



Review Article

Volume 11 Issue 6

Nov-Dec 2022

A REVIEW ON *BHARNGIARKA* IN *NAVAPRATISYAYA*

Dr.Aparna V. K¹, Dr.Ratheesh.P², Dr.Surejsubash³

¹Final year P.G. Scholar, Department of Kayachikitsa , P.N.N.M. Ayurveda Medical College and Hospital, Cheruthuruthy.

²Professor and HOD, Department of Kayachikitsa, P.N.N.M. Ayurveda Medical College and Hospital, Cheruthuruthy.

³Professor, Department of Kayachikitsa, P.N.N.M. Ayurveda Medical College and Hospital, Cheruthuruthy.

Corresponding author's Email id: aparnaa.vk@gmail.com

ABSTRACT

Pratisyaya is one of the common ailment causing distress in the society in which quality of life is adversely affected. It affects the people irrespective of their age and sex. *Pratisyaya* is a clinical condition in which there is continuous flow or movement of *kaphadidosha* through nostrils. It is a *vata* predominant *tridoshaja* condition. *Pratisyaya* occurs in *siras* which is one among *trimarma*. Acharya Susruta had added a separate chapter for the management of *pratisyaya* which signifies its importance among *nasaroga*. *Navapratisyaya* is the acute stage of *pratisyaya* which affects the body as a whole with *nasasrava*, *kshavadhu*, *sirogurutva*, *aruci*, *jwara*, *arati*, *ruk* and *vaktravairasya*.¹ If left untreated *pratisyaya* leads to *dushtapratisyaya* and other diseases of head.² So there is a need for an earlier and effective intervention. The drug *bharngiarka* is mentioned in *Arkaprakasa*.³ It is *tikta-katurasa*, *ushnaveerya*, *katuvipaka* with *kasa-swasa-peenasa-jwarahara* properties. *Bharngiarka* is a preparation which can subside *pratisyaya* by its *deepana*, *kaphasamana* and *vatanulomana* properties.

INTRODUCTION

Ayurveda is an ever existing science since the *guna* and *karma* of *tridoshas*, *lakshana* or characteristic features of *prakriti*, attributes such as *rasa*, *guna*, *veerya*, *vipaka* and *prabhava* of *dravya* remains the same forever irrespective of *desa* and *kala*. Ayurveda acharyas considered *bala* as the determining factor of *arogya* and all the treatment modalities are aimed for attaining *arogya*. Ayurveda always considered the *bala* of a person in preventive as well as curative aspects. Acharyas have described about the ways to increase *bala* in preventive aspect and to conserve *bala* in curative aspects. The *bala* can vary from person to person. So only by considering the *bala* of a *rogi*, we should select the appropriate treatments. We can find the fact that *agni* is responsible for the formation of *ojas*. *Bala* can be considered as the reflection of *ojas*. *Vishamasana*, *adhyasana*, *bhaya* and *soka* can lead to *agnivaishamya*. This can further lead to *ojakshaya* and thereby *balakshaya*. *Bala* or *vyadhikshamatva* can be considered as the factor which enable us to fight against the disease condition and to prevent the occurrence of the same. In short, we can say that *bala* is the power which corrects the altered physiological functions. In our science we can find a lot of measures to increase our *bala* by following *dinacarya* and *ritucarya* in preventive aspects and through *rasayana* in curative as well as preventive aspects. This *bala* will be compromised when the disease condition *pratisyaya* is not treated well. In our classics *pratisyaya* is explained in *nasagataroga*. Although it is a *nasagataroga* it affects our body as a whole and compromises the quality of life with irritability and restlessness. This restricts the patients from their day to day activities and gives rise to disturbed sleep patterns. This irritating disease condition causes absence from school and work places. More than 10 million people are suffering from cold in India annually. In adults 2-3 times of cold episodes occurs in a year. Out of the *nasagataroga*, *pratisyāya* is most important one as it is capable of producing several other diseases of head. It may occur as an independent disease as well as a premonitory symptom or as a secondary symptom of various diseases.

In *Susrutasamhita*, Dalhana commentary a separate description of *pratisyaya* as *ama* & *pakva* is mentioned. This differentiation is based on the stage of the disease. In *Susrutasamhita* a separate chapter is mentioned for the treatment of *pratisyaya* which signifies its importance. For the proper management, it is classified as *navapratisyaya* and *pakwapratisyaya*. Acharya Dalhana has quoted the opinion of Vriddha Sushruta regarding the stages of *pratisyaya* as *ama* and *pakva*.

Amapratisyaya is also called *navapratisyaya* which signifies its acute onset. The symptoms of *ama* stage includes anorexia, distaste in mouth, nasal catarrh, pain, aversion to everything, heaviness of head, sneezing and fever. The symptoms of *pakwa* stage includes thick yellow discharge from the nostrils along with relief in congestion of nose, oral passage and head. *Navapratisyaya* or *amapinasa* is the initial stage of *pratisyaya* where *ama* is involved. AcaryaSusrutha and Madhavakara have explained about *navapratisyaya* separately. *Navapratisyaya* if not treated in time will lead to *pakwaavastha* and can results further more complications such as *badhirya*, *andhatwa*, and *aghranatwam*. In present scenario, we can see that most of the viral fevers are associated with *lakshana* of *navapratisyaya*. In this *mala roopakapha* causes *vatavaigunya* due to *srotorodha*. We can understand the association of *ama* in these conditions. In *pratisyaya*, *doshakopa* occurs with predominant *vatadushti*. So we should do *agnideepana*, *vatanulomana* and *kaphaharachikitsa* in *pratisyaya*. *Navapratisyaya* mostly resembles with acute rhinitis (Common Cold) which is a frequent infectious disease with inflammatory responses. If *pratisyaya* is not treated well it will cause *kshaya* of the body and will reduce bala. Inorder to remove the *srotorodha* due to *malaroopa kapha* and subsequent *vatavaigunya*, a drug which possess *katu-tiktarasa*, *ushnaveerya*, *katuvipaka* with the property of pacifying *pratisyaya*, *jwara* and *vata* is needed. *Bharngi* is one such drug that possesses these properties. When prepared in an *arka* form, additional attributes of *laghutva* and *sookshmatwa* will provide the desired effects at a faster rate.

Drug details

Bharngi

Latin name: *Clerodendrum serratum* (Linn.)

Family: Verbenaceae

Vernacular names

Malayalam: Cheruthekk

Hindi: Bharangi

Synonyms:

Patma

Barbarika

Brahmanayashti

Kardamagandha

Kasaghni

Angara valli

Bhargavi

Distribution: Throughout India in forests upto 1,500 metre elevation.

Plant: Slightly woody shrub with bluntly quadrangular stems and branches, leaves usually three at a node, sometimes opposite, oblong or elliptic, coarsely and sharply serrate. Flowers are blue , many in a long cylindrical thyrus with a pair of bracts. Fruits are a four lobed purple durpe somewhat succulent with one pyrene in each lobe.

Parts used: Roots, leaves.

Properties and uses: The roots are bitter, acrid, thermogenic, anti-inflammatory, digestive, carminative, anthelmintic, expectorant and anti spasmodic are useful in vitiated conditions of *kapha* and *vata*, inflammations, dyspepsia, anorexia, colic, cough, asthma, bronchitis, skin diseases, leucoderma, leprosy and fever

Rasapanchaka of Bharngi

Rasa: Katu-thikta

Gunam :laghu-ushna

Veeryam: ushnam

Vipakam: Katu

Karma: deepani-pachani, kasa-swasahara, hikka-kaphaghni, peenasa-yakshma haram, jwarahara in action.

References in samhitas and nighantus

Charakasamhita– *Shwasa* and *Hikka*⁴

Susruthasamhita- Acharya Susrutha explained Bharangi as useful in *Apasmara*⁵.

Chakradatta– useful in *Gandamala, Galaganda, Kuranda, Shwasa*.

Vangasena– useful in *VatajaKasa, Bradhana, Kuranda*⁶

Bhavaprakasha Nighantu-*Sotha, kasa, Shwasa, Peenasa, Jwara*⁷.

DhanwantariNighantu- *Gulma, Jwara, Vatarogas, Rajayakshma, Peenasa.*

Raja Nighantu- *Kasa, Shwasa, Sopha, Vrana, Krimirogas, Daha, Jwara*

Bharngi is tikta-katu rasa, ushnaveerya ,katuvipaka, vatahara, jwarahara and kasahara. So it is indicated in *swasa, kasa, sotha, vrana, krimi, daha, peenasa* and *jwara*.

In Sodalanighantu, *deepana* property of *bharngi* is mentioned along with *kasa-swasa-jwaranasana* properties.

PHYTOCHEMISTRY

The major groups of chemical constituents present in the *Clerodendrum* genus are carbohydrates, phenolics, flavonoids, terpenoids and steroids. Carbohydrates Generally, D-mannitol has been found in the roots of the Plant. Flavonoids The isolated flavonoids like hispidulin and cleroflavone possess potent antioxidant, anti-microbial, anti-asthmatic, anti-tumour and CNS binding activities.

Terpenes: Terpenes isolated from plant like betulin, oleanolic acid, clerodermic acid, betulinic acid, friedelin and monomelittoside had weak CNS activity, strong molluscicidal and fungi toxic activities.

Phenolics: Some of the phenolic compounds isolated were serratagenic acid, acteoside, indolizino and verbascoside which possess biologically activities such as anti-oxidant, anti-microbial, anti-proliferative, antihypertensive and anti-cancer activities.

Steroids: Steroids are terpenes based on the cyclopentaneperyhydroxyphenanthrene ring. Chiefly, γ -sitosterol, β -sitosterol, cholestanol, clerosterol, campesterol and 24- ethyl cholesterol were reported to be isolated from the plant.

PHARMACOLOGICAL ACTIVITIES

Anti-inflammatory activity: The ethanolic root extract of *C. serratum* showed significant anti-inflammatory activity in carrageenan-induced oedema in rats, and also in the cotton pellet model in experimental mice, rats and rabbits at concentrations of 50, 100 and 200 mg/kg⁸.

Bronchodilator activity: Aqueous extract of leaves possess bronchodilator property⁹.

Allergic Asthma: Icosahydricpicenic Acid (IHPA) a new pentacyclic-triterpenoidsaponin was first isolated from roots of *Bharangi*. IHPA at the dose of 100mg/kg showed significant showed significant protection of mast cell degeneration (59.62%) as compared to standard sodium cromoglycate (64.48%). The compound also revealed significant inhibitory activity on histamine induced gout tracheal chain preparation¹⁰.

Wound healing activity: Ethanolic extracts of roots and leaves of *Bharangi* were obtained and their wound healing potency was evaluated on Albino rats. The results shows higher wound healing potency of root extract as compared to leaf extract.

The antihistamine activity of alcoholic extract and saponin isolated from root bark of *Clerodendrum serratum* in rats is reported. *Bharangi* is the drug of choice in the treatment of respiratory disorders such as *Shwasa*, *kasa* and *Peenasa*. It is also useful in the treatment of other disorders like *Sotha*, *Gulma*, *Galaganda*, *Vatavyadhis*, *Vrana* etc. The plant was found to be useful as Bronchodilator, in allergic Asthma, anti-inflammatory, anti-cancer, Hepato protective, and for its anti-microbial properties.

Discussion

Nasasrava can be equated with rhinorrhoea in which *malaroopakapha* is eliminated through *nasa*. *Nasa* is the main seat of *kapha* and the *indriyaartha* corresponding to it is *gandha*. Due to *abhishtyanda*, *nasasrava* occurs. Here *katu-thiktha rasa*, *rukshaguna* and *ushnaveerya* of *Bharngiarka* helped to bring about *amapacana*, *srotosodhana* and *kledasoshana*.

Sneezing or *kshavathu* is a natural response of our body to expel out *dooshitamalas*. In *pratisyayamalaroopakapha* is formed and the body will try to eliminate it. When *amapacana* and *kledasoshana* occurs *kshavathu* will subside.

Without *kapha* there is no *kandu* and the nasal itch denotes *kaphadushti*. When *dooshitakapha* gets mitigated by virtue of the properties of *Bharngiarka* (*Katu-thiktha rasa* and *ushnaveerya*) the symptom nasal itch will be relieved.

Nasal block denotes the obstruction of *vata* in *nasa* which is one of the *bahirmukhasrotas*. When *margardha* of *vata* by *kapha* is getting cleared, *nasavarodha* or nasal block will be cured.

Aruchi is caused due by the *indriyaupatapa* generated by the obstruction of the *vatadosha* by the *malaroopakapha*. *Vata* in its natural state is the responsible factor for the perception of the senses (*gandhana*), here the obstruction of the *vata* causes the disruption in the perception of the normal senses. The treatment of *aruchi* involves the administration of *thiktha rasa*. *Bharangiarka*, by its *thiktha-katurasa* helps in removing the *malaroopakapha*, thereby relieving the *indriyaupatapa*. The restoration of the obstructed *vata* thus regained its normal functions including *gandhana*.

Indulgence in various *kaphaprakopakanidana* causes the *kaphavidhi* in *shiras* leading to the *gaurava* in *shiras*. *Bharngi* is *katuthiktha* in *rasa*, *ushnaveerya* and *laghu-rooksha* in *guna* and *arka* in general is *laghu* in nature. These properties are antagonistic to *dooshitakapha*, and helps in relieving the *shirogurutwam*.

Conclusion

Pratisyaya is a *vata* dominant disease with movement of *kaphadidoshas* through *nasa*. Since it affects the *uthamanga* the patients suffer from *indriyaupatapa* due to *avarana* of *kapha*. *Bharngi* is *katu-thiktha rasa*, *katuvipaka* and *ushana veerya* which helps to bring about the normalcy of vitiated *kapha* which causes *nasavarodha*, *nasasrava*, *kshavathu*, *aruchi* and *kandu*. The *rookshaguna* and *ushna veerya* of the drug along with *katu-thiktha rasa*, *katuvipaka* results *amapachana* and *kledashoshana*. When the *avarana* by *malaroopakapha* subsides the *gati* and *gandhana karma* of *vata* will be regained. *Bharngi* is a drug of choice in ayurvedic materiamedica especially for respiratory disorders. Moreover anti inflammatory and anti pyretic effect of ethenolic root extract of *Bharngi* had proven in rats. Icosahydronic acid (IHPA), a saponin extract was proved to have significant protection against mast cell degeneration. The pharmacological study supports the anti histaminic and anti inflammatory action of the drug which is helpful to cure the disease condition.

References

1. Vaidya Jadavji Trikamji Acarya. *Susrutasamhita* of *Susruta* with *Nibandha Sangraha* commentary of *Sri Dalhanacarya* & *Nyayacandrika Panjika* of *Sri Gayadasacarya* on *Nidanasthana*. ChowkhambaKrishnadas Academy, Varanasi.Reprint, 2004. Chapter 24, *Pratisyaya pratishedha*; P652.Sloka no.16.

2. Vaidya Jadavji Trikamji Acarya. Susrutasamhita of Susruta with Nibandha Sangraha commentary of Sri Dalhanacarya & Nyayacandrika Panjika of Sri Gayadasacarya on Nidanasthana. Chowkhamba Krishnadas Academy, Varanasi. Reprint, 2004. Chapter 24, Pratisyaya pratishedha; P652.Sloka no.16.
3. DrSunilkumar. Arkaprakasam. Original Sanskrit text with prose translation. Samarat publishers, Thrissur. Sept-2019-E1.Triteeya satakam;P 72
4. Agnivesha Charaka Samhita by Dr. Ram Karan Sharma and Vaidya Bhagwan Dash, Choukumbha Sanskrit series office, Varanasi, 2009, volume 4, chikitsasthana, 110/17, P 146.
5. Acharya Susruthasamhita by Narayan Ram Acharya kavyatirtha, Chaukambhasur Bharati prakashan, Varanasi volume 2, 38-41/61, P 802
6. Vangasena's Vangasenasmhita by Dr. Nirmal Saxena Chowkhamba Sanskrit series office Varanasi, volume 1, 1st edition, 17/16 page 295.
7. Bhavaprakash Nighantu edited by Pt. Sri Brahmasankara Misra and Sri Rupalalajivaisya, Choukambha Sanskrit samsthan 5th edition, part 1, Harityadivarga . P101. Sloka no. 183.
8. Narayanan N., Thirugnanasambantham P., Viswanathan S., Vijayasekaran V., Sukumar E. Antinociceptive, Anti-inflammatory and Antipyretic Effects of Ethanol Extract of Clerodendrumserratum Roots in Experimental Animals. J Ethnopharmacology. 1999; 65: 237-241.
9. Singh Mukesh Kr, Khare Gaurav, Iyer Shiv Kr, Sharwan Gotmi and Tripathi DK. Clerodendrum Serratum – A clinical approach; Journal of Applied Pharmaceutical science; 2012; 2(2) 11-15
10. Nal Bhujbal, Santosh S et al. protective effects of Icosahydopicenic Acid isolated from the roots of Clerodendrumserratum (L) moon on experimental allergic Asthma, Journal of complementary and integrative medicine, 2010; (7)