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Lavangadi Vati - An Ayurvedic Epitome for Communicable Disease W.S. R Respiratory System



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ABSTRACT

Ayurveda is medical treatment that is practiced in various parts of the world from centuries ago. Ayurveda follows a unique treatment form which can be used for curative and preventive aspect which slow down the process of ageing, restore physical and mental strength and prevent the consequences of ageing by administration of herbal and Herbo mineral medication. Most of developing countries are bombarding with the serious threat of communicable disease. The objective is to evaluate the efficacy of Lavangadi vati in the cure of communicable disease w.s.r respiratory system. Lavangadi vati help to reduce the persistent cough, soothe the throat, liquifies the excess mucous in the chest region. For boosting immune system Lavangadi vati is the best Rasayana (rejuvenation) working on Pranavaha Strotas (respiratory system). By proper following of nidana parivarjana (avoiding causative factor), santarpana apatarpana chikitsa (nourishing-depleting treatment), achara rasayana (right conduct), proper dietary habits as asta vidha ahara visheshayana (rules of food intake) and various naimittika rasayana (rejuvenation), we can ward off communicable disease. Along with the shodhana chikitsa (cleansing treatment), in order to alleviate the uneasiness of cough and cold, Lavangadi vati is a ready reckoner which is explained in this article.



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INTRODUCTION:

Infectious diseases are spreading tremendously all over the world. Traditional health care system like *Ayurveda* is right choice to treat infectious diseases.¹ Infectious or Communicable disease can be defined as an illness caused by another living agent, or its products, that can be spread from one person to another. Infection is a kind of invasion of the body by pathogenic microorganisms leading to various diseases². As per *Ayurveda* the understanding of disease not completely depend on infectious pathogen only. *Ayurveda* follows a holistic approach in treating diseases with due regards to body and mind. As per *Ayurveda* diseases strongly affect mind. If the mind is not in healthiest state, it slows down healing process. So personalised intervention needed by considering the host and environment factors.

“*Aupasargika rogas*”, i.e., diseases which are transmitted from person to person and *Janapadodhamsa* (epidemic) is a state of widespread outbreak of infectious disease wherein many people are infected at the same time are the two infectious conditions explained in *ayurveda* with immense importance. Respiratory infections are ranked as the greater supplier of disease all over the world, due to urbanisation and industrialization especially it is spreading drastically among the people due to low socio-economic condition and high population in developing countries. The infective disorders like SARS, H Influenza and Covid like haunting diseases are the byproduct of these scenario. A large number of people are getting infected at the same period creating a huddle to the public health⁴.

In *Ayurveda* such health conditions are explained under *Kasa*(cough) and *Lavangadi Vati* (tablet) is one frequently used formulation for the management of *pratisyaya* (rhinitis) associated with *kasa*. One of the causative factors of cough includes the various infections in the upper and lower respiratory tracts which can be considered as a *krimija* (viral) disease. *Kasa* caused by *H. influenza* can be easily remedied by *Lavangadi vati* formulation.⁶ This formulation specifically acts on respiratory tract diseases and has also been proven to be useful in *Covid -19*.⁷

MATERIALS AND METHODS:

When we go through the current scenario of covid -19, patients are affected by the disease both physically and mentally. For boosting immune system *Lavangadi vati* is the best *Rasayana* working on *Pranavaha Strotas*. Each ingredient is very effective due to their antipyretic, antiallergic, immunomodulatory, anti-inflammatory, and analgesic properties. It is

used in *Ayurvedic* treatment of productive and non-productive cough, cold and allergic rhinitis. It helps in the maintenance of strong immune system. *Lavangadi Vati* is used in managing repeated episodes of respiratory infections, as an immunomodulator, skin disorders, Dyspepsia & Hyperacidity. As this *vati* is known to bring about a balance in the stomach acids, so one can never suffer from acidity by regularly using this *vati*. The dosage of *Lavangadi vati* is 1 tablet (1gm) chewable form at frequent intervals.

DRUG REVIEW:

Table 1: *Lavangadi Vati*⁸

Sl No	Sanskrit Name	Botanical Name	Part Used	Ratio	Chemical Constituent	Pharmacological Activity
1	<i>Lavanga</i>	<i>Syzygium aromaticum</i> (Linn.) Merr Myrtaceae	Floral bud	1part	Eugenol Flavonoids Triterpenes Beta-caryophyllene	Anti-microbial Antiviral Antipyretic Fungicidal Bactericidal
2	<i>Maricha</i>	<i>Piper nigrum</i> Linn Piperaceae	Fruit	1part	Piperine Piperanol Piplatrine Steroids	Antimicrobial Carminative Antipyretic Anti-fungal
3	<i>Vibhitaka</i>	<i>Terminalia bellarica</i> Roxb. Combretaceae	Pericarp	1 part	Fructose Galactose Glucose Mannitol Belliricanin Tannin	Anti-microbial Antiviral Anti-helminthic Lung tonic Expectorant Broncho dilatory
4	<i>Khadira</i>	<i>Acacia catechu</i> (Linn. f.) Willd. Leguminosae	Heartwood	3parts	Catechin Epicatechin Kaempferol Quercetin Triterpenoid	Anti-bacterial Antibiotic Antimicrobial Analgesic Anti-pyretic
5	<i>Babbula</i>	<i>Acacia arabica</i> Willd. Leguminosae	Stem- bark	Q. S	Tannins Kaempferol Polyphenolic Glycoside Iso-quercetin	Anti-microbial Demulcent anti-helminthic Anti-asthmatic Analgesic Anti-bacterial Antiviral

PREPARATION OF LAVANGADI VATI^{9, 10, 11}

After proper identification and quality assessment; *lavanga*, *maricha*, *vibhitaka* one part each and *khadira* 3 parts will be powdered separately and sieved. In the preparation of *Babbula kwatha* for *bhavana*(trituration)process, dried *babbula* bark will be made into coarse powder. *Babbula kwatha*(decoction)will be prepared in the ratio 1:16 reduced to 1/8th part. The ingredients of *Lavangadi churna* will be mixed homogeneously. *Babbula kwatha bhavana* will be given to the *Lavangadi churna* till the attainment of proper bolus and then pills are prepared of size of a pea.

Most of the ingredients of *Lavangadi vati* shows the pharmacological property of *Katu Vipaka* (*pungent secondary taste*), *UshnaVeerya* (*hot potency*), *Katu-Tikta-Kashaya Rasa* (*pungent-bitter- astringent taste*), and *Ruksha, Tikshna guna*(dry-sharp quality) and hence *thridoshahara* (*mitigates vat-pitta-kapha*)property. The drugs of *lavangadi* produce significant relaxation of bronchioles. *Kasa*(cough)and *swasa*(asthma)caused by *sanga*(block)and *vimargagamana*(reversed flow) of *srotas*(body channels) and *kapha*and *pitta prakopa*(aggravation)is cleared by the *ushna virya, katu, tiktarasa* and *kasa swasa hara* property of ingredients. So,it proves *Lavangadi vati* is very in *kapha pitta* predominant *kasa* and *shwasa*.

DISCUSSION

HUMAN

The most common respiratory-related communicable disease is acute bronchitis. A virus, Bacteria or allergen may cause airways of the patient to get inflamed, swollen, producing yellow or green mucus that cause severe cough. Symptoms usually begin 3 to 4 days after an upper respiratory infection and disappear after two or three weeks. In the context of bronchitis, the *Pranavaha srotas*(the airways along with the heart) are affected as the *Prana* (vital energy) from air is not supplied to the tissues. The body is made up of multiple functional channels known as *Srotas*. The *tridoshas* vitiate the *dhatu* (tissue elements) and causes impairment of the *srotas*, which manifests as disease. In a nutshell, *Pitta dosha* triggers the inflammatory process which makes the healthy *srotas*, basically *kapha*, to melt thereby producing excess mucus secretion. This excess secretion blocks the channels and thus the movement of *Vata* is impaired. This impaired *Vata* is experienced as *kasa* and *swasa*.¹²

Each ingredient is very effective due to their antipyretic, antiallergic, immunomodulatory, anti-inflammatory and analgesic properties. Drug in *Lavangadi vati* acts on respiratory tract

disorders like *kasa*, *Shwasa*, *Pratisyaya*, *Jwara* etc. which are most common signs of respiratory tract infections.

The presence of eugenol OVA-induced eosinophilia recovered IL-4 and IL-5 levels, inhibited P-I κ B α , NF κ BP65, and p-NF- κ BP65 protein levels, and increased VDUP1 and I κ B α protein levels. Flavonoids in lung disease could be attributed to an antioxidant and anti-inflammatory effect¹³. Inflammation is involved in all lung diseases, and its inhibition could ameliorate lung function as well as avoid lung remodeling especially Quercetin, Kaempferol glycoside¹⁴. Epicatechin-tannin helps in Supressed inflammatory response, and alveolocapillary membrane permeability. The presence of the piperine decrease the infiltration of eosinophils and reduced airway hyperresponsiveness by suppressing T cell activity and Th2 cytokine production¹⁵. The Phytochemical study shows that *lavangadi vati* has many phytochemical-like phenolic compounds and natural steroids, which prevent the release of free radicals and act as an antioxidant, in this way helps in reducing the severity of *Shwasa* and *kasa*. It also shows bronchodilator and expectorant property. By these property *lavangadi vati* help in breaking the pathogenesis of *Shwasa* and *kasaroga*.

Due to overpopulation and unhygienic conditions, infectious diseases are spreading all over the world. The government undertaking various measures to huddle this situation by vaccination and other measures which are temporary only. The holistic approach of ayurveda helps to get effective cure from this condition and treat the people physically, mentally and spiritually. After proper *Shodhana chikitsa*, *rasayana* therapy had proved its efficiency in the treatment of communicable disease. By the therapeutic and pharmacological action *lavangadi vati* is proven to be an easy and instant reliver from respiratory-related infectious diseases.

Following the *Ritucharya*, *Dinacharya* and *achara rasayana* helps in preventing the disease. Under *achara rasayana* mentioned all those measures to control source of infection, interrupt routes of transmission and immunize the host so that communicable disease can be prevented.

CONCLUSION

The clinical picture of epidemic disease will not vary from person to person because of the common factors involved. But the intensity of symptoms varies according to the immunity of the person. Along with the shodhana chikitsa and in order to alleviate the uneasiness of cough and cold, *Lavangadi vati* is a ready reckoner with its immediate action. *Lavangadi vati* is an

epitome that can be easily prepared, dispersed and immediate result also can be provided to patient who are suffering from respiratory-related communicable diseases.

CONFLICT OF INTEREST

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