

A CONCEPTUAL STUDY ON ROLE OF *TRIVRITADI KWATH* IN VATARAKTA (GOUT)

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ABSTRACT

Vatarakta is a chronic disorder which cause inflammatory condition with pain and impairment in the locomotor function. Etiology and symptomatology of Gout is certainly similar to that of *Vatarakta*. *Vatarakta* is one of the main articular diseases, characterized by severe pain, stiffness, inflammation and pain with movement, burning sensation in the affected joints. It is a *Tridoshaja Vyadhi*, having *Vata Pradhanyata* and *Rakta* as main *Dushya*. Static lifestyle is one of the etiological factors of *Vatarakta*. *Trivritadi kwath* is selecting because it is effective, cheap and easily available for this dreadful condition of joints. *Bhavprakash Samhita* has described the efficacy of *Trivritadi*

Kwath in the management of *Vatarakta* due to its *Vataghna*, *Pittaghna* and *Raktashamak* properties.

KEYWORDS: *Vatarakta*, Gout, life style, *Trivritadi kwath*.

INTRODUCTION

Vatarakta is a *Tridoshaja Vyadhi*, having *Vata Pradhanyata* and *Rakta* as main *Dushya*. Fast lifestyle disturbs *Vata* and fast food *Dushit Rakta* at the same time, which gives birth to *Vatarakta* disease. *Vatarakta* is a variety of *Vataroga* which results from *Avarana* of morbid *Vata Dosha* by vitiated *Rakta Dhatu*. *Vatarakta* is a disease related with *khavaigunya* found in *Raktavaha Srotas* that includes vitiated *Vata* and *Rakta*.^[1] These both vitiated *Doshas* get localized in the big toe of the foot or in the thumb of the hand. The disease further spreads to whole body like a virulent rat poison. The etiology and symptomatology of Gout is certainly similar to that of *Vatarakta*.

Gout is a chronic disorder which cause inflammatory condition with pain and impairment in the locomotor function. Gout is a metabolic disorder of protein metabolism which results from deposition of monosodium urate monohydrate crystals in joint space causing inflammatory arthritis.^[2] The incidence of Gout is 0.2 to 2.5 per 1000, with an overall prevalence of 2-26 per 1000. Gout is uncommon in children and pre-menopausal females in India.^[3] The fundamental biochemical hallmark of gout is hyperuricemia which results from increased production or decreased excretion of uric acid.^[4]

According to modern treatment, anti-inflammatory drugs, NSAID's, glucocorticoids are used to treat Gouty Arthritis symptomatically which have many adverse effects making the disease chronic after prolong usage. Therefore, there is a certain need to explore more efficacious and radical cure to this illness.

Bhavprakash Samhita has described the efficacy of *Trivritadi kwath* in the management of *Vatarakta chikitsa* due to its *Vataghna, Pittaghna* and *Raktashamak* properties.

COMPREHENSION OF VATARAKTA

Nidan – *Lavana, Amla, Katu, Kshara, Snigdha, Ushna Food, Ajirna Bhojan, Klinna Shushka Bhojan, Ambuja Mamsa, Anupa Mamsa, Pinyaka, Moolaka, Kulattha, Masha, Nishpava, Shaka, Dadhi, Adhyashana, Krodha, Diwaswaap, Ratri Jagaran* and *Sukumaratva*.^[5]

Lakshana - The two types or stages of *Vatarakta* as described in *Ayurveda* – *Uttana* and *Gambhira*.

Uttana Vatarakta Lakshana- blackish, red and coppery skin color associated with itching, burning sensation, pain, stretching, piercing pain, quivering and contraction.

Gambhira Vatarakta Lakshana- swelling, stiffness and hardness with severe pain inside, blackish or coppery, having burning sensation, piercing pain, quivering and inflammation, associated with distress and burning in stomach.^[6]

Samprapti - When a person takes excessive foods and exposes to lifestyle activities which aggravate *Vata* and causes *vata dushti*. On the other-hand *Rakta* gets vitiated by consumption of *lavana, amla, katu, kshara* etc and causes *rakta dushti*. Then *dushita rakta* obstructed the path of *dushita vata*. *Vata* gets vitiated further and vitiates *dushita rakta* again which leads to mutual obstruction of path by each other. Due to *sukshmatwa* and *saratwa* properties of *vayu*

and *saratwa* and *drawatwa* properties of *rakta*, both *vata* and *rakta* spreads and takes *ashraya* in *sandhies* due to *vakrata*. This perverse amalgamation of vitiated *vata* and *rakta* is called *Vatarakta*. This is said to be a dangerous fusion which causes serious painful symptoms.^[7]

Principle of Ayurvedic Management^[8]

In *Ayurveda*, the status of health and etiopathogenesis of disease depends upon status of *Agni* (digestion and metabolism). Therefore, the treatment is based upon correcting the digestion and metabolism. The *Shaman Chikitsa* of *Vatarakta* includes many drugs which are taken in single or combination form. Some drugs are *Vataraktantak Rasa*, *Kaishore Gugglu*, *Bodhivriksh Kashaya*, *Trivritadi Kwath*, *Amrita (Guduchi)* etc.

TRIVRITADI KWATH

Acharya Bhavprakash gives the description of *Trivritadi kwath* for the management of *Vatarakta*. It contains three ingredient *Trivrit*, *Vidarikand*, and *Gokshur* which has the properties that reliefs from the symptoms of *Vatarakta*. The Pharmacological properties^[9] are.

S.No.	Name of drug	Botanical Name	Rasa	Guna	Virya	Vipak	Dosha karma
1.	<i>Trivrit</i>	<i>Operculina terpehum</i>	<i>Tikta, Katu</i>	<i>Laghu, Ruksha, Tikshna</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kaphapitta sansodhak</i>
2.	<i>Vidarikand</i>	<i>Pueraria tuberosa</i>	<i>Madhur</i>	<i>Guru, Snigdha</i>	<i>Shita</i>	<i>Madhur</i>	<i>Vatapitta shamak</i>
3.	<i>Gokshur</i>	<i>Tribulus terristis</i>	<i>Madhur</i>	<i>Guru, Snigdha</i>	<i>Shita</i>	<i>Madhur</i>	<i>Vatapitta shamak</i>

PROBABLE MODE OF ACTION OF TRIVRITADI KWATH

Trivrit: On the basis of *Rasa*: *Tikta* and *Katu rasa* are present in *Trivrit*. There is a predominance of *Vata* and *Akash mahabhut* in *Tikta rasa* and *Vata & Agni mahabhut* in *Katu rasa*, hence having *deepan* and *pachan* properties.^[10] As *Agnimandhyata* is one of the causative factor for *Vatarakta*, hence *Katu* and *Tikta rasa* helps in *Jathragnideepan*.

On the basis of Guna: *Laghu*, *Ruksha*, and *Tikshna guna* are present in *Trivrit*. *Laghu*, *Rukhsa* and *Tikshna guna* has *Lekhan*, *Shoshan* and *Shodhan* properties respectively.^[11] *Shodhan* property of *tikshna guna*, helps in clearance of *Strotas Avarodha* and *Lekhan & Shoshan* property of *Ruksha* and *Tikshna guna* helps in opening of closed channels i.e., ‘*Srotansi Vivrinoti*’ caused by *Ama*.

On the basis of Virya: *Trivrit* has *Ushna Virya*, due to which it helps in pacifying *Vata Dosha* and helps in relief the symptoms which are caused by vitiated *Vata*.

On the basis of Vipak: *Katu vipak* is present in *Trivrit*. There is a predominance of *Vayu*, *Akash* and *Agni Mahabhut* in *Katu Vipak* which improves *Agni* i.e., *Jathragni* and thus helps in *Ama pachan*.

On the basis of Dosha karma and Aushdha karma: *Trivrit* has *Anulomak*, *Virechak*, *Shothahar* and *Shoolahara* properties.^[12] *Vata* and *Rakta* are main factors for *Vatarakta*. *Trivrit* is known as best *sukh-virechaka dravya* and according to *Aharya Charak Virechan* is best treatment for *Pitta Dosha*. *Rakta* has *Ashrayashrayi bhava* with *Pitta*, so it pacifies *Pitta* and *Rakta* also. *Anulomak* property of *Trivrit* pacify *Vata Dosha*.

Vidarikand and Gokshure

On the basis of Rasa: *Vidarikand* and *Gokshur* has *Madhur Rasa*. Due to *Madhur Rasa* they pacifies *Vata* and *Pitta Dosha*.^[13] As *Rakta* is *Dushya* of *Pitta Dosha*, so also pacifies *Rakta Dhatu*.

On the basis of Guna: *Guru* and *Snigdha Guna* is present in *Vidarikhand* and *Gokshur*. These *Guna* helps in pacifying *Vata Dosha*^[14] and patient got relief in symptoms caused by vitiated *Vata Dosha* like *Sandhishoola* and pain on movement of joints.

On the basis of Virya: *Vidarikand* and *Gokshur* has *Shita Virya*, due to which they pacifying *Pitta Dosha* and helps in relieving symptoms caused by vitiated *Pitta Dosha*.

On the basis of Vipak: *Vidarikhand* and *Gokshur* has *Madhur vipak*. Due to *madhur vipak*, both helps in pacifying *Pitta dosha*.^[15] Because of *Pitta shamak* property, patient got relief in symptoms like *Raga*, *Vidaha* and *Sparshasahtawa*.

On the basis of Dosha karma and Aushdha karma: *Vidarikand* has *Vatapitta shamak*, *Shonitasthapan*, *Mutral*, *Dahaprashamak* and *Shothaghna* properties. Due to these properties it pacifies *Vata*, *Pitta* and *Rakta* (as *Rakta* is *dushya* of *pitta dosha*). It also having *Rasayan* and *Balya* properties hence gives strength to the *srotas* and also helpful for *Apunarbhav Chikitsa*. *Gokshur* has *Vata-pitta Shamak*, *Shothahar*, *Vedanasthapak*, *Mutral* and *Anulomak* properties. So it pacifies *Vata*, *Pitta Dosha* and *Rakta Dhatu* (*Rakta* has *Ashrayashrayi bhava* with *Pitta*).^[16]

All these properties of *Trivritadi kwath* yield high efficacy in the treatment of *Vatarakta*.

DISCUSSION

The management of Gout occurs through two ways: 1. Management of symptoms. 2. Breaking down the pathology – it will happen by two set of medications.

- a) Inhibition of xanthine oxidase
- b) Excretion of uric acid.

As *Vatarakta* is co-related with Gout. So *Vatarakta* is also treated by two ways according to modern parlance. Now the pharmaco-dynamic aspect of *Trivritadi kwath* in modern parlance is as follows.

1. Management of symptoms.

- In *Trivritadi kwath*, pain and inflammation symptoms of disease is reduced due to anti-inflammatory and analgesic properties of *Trivrit* and *Gokshur*.
- The anti-arthritis activity of *Trivrit* helps in reducing the symptoms of *Vatarakta*.^[17]
- *Gokshur* has anti-urolithic activity which works on the other associated symptoms of the disease like stone forming tendency.^[18]
- The anti-oxidant and immunomodulatory activity of *Vidarikand* and *Gokshur* helps in the recovery and healing of deformed tissue.^[19]

2. Breaking down of Pathology

- i. Inhibition of xanthine oxidase: Xanthine oxidase inhibitors decreases the production of uric acid by interfering with xanthine oxidase enzyme. In *Trivritadi kwath*, *Gokshur* works as a xanthine oxidase inhibitor like Allopurinol which suppresses the production of uric acid. *Gokshur* contains saponin, phenolic compounds as chemical constituents and provides rich source of flavonoids like kaemiferol and quercetine. They works as a natural xanthine oxidase inhibitors.^[20]
- ii. Excretion of uric acid: As *Gokshur* is a natural uricosuric^[21], so it increases the excretion of uric acid by reducing its reabsorption once kidney have filtered it out of the blood. *Gokshur* and *vidarikand* has diuretic activity which excretes excess amount of uric acid from the body. *Vidarikand* has anti-oxidant and rejuvenating activity which helps in the rejuvenation of the joint along with breaking the pathology of the disease.

CONCLUSION

It is concluded that *Trivritadi kwath* has been mentioned according to *Rasa- panchaka*. It possesses many properties like anti-inflammatory, antioxidant, analgesic, anti-arthritis and diuretic. Due to uricosuric property it reduces the level of serum uric acid, which is a hallmark for the diagnosis and prognosis of *Vatarakta*. These properties show that *Trivritadi kwath* are acting on *Vatarakta* and useful in treating *Vatarakta*.

REFERENCES

1. Sushruta, Sushruta Samhita, Varanasi, Chaukamba orientalia, 7th edition, Nidana sthana, 2008
2. Davidson's principles and practice of medicine, 20th edition, Pub, Churchill Living Stone, Elsevier, 2006; 1111.
3. API Textbook of medicine, edited by GS Sainani, 6th edition, Association of physicians in India, 1999; 1028.
4. Harrison's principles of Internal medicine, 15th edition, Mc. Graw Hill Company, Columbus, 2001; 1994.
5. Agnivesha, Charaka Samhita, Chaukamba orientalia, Varanasi, 5th edition; 2009.
6. Agnivesha, Charaka Samhita, Chaukamba orientalia, Varanasi, 5th edition; 2009.
7. Agnivesha, Charaka Samhita, Chaukamba orientalia, Varanasi, 5th edition; 2009.
8. Ajay kumar sharma, Kayachikitsa, chaukamba orientalia, Varanasi, vol. II, 2014.
9. Acharya Priyavrat Sharma, Dravyaguna Vigyan, Chaukambha Bharti Academy, Varanasi, vol II, 2012; 419.
10. Dr. Prakash L. Hedge, DR. Harini A., Dravyagun Vijnana, Chaukambha Publications, New Delhi, Edition, 2011; Vol I, p. 207.
11. Dr. Prakash L. Hedge, DR. Harini A., Dravyagun Vijnana, Chaukambha Publications, New Delhi, Edition, 2011; Vol I, p. 163.
12. Acharya Priyavrat Sharma, Dravyaguna Vigyan, Chaukambha Bharti Academy, Varanasi, vol II, 2012; 419.
13. Dr. Prakash L. Hedge, DR. Harini A., Dravyagun Vijnana, Chaukambha Publications, New Delhi, Edition, 2011; Vol I: 207.
14. Dr. Prakash L. Hedge, DR. Harini A., Dravyagun Vijnana, Chaukambha Publications, New Delhi, Edition, 2011; Vol I: 163.
15. Dr. Prakash L. Hedge, DR. Harini A., Dravyagun Vijnana, Chaukambha Publications, New Delhi, Edition, 2011; Vol I: 283.

16. Acharya Priyavrat Sharma, Dravyaguna Vigyan, Chaukambha Bharti Academy, Varanasi, vol II, 2012; 632 & 739.
17. Shweta Gupta and Akash ved, Operculina turpethum (Linn.) Silva Manso as a Medicinal Plant Species: A Review on Bioactive components and Pharmacological properties, Pharmacogn Rev, 2017 Jul-Dec; 11(22): 158-166. (PMCID: PMC5628523, PMID:28989252).
18. Anita Patil and Bipin D. Lade, Pharmacological Aspects of Tribulus Terrestris Linn. (Goksuru): Progress and Prospects (<https://www.researchgate.net/publication/287994592>).
19. Anita Patil and Bipin D. Lade, Pharmacological Aspects of Tribulus Terrestris Linn. (Goksuru): Progress and Prospects (<https://www.researchgate.net/publication/287994592>).
20. Shalini Kapoor Mehta and Naira Nayeem, Natural Xanthine oxidase inhibitors for management of Gout: A Review, Research and Reviews: Journal of Medical and Health Sciences, (p-ISSN: 2319-9865, p-ISSN: 2322-0104).
21. Veeram Anjali, G. Sindhu, C. Girish: An overview of uricosuric Drugs and their screening methods, Indo American Journal of Pharmaceutical Research (ISSN No: 2231-6876).