***Review Article***

**A CRITICAL APPRAISAL OF *VATIKA KASA* (ALLERGIC BRONCHITIS) THROUGH THE LENS OF AYURVEDIC PRINCIPLES**

**Abstract**

Classical *Ayurveda* describes *Vatika Kasa* as a serious clinical illness that is predominantly caused by *Vata dosha* aggravation and manifests as a cough disorder. Chest pain, hoarseness of voice *(Swarabheda*), a dry or spasmodic cough (*Shuska Gala*), Chronic coughing, wheezing, and mucus production are some of its symptoms. It is primarily caused by the vitiation of ***Vata Dosha***, one of the three fundamental bio-energies in *Ayurved.* The respiratory ailment known as allergic bronchitis is characterized by inflammation of the bronchial tubes brought on by exposure to allergens. Pathologically, aggravated *Vata* impairs the functioning of the respiratory system, particularly affecting the Pranavaha Srotas (respiratory channels). Management includes *Vata*-pacifying therapies such as the administration of warm, unctuous, and nourishing foods, herbal formulations (like *Dashamoola, Vasavaleha*), medicated oils for Abhyanga (oil massage), Swedana (sudation), and Nasya (nasal medication). *Ayurveda* provides a comprehensive therapy approach that includes food control, herbal medication, and lifestyle modifications, whereas Alternative medicine concentrates on immunomodulation and symptomatic alleviation. Understanding *Vatika Kasa* from both *Ayurvedic* and modern perspectives provides a holistic approach to the management of chronic and dry cough conditions. It emphasizes lifestyle modifications and natural remedies to restore doshic balance and respiratory health. The purpose of this article is to examine the integrative potential, etiology, pathophysiology, clinical characteristics, and compare the two therapeutic methods in *Vatik Kasa* (allergic bronchitis).

**Key words:** Acute, *Ayurveda,* Bronchitis, *Kasa, Pranavaha Srotas, Shawasa, Tamaka, Vata*

**INTRODUCTION**

*Kasa* is a common respiratory symptom that can occur as a sign of various systemic illnesses or as a separate illness. According to *Doshik* predominance, *Kasa* is divided into five categories in *Ayurveda,[[1]](#endnote-1)* viz *Vataja, Pittaja, Kaphaja, Kṣataja,* and *Kṣayaja*. *Vata Dosha* impacting the respiratory system and main cause of *Vatika Kasa (Vataja Kasa*). According to *Sushruta*, *Vatika Kasa* can arise from *Vata* being disturbed by Assault by smoke and dust, more of physical exercise, consuming dry foods, particles of food moving in wrong paths (into the trachea), suppression of sneezing, bad eating habits, prolonged fasting, intense activity, or exposure to cold and dry air[[2]](#endnote-2). respiratory illnesses such as *Tamaka Shwasa* and *Kasa Roga* are intimately associated with allergic bronchitis. In the classics of *Ayurveda* explanation of *Kasa* disease resembles cough, and its pathophysiology precisely correlates with the action of the cough reflex.According to the *Ayurvedic* literature, it is caused by an imbalance between the *Vata* and *Kapha Doshas*, which obstructs and inflames the respiratory pathways. *Prana* and *Udana Vata* are accountable for the normal working of *Praanvaha Srotasa* (respiratory system). The abnormal *Prana Vata* and *Udana Vata* take an unusual course through the throat and mouth along with other *Doshas* and are expelled with a ‘coughing sound’ like the broken-bronze vessel[[3]](#endnote-3). In terms of how it manifests, this illness is similar to some contemporary conditions, such as dry bronchitis, cough variant asthma, and allergy cough. Understanding *Vatika Kasa* is crucial not only for its therapeutic management through *Vata*-pacifying treatments but also for its preventive aspects, emphasizing lifestyle and dietary discipline in alignment with *Ayurvedic* principles.

Cough is the supreme common symptom of respiratory diseases. The primary cause of allergic bronchitis (a form of chronic bronchitis), is exposure to allergens, including dust, pollen, smoke, or chemicals. It is typified by bronchial tube inflammation,[[4]](#endnote-4) which results in coughing, chest pain, and mucus production. The Global Initiative for Asthma (GINA) states that a large percentage of chronic respiratory disorders are caused by allergic components.[[5]](#endnote-5) Understanding the pathophysiology and triggers of allergic bronchitis is crucial for developing a comprehensive and individualized treatment plan to reduce symptoms and improve the patient’s quality of life.

**MATERIALS & METHODS**

This article includes contemporary clinical investigations. Among the sources are Current research databases, such as Google Scholar and PubMed, Ancient *Ayurvedic* writings like *Charaka Samhita, Ashtanga Hridaya, Sushruta Samhita, Sharangdhar Samhita, Bhavprakash Samhita, and Madhav Nidan.* Literature on allergic bronchitis, pertinent clinical trials, and *Ayurvedic* treatments with established or conventionally recognized effectiveness are requirements for inclusion.

**NIDANA (ETIOLOGY)**

The causative factors (*Nidana*) for*Vatika* *Kasa according to Charaka[[6]](#endnote-6)* causative factors of *Vatika* *Kasa* include the intake of *Ruksha* (dry*), Sheeta* (cold), and *Kashaya* (astringent) type of food, as well as consuming food in insufficient quantities, much less than required, or not eating at all. Excessive indulgence in *Vyavaya* (sexual activity), suppression of natural urges (*Vega),* and excessive physical strain also contribute to the manifestation of this condition. These factors collectively aggravate *Vata Dosha*, leading to the development of *Vatika Kasa*, which presents with distinct signs and symptoms*.*

* *Aharaja* (dietary): Intake of dry, cold, or light food; irregular meals
* *Viharaja* (lifestyle): Excessive physical activity, suppression of natural urges, excessive speaking.
* *Manasika* (psychological): Stress, anxiety, and emotional imbalance.

**Table No. 1 Showing Types of *Kasa* according to *Acharyas***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Charak[[7]](#endnote-7)*** | ***Sushruta[[8]](#endnote-8)*** | ***Vagbhata[[9]](#endnote-9)*** | ***Bhavprakash[[10]](#endnote-10)*** | ***Sharangdhar[[11]](#endnote-11)*** | ***Madavakar[[12]](#endnote-12)*** |
| *Vataja,* | *Vataja* | *Vataja* | *Vataja* | *Vataja* | *Vataja* |
| *Pittaja* | *Pittaja* | *Pittaja* | *Pittaja* | *Pittaja* | *Pittaja* |
| *Kaphaja* | *Kaphaja* | *Kaphaja* | *Kaphaja* | *Kaphaja* | *Kaphaja* |
| *Kṣataja* | *Kṣataja* | *Kṣataja* | *Kṣataja* | *Kṣataja* | *Kṣataja* |
| *Kṣayaja* | *Kṣayaja* | *Kṣayaja* | *Kṣayaja* | *Kṣayaja* | *Kṣayaja* |

***PURVA RUPA* (PREMONITORY SYMPTOMS)OF *VATAJA KASA*:**

Prodromal symptoms of *Vatika Kasa* are *Shooka Purna Galasyata, Kantha Kandu, Bhojymanvarodha.*

**Table No. 2 Showing *Purva Rupa* (Premonitory symptoms)of *Vataja Kasa* according to *Acharyas***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Charak[[13]](#endnote-13)*** | ***Sushruta[[14]](#endnote-14)*** | ***Vagbhata[[15]](#endnote-15)*** | ***Bhavprakash[[16]](#endnote-16)*** | ***Madavkar[[17]](#endnote-17)*** |
| Throat and mouth as if covered with awns. | Imitation of the throat. | Irritation in the throat. | Throat and mouth as if covered with awns. | Throat and mouth as if covered with awns. |
| Itching in the throat. | Hinderance to swallowing. | Loss of taste/ appetite.  | Itching in the throat. | Itching in the throat |
| Difficulty in the intake of food. | Coating of the throat and palate. | Feeling as though the throat is full of thorns. | Difficulty in the intake of food. | Difficulty in the intake of food. |
| \_ | Slight disorder of voice. |  | \_ | \_ |
| \_ | Loss of taste. |  | \_ | \_ |
| \_ | Weakness of digestion |  | \_ | \_ |

***SAMPRAPTI* (PATHOGENESIS)[[18]](#endnote-18)**

In the respiratory tract (*Praṇavaha Srotas*) *Prana* and *Udan Vayu,* which are responsible for the flow of air in the respiratory system, aggravated *Vata Dosha* rises and builds up, causing dryness, irritation, and spasmodic coughing. When *Kapha* is lacking, the cough becomes dry and ineffective. *Vayu* impeded from below moves to the upper channels, attains the character of the *Udan Vayu,* and sticks in the throat and chest. Further, it advances to all the orifices of the head and filling them produces breaking pain and jerking in the whole body, particularly causing strain and stiffness in the jaws, carotid region, orbits, eye balls, back, chest, and sides. Thus, a dry or phlegmy cough arises. *‘Kasa’* is so called because of producing the above movements and affliction.

***LAKṢAṆA* (CLINICAL FEATURES)**

Clinical features of *Vatika Kasa* are *Hrit-Shoola, Parshwa Shoola, Uraha Shoola, Shira Shoola* (Excruciating pain in the epigastric region, flanks, chest, and head), *Swara Bheda (*hoarseness of voice), *Shuska Urha Kantha* (Dryness in the chest, throat and mouth), *Hrista Loma (Horripilation and fainting), Nirgosh Denyasthanan (Resonant sound during*), *coughing, Dorbalya* (weakness), *Kshobha* (agitated), *Moha* (illusive perceptions), dry cough with difficulty.

**Table No. 3 Showing *Lakṣaṇa* (Clinical Features) of *Vataja Kasa* according to *Acharyas***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Charak[[19]](#endnote-19)*** | ***Sushruta[[20]](#endnote-20)*** | ***Vagbhata[[21]](#endnote-21)*** | ***Bhavprakash[[22]](#endnote-22)*** | ***Madavakar[[23]](#endnote-23)*** |
| Excruciating pain in the epigastric region, flanks, chest, and head. | Pain in the region of the heart, temples, head, abdomen, and flanks. | Dryness of the chest, throat, and mouth. | Pain in the region of the heart. | Pain in the region of the heart. |
| Hoarseness of voice. | Emaciation of the face. | Pain in the (region of) heart, flanks, and head. | Pain in the region of the head. | Pain in the region of the head. |
| Dryness in the chest, throat, and mouth | Decrease of strength, voice, and valour. | Delusion. | Pain in the region of chest. | Pain in the region of chest region. |
| Horripilation and fainting | Dry cough (not producing sputum) | Agitation of the mind. | Pain in the epigastric region. | Pain in the epigastric region. |
| Resonant sound during breath*.* | Broken voice. | Loss of voice.  | Dryness of mouth. | Dryness of mouth. |
| Weakness. |  | Gives rise to a dry cough accompanied with violent bouts. | Loss of power, voice, and vital energy.  | Loss of power, voice, and vital energy |
| Agitated.  |  | Severe pain and great noise. | Hoarseness of voice. | Hoarseness of voice. |
| Illusive perceptions. |  | Horripilation. | Dry cough | Dry cough |
| Feeling difficulty in sputum. |  | Brings out dry sputum with difficulty. |  |  |

**Contemporary Approach**

The modern medical approach to managing allergic bronchitis centres on controlling inflammation, relieving symptoms, and preventing recurrences. Treatment typically involves the use of medications such as bronchodilators like salbutamol, which help relax and open the airways,[[24]](#endnote-24) and inhaled corticosteroids such as budesonide or fluticasone to reduce inflammation in the lungs,[[25]](#endnote-25) Antihistamines like cetirizine or loratadine are used to manage allergic reactions[[26]](#endnote-26), while leukotriene receptor antagonists such as montelukast help reduce both allergy symptoms and inflammation[[27]](#endnote-27). Mucolytics like Ambroxol aid in thinning mucus, making it easier to clear from the airways[[28]](#endnote-28). Avoiding allergens such as dust, pollen, pet dander, and Mold is essential to prevent flare-ups. In some cases, allergy immunotherapy in the form of shots or sublingual tablets may be used to gradually build tolerance to specific allergens. Supportive care, including adequate hydration, the use of humidifiers to keep airways moist, and sufficient rest, plays a vital role in recovery. Lifestyle changes, such as quitting smoking, reducing exposure to environmental pollutants, and maintaining good indoor air quality, are also important. Regular medical monitoring and lung function tests help track the condition and ensure that treatment remains effective.

***Ayurvedic* Management**

(***Sodhana Chikitsa*** -Purificatory Treatment):-

***Snehana***(internal and external oleation):- *Snehana* or internal oleation by oral consumption of the prescribed medicated ghee. This is done with an aim to extract the toxins from the cellular level to the stomach for the ensuing purging procedure.  *Abhyanga* is a one part of Snehana which can be introduced by external oleation. In *Vatika kasa* management *Sarshapa taila* (mustard oil) mixed with *Saindhav Lavana* (rock salt) to pacify *.four type of snehan described in classical text[[29]](#endnote-29).*Ghrita (clarified butter), oil (of sesame), vasa (muscle fat) and majja (bone marrow) are considered the best sneha. Among these, ghrita is superior as it possesses the qualities of samskara i.e. blending with other substances having different properties without losing its own properties.

***Swedana***(sudation therapy):- It is said that swedana is useful in cough.[[30]](#endnote-30) Steam therapy applied to the chest region (*Urah Pradesh*) to alleviate stiffness and promote circulation. Swedana involves generating controlled heat on the body by massaging it with prescribed oils or powders and herbal steam. The sweating process liquefies the toxins making them easy to be eliminated. Two types of Swedana are indicated in classical text, (1)*saagni sweda* (2)*niragni sweda*. Hense Thirteen varieties of fomentation are *sankara, prastara, nadi, parisheka, avagahana, jentaka, ashmaghna, karshu, kuti, bhu, kumbhika, kupa, and holaka[[31]](#endnote-31)*. ten methods of sweating therapy without fire include exercises, residing in a warm chamber, wearing heavy clothing, restraining hunger, consuming excess liquid (specially alcoholic beverages), fear, anger, poultice, wrestling and exposure to sunlight[[32]](#endnote-32).

***Vasti***(medicated enema):- for systemic *Vata* pacification. *Vasti* is a part of *Panchkarma* or 5 treatment procedures explained in *Ayurveda*. This procedure involves administering of prescribed medicated oils and herbal decoction combinations through the ano-rectal route into the colon to help balance the *Vata* (sometimes through urinary or vaginal route in special case). While it directly affects the colon, it is not a localized or symptomatic treatment. It is a highly specialized procedure to achieve a therapeutic goal and must be carried out in hospital settings by an expert. based on the type of the liquid medicine used (Dravya Bheda) vasti can be classified in to three sub-types. 1.Niruha Basti/kashaya/ashthapana[[33]](#endnote-33) 2.madhu tailika basti 3.anuvasana basti/sneh basti[[34]](#endnote-34).

***Shamana Chikitsa*** – (palliative treatment)

**Table No. 4 Showing *Chikitsa*** **of *Vataja Kasa* According to *Acharyas***

|  |  |  |  |
| --- | --- | --- | --- |
| ***Charak[[35]](#endnote-35)*** | ***Sushruta[[36]](#endnote-36)*** | ***Vagbhata[[37]](#endnote-37)*** | ***Bhavprakash[[38]](#endnote-38)*** |
| *Kantakari Ghrit*. | *Kasahar Yog (Ashu-Phalprad Yog)* | *Snehana,Swedana, Avagahan, Yush, Ras,Lehya,Dhoom, Vasti, Ghritpan-Ksheerpan*. | *Dashmool Siddha Yavagu*.  |
| *Pippalyadi Ghrit*. | *Kasahar Marich Yog, Varti*. | *Guduchyadi Ghrit*. | Kasahar Yog. |
| *Tryuşaņadi Ghrit*. | *Kasahar Dhoom Dravya*. | *Dashmool Ghrit.* |  |
| *Rasna Ghrit.* | Kasahar Sidhu. | *Rasnadi Ghrit.* |  |
| *Chitrakadi Leha*. | *Kasahar Ksheerpak*. | *Ashokadi Ghrit*. |  |
| *Agastya Haritaki*. | *Ni-Digdhadi Churna*. | *Vidangadi Leh.* |  |
|  | *Kasahar Utkarita, peya.* | *Duralabhadi Leh*. |  |
|  | *Kasahar Ghrit*. | *Du-Sparshadi Churna*. |  |
|  | *Virechan.* | *Snehik Dhoompan*. |  |
|  |  | *Sidhdh Peya*. |  |

**Herbal Formulations:** *Yashtimadhu[[39]](#endnote-39)* (Glycyrrhiza glabra) is known for its soothing effects on the mucous membranes and also has anti-inflammatory properties. *Vasa[[40]](#endnote-40)*(*Adhatoda vasica*) supports the breakdown and expulsion of mucus while reducing inflammation. *Tulsi[[41]](#endnote-41)* (*Ocimum sanctum*) strengthens the immune system, acting as a natural immunomodulator. *Haridra[[42]](#endnote-42)* (*Curcuma longa*) offers protection against allergies and inflammation. *Sitopaladi Churna*, *Talisadi Churna* and *Madhuyesti Churna* especially when given with honey, acts as a soothing agent and helps in suppressing the cough. *Vasa Kwatha,Vasa Kantakari Kwatha, Shunthi Bharangi Kwatha, Dashmool Kwatha, Gojhivadi Kwatha* and *Dashmool Kwatha[[43]](#endnote-43)* etc helps reduce inflammation and balances *Vata Dosha*. Other preparation like *Haridrakhanda*, *Vasavleha, Kantakariyadi Avleha, Draksha Avleha, Eladashmulam Avleha, Kantakari Ghrita* is beneficial for easing respiratory issues by lubricating and calming the airways. In addition, internal oleation with medicated oils and ghee, such as *Tila Taila* and various *Ghrita* preparations, supports internal balance and nourishment.

**Diet & Lifestyle Management**

Eating warm, flavourful, and easily digestible foods is beneficial for maintaining good health. It's advisable to avoid foods that are cold, uncooked, or overly dry, as they may disturb the body's natural balance. Staying hydrated with warm water throughout the day supports digestion and overall vitality. Gentle *Yoga* and *Pranayama* exercises can help improve lung function and breathing capacity. Furthermore, practicing relaxation techniques and meditation can effectively reduce stress and promote emotional well-being.

The patient should be kept on a wholesome diet consisting of *Fali* and *Saştika* rice, barley, and wheat with meat soup of domestic, marshy, and aquatic animals. One should take, in *Vatika* cough, liquid gruel processed with *Yavani, Pippali, Bilva* (fruit pulp), *Sunthi, Chitraka, Rasna, Jiraka, Prsniparni, Palasa, Shati,* and *Puskara-Mula* and added with fat, sour substance, and salt. It alleviates pain in the waist, heart, sides, and belly, dyspnoea, and hiccups. He may also take liquid gruel cooked with the decoction of *Dashmool* along with *Panchakola* and jaggery, or one cooked in milk with an equal quantity of Sesamum, or one added with rock salt. Or the patient suffering from *Vatika Kasa* should take liquid gruel prepared of the meat of fish, cock and boar and added with G*hee* and rock salt. *Vastuka, Vayasi, Mulaka,* and *Sunisannaka* (as vegetables), fats such as oil, etc., edibles prepared with milk, sugarcane juice, and jaggery, and drinks of curd, sour gruel, sour fruit juice, and clear wine, along with other sweet, sour, and salty substances, are recommended in *Vatika Kasa.*

**DISCUSSION**

In contemporary medicine, *Vatika Kasa* has clinical parallels to ailments like post-viral cough, chronic irritative cough, and dry bronchitis. Although contemporary medicine provides immediate symptom alleviation, it frequently necessitates long-term drug use with possible adverse effects.

In addition to treating symptoms, *Ayurveda* offers a constitutional and comprehensive treatment plan that addresses the underlying *Doshika* imbalance. By balancing the *Doshas* and boosting immunity, *Ayurvedic* treatment targets the underlying cause, albeit at a slower pace. An integrative strategy may be advantageous. Attack frequency can be decreased by using *Ayurvedic* herbs like *Vasa* with inhaled bronchodilators. Both systems can benefit from *yoga* and lifestyle modification. Gentle *Yoga* and *Pranayama* exercises can help improve lung function and breathing capacity. Furthermore, practicing relaxation techniques and meditation can effectively reduce stress and promote emotional well-being.

 *Panchakarma* and other *Ayurvedic* detoxification techniques may be used in conjunction with contemporary desensitization treatments. However, for *Ayurvedic* remedies to be widely accepted, standardization, quality control, and thorough clinical trials are required. Classical scriptures have extensively recorded the use of *Panchakarma,* particularly *Basti*, in the treatment of persistent *Vata* diseases. *Herbal* treatments exhibit encouraging immunomodulatory, anti-inflammatory, and mucosal healing effects. There are currently few evidence-based clinical trials, though, and more research is needed to confirm this.

**CONCLUSION**

With a thorough approach to diagnosis and therapy, *Vatika Kasa* is a unique clinical entity that has been documented in *Ayurvedic* literature. An efficient and comprehensive therapeutic option is provided by *Ayurvedic* management, which places an emphasis on nutrition, lifestyle changes, and *Dosha*-specific therapies. Its effectiveness in modern practice can be further demonstrated through integrative and translational research. Modern treatment sometimes requires long-term drug use with potential side effects, even though it offers instant symptom relief. Respiratory illnesses such as *Tamaka Shwasa* and *Kasa Roga* are intimately associated with allergic bronchitis. In the Classics of *Ayurveda* explanation of *Kasa* disease resembles cough, and its pathophysiology precisely correlates with the action of the cough reflex.According to the *Ayurvedic* literature, it is caused by an imbalance between the *Vata* and *Kapha Doshas*, which obstructs and inflames the respiratory pathways.

**References**

1. Dr. Brahmanand Tripathi, Charak Samhita, Chaukhamba Surbharati Prakashan, Varanasi, 2019, Chikitsa Sthan 18/4. [↑](#endnote-ref-1)
2. Prof. K. R. Srikantha Murthy, Sushruta Samhita, Chaukhamba Orientalia, Varanasi-2023, English Translation Vol. III Uttara Tantra 52/4. [↑](#endnote-ref-2)
3. Priyanka Ratan Dawane, Manoj Kumar Chaudhari, Yogita Chaudhari, Vataja Kasa Review as per Classical Texts of Ayurveda, Ayurlog - National Journal of Research in Ayurved Science, Oct- Dec 2022, Volume 10th, Issue 4.th  [↑](#endnote-ref-3)
4. J. A., Red P. T. Davidson, S. S. Davidson's Principles and Practice of Medicines, 20th ed. Philadelphia: Churchill Livingstone Elsevier: 2006, page 657. [↑](#endnote-ref-4)
5. GINA 2024 Report: Global Initiative for Asthma. [↑](#endnote-ref-5)
6. Dr. Brahmanand Tripathi, Charak Samhita, Chaukhamba Surbharati Prakashan, Varanasi, 2019, Chikitsa Sthan 18/10. [↑](#endnote-ref-6)
7. Prof. Priyavrat Sharma, Charak Samhita, Chaukhamba Orientalia, Varanasi, 2014, English translation Chikitsa Sthan 18/4. [↑](#endnote-ref-7)
8. Prof. K. R. Srikantha Murthy, Sushruta Samhita, Chaukhamba Orientalia, Varanasi-2023, English Translation Vol. III Uttara Tantra 52/6. [↑](#endnote-ref-8)
9. Prof. K. R. Srikantha Murthy,Ashtanga Hridaya, Chaukhamba Krishnadas Academy Varanasi-2018, English Translation, Vol. II Nidana Sthan 3/17. [↑](#endnote-ref-9)
10. Bhisagratna Pandit Sri Brahma Sankara Misra, Bhav Prakash (Vidyotini Hindi Commentery), Chaukhambha Sanskrit Bhavan Varanasi 2022, vol.2 Chikitsa Prakaran 12/3. [↑](#endnote-ref-10)
11. Dr Brahmanand Tripathi, Sharangdhar Samhita (Dipika-Hindi Commentary) Chaukhambha Surbharti Prakashan-Varanasi-2007, purva khand 7/21. [↑](#endnote-ref-11)
12. Prof. Yadunandan Upadhayay, Shri Sudarshan Shatri, (Vidyotini Hindi Commentary), Sri Vijayalakshita and Srikanthadata (Madhukosh Sanskrit Commentery) Madhav Nidan Chaukhambha Sanskrit Bhavan Varanasi 2002, part-1, 12/5. [↑](#endnote-ref-12)
13. Dr. Brahmanand Tripathi, Charak Samhita, Chaukhamba Surbharati Prakashan, Varanasi, 2019, Chikitsa Sthan 18/5. [↑](#endnote-ref-13)
14. Prof. K. R. Srikantha Murthy, Sushruta Samhita, Chaukhamba Orientalia, Varanasi-2023, English Translation Vol. III Uttara Tantra 52/7. [↑](#endnote-ref-14)
15. Prof. K. R. Srikantha Murthy,Astanga Hrdayam, Chaukhamba Kishnadas Academy Varanasi-2018, English Translation, Vol. II Nidana Sthan 3/18. [↑](#endnote-ref-15)
16. Bhisagratna Pandit Sri Brahma Sankara Misra, Bhav Prakash (vidyotini hindi commentery), Chaukhambha Sanskrit Bhavan Varanasi 2022, vol.2 Chikitsa Prakaran 12/4. [↑](#endnote-ref-16)
17. Prof. Yadunandan Upadhayay, Shri Sudarshan Shatri, (Vidyotini Hindi Commentary), Sri Vijayalakshita and Srikanthadata (Madhukosh Sanskrit Commentery), Madhav Nidan Chaukhambha Sanskrit Bhavan Varanasi 2002, part-1, 12/6. [↑](#endnote-ref-17)
18. Dr. Brahmanand Tripathi, Charak Samhita, Chaukhamba Surbharati Prakashan, Varanasi, 2019, Chikitsa Sthan 18/6-8. [↑](#endnote-ref-18)
19. Dr. Brahmanand Tripathi, Charak Samhita, Chaukhamba Surbharati Prakashan, Varanasi, 2019, Chikitsa Sthan 18/11-13. [↑](#endnote-ref-19)
20. Prof. K. R. Srikantha Murthy, Sushruta Samhita, Chaukhamba Orientalia, Varanasi-2023, English Translation Vol. III Uttara Tantra 52/8. [↑](#endnote-ref-20)
21. Prof. K. R. Srikantha Murthy,Astanga Hrdayam, Chaukhamba Krishnadas Academy Varanasi-2018, English Translation, Vol. II Nidana Sthan 3/22-24. [↑](#endnote-ref-21)
22. Bhisagratna Pandit Sri Brahma Sankara Misra, Bhav Prakash (Vidyotini Hindi Commentery), Chaukhambha Sanskrit Bhavan Varanasi 2022, vol.2 Chikitsa Prakaran 12/5. [↑](#endnote-ref-22)
23. Prof. Yadunandan Upadhayay, Shri Sudarshan Shatri, (Vidyotini Hindi Commentary), Sri Vijayalakshita and Srikanthadata (Madhukosh Sanskrit Commentery) Madhav Nidan Chaukhambha Sanskrit Bhavan Varanasi 2002, part-1, 12/7. [↑](#endnote-ref-23)
24. Allergic bronchitis: Symptoms, Treatment and more: Medically reviewed by Katie Mena. M.D- written by Stephanie Watson- updated on August 23, 2018. Available from: [http://www.healthline.com](http://www.healthline.com/) [↑](#endnote-ref-24)
25. Feng JF, Ding GR, Xie YZ, Zhao D, Wang X. Efficacy of budesonide/formote and tiotropium combination for the treatment of Chinese patients with chronic obstructive pulmonary disease. Medicine (Baltimore). 2018 Jun;97(22): e10841. [PMC free article] [PubMed]. [↑](#endnote-ref-25)
26. Sharma S, Hashmi MF, Chakraborty RK. Stat Pearls [Internet]. Stat Pearls Publishing; Treasure Island (FL): Jun 20, 2023. Asthma Medications. [PubMed]. [↑](#endnote-ref-26)
27. Nanda A, Baptist AP, Divakar R, Parikh N, Seggev JS, Yusin JS, Nyenhuis SM Asthma in the older adult. J Asthma. 2020 Mar;57(3):241-252. [PubMed]. [↑](#endnote-ref-27)
28. Drugs for cough. Med Lett Drugs Ther. 2018 Dec 17;60(1562):206-208. [↑](#endnote-ref-28)
29. Prof. Priyavrat Sharma, Charak Samhita, Chaukhamba Orientalia, Varanasi, 2014, English translation Sutra Sthan adhyay 13 snehadhyaya versa 13. [↑](#endnote-ref-29)
30. Prof. Priyavrat Sharma, Charak Samhita, Chaukhamba Orientalia, Varanasi, 2014, English translation Sutra Sthan adhyay 13 snehadhyaya versa 20. [↑](#endnote-ref-30)
31. Prof. Priyavrat Sharma, Charak Samhita, Chaukhamba Orientalia, Varanasi, 2014, English translation Sutra Sthan adhyay 13 snehadhyaya versa 39-40. [↑](#endnote-ref-31)
32. Prof. Priyavrat Sharma, Charak Samhita, Chaukhamba Orientalia, Varanasi, 2014, English translation Sutra Sthan adhyay 13 snehadhyaya versa 64-65. [↑](#endnote-ref-32)
33. Prof. K. R. Srikantha Murthy, Sushruta Samhita, Chaukhamba Orientalia, Varanasi-2023, English Translation chikitsa sthan adhyay 35 varse18. [↑](#endnote-ref-33)
34. Prof. K. R. Srikantha Murthy, Sushruta Samhita, Chaukhamba Orientalia, Varanasi-2023, English Translation chikitsa sthan adhyay 35 varse 18. [↑](#endnote-ref-34)
35. Dr. Brahmanand Tripathi, Charak Samhita, Chaukhamba Surbharati Prakashan, Varanasi, 2019, Chikitsa Sthan 18/32-62. [↑](#endnote-ref-35)
36. Prof. K. R. Srikantha Murthy, Sushruta Samhita, Chaukhamba Orientalia, Varanasi-2023, English Translation Vol. III Uttara Tatra 52/14-28. [↑](#endnote-ref-36)
37. Prof. K. R. Srikantha Murthy,Astanga Hrdayam, Chaukhamba Krishnadas Academy Varanasi-2018, English Translation, Vol. II Nidana Sthan 3/1-24. [↑](#endnote-ref-37)
38. Bhisagratna Pd. Sri Brahma Sankara Misra, Bhav Prakash (Vidyotini Hindi Commentery), Chaukhambha Sanskrit Bhavan Varanasi 2022, vol.2 Chikitsa Prakaran 12/19-24. [↑](#endnote-ref-38)
39. Dr. K.C. Chunekar, Dr. G.S. Pandey, Bhavprakash Nighantu, Chaukhamba Bharti Academy, Haritkyadi Varg p.145. [↑](#endnote-ref-39)
40. Prof. Ramnath Dwivedi, Dr. Inderdeva Tripathi, Chakradatta, Chaukhamba Sanskrit Bhawan, Varanasi, Chikitsa Sthan 1/4. [↑](#endnote-ref-40)
41. L.N. Dwivedi, *Kasa Roga*: An Ayurvedic Perspective. Chaukhambha Orientalia, (2002). [↑](#endnote-ref-41)
42. Sharma, R. (2021). “Effectiveness of *Ayurvedic* Formulations in Dry Cough: A Clinical Review.” Journal of *Ayurveda* & Holistic Health. [↑](#endnote-ref-42)
43. Patgiri, B.et al. (2018). “Role of *Dashamoola* in Respiratory Disorders.” Ayu Journal. [↑](#endnote-ref-43)