

Systematic Review on Understanding and Management of *Vatarakta* (Gouty Arthritis)

Preeti Patel¹, Santosh Kumar Bhatted², Prasanth Dharmarajan³

¹MD Scholar (1st year), Department of Panchakarma, All India Institute of Ayurveda, Delhi

²Associate Professor, All India Institute of Ayurveda, Delhi

³Assistant Professor, All India Institute of Ayurveda, Delhi

Corresponding Author: Preeti Patel

ABSTRACT

Background – *Vatarakta* (gouty arthritis) is a chronic disease in which derangement of metabolism occurs due to indulgence in unwholesome dietary habits and lifestyle. *Vatarakta* is caused by vitiated *Vata* and *Rakta*. Initially vitiated *Vata* obstructs the path of vitiated *Rakta* and then gets obstructed by *Rakta* itself. It can be correlated with Gouty Arthritis due to their similarity in the clinical presentation. Various *Ayurveda* researches shows the evidence of efficacy of different treatment protocol mentioned for *Vatarakta* such as *Raktamokshan* (blood-letting therapy), *Virechana* (purgation) and *Basti Karma*(therapeutic enema) besides the *Shamana*(pacification), *Rasyana Dravyas* along with external applications like *Lepa*, *Upanah* (poultice), *Parishek*, *Abhyanga*(oleation). AIM-The aim of the present study was to explore the understanding of *Vatarakta* with its treatment protocol and to compile the outcome of various researches related to *Vatarakta*.

Methods- Various *Ayurvedic Samithas*, database such as PubMed, Scopus, DHARA, Google Scholar and related research works were searched and reviewed for establishing the understanding to *Vatarakta* with its treatment protocol.

Results & Conclusion – After going through various research works on the management of *Vatarakta* it has been observed that *Guduchi Siddha Yoga Basti*, *Siravyadha* and *Punarnava-Amrita-Guggulu* showed highly significant improvement in the sign and symptoms of *Vatarakta* when adopted as a treatment protocol. The detailed observations of these studies are mentioned here.

Keywords: *Vatarakta*, Gouty-Arthritis, *Punarnava-Amrita-Guggulu*, *Guduchi Siddha Yoga Basti*, *Siravedhana*.

INTRODUCTION

Vatarakta is a *Santarpana-Janya Vyadhi* hence *Aam-Dosha* is dominant initially. It shows much resemblance with "gouty arthritis" in modern medical science. It is a disorder of purine metabolism secondary to hyperuricemia, which is characterized by pain and swelling of IMTP (inter metatarsophalangeal joint) initially followed by other Joints, that leads to disturbance in day-to-day life of patients. [1]

INCIDENCE:

Incidence of gouty arthritis is 0.2-2.5 per 1000. overall prevalence is 2-26 per 1000. Gout is rare in children and

premenopausal women in India. Out of the affected population, males are more common while female of post menopausal age are on more risk. [2]

NIDAN (CAUSATIVE FACTOR)

In *Ayurveda Nidan* of *Vatarakta* described under the heading of *Aaharaj* (dietary causes) and *Viharaja Nidan*.

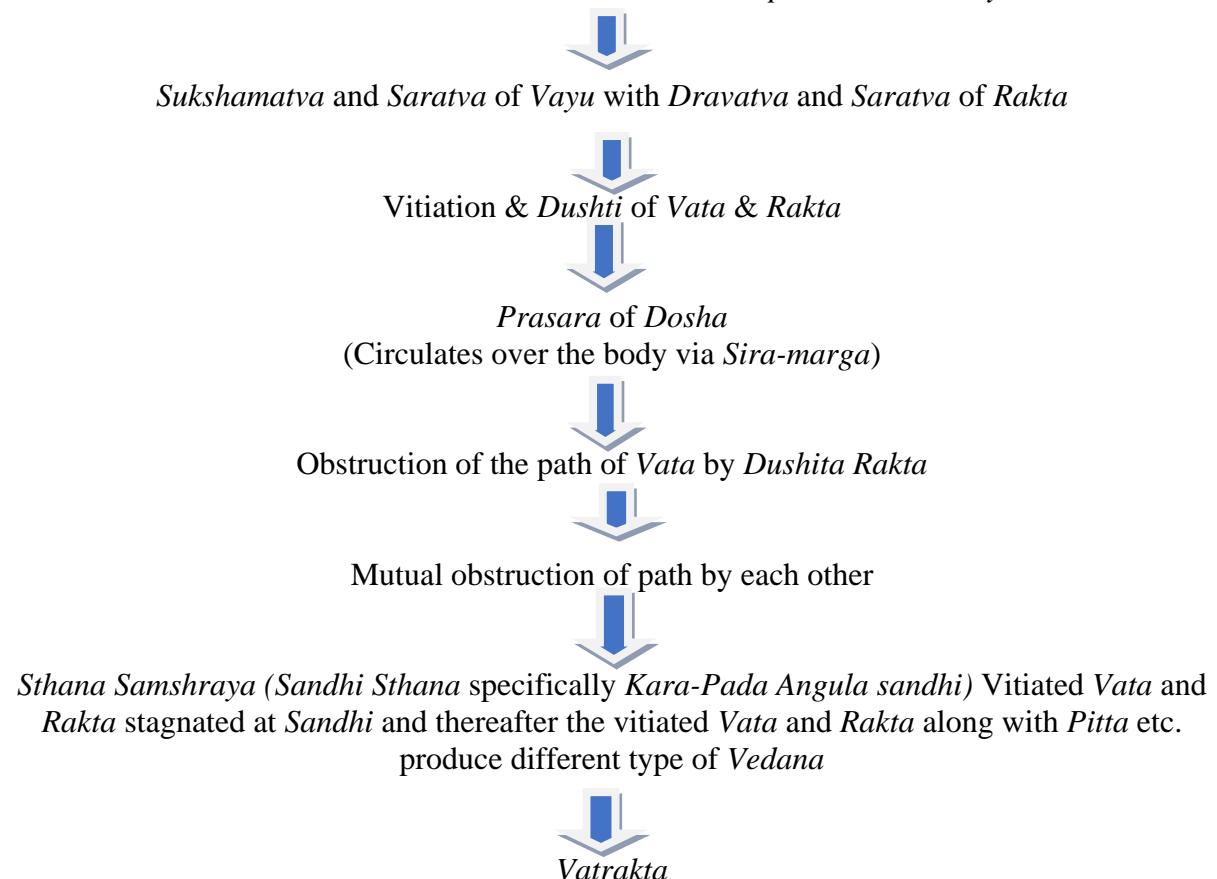
Aaharaj Nidan-Excessive Intake of *Rasa* such as- *Katu* (pungent), *Tikta* (bitter), *Kshaya* (astringent), *Amla* (acidic), *Lavana* (salty) and *Kshara* (alkaline). Excessive intake of *Ahara*(diet) which is *Snighda* (unctuous), *Ushna* (hot) and *Ruksha* (dry in nature) in *Guna* and *Klina* (sodden),

Shushka(dry), *Aanupa Mamsa* (fleshes of marshy land). Intake of *Pindyaka* (paste of oil seeds after extraction of oil), *Mulaka* (radish), *Kulattha* (red gram), *Masha* (black gram), *Shakadi* (green leafy vegetables), *Palala* (grated flesh), *Ikshu* (sugar-cane), *Dadhi*(curd), *Aarnala*, *Souvier* (fermented liquid from dehusked barley), *Shukta* (acidic preparations obtained by fermentation of tubers fruits), *Takra* (butter milk), *Sura* (wines) and *Asava* (self generated alcoholic medicinal preparations), due to faulty dietary patterns such as *Adhyashana* (eating food before proper digestion of previous one), *Vriudhashana* (incompatible food), *Abhojana* (excessive fasting) and *Misthana* (sweets) *Sukbhोजना* . [3]

Viharaja Nidana– *Ativyayama* (excessive exercise), *Krodha* (anger), *Divaswapna* (day sleep), *Raatrijagrana* (vigil during the night), *Achankramansheela* (lack of physical activity), *Abhighata* (trauma), *Ambukrida* (activities in water), *Plavan* (swimming), *Veganigraha* (suppression of the natural urges), travelling on *Hasti* (elephant), *Ashva* (horse), *Usthra* (camel). These above mentioned factors causing aggravation of *Vata dosha* and vitiation of *Rakta Dhatu* which leads to *Samprapti* (pathology) of *Vatarakta*. In general, the *Sukumara* (delicate in nature) person who indulged in sweet and delicious food substances and are not habituated for physical activities are prone to develop *Vatarakta*. [4]

SAMPRAPTI [5] (PATHOGENESIS):

Nidana Sevana i.e. *Sevana* of *Vata & Rakta Prakopa Ahara* and *Anyas Hetus*



SAMPRAPTI GHATAKA:

Dosha - *Vata Pradhan Tridosha-Janya Vyadhi*

Dushya – *Rakta, Twak, Mamsa*

Agni - *Mandagni*

Udhhavasthana – Pakvashya
 Sancharasthana- Sarva Sharira
 Vyaktasthana – Sandhi(Visheshata Kara Pada Sandhi)
 Srotus - Raktavaha, Asthivaha, Majjavaha
 Srotodushthi Prakara – Sanga, Vimargagaman
 Rogamarga – Madhyam

POORVA-ROOPA: [6] (PREMONITORY SYMPTOMS)

S.NO.	POORVA-ROOPA
1.	<i>Svedo-ayartham na va</i> (Excessive or absence of perspiration)
2.	<i>Karshnyam</i> (Blackishness of the body)
3.	<i>Sparsha-Agyavam</i> (Lack of tactile sensation)
4.	<i>Kshate-Atiruk</i> (High intensity of pain on trauma)
5.	<i>Sandhi-Shaithilya</i> (Laxity of joints)
6.	<i>Alasya</i> (lethargy)
7.	<i>Nistoda, Sphurana, Bheda, Guruta, Supti, and Kandu</i> in <i>Janu-Jangha-Uru-Kati-Hasta-Padaang Sandhi</i> (Feeling of heaviness, numbness and itching at knee, thigh, waist, shoulder, hands, legs and other joints of body)
8.	<i>Pidikodgam</i> (eruption of papules / pustules)
9.	<i>Vaivarinya</i> (Discoloration of body)
10.	<i>Mandalutpatti</i> (eruption of wheals / rashes)
11.	<i>Sadana</i> (fatigue)

TYPES AND STAGE:

There are some discrepancies in this context; *Aacharya Charaka* mentioned it as types of *Vatarakta*, [7] while *Aacharya Sushruta* had opinion that these are stages of *Vatarakta* not types. [8]

UTTANA VATARAKTA (Superficial)	GAMBHIR VATARAKTA (deeply seated)
1. <i>Doshas</i> seated only up to <i>Twak</i> and <i>Mamsa Dhatu</i> .	1. Where <i>Doshas</i> penetrate to deeper <i>Dhatu</i> s and have complex manifestation.
2. sign and symptoms- <i>Kandu</i> (itching), <i>Daha</i> (burning sensation), <i>Ruja</i> (pain), <i>Aayama</i> (extension), <i>Toda</i> (pricking pain), <i>Sphurana</i> , <i>Kunchan</i> (contraction), <i>Skin</i> becomes <i>Shyavarakta</i> and <i>Tamra Varna</i> [brownish,black,red or coppery in color].	2. sign and symptoms- <i>Swayathu</i> with <i>Stabdhata</i> (oedema with stiffness), <i>Kathino-Antar-Arti</i> (hardness-agonizing pain inside the joints), <i>Shyava-Tamra Twak Varna</i> (dusky red or coppery coloration), <i>Daha</i> (burning), <i>Toda</i> (pricking), <i>Sphurana</i> (throbbing), <i>Pakavana</i> (tendency to suppuration).

MANAGEMENT

Aggravated *Vayu* enters in various *Shakha* and *Sandhi* causing vitiation of *Rakta*. *Rakta* in turn blocks *Vayu* resulting in severe painful condition. [9] Looking into the nature of *Samprapti* and chief factors involved in pathogenesis following could be preferred treatment from *Ayurveda*.

- *Rakta-mokshan* (Blood-letting therapy): As being *Rakta-Pradoshaja Vikar Rakta-mokshan* with the help of *Shring, Jalouka, Suchi, Alabu, Pracchana, Siravedhana* according to the *Dosha* and body constitution [10] would be a preferred treatment.
- *Virechana* [11] (Purgation)-Internal *Snehana* followed by either *Snigdha Virechana, Ruksha, Mridu Virechana*. Such as *Dharoshna Mutra Yukta Ksheer*, [12] *Trivrit Choorna* with

Dharoshna Ksheer, [13] *Eranda Taila* with *Ksheer* [14] etc.

- *Basti* [15] (Therapeutic enema): *Basti* also the most appropriate procedure in *Vatarakta*. *Niruha* and *Anuvasana Basti* Both should be repeated simultaneously.
- *Bahya Chikitsa* (External application): *Pariseka, Abhyanga, Pradeha*, also should be used.

SHAMANA CHIKITSA (Pacification): Many formulations have been mentioned in our classics for *Dosha* pacification in *vatarakta*. Some of them are-*Triphala kwatha* with *Madhu*, [16] Milk prepared from *Dashmool - Sadhya shoola nivarana*, [17] *Haritaki choorna* with *Guduchi Swarasa* in *Janugata Vatarakta*, [18] Decoction of *Amla, Haridra, Musta* with *Madhu*, [19] *Kokilaksha*: in decoction form. [20]

Guduchi Kwatha [21] with different *Anupanas* as per the underlying condition:
Ghrita in Vata- Vikar
Sharkara(sugar)- Pitta Vikar
Madhu(Honey)- Kapha

Guda (jaggery)- Vivandha
Shunthi- Amvata
Eranda Taila (castor oil)- Severe Vatarakta
Shudha Shilajatu- With Guduchi Kwatha. [22]

Table no. 1. Showing researches on various Pachakarma procedures and Shamana Yoga :

S.N.	Trial drugs	NO.OF PATIENT
1.	<i>Guduchi-Siddha Yoga Basti</i> [23] [<i>Sa-Ghrita Guduchi Ksheera Siddha Niruha</i>] [<i>Guduchi Siddha Taila Anuvasana</i>]	No.of patients 20. <i>Niruha –Guduchi Ksheerapaka – 50 gm Guduchi Kwatha Choorna+ 400 ml milk +1600 ml water = Ksheeraavashesha (400 ml),Madhu, Saindhva,Shatpushpa and Madanaphala Kalka</i> Total duration – 24 days
2.	<i>Jalouka-avcharana</i> [24]	No. of patient 10 3 times at interval of 1 week
3.	<i>Siravyadha</i> [23]	No. of patient 20. <i>Siravyadha</i> twice a day with an interval of 11 days
4.	<i>Bodhivruksha Kashaya</i> [25]	No. of patient 10 total trial of 45 days
5.	<i>Guduchi Kashaya</i> [25]	No. of patient 10 total trial of 45 days
6.	<i>Punarnava Amrita Guggulu</i> [26]	No. of patient 30 500 mg thrice each day with <i>Anupana</i> of <i>Amritadi Kashaya</i> 72 ml
7.	Combined effect of <i>Kaishora Guggulu</i> and <i>Punarnavadi Guggulu</i> [27]	No.of patient 32 2 tablets (500 gm) each twice each day Total trial of 42 days

OUTCOMES OF VARIOUS AYURVEDA RESEARCHES:

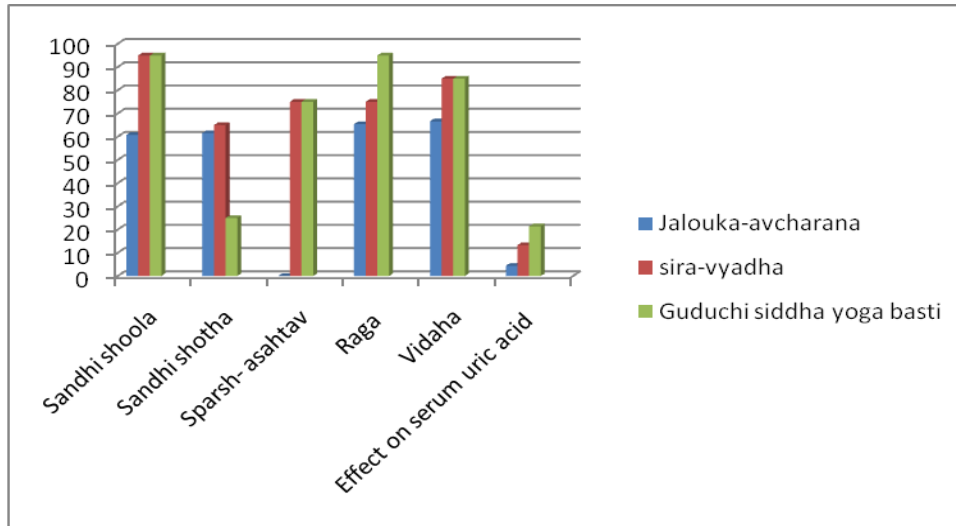
Here an effort has been made to summarize the results of the researches in the management of *Vatarakta*.

Table no. 2 showing results of various researches in the management of Vatarakta through Panchakarma:

Symptoms	% relief		
	<i>Jalouka-avcharana</i> [24]	<i>Sira-vyadha</i> [23]	<i>Guduchi Siddha Yoga Basti</i> [23]
<i>Sandhi shoola</i> (joint pain)	60.8	95	95
<i>Sandhi shotha</i> (edema)	61.5	65	25
<i>Sparsh- asahtav</i> (Tenderness)	-	75	75
<i>Raga</i> (erythema)	65.38	75	95
<i>Twak-vaivarnya</i> (Discoloration of skin)	-	-	-
<i>Vidaha</i> (burning)	66.6	85	85
Status of pain on joint movement	-	-	-
Effect on serum uric acid	4.4% reduction	13.33	21.4

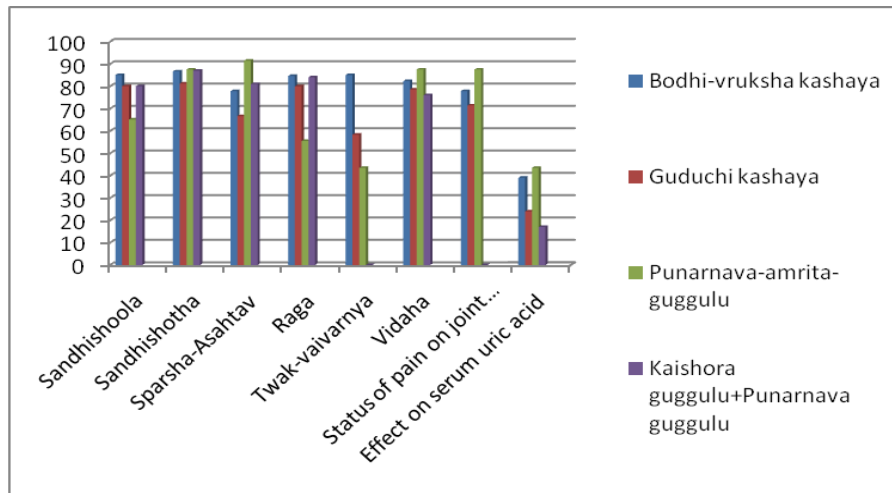
Table no. 3. Showing results of various researches in the management of Vatarakta through Shamana Yoga (Oral medication):

Symptoms	% relief			
	<i>Bodhi-Vruksha Kashaya</i>	<i>Guduchi Kashaya</i>	<i>Punarnava Amrita Guggulu</i>	<i>Kaishora Guggulu + Punarnava Guggulu</i>
<i>Sandhi shoola</i> (joint pain)	85	80	65.11	80
<i>Sandhi shotha</i> (oedema)	86.66	81.25	87.5	87
<i>Sparsh- asahtav</i> (Tenderness)	77.77	66.66	91.48	81
<i>Raga</i> (erythema)	84.61	80	55.55	84
<i>Twak-vaivarnya</i> (Discoloration of skin)	85	58.33	43.47	-
<i>Vidaha</i> (burning)	82.33	78.57	87.5	76
Status of pain on joint movement	77.77	71.42	87.5	-
Effect on serum uric acid	39.04% reduction	23.93% reduction	43.43 % reduction	17% reduction



Results of different Panchakarma procedures in the sign and symptoms of Vatarakta.

On X axis : % of relief in sign and symptoms and on Y axis :sign and symptoms of Vatarakta



Results of different Ayurveda medicines in the sign and symptoms of Vatarakta

The X axis showing presentation % of relief in symptoms of Vatarakta on the other hand Y axis Showing sign and symptoms of Vatarakta

DISCUSSION

In this Review, the conceptual part of Vatarakta and its management with outcome of various researches associated with it has been described for better understanding of Vatarakta and its treatment protocol. Vata and Rakta are the main culprits of Vatarakta. It is mainly characterized by pain in the metatarsophalangeal joint and clinically diagnosed by elevated serum uric acid. Having similar clinical presentation, Vatarakta can be correlated with gouty arthritis.

This study reveals that among all the sign and symptoms of Vatarakta which mentioned in table no.2 and 3, Guduchi Siddha Yoga Basti showed highly significant relief specially in Sandhishoola and Raga about 95%, Siravyadha also showed marked improvement in Sandhishoola by 95%, Jalouka-avcharana showed improvement specially in Vidaha about 66.6% relief, Bodhi-Vruksha Kashaya (Bodhi-Vruksha-decoction) showed maximum improvement in Sandhishotha by 86.66%, Guduchi Kashaya showed maximum improvement in Sandhishotha by

81.25%, *Punarnava Amrita Guggulu* showed improvement specially in *Sparsh-Asahtav* by 91.48% and Combined effect of *Kaishora Guggulu* and *Punarnava Amrita Guggulu* showed maximum improvement in *Sandhisotha* by 87% .

CONCLUSION

In present era due to sedentary lifestyle, *Vatarakta* is one of the common diseases in day to day clinical practice. Therefore, it is a high time to explore the role and application of *Ayurvedic* drugs and therapies in *Vatarakta*. After searching and reviewing various research works related to *Vatarakta*, it is evident that *Panchkarma* therapy such as *Siravyadha* and *Guduchi Siddha Yoga Basti* provides much better relief in the sign and symptoms of *Vatarakta* as well as *Punarnava-Amrita Guggulu* and *Bodhi-Vruksha Kashaya* as *Shamana Yoga* are also highly effective in managing the *Vatarakta*.

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