# Review on Understanding and Management of Vatarakta W.S.R. to Hyperuricemia

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#### ABSTRACT

**Background** - Health is a multidimensional concept that includes physical, physiological, mental, emotional, spiritual, and social well-being, all of which are profoundly influenced by diet and lifestyle choices. Throughout Ayurvedic literature, there is a consistent emphasis on the critical role of Ahara (diet) and Vihara (lifestyle) in both preserving Swasthya (health) and managing Vikara (diseases). This emphasis is especially relevant today, given the significant rise in lifestyle-related metabolic disorders. Vatarakta or gouty arthritis, is a chronic condition stemming from metabolic disruptions caused by unhealthy dietary habits and lifestyle choices. It involves vitiated Vata and Rakta (blood). Initially, vitiated Vata blocks the pathways of vitiated *Rakta*, which subsequently obstructs *Vata* itself. This condition shares clinical features with gouty arthritis in its modern counterpart. The primary biochemical feature of gout is elevated levels of serum uric acid (Hyperuricemia) in the bloodstream, stemming from either increased production, decreased excretion, or a combination of both the processes. Ayurvedic literature emphasizes various treatment approaches for Vatarakta, including Raktamokshan (blood-letting therapy), Virechana (purgation), Basti Karma (therapeutic enema), Shamana chikitsa (pacification), Rasayan chikitsa (Rejuvination) and external therapies such as *Parishek* (fomentation), Abhyang (Oleation), Lepa (ointment), Upanah (poultice).

**Aim** - This study aims to explore the concepts of *Vatarakta*, its management and to compile the findings from various previous researches and effect of their treatment protocols on Hyperuricemia

**Material and methods** - Ayurvedic texts (Samithas) and databases like PubMed, Scopus, DHARA, Google Scholar, and other related researches were extensively reviewed to gain a comprehensive understanding of *Vatarakta* and its therapeutic strategies.

**Results & Conclusion** - Multiple studies on *Vatarakta* management were reviewed, revealing significant decrease in serum uric acid levels with treatments like *Guduchi Siddha Yoga Basti, Yashtyadi niruha basti, Kaishore guggulu, Punarnava-Amrita Guggulu, Navkarshik ghan vati* and *Navkarshik kashayam*. Detailed insights from these studies are discussed below.

*Keywords:* Vatarakta, Raktamokshana, Rasayana, Gouty Arthritis, Punarnava-Amrita-Guggulu, Guduchi Siddha Yoga Basti, Navkarshik kashayam.

#### **INTRODUCTION**

In Ayurved, Health is the state of Doshasamva. Dhatusamva. Agnisamya, samanya malakriya as well as wellness of mana and *Atmanedriya*.<sup>[1]</sup> It is Vata pradhan tridoshaj vyadhi and its main Dushva is Rakta. According to acharya Sushrut "Aakhorvishamiv krudham deham anusarpati" (in aggravated stage, it spreads in whole body like Rat poison)<sup>[2]</sup> It is considered that the life of all living beings depends on Rakta. By excessive intake of hot, sour, irritant, alkaline food items, exposure to too much heat *Rakta dhatu* gets vitiated and if the same individual with vitiated rakta dhatu starts taking Vata prakopak ahara and vihara, it will cause vitiation of Vata Dosha. Already vitiated Rakta dhatu obstructs the path of Vitiated vata. Aggravated and obstructed vata dosha in turn vitiates the rakta dhatu and manifests as *Vatarakta* (Gout).<sup>[3]</sup> It can be co related with "Gout" due to similarities in their symptoms. These days, due to rapid modernization, consumption of half fried food or baked food causes impairment in digestion and metabolism making human being prone to many life-threatening ailments like stroke functional or impairment like in joint disorders. Among all these ailments Vatarakta (Gout) is a common presentation with symptoms like inflammation. severe pain. burning sensation and tenderness in the affected joints. Gout is a true crystal deposition disease and it is a pathological reaction of the joint or periarticular tissue to the presence of monosodium urate monohydrate crystals.<sup>[4]</sup> Small joints of feet and hands are mainly affected in Vatarakta (Gout). Gout is a metabolic disorder affecting middle aged to elderly men and postmenopausal women.<sup>[5]</sup> Purine is a chemical compound and building block of DNA, RNA and its metabolism is disturbed in gout. A high protein diet contains large purines. quantities of All alcoholic beverages, meats like bacon, turkey, chicken, lamb, organ meat, seafoods. spinach, peas, cauliflower are rich in

purines. Uric acid is the end product of purine metabolism. The fundamental biochemical hallmark of Gout is raised uric acid level which results from increased production and decreased excretion of uric acid or combination of both processes. Levels are higher in men than women, they rise from the age of 20 in men and after menopausal age in women. Hyperuricaemia is defined as serum uric acid levels greater than 2 standard deviations above the mean for the population.<sup>[4]</sup> Hyperuricaemia leads to formation and deposition of mono sodium urate crystals (MSU crystals) which advantageously deposit in bursa, joint, tendon and its spaces and eventually form nodular swellings called Tophi. Gout is typically characterized by episodic acute and chronic arthritis and pain and swelling of 1st metatarsophalangeal joint initially, followed by involvement of other joints. The prevalence of Gout is 1-2% with a strong male predominance (>5:1).<sup>[4]</sup> Among the affected population, males are more affected, commonly whereas postmenopausal women are at a higher risk.<sup>[6]</sup>

Gout is almost exclusively a male disease and it is the most common cause of arthritis in men over the age of 40. Secondary gout is due to renal impairment or drug therapy which mainly affects people over the age of 65 and usually this form is seen in females. treatment **NSAIDs** In modern and Glucocorticoids are one of the treatment protocols to treat Gouty Arthritis symptomatically, which has many adverse effects specially in the presence of GIT ailments or renal insufficiency making the disease chronic after prolonged usage. Therefore, this review is an attempt to compile the results of various researches done on vatarakta.

# NIDANA OF VATARAKTA

In *Ayurved*, the causative factors (*Nidan*) of *Vatarakta* are categorized under *Aaharaj* (dietary causes) and *Viharaja* (lifestyle causes).

# Aaharaj Nidan (dietary causes) include:

- Excessive intake of *Rasa* (tastes) such as *Katu* (pungent), *Tikta* (bitter), *Kshaya* (astringent), *Amla* (acidic), *Lavana* (salty) and *Kshara* (alkaline).
- Excessive consumption of *Ahara* (diet) that is *Snighda* (unctuous), *Ushna* (hot), *Ruksha* (dry), and *Klina* (sodden).
- Consumption of Shushka (dry), Aanupa Mamsa (flesh of marshy land), Pindyaka (paste of oil seeds after oil extraction), Mulaka (radish), Kulattha (red gram), Masha (black gram), Shakadi (green leafy vegetables), Palala (grated flesh), (sugarcane), Ikshu Dadhi (curd), Aarnala, Souvier (fermented liquid from dehusked barley). Shukta (acidic preparations obtained by fermentation of tubers and fruits), Takra (buttermilk), Sura (wines), and Asava (self-generated alcoholic medicinal preparations).
- Faulty dietary patterns such as Adhyashana (eating before the proper digestion of previous food). Vriudhashana (eating incompatible foods), Abhojana (excessive fasting), Misthana (sweets), and Sukbhojana (excessive indulgence in enjoyable foods).<sup>[7]</sup>

These dietary factors are believed to contribute significantly to the development of *Vatarakta* according to Ayurvedic principles.

# *Viharaja Nidana* - The causative factors related to lifestyle include:

- *Ativyayama* (excessive exercise)
- *Krodha* (anger)
- Divaswapna (daytime sleep)
- *Raatrijagrana* (staying awake during the night)
- *Achankramansheelata* (lack of physical activity)
- *Abhighata* (trauma)
- *Ambukrida* (activities involving water)
- *Plavan* (swimming)
- *Veganigraha* (suppression of natural urges)

• Traveling on *Hasti* (elephant), *Ashva* (horse), *Usthra* (camel)

These factors exacerbate *Vata dosha* and disrupt *Rakta Dhatu*, thereby contributing to the pathogenesis of *Vatarakta*. Generally, individuals with a *Sukumar prakriti* (delicate constitution), who consume sweet and delicious foods and lack regular physical activity, are more susceptible to developing *Vatarakta*.<sup>[8]</sup>

#### SAMPRAPTI/PATHOGENESIS<sup>[9]</sup>

Various etiological factors mentioned above causes vitiation of *Vata dosha* and *Rakta dhatu*. Vitiated *rakta* obstructs the passage of *vata* in which it has to flow. The obstruction causes aggravation of *vata*, which in turn again vitiates the whole *rakta* and manifests as *vatashonita/vatarakta*, having synonyms as *khuda*, *vatabalasa* and *adhyavata*.

# SAMPRAPTI GHATAK

Dosha - Vata Pradhan Tridosha-Janya Vyadhi Dushya - Rakta,Twak ,Mamsa Agni - Mandagni Udhbhavasthana - Pakvashya Sancharasthana - Sarva Sharira Vyaktasthana - Sandhi (Visheshata Kara Pada Sandhi) Srotus - Raktavaha, Asthivaha, Majjavaha Srotodushthi Prakara -Sanga,Vimargagaman Rogamarga - Madhyam

# METHOD OF PROGRESSSION

According to Acharya charaka the signs and symptoms are first manifested in small joints of fingers of both hands and feet.<sup>[10]</sup> Susrutha gives two different opinions in two different places. In Nidanasthana, he states that the first manifestation is at the Padamoola or root of the foot, sometimes affecting the hand also.<sup>[11]</sup> In Chikitsasthana, his opinion is same as that of Charaka.

**POORVAROOPA** (Prodromal symptoms) [12]

S. No.	Prodromal symptoms
1	Swedo atyartham na va - Excessive sweating or absence of sweating
2	Karshnyam - Black discolouration of skin
3	Sparsh agyatvam - Lack of tactile sensations
4	Kshte atiruk - Excessive pain on injury
5	Sandhi shaithilya - Lax joints
6	Alasya – Lethargy
7	<i>Nistoda, Sphurana, Bheda, Guruta, Supti</i> and <i>Kandu</i> in <i>Janu-Jangha-Uru-Kati-Hasta-Padaang Sandhi</i> - Different types of pain, pulsations, heaviness, numbness and itching in knee, thigh, waist, shoulder, hands, feet and other joints.
8	Pidikodgam - Different type of eruptions (Pustules, papules)
9	Vaivarnya - Discolouration of the body or affected part
10	Mandala Utpatti - Appearance of rashes
11	Sadana - Fatigue

#### TYPES OF VATARAKTA

Acharaya charak mentioned Uttana and Gambhira as two types of Vatarakta,<sup>[13]</sup> whereas Acharya Sushrut believed them to be two STAGES of Vatarakta.<sup>[14]</sup>

	Uttana Vatarakta (Superficial)	Gambhira Vatarakta (Deep seated)		
Dhatu involved	Tvak, Mamsa	Involves deeper tissues		
Symptoms	Kandu (Itching)	<i>Shvyathu stabhdha kathina</i> (Swelling Stiffness of the joints, Hardness)		
	Daha (Burning sensation)	Antar bhrushartimana (Agonizing pain)		
	Ruja, Tod, Sphurana (Pain and Fasciculations)	<i>Tod, Sphurana</i> (Pricking pain, fasciculations)		
	Ayama Akunchana (Stretching and constricting sensation)	Paka (Ulceration)		
	<i>Shyavrakta, Tamra tvak</i> (Blackish, Red or coppery discolouration of Skin)	Khanj, Pangu (Deformities in the joints)		

#### AIM

This study aims to explore the concepts of *Vatarakta*, its management and to compile the findings from various previous researches and effect of their treatment protocols on Hyperuricemia

#### **MATERIALS & METHODS**

Ayurvedic texts (*Samithas*) and databases like PubMed, Scopus, DHARA, Google Scholar, and other related researches were extensively reviewed to gain a comprehensive understanding of *Vatarakta* and its therapeutic strategies.

# LIST OF VARIOUS RESEARCHES DONE ON THE MANAGEMENT OF VATARAKTA

TRIAL DRUG	NO. OF	TYPE OF	DURATION	RESULT
	PATIENTS	STUDY		
Group 1 -Amritadi kwath 30ml	15 in each	Randomised	6 weeks	Group 1 - 22.6%
with Guda Haritaki 10gm BD	group	clinical trial		reduction in Serum
Group 2- Febuxostat 40mg BD <sup>[15]</sup>				Uric Acid Levels
				Group 2 - 24.4%
				reduction in Serum
				Uric Acid levels
Group A-Guduchi kanda kwatha	47	Randomised	48days	Group A - Mean
40ml BD	(Goup A- 23	open label		serum uric acid value
Group B -Gambhari twaka kwatha	Group B –	comparative		Before intervention -

40ml BD [16]	24)	clinical study		7 30
40ml BD <sup>[16]</sup>	24)	clinical study		7.30 After intervention - 5.44 Group B - Mean Serum uric acid reading before intervention -7.5 After intervention -
Case 1,2,3 - Navkarshika Ghana vati 250mg, 2BD with 100ml Nvakarshika kashayam Case 2,3 - Amrutadi tailam 10ml with 100ml lukewarm water <sup>[17]</sup>	3 cases	A case series	Case 1- 40days Case 2- 4 months 12 days Case 3 - 23days	5.83 S. Uric acid level in Case 1 BT - 9.57mg/dl AT - 6.3mg/dl Case 2 BT - 9.94mg/dl AT - 5.0mg/dl Case 3 BT - 9.55mg/dl AT - 7.0mg/dl
Guduchi yoga (Guduchi kanda churan 1.5gm plus 0.5 gms Trapusha juice extract) <sup>[18]</sup>	20	Randomised single blind, single centre, clinical study.	12 weeks	S.Uric acid levels Before intervention 7-7.9mg/dl -1patient 8-8.9mg/dl - 5pts 9-9.9mg/dl - 8pts 10 and above - 6pts After intervention 3.5-7.5mg/dl - 14pts 7 and above - 6pts
Guduchi Kashaya 50ml BD <sup>[19]</sup>	30	Randomised clinical trial	30	Mean S. Uric acid level before intervention - 7.92mg/dl After intervention - 7.20mg/dl
Group A -Yashtyadi niruha basti(400-700ml) and Murchhit til tail Anuvasana (100-200ml) Group B - Kaishore Guggulu(250mg) 2BD <sup>[20]</sup>	40 (20 in each group)	Randomised clinical trial	30 days	Group A - % decrease in S. Uric acid levels - 36.95% Group B - 35.13%
Group 1 - Kaishore Guggulu 3gm BD Group 2 - Amritadi Guggulu 3gm BD <sup>[21]</sup>	60 (30 in each group)	Randomised clinical trial	18months	Group 1 - % decrease in S. Uric acid levels -31.47% Group 2 - 37.25%
Group 1 - <i>Mridu virechan</i> with <i>Erand tail</i> (10-50ml) in <i>ksheera</i> for 3-5 days followed by administration of 2Tab <i>Punarnava</i> <i>amritadi guggulu</i> (500mgeach) with <i>Amritadi kwatha</i> (24gm for each decoction) Group 2 – 2Tab <i>Punarnava Amritadi guggulu</i> (500mg each) with <i>Amritadi</i> <i>kashayam</i> (24gm for each decoction) <sup>[22]</sup>	30 (15 in each group)	A clinical trial	8 weeks	Group 1 - 20.7% change in S. Uric acid levels Group 2 - 24% change in S. Uric acid levels
Combined efficacy of Kaishore Guggulu and Punarnavadi Guggulu 2Tab (500mg each) BD [23]	35	Open label, single arm clinical trial	42 Days	Mean S. Uric acid value Before intervention - 7.4 After intervention -

Group 1 - Bodhi vriksha Kashaya 40ml with honey, BD Group 2 - Guduchi Kashaya 40ml BD <sup>[24]</sup>	20 (10 each group)	Randomised clinical trial	45 days	6.1 % change in S. Uric acid value - 17% Group 1 - % reduction in S. Uric acid level 23.93% Group 2 - 39.04%
Group A- Siravyadha - Twice with interval of 11days (On 1 <sup>st</sup> and 12 <sup>th</sup> day of trial, followed by final observation on 24 <sup>th</sup> day) Group B- Guduchi siddha yoga basti Niruha - Guduchi Ksheerapaka - (50 gm Guduchi Kwatha Choorna+ 400 ml milk +1600 ml water) Madhu, Saindhva,Shatpushpa and Madanaphala Kalka Anuvasana - Guduchi Siddha Taila Anuvasana <sup>[25]</sup>	40 (20 in each group)	24 days	A comparative randomised clinical study	Group A -13.33% change in S. Uric acid levels Group B - 21.4% change in S. Uric acid levels
Jaloka avacharana(Leech therapy) 3 times at an interval of one week <sup>[26]</sup>	10	3 weeks	A Pilot Study	S. Uric acid results were not significant. % change in serum uric acid levels was 4.4%
<i>Amritadi guggulu</i> 1Tab (1gm) TDS <i>Madhuyashtyadi tail</i> - External application on affected joint, twice daily <sup>[27]</sup>	30	90 days	Random open label clinical trial	Average decrease in S. Uric acid levels 45%

# DISCUSSION

provides This review an in-depth exploration of Vatarakta, focusing on its theoretical framework and the outcomes of various researches done in the past. The aim is to enhance understanding of Vatarakta and its treatment strategies and their effect on the raised serum uric acid levels. This review revealed that both Shodhan and Shaman chikitsa had significant effect on decreasing the uric acid levels except Jalokavacharana (Leech Therapy). Jaloka might not have significant effect on lowering serum uric acid levels but it is useful in managing Ugra Vatarakta (Gout flare ups) as *Vatarakta* is caused by vitiated Vata and Rakta doshas and raktamokshana (Bloodletting) is the primary treatment for disorders involving vitiation of *rakta*.<sup>[28]</sup> According to Charaka Samhita, Vatarakta is predominantly found in Sukumara individuals)<sup>[29]</sup> (Delicate and Jalaukavacharana (Leech therapy) is specifically recommended for such individuals. Leeches live in cold water and possess a sweet taste, making them particularly beneficial in *Pitta* disorders.<sup>[30]</sup> Similarly Siravyadh is also a type of raktamokshana and it is an attempt to remove excessive kleda (multiple intermediate metabolites like uric acid) from the *dushit rakta*.<sup>[25]</sup> Siravyadha improves Sandhishool and Jalouka gives relief in *Vidaha* in present in *Ugra Vatarakta*.<sup>[31]</sup> The drugs Amrutha and Guggulu are known

to have uricosuric action which excretes excess amounts of uric acid from the body. *Triphala* is one of the major ingredients in majority of the formulations (*Kaishore guggulu, Amritadi guggulu, Punarnavadi guggulu and Navkarshik ghana vati*) mentioned in this review and it works as a xanthine oxidase inhibitor like allopurinol which suppresses the production of uric acid. *Amalaki* is a good source of vitamin C which is associated with lowered serum uric acid levels. When serum uric acid is lowered below MSU saturation point, the crystals dissolve and gout can be cured.<sup>[27]</sup> Haritaki posseses anti arthritic properties and reduces inflammation in joints.

Amritadi kwath (Amrita, shunthi, dhanyaka) showed good results in reducing Serum uric acid levels. Amrita (Guduchi) is Tridosha Hara, Snigdha in Guna and has Madhura Vipaka.<sup>[32]</sup> It has properties like *Sroto* Vishodhana (Cleanses the channels) and Rasayana(rejuvenation). Because of these properties, it helps in maintaining balance between Dosha and Dhatu. Its Mutra Virechana (Diuretic) property helps in excretion of excess of uric acid present in the blood and it also helps in relieving pain caused by vitiation of Vata Dosha. Phytoconstituents like alkaloids, glycosides, steroids, terpenoids present in it are responsible for the analgesic effect of this drug and the flavonoids present are responsible for the inhibition of prostaglandins, so, relieving the inflammation. Shunthi is Katu in Rasa, Laghu, Snigdha in Guna and has Ushna *Virva*.<sup>[33]</sup> *Agnimandya* is one of the causative factors of vatarakta. Deepana-Pachana properties of Shunthi increases the digestive fire and improves digestion by Ama Pachana. Coriandrol is the major phytochemical present in Coriandrum sativum L. (*Dhanyaka*) that is very effective anti-inflammatory agent.<sup>[34]</sup> It helps in reducing the inflammation in various joints. Haritaki is Kshaya in Rasa, Madhura in Vipaka, pacifies all three Doshas and possesses properties like Rasayana and Anulomana (Vata anulomana). Kshaya Rasa helps in reduction of Kleda guna of *Rakta*, *Kapha Dosha and Ama*.<sup>[15]</sup>

Navkarshika (Triphala. Guduchi. Daruharidra, Mnjishtha, Vacha, Katuki, subsides the symptoms of Vatarakta due to Shothahara (Relieves swelling). its Vedanasthapak (Analgesic), Raktashodhak morbid rakta), Kandughna (Cleanses (Relieves itching), Dahaprashamana (Relieves burning sensation) properties.<sup>[17]</sup> Since it has ingredients like Triphala and

*Guduchi* it also decreases Serum uric acid levels.

Gambhari has Madhura rasa, Guru guna, hot potency and acts as Vata hara. Pacifies Pitta and Rakta due to its Madhura tikta kashaya rasa, and Madhura vipaka. It also posseses *Rakta dosha hara karma*.<sup>[16]</sup> The active components like alkaloids, quercetin, lignans like arboreal, isoarboreal and saponins present in the bark of Gambhari exhibit anti-inflammatory activity, and are also responsible for the anti-nociceptive activity. Therefore it reduces pain, edema, and stiffness.<sup>[35]</sup> <sup>[16]</sup> Tannins and lignans (including arboreal, isoarboreal, and related types) are potentially responsible for its ability to increase uric acid excretion action). Ouercetin inhibits (Uricosuric xanthine oxidase, thereby reducing the sensation of burning pain by lowering elevated serum uric acid levels.<sup>[16]</sup><sup>[36]</sup>

Approximately two-thirds of serum uric acid is excreted through the gastrointestinal tract, while the remaining one-third is eliminated through the kidneys. In cases of hyperuricemia, the excretion of uric acid through the gut may be impaired. Basti improve intestinal chikitsa excretory functions, so, potentially aiding in the uric acid through excretion of the gastrointestinal tract. Basti is indicated mainly in *Vata* predominant diseases.<sup>[37]</sup> Basti is glorified as Ardhachikitsa by Acharya Charaka and Complete Chikitsa by some other *Acharayas*.<sup>[38]</sup> *Yashimadhu* present in Yashtyadi Niruha Basti has medicinal properties such as Shothahara, Vatanuloman. Vedanasthapana, Dahashaman & Rasayan effect. Other ingredients present in Yashtyadi niruha have properties like Dahaprashaman, Sothahara, *Vedanasthapan*.<sup>[20]</sup> Raktashodhan and Anti-inflammatory and Punarnava has Diuretic action.<sup>[39]</sup> *Punarnava* accelerates the kidney's filtration process, facilitating the removal of excess fluids and waste products. Bodhi vriksha Kashaya is vatapittashamak and it has antiinflammatory and analgesic properties.<sup>[40]</sup>

As discussed above Guduchi and Guggulu have uricosuric properties and Triphala being xanthene oxidase inhibitor, decreases the production of Uric acid. Apart from that Guduchi also has anti-inflammatory and *rasayana*(rejuvenating) action hence providing the symptomatic relief in gout. possesses Guggulu anti-inflammatory, antioxidant, anti-rheumatoidal and properties, thereby aiding in breaking down the pathophysiology of Gout. Triphala, Trikatu, Danti, Vidanga, and Trivrit offer antioxidant, anti-inflammatory, analgesic, antipyretic. diuretic. and immunomodulatory benefits. Amrutha guggulu incorporates all these pharmacotherapeutic effects necessary for managing vatarakta Yashtimadhu contributes (Gout). antiinflammatory and antioxidant properties, while *Tila taila* is highly effective in *Vata* management when used externally in Abhyanga. Together with other ingredients, Madhuyashtyadi taila acts as an antiinflammatory and analgesic, providing relief pain.<sup>[27]</sup> Almost from joint every formulation compiled here showed good Hyperuricemia, results in specifically *Guggulu*(internal) Amritadi with Madhuyashti tailam (external) showed 45% decrease in uric acid levels. Kaishore Guggulu 35.13% and Yashtyadi Niruha with murchhit til tail anuvasana Basti showed 36.95% decrease in uric acid levels, which was highly significant.

# CONCLUSION

Vatarakta (Gout) is a metabolic disorder resulting from disturbed Purine metabolism, which leads to increased production and decreased excretion of uric acid. So, various drugs discussed in this review like Amrita, Guggulu and Triphala possessing uricosuric and xanthene inhibitor properties play a vital role in decreasing the raised uric acid levels (Hyperuricemia) and treating Vatarakta (Gout). Basti chikitsa improve intestinal excretory functions, so, it aids in the excretion of uric acid through the GIT. *Basti* is one of the best treatments for *vata* dominant diseases so it gives symptomatic

relief as well. Raktmokshana with shaman chikitsa helps in decreasing serum uric acid levels and relieves symptoms like Ruja (Pain), shotha (edema) and Daha (Burning sensations) in Gout flare ups. Madhuyashti taila Abhyanga (Local application) pacifies vata and acts as anti-inflammatory and So, from this review it can be analgesic. concluded that Shaman and Shodhan chikitsa both show significant results in managing Hyperuricemia. If the patient follows strict diet and lifestyle, Shaman and Shodhan chikitsa combined with external application will give tremendous results in Hyperuricemia, reducing the flare ups and hence relieving the symptoms of Vatarakta.

# **Declaration by Authors**

**Ethical Approval:** Since the review did not contain any confidential information, ethical clearance was not deemed necessary for conducting the study.

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#### REFERENCES

- Shastri K. Ambika Datta,edition reprint, Ayurved tatva sandipika Hindi commentory on Sushrut samhita, volume 1, sutra sthan ; Dosha dhatu mala kashaya vriddhi vigyaniya adhyaya: chapter15, 48. Varanasi ; Chaukhambha sanskrit sansthan, 2018; 84.
- Shastri K. Ambika Datta,edition reprint, Ayurved tatva sandipika Hindi commentory on Sushrut samhita, volume 1, nidan sthan ; Vatavyadhi nidan : chapter 1, 48. Varanasi ; Chaukhambha sanskrit sansthan, 2018; 300
- 3. Sastri Kasinatha, Chaturvedi Natha Gorakha, Ed reprint, Vidyotini Hindi Commentary onCaraka Samhita of Sthan: Agnivesh. Chikitsa vatashonitachikitsa Adhyaya: Chapter 29,8-11.Varanasi: Chaukhamba Bharati Academy, 2018; pg 820.
- 4. Stuart H. Ralston, Nicki R. Coledge, Brian R. Walker, et al. Davidson's Principals and practice of medicine, 21st edition. Churchill Livingstone Elsevier; 2010, page no. 1097.
- 5. J. Larry jameson, Denis L. kasper, Dan L. Longo, et al. Harrison's Principles of

Internal medicine, 20 th edition. Mc Graw Hill Education; 2018, page no. 2631.

- 6. Sainani GS. API Text Book of Medicine. 6th ed. Mumbai: Association of Physicians of India; 1999
- Charaka, Charaka Samhita (Vidyotini Hindi Commentary). Rajeswaradatta Shastri, Kashinath Shastri, Gorakh Nath Chaturvedi, editors. 1st ed. Varanasi: Chaukhamba Bharti Academy; 2004. Chikitsa Sthana, 29/5-7.p.820.
- Aacharya Yadavji Trikamji ed,Charaka Samhita (ISBN : 978-93-80326-73-3) of Agnivesha,Chakrapani Datta, s Ayurveda deepika(sans),chikitsa sthana,vatashonita chikitsa ,29/8-10, Choukhambha Surbharti Prakashana,Varanasi,2020, p.627-628.
- 9. Aacharya Yadavji Trikamji ed,Charaka Samhita (ISBN : 978-93-80326-73-3) of Agnivesha,Chakrapani Datta, s Ayurveda deepika(sans),chikitsa sthana,vatashonita chikitsa ,29/12-14 ,Choukhambha Surbharti Prakashana,Varanasi,2020, p.628.
- Caraka, Caraka Samhita, Chikitsasthanam vatashonithachikitsa 21/8-11. Vaidya Sri Satya Narayana shastry reprint: 1998 Varanasi. Chaukhamba bharati academy
- 11. Shastri K. Ambika Datta,edition reprint, Ayurved tatva sandipika Hindi commentory on Sushrut samhita, volume 1, nidan sthan ; Vatavyadhi nidan : chapter 1, 48. Varanasi ; Chaukhambha sanskrit sansthan, 2018; 300.
- 12. Aacharya Yadavji Trikamji ed,Charaka Samhita (ISBN : 978-93-80326-73-3) of Agnivesha, Chakrapani Datta, s Ayurveda deepika(sans), Chikitsa, Vatashonita Chikitsa, 29/16-18, Choukhambha Surbharti Prakashana,Varanasi,2020, p.628.
- Rajeswaradatta Shastri, Kashinath Shastri, Gorakh Nath Chaturvedi, editors. Charaka Samhita,charak (Vidyotini Hindi Commentary), 1st ed., Chikitsa,Vatashonita Chikitsa, 29/19 Chaukhamba Bharti Academy, Varanasi: 2004, p.822
- Sushruta, Sushruta Samhita (Ayurveda tatva Sandipika Hindi Vyakhya), Vol. 1. Kaviraj Ambikadutta Shastri, editor. 1st ed. Varanasi: Chowkhamba Sanskrit Sansthana; 2007. Nidana Sthana, 1/48. p.232.
- 15. Shikha, Thakur Sunil, Chaudhary Vijay, Soni Manik. A Clinical Study to Evaluate the Effect of Amritadi Kwatha and Guda-Haritaki in the Management of Vatarakta w.s.r. to Hyperuricemia. AYUSHDHARA, 2022;9(Suppl 1):38-45.

- 16. Ashwini S Pai, Dharani. A Comparative Clinical Evaluation of Efficacy of Guduchi (Tinospora Cordifolia (Willd.) Miers) Kanda (Stem) and Gambhari (Gmelina Arborea Roxb.) Twak (Bark) in Vatarakta with special reference to Gouty Arthritis. AYUSHDHARA, 2023;10(1):1-13.
- Choudhary P, Jain NA. Successful Management of Hyperuricaemia through Ayurveda Medications: A Case Series. Int. J. AYUSH CaRe. 2021; 5(3):197-202.
- Choudhary P, Jain NA. Successful Management of Hyperuricaemia through Ayurveda Medications: A Case Series. Int. J. AYUSH CaRe. 2021; 5(3):197-202.
- 19. Gutakar s, Bhagat S, Ayurvedic management of Vatarakta with Guduchi Kwatha w.s.r. to Gouty Arthritis. World journal of pharmaceutical research vol 10, issue 14, 2021; 1916-1920
- 20. Kaushik B, Bhatkoti M, Sharma UK, Kumar V, A Clinical Study To Evaluate The Efficacy Of Yashtyadi Niruha Vasti In Vatarakta JOA XIII- 4, 2019; 5 – 16
- 21. Shibabrata Behera, Kamadev Das, Arun Ku. Das. A Comparative Pharmaceutico Clinical Study of Kaisore Guggulu and Amrutadi Guggulu on Vatarakta. International Journal of Ayurveda and Pharma Research. 2017;5 (3):39-43.
- 22. Rana V, Mishra A, Mehra B.L. Effect of Punarnavamrita Guggulu with Amritadi Kwatha in the management of Vatarakta w.s.r. to Gout – A clinical Trial. World journal of pharmaceutical research vol 6, issue 8, 2021; 1143-1149
- 23. Vikas Nariyal, Om Raj Sharma, K.S. Dhiman. A combined effect of kaishora guggulu and punarnavadi guggulu in the management of vatarakta (gout): A case series. International journal of advanced research (IJAR). 2017;5 (6) ,1793-1798
- 24. Dr. Rajeev Kumar Saini, Dr. Ankita Thakur, Dr. Sakshi Sharma, Dr. Akhilesh Kumar Srivastva and Dr. Rajesh Manglesh. To Evaluate The Comparative Effect Of Bodhi Vriksha Kashaya And Guduchi Kashaya In The Management Of Vatarakta W. S. R TO GOUT.wjpmr, 2018,4(9), 198 -209, ISSN 24553301.
- 25. Adithya Acharya K, Ahalya Sharma. Evaluation of the efficacy of Siravyadha and Guduchi siddha yoga basti within the management of vatarakta w.s.r. to Gout.

Int.J.Res.Ayurveda Pharm.2013; 4 (3 ):402 – 409

- 26. Shashanka Jha ,Londhe PD :Role of leech application in vatarakta : a pilot study. International journal of Ayurvedic Medicine,2014,5(1) 129-132
- 27. Jyothi Rapolu, K. Laxmikantham, P. Srikanth Babu.The Efficacy of Amruta Guggulu (Internal) and Madhuyashtyadi Taila (External) in the Management of Vatarakta w.s.r. to Gouty Arthritis. AYUSHDHARA, 2024;11(2):1-16.
- 28. Kashinath pandey charak samhita 2011 (Vidyotani tika) part 1 Choukhamba, Varanasi page 573,445
- 29. Kashinath Pandey charak samhita 2011 (Vidyotani tika) part 2 Choukhamba, Varanasi page 825, 820
- 30. Ambikadatta Sastri sushrut samhita 2010 Choukhamba, Varanasi, page 60,57
- 31. Patel P, Bhatted SK, Dharmarajan P. Systematic review on understanding and management of vatarakta (gouty arthritis). Int J Health Sci Res. 2020; 10(9):198-204.
- 32. Gawhare Vikesh S. A Review on Guduchi through Ayurvedic Texts International Ayurvedic Medical Journal, Volume 1; Issue 3; May-June 2013, 1-7.
- Sharma P.V; Kaidev Nighnatu; 1st Edition; 1070; Chawkhamba Oriental; Varanasi, Delhi; p.5.
- 34. Manoj Kumar et al. A Comparative Clinical Study to Evaluate the Effect of Herbal Preparation Bodhi Vrikshkashaya and Amritaadikwath in the Management of Vatarakta w.s.r. Gout, AYUSHDHARA, 2020; 7(5); 2931-2939.

- 35. Kulkarni, Yogesh A et al. "Effect of Gmelina arborea Roxb in experimentally induced inflammation and nociception." Journal of Ayurveda and integrative medicine vol. 4, 3 (2013): 152-7. doi:10.4103/0975-9476.118697
- 36. Arora, Charu & Tamrakar, Vinita. (2017). Gmelina arborea: chemical constituents, pharmacological activities and applications. International Journal of Phytomedicine. 9. 528. 10.5138/09750185.2149
- Charaka A. In: Acharya VY, editor. Samhita with Ayurveda Deepika Vyakhya. Varanasi: Chaukhambha; 2011.
- 38. Charaka A. In: Acharya VJ, editor. Samhita Revised by Charaka and Dridhbala with 'Ayurveda Dipika' Commentary, by Chakrapanidatta. Varanasi: Chowkhamba Sanskrit Sansthana, Gopal Mandir Lane, Sidhhisthana 1/38; 2011. p. 39-683.
- 39. Mishra S, Aeri V, Gaur PK, Jachak SM. Phytochemical, therapeutic, and ethnopharmacological overview for a traditionally important herb: Boerhavia diffusa Linn. BioMed research international. 2014;2014.
- 40. Kapile C, Kulkarni A, Pardeshi P, Sayed A, Nehe A, Ficus religiosa: A beneficial medicinal plant, Journal of Drug Delivery and Therapeutics. 2022; 12(2-s):210-218

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