .....  .....  .....  .....

Date... 2023/06/02 .....