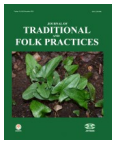
Volume 11 (01 & 02) December 2023, 36-39
ISSN 2278- 5906
http://jtfp.jntbgri.res.in



Journal of Traditional and Folk Practices

A review on the role of *Vasa avaleha* in *jwara upadrava kasa*

Devi D Das*, Arjun Chand C P, Arun Pratap and Kasthuri Nair A

Department of Kayachikitsa, Pankajakasthuri Ayurveda Medical College and PG Centre, Thiruvananthapuram - 695 572, Kerala, India

*deviddas1990@gmail.com

Received: 02 June 2023 Accepted: 13 November 2023

Abstract

The complication of cough due to fever is known as *jwara upadrava kasa.* It has become a prevalent issue affecting the majority of our population. The chronicity of this disease is increasing over time due to the emergence of different types of viral fevers. The usage of antibiotics is not a permanent solution. *Vasa avaleha* is one of the effective ayurvedic formulations to treat this condition. This medicine is *srothoshodhana* (cleansing channels), *agnivardhana* (enhancement of digestive fire) and *rasayana* (rejuvenation) in action, vasicine, a chemical constituent present in *Justicia adhatoda* L., and the alkaloid piperine found in *Piper longum* L., exhibit broncho-dilatory as well as immunomodulatory action. *Vasa avaleha* primarily acts on the respiratory tract. The present review is an attempt to understand the pathogenesis of this disease and the probable mode of action of *Vasa avaleha* in *jwara upadrava kasa*.

Keywords: *Aganivardhana, Leenadosha, Rasayana, Srothoshodhana*

1. Introduction

Jwara upadrava (complications of fever) are considered as the complications that persist after the recovery of fever. In western science they are known as sequelae of fever. *Swasa* (dyspnoea) *murcha* (fainting) *aruchi* (anorexia), *chardi* (vomiting), *trishna* (thirst), *athisara* (diarrhoea), *vitgraha* (constipation), *hikka* (hiccough), *kasa* (cough) and *angabheda* (cramps all over the body) are the ten *jwara upadravas* mentioned in Vangasena Samhitha (Vangasena, 2004).

Among them, *kasa* (cough) is the more prevalent *upadrava* (complication) in this scenario. The pathophysiology underlying *jwara upadrava kasa* (complication of cough due to fever) involves vitiation of respiratory channels due to the *malaroopa* (vitiated) *kapha* (one of the *tridosha*, a functional unit according to Ayurveda) and aggravated *vata* (one of the *tridosha*, a functional unit according to Ayurveda). As the fever progresses, there is depletion of bodily fluids leading to drying up of *malaroopa kapha.* This results in adherence of the impurities to the respiratory channels, obstructing the normal movement of *vata.* Consequently, the body attempts to expel these impurities, leading to the development of cough as a reaction.

The stage of disease closely related to *jeerna jwara* (fever after acute infective phase) where the vitiation of *leena dosha* (deep seated *dosha*) is the main factor causing cough. Therefore, for treatment *srothassodhana* (purification of channels), *deepana* (digestive stimulation) *pachana* (digestive enhancement) as well as *rasayana* (rejuvenative) drugs should be selected for this condition. By analyzing the properties, *Vasa avaleha* (a medicated semisolid preparation) is considered one of the suitable medicines of this aliment.

Vasa avaleha, mentioned in the text book "Bhavaprakasa", Rajayakshma adhikara (11th chapter)

has specific indications for *kasa* (cough), *swasa* (dyspnoea), *rajayakshma* (tuberculosis), *parswasoola* (pain in the sides), *hritsoola* (chest pain), *rakta pitta* (bleeding disorders) and *jwara* (fever). It is prepared using *vasa swarasa* (juice of *Justicia adhatoda* L.) *pippali* (*Piper longum* L.), *sitasarkara* (sugar candy (*Saccharum officinarum* L.)), *ghrita* (ghee) and *madhu* (honey) (Bhavaprakasa, 2002).

This medicine is administered only when the patient has good digestive power. If the *jwara upadrava kasa* (complication of cough due to fever) persists with symptoms of *ama* (indigestion), the medicine is contraindicated in that condition. This is because the preparation is *snigdha* (oily) and *guru* (heavy), which can lead to digestive impairment. Therefore, this medicine can be prescribed only after considering the digestive strength of the patient.

2. Materials and methods

Data were collected through a comprehensive literature review of various Samhithas (classical texts) and published research articles. Logical explanations were formulated by critically evaluating the properties of the drugs and understanding the pathophysiology of the disease.

3. Results and discussion

Vasa, *pippali*, *sitasarkara*, *ghrita* and *madhu* are used for the preparation of *Vasa avaleha*. Botanical identity of the drugs, parts used and the quantity of each drug required for the preparation are mentioned in Table 1. This information will help in collecting the authentic drugs for preparation. Fig 2 explains the classical method of preparation of *Vasa avaleha*. The ayurvedic properties of each drug, such as *rasa*, *guna*, *veerya vipaka* and *karma* are explained in Table 2. The chemical constituents of the *vasa* and *pippali*, along with its modern pharmacological action are mentioned in the Table 3.

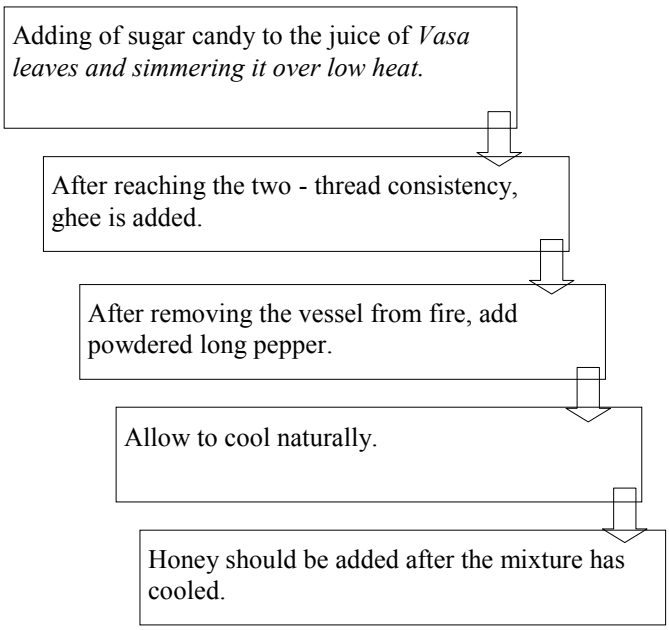


Fig. 1. Method of preparation of *Vasa avaleha*

3.1. Probable mode of action

Vasa, *pippali*, *sitasarkara*, *ghrita* and *madhu* are the ingredients of *Vasa avaleha*. Although all the ingredients play a role in alleviating the disease, *vasa* and *pippali* have a major role in breaking down the disease process. *Ghrita* (ghee), *madhu* (honey) and *sitasarkara* (sugar candy) act as supportive agent to relieve the disease. The *malaroopa sushka kapha* (dry and sticky *kapha*) in the respiratory channels is the causative factor of *jwara upadrava kasa*. Analysing the properties of each ingredient, *ushna guna* (warming quality) of *pippali* liquefies the dry *kapha* adhered within the respiratory channels (Sastry, 2004). In this process, *ghrita* act as liquefying agent due to its *snigdha guna* (oily quality), *lekhana guna* (scraping property) of *madhu* helps to remove the *kapha* from the channels. *Sitasarkara* by its *madhura rasa* (sweet tase) and *snigdha guna* balances the *vata*. Moreover, the

Table 1. Ingredients and quantity

Sl. No.	Drugs	Botanical name/common name	Family	Part used	Quantity
1	*Vasa*	*Justicia adhatoda* L.	Acanthaceae	Leaf (juice)	768 ml
2	*Pippali*	*Piper longum* L.	Piperaceae	Fruit	96 gm
3	*Sitasarkara*	*Saccharum officinarum* L.	Poaceae	Stem (extract)	384 ml
4	*Ghrita*	Ghee	-	-	96 gm
5	*Madhu*	Honey	-	-	384 ml

Table 2. Properties of drug

Sl. No.	Drug	*Rasa*	*Guna*	*Virya*	*Vipaka*	*Karma*
1	*Vasa*	*Tikta*	*Laghu* *Ruksha*	*Sheetha*	*Katu*	*Kapha pittahara* *Kasahara Swasahara* *Swarya*
2	*Pippali*	*Katu*	*Laghu* *Snigdha* *Theekshna*	*Ushna*	*Madhura*	*Tridoshahara* *Srothosodhaka* *Deepana* *Vrishya* *Ruchya Rasayana*
3	*Sitasarkara*	*Madhura*	*Snigdha*	*Sheetha*	*Madhura*	*Ruchya* *Vatapittahara*
4	*Ghrita*	*Madhura*	*Snigdha* *Guru*	*Sheetha*	*Madhura*	*Tridoshasamana* *Yogavahi*
5	*Madhu*	*Madhura* *Kashaya*	*Guru* *Ruksha*	*Sheetha*	*Madhura*	*Kaphavatahara* *Lekhana*

Table 3. Chemical constituent and modern pharmacological action

Sl. No.	Drug	Chemical constituent	Modern pharmacological action
1	*Justicia adhatoda* L.	Vasicine, Vasicinone, Vasicinolone ,Vasinol	Bronchodilation, Expectorant, Anti-bacterial, Anti-oxidant, Anti- inflammatory
2	*Piper longum* L.	Piperine, Metylpeperin, Peperidine, Iperonaline, Sesamin	Anti-inflammatory, Hepatoprotective, Immunomodulatory,

main component, *Vasa* help to remove the *kapha* and normalise the movement of *vata* in the respiratory channels by *katu vipaka* and specific action such as *swasakasahara* property (relieving asthma and cough) (Sastry, 2004).

Vasa has been extensively used for treating a range of respiratory conditions. It is recommended as a potent bronchodilator and antitussive drug even in modern science. Derivatives of *vasa* such as bromhexine and ambroxol are effective against various respiratory ailments like asthma, COPD and tuberculosis (Atish *et al.,* 2021). Chemical constituents like vasicine and vasicinone found in *Vasa* also exhibit broncho dilatory effects.

Piperine is a major alkaloid isolated from fruits of *pippali* (*Piper longum* L.) that has the capacity to inhibit the release of Th2-mediated cytokines and eosinophil infiltration. The alcoholic extract of *pippali* exhibits immunomodulatory action (Kavita *et al*., 2021). Both *vasa* and *pippali* acts as good remedies for treating respiratory tract infections.

In various classical texts, *acharyas* have mentioned the *kasaghna* (cough relieving*) swasaghna* (asthma relieving) and *kshayaghna* (consumption relieving) properties of *vasa* (Bhavaprakasa, 2001). *Pippali* is also noted for its properties including have *swasa kasahara* (relieves cough and asthma), *deepana* (digestive stimulant), *rasayana* (rejuvenative), *kaphahara* and *srothosodhaka* (cleansing channel) actions (Bhavaprakasa, 2001). *Ghrita* is described as pacifying to *vata-pitta*, and *brimhana* (nourishing) (Vagbhata, 2008). *Madhu* is noted for its *kaphahara* (reducing *kapha*) and *lekhana* (scraping) properties (Vagbhata, 2008). *Sitasarkara* (sugar candy) is described as *madhura* (sweet), *ruchya* (appetizing), and pacifying to *vata* and *pitta* (Bhavaprakasa, 2001).

While individually analysing the properties of drugs, most of the ingredients exhibit *sheeta veerya* (cooling properties) which tend to aggravate *vata*. However, the combined action of these drugs indicates *srothassodhana* (channel cleansing), *agni vardhana* (enhancement of digestive fire) and *rasayana* (rejuvenative) which is evident from the indication themselves.

Vasa avaleha acts against the obstruction of the respiratory channels through the combined action of its ingredients. *Sukshma* (subtle) and *theekshna guna* (penetrating) qualities of *vasa*, *pippali* and *madhu* help to remove accumulated phlegm from the throat and chest. Ingredients such as *sitasarkara*, *ghrita* and *pippali* facilitate the proper movement of *vata* and pacify excessively aggravated *vata*. *Ghrita* and *pippali* also act on the site of *pitta* improving the function of digestive fire, thereby aiding in normal digestion and metabolism. Furthermore, the formulation helps in boosting immunity through its rejuvenating action, thereby protecting the body from recurrent attacks.

4. Conclusion

Vasa avaleha has a remarkable effect on the *jwara upadrava kasa*. It aids in removing the *leena dosha* from the channels, especially from the respiratory channels, restoring the normal movement of *vata dosa* and thereby relieving cough. *Ghrita* and *pippali* exhibit rejuvenating action, which helps to strengthen the *dhathu* (tissue) and acts as a rejuvenator. Additionally, they assist in maintaining normal digestive fire. *Vasa avaleha* emerges as a potent remedy for the treatment of cough due to fever in the present times.

Acknowledgements

I extend heartfelt gratitude to the management of institution, all other faculty members and PG scholars for their valuable guidance and support.

References

Atish Gheware, Dhwani Dholakia, Sadasivam Kannan, Lipsa Panda, Ritu Rani, Bijay Ranjan Pattnaik, Vaibhav Jain, Yash Parekh, M Ghalib Enayathullah, Kiran Kumar Bokara, Venkatesan Subramanian, Mitali Mukerji, Anurag Agrawal, and Bhavana Prasher 2021. *Adathoda vasica* attenuates inflammatory and hypoxic responses in preclinical mouse models: potential for repurposing in COVID-19-like conditions. Respir. Res. 22(99). https://doi.org/10.1186/s12931-021-01698-9.

Bhavaprakasa 2001. Translated by Srikantha Murthy K R, Poorva Khanda,Guduchyadi Varga 6th Chapter 88th -90th sloka. Krishnadas academy, Chowkhamba Press, Varanasi. ed 2nd .1: pp 241.

Bhavaprakasa 2001. Translated by Srikantha Murthy K R. Poorva Khanda, Hareethakyadi Varga 6th Chapter 53rd - 58th sloka. Krishnadas academy, Chowkhamba Press, Varanasi. ed 2nd .1: pp 167.

Bhavaprakasa 2001. Translated by Srikantha Murthy K R, Poorva Khanda, Ikshu Varga 6th Chapter 30th sloka Krishnadas academy, Chowkhamba Press, Varanasi. ed 2nd.1: pp.493.

Bhavaprakasa 2002. Translated by Srikantha Murthy K R, Madhyama Khanda. 11th Chapter 54th-56th sloka. Krishnadas academy, Chowkhamba Press, Varanasi. 2: pp.236.

Kavita Gulati, Pankaj Verma, Nishant Rai and Arunabha Ray 2021. Role of nutraceuticals in respiratory and allied diseases, In: Nutraceuticals (2nd ed), Academic Press, USA. Pp.101-115. https://www.sciencedirect.com/topics/agricultural-and-biological-sciences/piper-longum.

Sastry J L N 2004. DravyagunaVijnana. Chaukhambha orientala,Varanasi 2: pp.407, 452.

Vagbhata 2008. Ashtanga Hridayam,Sutra Sthana. Translated by Sreekumar T 5th Chapter, 42th -45th sloka and 57th -58th sloka; Publication department of Harisree Hospital, Mannuthy , Thrissur,Kerala.1. pp 129 and 133.

Vangasena 2004. Vangasena Samhitha. Translated by Nirmal Saxena Jwara Chikitsa 840th sloka. Chowkhamba Sanskrit Series Office, Varanasi. ed 1st. 1: pp.100.