

TAMAK SHWASA (BRONCHIAL ASTHMA): A CRITICAL REVIEW STUDY

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ABSTRACT

Respiratory disorders are significant public health burden worldwide. Bronchial asthma is one of the commonest respiratory disorders. The WHO estimates that 300 million people currently are suffering from bronchial asthma. In India prevalence of asthma has been found to be 15-20 million people. Prevalence of asthma is more in urban areas than rural areas due to smoke, pollution and environmental factors. Management of Bronchial asthma as per contemporary treatment modalities include use of bronchodilators, corticosteroid, anticholinergics and several other drugs having long term side effects and dose dependency. *Tamaka Shwasa* which is described in Ayurveda as a disease entity through its sign & symptoms, pathogenesis, prognosis and treatment can be correlated with Bronchial asthma in modern parlance. So, the present conceptual study helps to understand the disease of the modern era by the Ayurvedic perspective and contributes in the integrative approach in the management of *Tamaka Shwasa* or bronchial asthma.

KEYWORDS: *Tamaka Shwasa, Bronchial Asthma, Ayurveda, Nidana.*

INTRODUCTION

Respiratory disease is responsible for a major burden of morbidity and untimely death.^[1] Asthma is one of the most common chronic non communicable diseases currently affecting a large mass of people with almost worldwide distribution.^[2] *Ayurveda* has described five types of *Shwasa Roga* and *Tamaka Shwasa* is one amongst them. *Tamaka Shwasa* is a “*Swatantra*” *Vyadhi* i.e., independent disease entity and having its own etiology, patho-physiology and management. *Shwasa Roga* has been considered as a *Yapya Vyadhi* (palliative)^[3] It is well co-related with bronchial asthma which results due to derangement of *Pranavah Srotasa* (respiratory system) in which *Prana Vayu* is vitiated that is unable to perform its normal physiologic function due to obstruction through cough and moves in upward direction (*Pratilom Gati*).^[4]

Bronchial asthma is characterized by difficulty in breathing, cough, wheezing and chest tightness.^[5] Paroxysm attacks can last for days to months which results in sleepless night, thus disturbing the normal life style of the person. Worldwide, equally affecting both sexes in adult but in children male female ratio is 2:1.^[6] The varieties of indigenous and exogenous factors are responsible for the incidence of this disease.^[7] Out of these genetic susceptibilities, environmental factors, drugs, infection, smoking, anxiety & psychological factors are major cause of concern.^[8]

In Indian context asthma is now a serious public health problem and it is seen as one of the leading cause of morbidity and mortality in India.^[9] Although the prevalence of asthma in India is seen to be somewhat similar to other Asian countries, the incidence in the country has increased significantly.^[10] There has been an increase in the prevalence and similar trend is observed in India. This disease is more predominant in children and aged population.^[11] At the age of six to seven years, the prevalence ranges from 4-32%. As stated by W.H.O., 100-150 million of global population is suffering from bronchial asthma; out of which 1/10th are Indians and the prevalence of asthma is increasing everywhere.^[12] Lots of advances have been achieved through modern medicine in combating this disease i.e., advanced antibiotics, corticosteroids, bronchodilator, etc.^[13] All these fight the disease and offer relief but patient with weak immune status due to recurrent infection, malnutrition, drug toxicity, chronicity of disease and stress disorder etc,^[14] become prone to further infection and exacerbations of disease, hampering their life quality.^[15]

Thus, due to these similarities, *Tamaka Shwasa* and bronchial asthma can be taken as a similar disease condition. The present review helps to understand bronchial asthma through an *Ayurvedic* perspective and helps in an integrative approach in the treatment.

There are five classes of *Shwasa*: *Kshudra*, *Tamaka*, *Chhinna*, *Maha* and *Urdhava*. *Tamaka swasa* is a type of respiratory disease *Shwasa roga* that affects the airways and characterized by wheezing, dyspnoea of very deep velocity, which is excessive harmful to life.^[4] *Vata* is rotating in reverse order permeates the channels (Vital breaths), afflicts the neck and stimulates the head, and *kapha* by obstruction (Blockage of the respiratory tract) broncho constriction.

AIMS AND OBJECTIVES

To highlight the key messages that is common to many of the existing guidelines. Critically reviewing and commenting on any differences, and to assess the effectiveness of internal i.e. herbal and herbo-minerals drugs (*Shamana Chikista*) and procedure based *Panchakarma* therapy (*Shodhana Chikista*) for the treatment of *Tamaka-Shwasa*.

MATERIAL AND METHODS

1. This review has been done by compiling the classical *Ayurveda* Literature, Modern Literature, and *Rasashastra* Books, Magazines and Research journals as well as PubMed, drug database.
2. Based on the collected information, logical interpretation was done to review efficacy and mode of action of *Vamana*, *Virechana*, and herbal and herbominerals drug in the management of *Tamakashwasa*.

Ayurvedic disease review

The disease is called *Tamaka* as attack of the disease precipitate during night and during the state of attack Dyspnoea becomes so severe that patient feels entering into the darkness.

Types of *tamaka shwasa*

Acharya Charaka has mentioned two-allied condition of *Tamaka Shwasa* known as two types or further complication of disease proper i.e., *Pratamaka* and *Santamaka*. *Sushruta* and *Vagbhata* have only mentioned the name as *Pratamaka*, which includes clinical manifestation of *Santamaka*.^[16]

Pratamaka shwasa

When Patients suffering from *Tamaka Shwasa* gets afflicted with fever and fainting, the condition is called as *Pratamaka Shwasa*. It is suggestive of involvement of *Pittadosha* in *Pratamaka Shwasa*. It is aggravated by *Udavarta*, Dust, Indigestion, Humidity (*Kleda*), suppression of natural urges, *Tamoguna*, Darkness and gets alleviated instantaneously by cooling regimens.^[17]

As a matter of fact, cooling regimen is one of the causative factors of *Tamaka Shwasa* but in *Pratamaka Shwasa*, the patient gets relief by administering cooling agents due to *Pitta Dosha* involvement.

Santamaka shwasa

When the patients of *Pratamaka Shwasa* feels submerged in darkness, the condition is called as *Santamaka Shwasa*. Though *Chakrapani* has mentioned these two as synonyms of each other *Charaka* refers them as two different ailments representing two different conditions of *Tamaka Shwasa*, these two conditions differ from each other according to intensity of attack.^[18]

Nidana panchaka of *tamak shwasa*^[19]

The *Nidana* has been mainly of two types:

a. *Bahya nidana*

Asatmendriyartha sanyoga

It plays important role in development of *Shwasa roga*. Mainly *Ghranendriya*, *Rasanendriya* and *Sparsanendriya* and their *Asatmyaindriyartha sanyoga* may precipitate *Tamaka Shwasa*. For example exposure of the *ghranendriya* to pollens, dusts etc. may evoke an *Asatmendriyartha sanyoga*.

Pragyaparadha

It is a conscious or unconscious indulgence in harmful activities. It is again of two types.

1. *Sharirika pragyaparadha*, eg. excessive indulgence in sex, excessive working and other likewise activities.
2. *Manasika Pragyaparadha* are anxiety, excitement, fear, sorrow, anger, greed, pride etc.

Parinama

It means *Kala* i.e. the effect of climatic condition. This is observed that paroxysmal attacks of *Shwasa roga* occur during specific times and seasons, eg: night, cloudy climates, winter and rainy season.

b. *Abhyantara nidanas*

In *Tamaka Shwasa*, *Kapha* and *Vata* are the main *Dosha*, which are the internal factors responsible for the disease. *Tamaka Shwasa* can be produced secondarily to some disease eg. *Jwara*, *Pandu*, *Kasa* etc. *Vagbhata* has clearly narrated that the neglected cases of *Kasa* may lead to *Shwasa*.

Triggering factor

Knowledge of these factors is useful in prevention by taking precautions to occur actual manifestation of diseases. *Megha* (cloudy weather), *Pragwat* (Eastern wind), *anbu* (rainy season), increased cough, cold place (winter season or cold climate) can be considered as an expression.

Inducing factor

Genetic factor.
Viral and bacterial infection in early life.
Exposure to tobacco smoke.
Obesity.

Samprapti: [Etio-pathology/mechanism of disease development]

Nidana sevana: Raja, Dhuma, Prag-Vatasevana, Marmaghata, Vata-Kapha Prakopaka Ahara Vihara etc.

Sanchayavastha: Sanchaya of Vata occurs in Pranavaha Srotas and that of Kapha in Uras

Prakopavastha: Sheeta Kaala and Durdina etc. will provoke the Sanchita Doshas. As a result the Vata Dosha in Pranavaha Srotas and Kapha in Uras tries to move to other places

Prasaravastha: vitiated Doshas hampers the Agni and causes Agnimandya and in turn produces Ama. Both Vata and Kapha begins to move all over their Aashaya.

Sthanasanshrayavastha: the aggravated Dosha i.e. Vata and Kapha are moving all over the body, as well in Pranavaha Srotas, will lead to the Kha-Vaigunyatha. There will be obstruction to the movement of Vata and as a result of this, prodromal features of the disease are manifested.

Vyaktavastha: Prakupita Vata which is obstructed by Kapha will attain Pratiloma Gati, results in Vimarga Gamana of Kapha from Annavaha and Udakavaha Srotas. Peenasa and ghurghuraka etc. symptoms.

Bhedavastha: in the absence of proper treatment there will be permanent changes in the Srotas resulting in complications (Deerghakaala Anubhandhatwa).

Poorvarupa [Predisposing signs and symptoms]^[20,21,22,23]

1. Anaha (Distension of the abdomen)
2. Adhmana (Fullness of the abdomen)
3. Arati (Restlessness)
4. Bhaktadwesa (Aversion to take food)
5. Vadanasya Vairasya (Abnormal taste in mouth)
6. Parshwa Shoola (Pain in the sides of the chest)
7. Peedanam Hridaayasya (Tightness of the chest)
8. Pranasya Vilomata (Sinusitis or Rhinitis)
9. Shankha Nistoda (Temporal headache)

Rupa [Presenting Symptoms/Clinical manifestation]

Rupa means signs and symptoms of the disease. It appears in the 4th Kriyakala i.e., Vyaktavastha in which signs and symptoms of a disease are completely manifested.

Peenas (Running nose, sneezing, stuffiness of the nose)

1. Shwasa (Dyspnoea)
2. Tivravega Shwas (Rapid breathing)
3. Amuchyamane Tu Bhrisham (Severe breathlessness if sputum is not expectorated out)
4. Vimokshante Sukham (Slight relief in breathlessness on spitting out the sputum)
5. Anidra (Breathlessness disturbs sleep)
6. Sayanah Shwas Peeditaha (discomfort worsens on lying)
7. Aseeno Labhate Soukhyam (Feels easy to breath in sitting position)
8. Pratamyati Ati Vega (Deterioration of consciousness)
9. Pramoham Kasamanashcha (Frequent deterioration of consciousness during paroxysm of cough)
10. Kanth Gurghurak (rattling)
11. Utshoonaksa (Oedema around the eyes)

12. Vishushkasya (Dryness of mouth)

13. Meghaihi Abhivardhate (Cloudy weather worsens the attack)

14. Ushnabhinandate (Likes hot things)etc.

Principles of treatment:

The physician should treat the patient afflicted Asthma in the beginning, with unctuous fomentation therapies. Like Nadi - Sveda, Prastara- Sveda and Sankara - Sveda after anointing the body with oil (unctuous substance) mixed with rock salt. The fomentation therapy renders the adhered Kapha dissolved in the channel of circulation and softened thereby. These therapies also cause downward movement of Vayu (Vatanulomana). The stable Kapha in the body get dissolved on account of the heat generated by these formation therapies.^[24]

Nidana parivarajan:

In all the four types of patients for the treatment, Nidana Parivarjan or avoidance of all types of precipitating or predisposing factors are to be strictly followed. If the precipitating or predisposing factors are not avoided, the Doshas involved in the pathogenesis will further be aggravated and the prognosis will be worse.

Shodhana chikitsa:

According to Charaka Shodhanachikitsa is Vamana and Virechana. If Shwasa patients complain with Kasa and Swarabheda then manage with Vamana and Vatakaphanashaka medicine along with Virechana used in Tamakashwasa.^[25]

The following types of sedation are specifically indicated in the treatment of hikka and Shwasha - Nadisveda, Prastara Sveda and Shankara Sveda.

Vamana

Vamana is not an ideal option for patients with pre-existing symptoms vata dosha. In major patients with vitiation of Kapha dosha, Vamana Karma most appropriate in patients who present with symptoms like paroxysmal productive cough where there is sputum strong, disturbing paroxysmal small amount of viscous sputum comes in the cough.⁸

Vamana is recommended only to those patients who are physically strong and can bear the exertion of Vamana Karma.^[26]

Dhoompan

It is recommended after Vamana karma and it eliminates Kapha dosha even after Vamana karma.^[27] In debilitated patients where Shodhan karma is not possible to purify them Dhoompan can be given alone which helps elimination of kapha dosha.

Virechana

The origin of Shwasa roga is from the pitta sthana as mentioned by Acharya Charaka as pittasthanasamudbhava. Virechana Karma is indicated as the best treatment for aggravated pitta dosha.

Therefore, *Virechana* helps maintaining the normal level of *pitta dosha*. However, *basti* is the best treatment for *vata dosha* but *Acharya Charak* has explained that if *Vata* is associated with other *doshas*, Then it should be done by applying mild rectification or mild *virechana* oil.^[28]

Avegakalina chikitsa

Rasayana chikista:

Increase in the strength of *PranavahaStrotas* following medication should be used.

1. ***Chyavanprashsa***-It alleviates cough, asthma, and bronchospasm of seasonal and non- seasonal origin, smooth functioning of the tracheobronchial tree, maintain the adequate hydration of respiratory system, increasing the strength of respiratory system.^[29]
2. ***Vardhaman Pippali***-Gives strength to the *Pranavahasrotas*. Used in *Vata* type asthma, chronic cough and bronchitis.^[30]
3. ***Chausashta Prahari Pippali***- Improves lung health. It helps in detoxifying lung.^[31]

Herbal Drugs and Herbominerals compound:

Herbal and Herbo-minerals are used in- *Tamaka Shwasa* because of their very good properties. This drug pacifies all the signs symptoms of asthma.

Compound formulation^[32,33,34,35,36]

Many compound formulation are used in *TamakaShwasa*, they relieve the signs and symptoms and improve the quality of life. Some of them are-

1. ***Puskaramuladi churna***
2. ***Vasa avaleha***
3. ***Vasa haritakiavaleha***
4. ***bharngyadiavaleh***
5. ***Kanakasava***
6. ***Shwasa-kasa-chintamani ras***
7. ***Mahalaxmivilasa rasa***
8. ***Shwasa-kuthara ras]***
9. ***Lavanagadi vati***
10. ***Abhraka bhasma***

DISCUSSION

The etiological factors of *Tamaka Shwasa* are mentioned with variable multiplicity of diet (*Ahara*), lifestyle (*Vihara*) and consequences of diseases (*Nidanarthakara Roga*). If the patient of *Tamaka Shwasa* drops the treatment, disease aggravates again with more severity. *Tamaka Shwasa* can be correlate with Bronchial Asthma and this is one of the most prevalent chronic health conditions among children and adults. There are some cardinal features found in *Tamaka shwasa (Asthma)* like- *Ghurghurshabda*, *Kanthodhwansa*, *Parshvashoola*, *Meghambushita* *Pragvatah* *Shleshmachabhivardhate*, *Slesmani vimokshante*, *Mahuratam Sukham* and *Vishushkashyate..*

According to modern medical science Bronchial asthma is mainly a chronic inflammatory disease, affecting the

air ways causing labored breathing. Main cause of inflammation due to over-reactivity of the immune system of the lungs induced by a variety of external and internal allergens.

CONCLUSION

The disease with manifests of *Tama* as cardinal symptom due to difficulty in breathing which is produced by *viloma gati* of *vata* obstructed by vitiated *kapha dosha*. The vitiation of *vata* and *kapha dosha* is mainly responsible for pathogenesis of *Tamak Shwasa roga*. In the etiology of *Tamak shwasa roga Ama dosha* is formed during the stage of *mandagni*. *Ama dosha* has a certain role in producing *Tamak Shwasa*. For the best treatment/ management of *Tamak Shwasa* every physicians must have great command of both *Ayurvedic* and modern perspective.

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