

Review Article

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ETIOPATHOGENESIS AND DIAGNOSIS OF *KAPHAJA KASA*, IT'S CORRELATION WITH CHRONIC BRONCHITIS

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Abstract

Ayurveda described some pathological conditions as symptoms as well as disease; *Kasa* is one such condition which mentioned as symptom as well as independent *Vyadhi* in some Ayurveda texts. Ayurveda literatures encompass details about the pathogenesis, symptoms and treatments of *Kasa*. This condition is described as *Pranavaha srothodusti janita vyadhi* which affects individuals of all age groups. *Kaphaja Kasa* mainly dominated by *Kapha Dosha* along with *Vatadusti*. As per modern science this condition can be correlated with chronic bronchitis which is characterized by the presence of chronic cough and secretion of excessive mucous. Smoking, environmental pollution, exposure to the diversified climatic conditions and awful conceptions of concept of *Ahara-Vihara* are major causes of this condition. Present article explores etiopathogenesis, diagnosis of *Kaphaja Kasa* and its correlation with chronic bronchitis.

Key-Words: *Ayurveda, Kaphaja Kasa, Bronchitis, Etiopathogenesis, Pranavaha*

Introduction

Kasa is a *Pranavaha strotodushti vikara* which is mentioned as disorder of respiratory system and affects large number of population world-widely. *Kaphaja Kasa* is a chronic mucopurulent bronchitis dominated by *Kapha* and *Vata dusti*. *Kaphaja Kasa* can be compared with chronic bronchitis as per modern science. This condition is characterized by chronic coughing and excessive mucus secretion [1-3].

Smoking, dust, environmental pollution, vapors, chemical irritants, allergens and excessive cold conditions, etc. are the major causes of bronchitis. *Kasa* mentioned as a *Swatantra vyadhi* or also mentioned as *Lakshana* of other disease in various Ayurveda texts. *Kaphaja Kasa* sometimes develops as an *Upadrava* of other disease. *Sarvadaihika lakshana* and *Urdvajatrugata lakshana* are symptoms associated with *Kaphaja Kasa*. *Kasahara*, *Kaphahara*, *Shwasahara* and *Vata Shamaka* medicines advocated for the management of such types of conditions.

Kaphaja Kasa being a part of *Pranavaha strotodushti vikara* imparts several difficulties in day to day living. It is classified as *Ardrakasa* and *Shushkakasa*, characterized by chronic cough persisting for months or longer period of time, along with allergic symptoms. Pathologically disease involves thickening of bronchial wall due to the anticipatory responses of allergens [4-7].

Ayurveda considered different approaches for treating *Kaphaja Kasa* which includes *Nidanaparivarjana*, *Shodhana* and *Shamanoushadhi*, etc. Modern medical system suggested uses of expectorants, antibiotics and anti-inflammatory agents, etc. In Ayurveda *Pranavaha Sroto-vikaras* includes conditions like; *Kasa*, *Hikka* and *Shwasa*. These conditions are associated with the symptoms of coughing and breathlessness, etc. Children and elderly peoples are more prone to these conditions due to the diminished state of immunity.

Morbid *Vata* and *Kapha* mainly induce pathogenesis of *Kasa* in *Pranavaha srotas*. *Vimargagamana* of *Pranavayu*, *Avarana* of *Prana Vayu* by *Kapha* and *Doshadushti*, etc. are major pathological events associated with *Kasa* or *Kaphaja Kasa*. The chronic inflammation

of bronchial mucosa leads chronic bronchitis. Chronic bronchitis involves obstruction to the airflow and inflammatory cascade due to the involvement of etiological factors [6-8].

Symptoms

- ✚ Cough (*Kasa*)
- ✚ Sputum (*Kapha Nishteevana*)
- ✚ Dyspnoea (*Shwasa Kricchrata*)
- ✚ Fever occasionally (*Jwara*)

Diagnostic Factors:

- ❖ Examination of productive cough
- ❖ Pulmonary function tests
- ❖ Chest X-rays and CT scans
- ❖ Blood examination and analysis of level of inflammatory mediators
- ❖ The increase in thickness can be quantitatively assessed by micrometer lens/morphometry.

Etiological factor

Smoking habit, exposure to dust, industrial fumes, allergens like pollen grains, hereditary factors, environmental conditions, consumption of excessive cold food materials, exposure to cold atmosphere, noxious gases, frequent respiratory infection and side effects of some medicines, etc. may induces pathogenesis of *Kaphaja Kasa*. *Samanyanidana* for *Kasa* are not mentioned by *Charaka* since *Kasa* is considered as one of the *Pranavaha Srotho Dustijanita Vyadi* which possesses similarity with *Hikka* and *Shwasa*, thus *Pranavahasrotho dusti Nidana* can be considered as *Samanya Nidana* for *Kaphaja kasa*. In this regard *Dhum*, *Rukshanna*, *Raja Vyayam*, *Kshvathu vegavrod* and *Bhojan Vimargagaman*, etc. are described as *Nidana* for *Kaphaja kasa*. Similarly *Abhishyandi*, *Snigdha Ahara*, *Divaswapna*, *Achesta* and *Guru Ahara*, are mentioned as *Vishesha Nidana* for *Kapajakasa*. These all *Nidana* act as *Dosha Hetu* and *Vyanjaka Hetu*, ultimately causes *Samprapthi* of *Kaphaja Kasa* [2-4].

Samprapti of Kaphaja Kasa and Chronic Bronchitis:

Avasthika Samprapthi and *Vega Kalen Samprapti* are two major categories of *Samprapthi* of *Kaphaja Kasa*. As per Ayurveda the etiological factors vitiate both *Vata* and *Kapha* thus initially events of *Udana Vatadusti* and *Kaphadusti* take places. *Kapha* obstruct function of *Udanavata* and take *Stanassamshtaya* in *Kantha*, *Shiras* and *Uraha*. Furthermore *Vegakala Vyanjakahetu* (*Dhuma*, *Shithambu* and *Raja*) fasten up the *Samprapti* of disease leading to the *Kaphajakasa Vega*. The *Samprapti Vighatana* of *Kaphaja Kasa* is depicted in **Figure 1**. *Avarana* of *Kapha* to *Pranavayu* mainly leads chronic bronchitis, *Agni Dushti* also play important role in the *Samprapti* of disease. *Rasa Dhatu* abnormalities bring *Dushya* of *Dhatu* while *Avarana Samprapti* causes *Vilomagati* of *Prana Vayu*. *Vata Kopa* mainly involves at initial level of disease but as prolongation of disease take places *Avarana* of *Kapha* to *Pranavayu* results *Kapha Kasa* [1-3].

Etiopathogenesis of chronic bronchitis also described in details by various literatures of modern science. Bronchial wall becomes thick, edematous and hyperaemic due to the etiological factors. This condition reduces lumina of bronchi which contain mucous or mucopurulent exudates. Increased Reid Index is the main pathological changes that occur in the trachea during the chronic bronchitis. Squamous metaplasia and dysplasia may be express by bronchial epithelia. Goblet cell hyperplasia and peribronchial fibrosis also occurs at the level of small airway in chronic bronchitis.

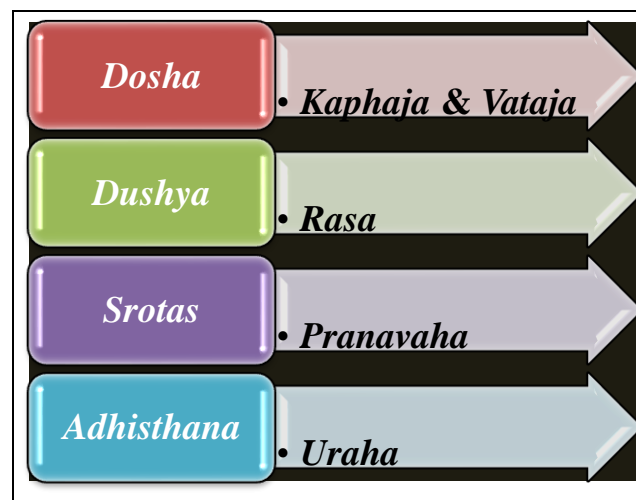


Figure 1: Pathological components associated with *Kaphaja Kasa*

Treatment

Agnideepana, Vatanulomaka, Rasayana and *Avaranahara*, etc. therapies are mainly indicated for the management of *Kasa*. Formulations having *Snigdha, Srotoshodhana* and *Anabhishtyandi* properties also provide relief in the symptoms of disease. Anti-inflammatory and anti-infective therapies also mentioned for relieving disease pathogenesis. *Snigdha* and *Srotoshodhana* therapies provide relieves from the obstruction of respiratory path ways [8-10].

Conclusion

Kaphaja Kasa is *Pranvaha Srothodusti Janita Vyadhi* with can be correlated with the chronic bronchitis according to the similarities in sign and symptoms. Chronic Bronchitis is characterized by persistent cough with expectoration most of the days for more than a month or longer period of time. Consumption of cold, oily foods, exposure to allergens, respiratory infections and diversified climatic conditions can trigger pathogenesis of *Kaphajakasa*. Vitiating of *Kapha Dosha* causes cloudy persistence mucus along with the episodes of coughing due to the allergic response of body. *Kapha Dosha* accumulates in air ways and obstructs the air pathways in lungs which leads symptoms of *Shwasa Kricchrata* and *Kasa*, etc. *Nidana Parivarjana, Shamnoushdhi* and *Shodana* therapy advises for treating *Kaphajakasa*. In this regards drugs possessing cough suppressant, mucolytic and expectorants effects are recommended to provides symptomatic relief in *Kaphajakasa*.

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