



## Review Article

### A COMPREHENSIVE STUDY OF VATA RAKTA W.S.R. TO GOUT

Vikas Rana<sup>1\*</sup>, Anjana Mishra<sup>2</sup>, B.L.Mehra<sup>3</sup>

\*<sup>1</sup>Kayachikitsa, <sup>2</sup>Reader, <sup>3</sup>H.O.D., P.G. Department of Kayachikitsa, R.G.G.P.G.Ayu.College & Hospital, Paprola, H.P., India.

#### ABSTRACT

The rapid modernization in India, fast food culture, stressful and speedy life, prevalent in urban areas is spreading its wings in remote villages too. Nowadays human beings are vulnerable to many disorders due to their altered life style and food habits. Among such metabolic disorders *Vatarakta* is one of them.

*Vatarakta* is more distressing and common metabolic disorder prevalent in present era. It is characterised by severe pain, tenderness, inflammation and burning sensation in the affected joints. It is a *Vatapradhana tridoshaja vyadhi* where *Rakta* is main *Dushya*. *Vatarakta* is an illness where both *Vata* and *Rakta* are afflicted by distinct aetiological factors. Sedentary lifestyle along with mental stress, consumption of non-vegetarian and highly protein diet, excessive alcohol intake are some of the precipitating factors which causes acute exacerbation of *Vatarakta*. The aetiological factors responsible for Gouty arthritis, pathology and clinical features are quite similar with the *Vatarakta*.

Due to excruciating pain, inflammation, joint deformity and restricted joint movements with the risk of various complications like urate nephropathy and urate nephrolithiasis its necessary to have a complete overview on all aspects of disease for treatment. Management of *Vatarakta* is a challenge as it is a disease of severe morbidity, chronicity and incurable to certain extent with associated complications. With certain life style modifications like low protein diet etc. and certain Ayurveda modalities viz. *Shodhana* and *Shamana Chikitsa* its can be cure and prevented.

**KEYWORDS:** Ayurveda, *Vatarakta*, *Vata*, *Rakta*, Gouty arthritis.

#### INTRODUCTION

The health of an individual depends solely on his/her diet and lifestyle. Nowadays human beings are more vulnerable to metabolic disorders due to their faulty dietary habits and life style. These disorders may be causing functional impairment or crippling disorders like *Vatarakta*. The disorder produced by conjugation of vitiated *Vata* and *Rakta* generate multiple health ailments and most important of them is *Vatarakta*.<sup>[1]</sup> Hence it has been described as a separate disease entity in *Charaka Samhita*. There are many references along with description of this disease in classical texts under the name of *Vatarakta*, *Adhyavata*, *Vatabalasa* and *Khuddavata*.<sup>[1,3]</sup> The rich those who have plenty of resources and are delicate, are mostly affected with the disease so it also named as *Aadhyavata*. Similarly, "*Khudda*" means joint and small, hence the disease affecting mostly the smaller joints of the body is called as *Khuddavata*.

Both *Vataprakopak* and *Raktaprakopaknidan* are involved in *Samprapti* of the disease.<sup>[2]</sup> When a person does not opt for purification processes like *Vamana* and *Virechana* or due to trauma, *Raktadhatu* gets vitiated. The same individual with vitiated *Raktadhatu* when starts taking *Vata-prakopakahara* and *Vihara*, become prone to *Vata-vridhhi*. Already vitiated *Raktadhatu* obstructs the path of *Vridhhvata*, in which the *Vata* has to flow. Vitiated *Vata* becomes *Aavrut* with vitiated *Raktadhatu*. *Vridhh* and obstructed *Vata* inturn vitiates the whole *Rakta* and manifests as *Vatarakta*.<sup>[1,14]</sup> It is characterised by severe pain, tenderness, inflammation and burning sensation in

the affected joints. It has two stages i.e., *Uthana* and *Gambhira*.<sup>[1,3]</sup> *Gambhira Vatarakta* mainly affects *Asthidhatu* and Causes *Ruja* which spreads as *Aakhorvisha* (rat poison).<sup>[2]</sup> Intense painful condition, initial site of manifestation i.e. involvement of hands and feet, and other clinical features can be compared with gout described in modern medicine. The gout is also known as "disease of kings" and also "king of diseases" in modern medicine.<sup>[7]</sup> Gout is a metabolic disorder and inflammatory response to monosodium urate crystals formed secondary to hyperuricemia.<sup>[9]</sup> In 21<sup>st</sup> century, gout remains the most common inflammatory arthritis in men over 40 years old and in post-menopausal women, although more common in men (10:1). The number of cases rise with age, from 2/1000 in males aged 18 - 44 and 34/1000 in males of age 45-65 years. Number of self-reported cases of gout in U.S.A. increased from 2.1 million to 3.0 million over a ten year period (from 1990-99) making it more prevalent than R.A.<sup>[11]</sup> Its prevalence is increasing; more over it is a potential signal for unrecognized comorbidities like obesity, metabolic syndrome, diabetes mellitus, hypertension and renal disease etc. Patients of gouty arthritis land up in severe joint destructions. The common complications in patients of gout are urate nephropathy, uric acid nephropathy and nephrolithiasis.<sup>[8]</sup> Due to its remittent and relapsing nature and complications, there is no permanent cure of this disease, which is a challenge for 21<sup>st</sup> century. Management of *Vatarakta* is a challenge as it is a disease of severe morbidity, chronicity

and incurable to certain extent with associated complications. Though a number of drug regimens have been advised for the management of gout in the modern medicine like NSAIDs, Colchicine, Corticosteroids, Antihyperuricemic drugs and Uricosuric agents. [9] The entire above are associated with adverse effects and certain limitations. So there is need to understand the pathogenesis of the disease to break down the vicious circle of *Doshas*. In Ayurvedic texts, two types of treatment of *Vatarakta* are mentioned such as *Samanya Chikitsa* (General management) and *Vishishtha Chikitsa* (Specific treatment according to classification). In *Vishishtha Chikitsa* after careful diagnosis on the basis of stages of disease i.e. *Uthana* or *Gambhira* specific treatment is planned.

#### AIMS AND OBJECTIVES

- To review the available literature in Ayurvedic text and its correlation with modern literature on Gout.
- To review the *Vatarakta* in context of Gout.
- To review the role of diet and life style in the prevention of *Vatarakta*.

#### MATERIALS AND METHODS

##### Conceptual Review

Description of disease *Vatarakta* is given in *Brihatrayi* and in all successive texts. From the period of *Charaka* onwards, the disease *Vatarakta* has been described as a separate disease entity.

##### Etymology

The disease which occurs due to the derangement of *Vata* and *Rakta* is known as *Vatarakta* (*Shabda-Kalpa Druma*). The disease caused due to *Vatadohsa* and *Raktadhatu* is called as *Vatarakta* (*Chakrapaniteeka*). [1] The vitiated *Raktadhatu* obstructs *Vata* results in *Vatasonita* (*Ashtanga Hridaya*). [3] The disease which is resulted due to vitiation of *Vatadosha* and *Raktadhatu* leading to the specific *Samprapti*, is known as *Vatarakta* (*Madhukosha teeka*). [4]

##### Synonym

*Aadhya Vata, Khudda Vata, Vata Balasa, Vatashonita, Vatarakta*. [1,3]

##### Nidana / Etiology

Different *Nidana* of *Vatarakta* have been mentioned in *Ayurvedic* texts and can be classified into following groups:

1. **Aharaja Nidana** - Causes related to dietary habits.
2. **Viharaja Nidana** - Causes related to individual habits and environmental factors.
3. **Mansika Nidana**- Causes related to psychological factors.
4. **Agantuja Nidana**- Exogenous factors.
5. **Prakriti based Nidana** - Miscellaneous factors.

##### Aharaja Nidana<sup>(1)</sup>

- Excessive intake of foods and drinks that are having *Lavana, Amla* and *Katu rasa* or *Snigdha, Ushna, Klinna, Ruksha, Ushna, Vidahi* and *Ksara* in quality.
- Excessive intake of saline, sour, pungent, alkaline, unctuous (oil, greasy), hot and uncooked food.
- Intake of flesh of aquatic and marshy land inhabiting animals.

- Excessive intake of oil-cake preparations or raddish.
- Excessive intake of *Kulatha* (*Macrotyloma uniflorum*), *Masha* (*Vigna mungo*), *Nishpavshaak* (*Dichous lablab*), *Pinyak* (*Sesamum Indicum*), leafy vegetables and sugarcane (*Saccharum*).
- Excessive intake of curd, *Aranala* (kanji), *Sauvirak, Sukta* (vinegar), *Takra* (butter milk), alcohol and wine.

##### Viharajanidana<sup>[1,2]</sup>

- Excessive anger, *Divaswapan, Ratrijagran, Abhighata, Ashuddhi, Acankramanasilata*.
- Riding on elephant, horse and camel.
- Excessive swimming, excessive sexual indulgence.

##### Mansiknidana:<sup>[1]</sup>

-*Akrodha, Acinta* and *Harshanityatva*.

##### Prakriti based Nidana<sup>[1,2]</sup>

- The individuals who are *Sukumaar*, obese and consuming unwholesome diet are mainly affected. Overweight person also surrenders the exercise schedule so chances of getting *Kaphamedasdusti* are increased. *Kaphamedasdusti* further add up to the etiology of this disease.

##### Agantuja Nidana (Miscellaneous factors)

- Exogenous factors which vitiate the *Dosha* and *Dhatu*.

##### Nidana of Vatarakta vis-à-vis Etiology of Gouty Arthritis

The comparison of etiology of the disease according to Ayurvedic as well as modern view is as follows.

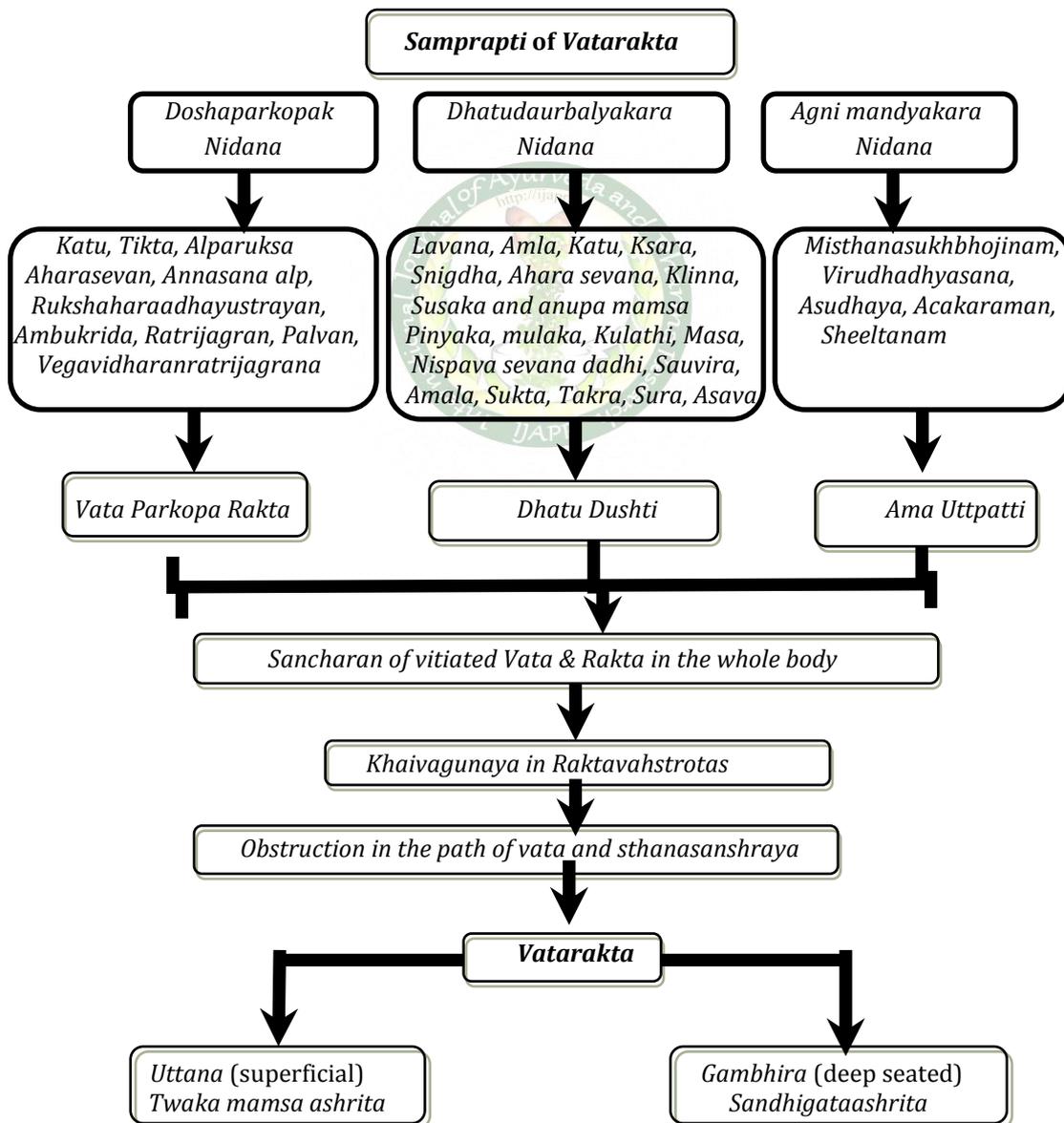
1. **Lavana rasa**- Dehydration is discussed as provoking cause of gout attacks and salt is the leading cause of dehydration. Excess salty food does not allow water to excrete out of the body and no flushing of uric acid from the body occurs. So *Lavana* rasa precipitate the gout.
2. **Shaak**- The intake of high purine rich diet like spinach or asparagus, cauliflower etc. vegetables can cause gout attack. [13]
3. **Mulak, Kulath, Masha, Nishpaav**- Raddish, legumes (dried beans, peas), pulses (along with testa) are rich in purine which on metabolism form uric acid as end product. [7]
4. **Dadhi, Takra**- These dairy products are also rich in protein content so they can also increase the uric acid level but according to recent researches, dairy products help in reducing serum uric acid.
5. **Anoopdeshiyamansa, Ambujamansa**- All non-vegetarian foods mainly seafood like salmon, mackerel and red meat contain large amount of purines. [8]
6. **Arnala, Souvira, Shukta, Sura, Asava**-These fermented drinks also contain high purine content. According to modern science, alcohol consumption is a significant risk factor for gout because it reduces urate excretion and increases urate production in blood. [8]
7. **Anashana, Langhana**- As in starvation like condition, body starts metabolizing its own tissues (purine rich) for energy. So in this condition, amount of purine converted to uric acid is raised. Starvation like stress condition also hampered the kidney's ability to excrete uric acid due to competition for transport between uric acid and ketones. [8]

- 8. Mithyahara, Virudhashan-** Ingestion of food/drinks kept in lead lined container or its inhalation when handling it on daily basis (occupationally like in plumbers, painters etc.) leads to chronic lead poisoning, which is also an etiology factor for gout (V. Batuman et. al, 1968). Other than this, excessive ingestion of certain drugs like aspirin, diuretics can be included in *Mithya Ahara*.<sup>[10]</sup>
- 9. Ikshu, Mishthannabhojana-** These food items are rich in fructose. Fructose rich diet (fruit juices and fructose rich sweetened soda) is found to be the common cause for gout attacks. It increases uric acid production during its phosphorylation by increasing adenosine triphosphate (ATP) degradation to adenosine monophosphate (AMP), a uric acid precursor. So within minutes after ingestion of fructose infusion, uric acid concentration is increased.<sup>[10]</sup>
- 10. Shushkaahara** –Water is responsible for diuresis in the body so removes acidic wastes from the body. Decreased amount of water inside the body causes

retention of acidic wastes in the blood including uric acid, which should be flush out from the body, causing hyperuricemia.

- 11. Achankraman-**Gout is also known as “Disease of Kings” or “Rich man’s Disease” since long time, because it is linked with sedentary lifestyle. Though the disease affects anyone in society but found to be more prevalent in persons with sedentary lifestyle.<sup>[10]</sup>
- 12. Abhigataj-**Trauma like stress full conditions is also a trigger factor for gout attacks.<sup>[8]</sup>
- 13. Ativyayam, Ativyavaya-**Excessive muscular exertion (by doing heavy work) leads to increased degradation of ATP into AMP, which helps in raising the uric acid level.<sup>[8]</sup>
- 14. Sthaulya-**Obesity, in present days, is not an independent cause but main risk factor of gout. According to Campion EW.et al, 1987, Body Mass Index (BMI) is a significant predictor for the development of gout.<sup>[10]</sup>

**Samprapti**



## Pathya- Apathya

**Pathya for Vatarakta:** The cereals like the old Barley, wheat, *Sali* as well as *Shashtika* types of rice should be included in diet. Leafy vegetables like *Kakamachi* (*Solanum nigrum*), *Vastuka* (*Chenopodium album*), Soup of *Adhaki* (*Cajanus indicus*), *Chanaka* (*Cicer arietinum*), *Masura* (Lentil), *Mudga* (*Psoralea radiatus*) added with *Ghrta* in liberal quantity should be taken. Milk of cow, buffalo and goat is *Pathya* for *Vatarakta* patients.<sup>[1,3]</sup>

**Apathyafor Vatarakta:** *Vatarakta* patients should avoid meats, seafood, high purine vegetables such as asparagus, spinach, peas, cauliflower or mushrooms and alcohol. Persons should also not take hot, heavy *Abhishyandiguna* and *Ushna veeryas* food ingredients as *Masha*, *Kullatha*, curd, sugarcane, radish, alcohol, *Tilataila*, *Kanji*, *Saktu*, jackfruit and brinjal etc. Also avoid sleep during day time, exposure to heat, intercourse, excessive exercises and excessive intake of pungent, saline and alkaline taste. Incompatible diets should be avoided by the patients suffering from *Vatarakta*.

**Management:-**Two types of treatment of *Vatarakta* are described.

- Samanya Chikitsa* (General management)
- Vishishtha Chikitsa* (Specific treatment according to classification)

### Samanya Chikitsa

- Shodhana Chikitsa*
- Shamana Chikitsa*
- Rakta-mokshana karma*
- Lepa Chikitsa*

Antahparimarjana Chikitsa

Bahiparimarjana Chikitsa

*Shodhanachikitsa* includes *Snehana karma*, *Virechana karma* and *Basti*.<sup>[1]</sup> Most commonly used drugs for *Shamanachikitsa* in *Vatarakta* are *Gokshura*, *Guduchi*, *Madhuka*, *Punarnava*, *Trivrita* etc. <sup>[1]</sup> and various *Guggulu* preparations. Predominant *Dosha* is recognized and specific treatment is planned keeping the general principle of management in view. Most of these drugs have *Vatashamaka* properties and *Mutra-virechaka* quality so help in excretion of excess uric acid present in the body. Some formulations found to be effective are *Manjishthadi Kvatha*, *Suranjana churana*, *Sukumaraka taila*, *Guduchadi ghrta*, *Kaishore guggulu*, *Gokshuradi guggulu*, *Panchtikta ghrta guggulu*, *Simhanada guggulu* and *Punarnavamrita guggulu*.<sup>[5]</sup>

### DISCUSSION

The main causative factors for *Vatarakta* are excessive use of alcohol, high purine diet, non-vegetarian diet, acidic and astringent foodstuffs, person leading sedentary life, excessive anger and emotional distress. Both *Vata* and *Rakta* play a major role in the pathogenesis of *Vatarakta*. Vitiated *Raktadhatu* obstructs the path of *Vridhhvayu*, in which the *Vayu* has to flow. *Vridhh* and obstructed *Vata* inturn vitiates the whole *Rakta* and this *Dosha-dushya sammurchhana* in joints manifests as

*Vatarakta*. *Pathya* and *Apathya* are very important factors in the management of gout like metabolic disorder. So along with medicine disease can be better controlled by avoiding all such precipitating factors.

### CONCLUSION

The prevalence of life style disorders is rising rapidly. The best thing which can be done in current scenario is to prevent it rather than cure. *Vatarakta* is also a life style disorder of today world. Excessive purine diet and sedentary life style are the causative factor of the disease. Disease can be controlled by adopting certain life style changes like excessive water intake, reducing body weight and low purine diets. In advance cases there may be need of some herbal drugs which can remove excess uric acid present in the body and alleviate symptoms of the disease.

### REFERENCES

- Vaidyajadavaji Trikamji Acharya. Charaka Samhita of Chakrapanidutta (1992) edited by Publishers Munshi Ram ManoharLal Pvt. Ltd. New Delhi.
- Kaviraj Dr. Ambika Dutta Shastri commentary. Sushruta Samhita (1987) Vol-I and Vol-II, Chaukhambha Sanskrit Sansthan Varanasi.
- Sharma Shiv. Ashtanga Hridaya Deepika Hindi Tika (1996) by Publishers Khem Raj, Krishan das Prakashan Bombay.
- VaidyaLal Chandra Shastri. AshtangaSamgraha, Sarvanga Sundari Vyakhya Sahit (1982) 1st edition.
- Inderdeva Tripathi. Chakradutta (1994) Chaukhambha Sanskrit Bhawan Varanasi.
- Upadhyay Yodunanda. Madhav Nidanam Madhukosha Sanskrit Commentary (1993) 22<sup>nd</sup> edition by Publishers Chaukhambha Sanskrit Bhawan.
- Goldman and Bennet. Cecil Text Book of Medicine 2004 Vol. II, Publication-Elsevier p.1703-1708.
- Braun Wals, Fauci. Harrison's Principles of Internal Medicine, 18<sup>th</sup> edition, 2010.
- Sidharth N. Shah Chief editor. API Textbook of Medicine vol.1, 8<sup>th</sup> edition 2008, Chief Association of Physicians of India, Mumbai. p. 283-287.
- Robert L, Wortman & William M. Kelley (2001) - Kelley's Textbook of Rheumatology vol-II 6<sup>th</sup> edition W.B. Saunders Company. p. 1339-1376.
- Clinical Spectrum of Gout in South India, J Indian Rheumatol Assoc 2002:10.
- Bhardwaj S.et al. 2012 (P.G.Thesis)-Comprehensive study of "vayuvridho vridna raktanavarita pthi" in reference to aetiopathogenesis of vatarakta and its management.
- Nafria S.et al. 2014 (P.G.Thesis)-A Clinical Study to Evaluate the Effect of Guduchyadi Ghrta in the management of Vatarakta w.s.r. to Primary& Secondary Hyperuricaemia.

#### Cite this article as:

Vikas Rana, Anjana Mishra, B.L.Mehra. A Comprehensive Study of Vata Rakta w.s.r. to Gout. International Journal of Ayurveda and Pharma Research. 2017;5(8):93-96.

Source of support: Nil, Conflict of interest: None Declared

#### \*Address for correspondence

Dr. Vikas Rana

Dept. of Kayachikitsa

R.G.Govt. P.G. Ayu. College & Hospital, Paprola, H.P., India.

Email: [vikas8rana@gmail.com](mailto:vikas8rana@gmail.com)

Mobile: 09418884849